



**United Nations
Conference
on the Law of the Sea**

Official Records

Volume I:

PREPARATORY DOCUMENTS

GENEVA

24 February — 27 April 1958



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INTRODUCTORY NOTE

The *Official Records* of the United Nations Conference on the Law of the Sea comprise seven volumes, as follows :

- Volume I : Preparatory Documents
- Volume II : Plenary Meetings
- Volume III : First Committee (Territorial Sea and Contiguous Zone)
- Volume IV : Second Committee (High Seas : General Régime)
- Volume V : Third Committee (High Seas : Fishing, Conservation of Living Resources)
- Volume VI : Fourth Committee (Continental Shelf)
- Volume VII : Fifth Committee (Question of Free Access to the Sea of Land-locked Countries)

The *Preparatory Documents* contain :

- (a) Studies prepared at the request of the Secretary-General of the United Nations by experts and the secretariats of specialized agencies ;
- (b) Memoranda by the Secretariat of the United Nations on questions relating to the work of the Conference ;
- (c) Observations by Governments and some specialized agencies on the draft articles adopted by the International Law Commission at its eighth session ;
- (d) Documents concerning the preparation of the work of the Conference, including the provisional agenda and the provisional rules of procedure.

The Secretariat of the Conference has made a selection from these documents for this volume, which, in addition, contains a complete list of the preparatory documents submitted to the Conference.

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Symbols of United Nations are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

The Conference documents all bear the symbol A/CONF.13/..., followed by capital letters and figures.

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Abbreviations used in reference notes :

Ser. L.o.N.P. : Series League of Nations Publications

I.C.J. : International Court of Justice

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HISTORIC BAYS

MEMORANDUM BY THE SECRETARIAT OF THE UNITED NATIONS

(Preparatory document No. 1)

[Original text : French]
[30 September 1957]

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Introduction

I. Object of the present study

1. This study is intended for the United Nations Conference on the Law of the Sea, to be held in pursuance of General Assembly resolution 1105 (XI) of 21 February 1957.¹

¹ *Official Records of the General Assembly, Eleventh Session, Supplement No. 17 (A/3572), p. 54.*

2. By the terms of that resolution, the General Assembly has referred to the Conference, as the basis for its proceedings, the draft articles concerning the law of the sea adopted by the International Law Commission at its eighth session. The Commission's draft article 7 deals with bays and reads as follows :

“ 1. For the purposes of these articles, a bay is a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute

more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as, or larger than, that of the semi-circle drawn on the mouth of that indentation. If a bay has more than one mouth, this semi-circle shall be drawn on a line as long as the sum total of the length of the different mouths. Islands within a bay shall be included as if they were part of the water area of the bay.

"2. The waters within a bay, the coasts of which belong to a single State, shall be considered internal waters if the line drawn across the mouth does not exceed fifteen miles measured from the low-water line.

"3. Where the mouth of a bay exceeds fifteen miles, a closing line of such length shall be drawn within the bay. When different lines of such length can be drawn that line shall be chosen which encloses the maximum water area within the bay.

"4. The foregoing provisions shall not apply to so-called 'historic' bays or in any cases where the straight baseline system provided for in article 5 is applied."²

3. As will be gathered from the provisions above, the Commission excluded the so-called "historic" bays from the scope of its general rules concerning ordinary bays. The question of this class of bays was, therefore, reserved by the Commission.

4. The object of this memorandum, prepared by the Secretariat of the United Nations, is to provide the Conference with material relating to "historic bays".

5. Part I describes the practice of States by reference to a few examples of bays which are considered to be historic or are claimed as such by the States concerned. Part I then proceeds to cite the various draft codifications which established the theory of "historic bays", and the opinions of learned authors and of Governments on this theory. Part II discusses the theory itself, inquiring into the legal status of the waters of bays regarded as historic bays, and setting forth the factors which have been relied on for the purpose of claiming bays as historic. The final section is intended to show that the theory does not apply to bays only but is more general in scope.

II. Definition of the subject

A. Bays and gulfs

6. Dictionaries differentiate between the terms "bay" and "gulf", applying the former to a small indentation of the coast and the latter to a much larger indentation; in other words, a bay would be a small gulf. The distinction is not, however, reflected in geography. A cursory glance at an atlas will show that certain maritime areas are designated as bays although they are of considerable size, while other relatively much smaller areas are described as gulfs. For example, despite its name, Hudson Bay is vast, whereas the Gulf of St. Tropez is not more than four kilometres across at its entrance.

7. This paper deals with both bays and gulfs, geographical terms being immaterial to the subject. The pages which follow contain numerous references to

penetrations of the sea inland, variously designated as bays and as gulfs without regard to their size. The usage of geographical nomenclature will be respected. In cases, however, where the text is not concerned with specific penetrations, the word "bay" will be used to denote both bays and gulfs.

B. "Historic bays" and "historic waters"

8. As indicated in part II of this paper, the theory of historic bays is of general scope. Historic rights are claimed not only in respect of bays, but also in respect of maritime areas which do not constitute bays, such as the waters of archipelagos and the water area lying between an archipelago and the neighbouring mainland; historic rights are also claimed in respect of straits, estuaries and other similar bodies of water. There is a growing tendency to describe these areas as "historic waters", not as "historic bays". The present memorandum will leave out of account historic waters which are not also bays. It will, however, deal with certain maritime areas which, though not bays *stricto sensu*, are of particular interest in this context by reason of their special position or by reason of the discussion or decisions to which they have given rise.³

III. Origin and justification of the theory of historic bays

9. The origin of this theory is traceable to the efforts made in the nineteenth century to determine, in bays, the baseline of the territorial sea. In view of the intimate relationship between bays and their surrounding land formations and in the light of the provisions of municipal law and of conventions governing the subject, proposals were made the object of which was to advance the starting line of the territorial sea towards the opening of bays. The intention was that, in bays, the territorial sea should not be measured from the shore—the method proposed in the case of more or less straight coasts—but should, rather, be reckoned as from a line drawn further to seaward. On this point agreement was virtually unanimous, though the exact location of the line from which the territorial sea was to be reckoned continued to be the subject of controversy. According to various proposals put forward, the territorial sea was to be measured from a straight line drawn across the bay at a point at which its two coasts were a specified distance apart (six miles, ten miles, twelve miles, etc.); the waters lying to landward of that line would be part of the internal waters of the coastal State.

10. This attempt to restrict, in respect of bays, the maritime area claimable by the coastal State as part of its internal waters conflicted with existing situations. There were bays of considerable size the waters of which

³ A case in point is that of the maritime areas created by the application of the "straight baselines" method which, as regards the Norwegian coast, was approved by the International Court of Justice in the Anglo-Norwegian Fisheries case (see *infra*, especially paras. 50-72) and which is the subject of article 5 of the draft articles concerning the law of the sea adopted by the International Law Commission at its eighth session (see *infra*, especially paras. 104-108).

² *Ibid.*, Supplement No. 9 (A/3159) p. 15.

were wholly the property of the coastal States concerned—the territorial sea being accordingly reckoned, in these cases, from the opening of the bay in question towards the sea. Hence, for the purposes of codification, the choice lay between two possible courses, viz. allowing for these cases by means of an exception to the general rule to be formulated; and ignoring them by making the rule apply to all bays, regardless of their *de facto* status. The second course was felt to be arbitrary, and capable, if applied in practice, of causing international difficulties. Most of the draft codifications which dealt with bays endorsed the first solution. There remained, however, and there still remains, the question which bays are covered by the exception. The mere fact that a State claims the ownership of a bay which is not already territorial by virtue of the general rule does not *per se* ensure acceptance of the claim. The claim would have to be substantiated by reference to a specific criterion. And, according to the theory as originally conceived, this criterion was to be essentially historic. The modern view, however, has gone beyond this conception. According to one school of thought (which is more particularly discussed elsewhere in this paper), the proprietary title may be founded either on considerations connected with history or else on considerations of necessity, in which latter case the historical element might be lacking altogether.

PART I

The practice of States; draft international codifications of the rules relating to bays; opinions of learned authors

I. THE PRACTICE OF STATES : SOME EXAMPLES OF HISTORIC BAYS

11. The undermentioned bays, which are cited for the purpose of illustration, are regarded as historic bays or are claimed as such by the States concerned. They are grouped under two headings, namely, bays the coasts of which belong to a single State, and bays the coasts of which belong to two or more States.

A. Bays the coasts of which belong to a single State

Sea of Azov

12. The Sea of Azov is ten miles across at its entrance. It is situated entirely within the southern part of the territory of the Union of Soviet Socialist Republics and extends a considerable distance inland, its dimensions being approximately 230 by 110 miles. De Cussy⁴ mentions the Sea of Azov among the gulfs

⁴ *Phases et causes célèbres du Droit maritime des Nations*, 1856, pp. 97-98: In addition to the Sea of Azov the writer mentions "among the gulfs... which may be regarded as part of the territorial sea, subject to the jurisdiction and control of the State by virtue of the right of self-preservation inherent in its independence" the Sea of Marmara, the Zuyder Zee and the Dollart, the Gulfs of Bothnia and Finland, the Gulf of St. Lawrence in North America, part of the Gulf of Mexico (to the extent indicated in respect of each of the coastal States of that Gulf), the innermost part of the Adriatic Gulf in the vicinity of Venice, Trieste, Rijeka (Fiume), etc., the Gulf of Naples, Salerno, Taranto, Cagliari, Thérmai (Salonica), Coron, Lepanto, etc.

"which may be regarded as part of the territorial sea". P. C. Jessup⁵ states that this contention "seems reasonable and any such Russian claim would not be contested". A. N. Nikolaev regards the Sea of Azov as part of the "internal waters of the USSR" (see *infra*, para. 92). Gidel⁶ is of the opinion that certain maritime areas—of which the Sea of Azov is one—should not be treated as falling within the category of historic waters "because, pursuant to the rules of the ordinary international law of the sea, these areas are in any case internal waters" (see *infra*, paras. 32-34).

Bay of Cancale (or Granville Bay)

13. This bay (in the north-western part of France) is about seventeen miles across at its entrance. In its reply to the inquiries advanced to Governments by the Preparatory Committee of the Conference on the Codification of International Law, 1930, the French Government stated that "Granville Bay is recognized to consist of territorial waters by the Fisheries Convention of 2 August 1839, concluded with Great Britain (article 1) and by article 2 of the Fisheries Regulations concluded on 24 May 1843 with Great Britain."⁷ Gidel⁸ states that "the waters of Granville Bay are recognized as French [territorial waters], even though the bay is about seventeen miles across at its entrance". According to Jessup,⁹ the bay "seems to be claimed by France without objection. This may be due to the practical appropriation of the bay through the exploitation of its oyster fisheries over a long period. By treaties of 1839 and 1867 Great Britain recognized the exclusive French fisheries in those waters".

Bay of Chaleur

14. This bay (between the Provinces of Quebec and New Brunswick in Canada) does not exceed twelve miles in width; it is about 100 miles long. Its entrance into the Gulf of St. Lawrence is sixteen miles across. In its decision concerning the status of the bay, given in the case of *Mowat v. McFee* (1880), the Supreme Court of Canada held that the Bay of Chaleur was included in its entirety "within the present boundaries of the Provinces of Quebec and New Brunswick, and within the Dominion of Canada".¹⁰

15. "The arbitral award in the North Atlantic Fisheries case, 1910, upheld the British contention concerning the Bay of Chaleur".¹¹ In that award, the tribunal appointed by the Permanent Court of Arbitration recommended that the limit of the bay should be constituted by "the line from the light at Birch Point on Miscou Island to Macquereau Point

⁵ *The Law of Territorial Waters and Maritime Jurisdiction*, 1927, p. 383.

⁶ *Droit international public de la Mer*, 1930-1934, vol. III, p. 663.

⁷ Ser. L.o.N.P. 1929, v. 2, p. 160.

⁸ *Op. cit.*, p. 657.

⁹ *Op. cit.*, pp. 385-386.

¹⁰ Reports of the Supreme Court of Canada, vol. 5 (1880), p. 66.

¹¹ Gidel, *op. cit.*, p. 659.

light".¹² The recommendation was accepted by Great Britain and the United States by the Treaty¹³ of 20 July 1912 (article 2).¹⁴

Chesapeake Bay

16. This bay is twelve miles across at its entrance ; it is nowhere more than twenty miles wide and is about 200 miles long. Its status was considered in 1885 by the Second Court of Commissioners of Alabama Claims in the case of the "Alleganean", a vessel which had been sunk by Confederate forces in the waters of the bay. The Court held¹⁵ that Chesapeake Bay was entirely within the territorial jurisdiction of the United States.

17. After citing the case-law of the English courts concerning the Bristol Channel and Conception Bay, and the opinions of certain writers on the status of bays, the Court proceeded :

"We must now examine the local circumstance touching the status of Chesapeake Bay, and then determine whether those should be held to be the open ocean or jurisdictional waters of the United States in the light of these authorities.

"The headlands are about twelve miles apart, and the bay is probably nowhere more than twenty miles in width. The length may be 200 miles. To call it a bay is almost a misnomer. It is more a mighty river than an arm or inlet of the ocean. It is entirely encompassed about by our own territory, and all of its numerous branches and feeders have their rise and their progress wholly in and through our own soil. It cannot become an international commercial highway ; it is not and cannot be made a roadway from one nation to another.

"The second charter of King James I to the Virginia Company in the year 1609 granted : 'All those lands, countries, and territories situate, lying, and being in that part of America called Virginia, from the point of land called Cape or Point Comfort, all along the seacoast to the northward 200 miles, and all along the seacoast to the southward 200 miles, and all that space and circuit of land lying from the seacoast of the precinct aforesaid up into the land throughout from sea to sea, west and northwest, together with all the soils, grounds, havens, ports, . . . rivers, waters, fishings, etc.'

"This language would seem to place Chesapeake Bay within the boundary lines of Virginia. A line running north (as near as may be) from Point Comfort along the seacoast crosses the mouth of the bay from Cape Henry to Cape Charles.

"By the King James Charter to Lord Baltimore in 1632, erecting the territory of Maryland, the southern boundary line is made to cross Chesapeake Bay from Smiths Point, at the mouth of the Potomac River, to Watkin's Point, on the eastern shore, which apparently places a portion of this bay within the territory of Maryland. Had this not been intended, the boundary would presumably have followed the shore line around the bay.

¹² Scott, *Hague Court Reports, First Series*, 1916, p. 189. Gidel, *op. cit.*, p. 659, explains this delimitation as follows : "This bay was considered British as far as a line sixteen miles long drawn between the two lights at Birch Point towards Miscou Island (Marquereau Point light)."

¹³ *Treaties and Conventions between the United States and other Powers*, 1910-23, vol. III, p. 2632.

¹⁴ Higgins and Colombos : *The International law of the Sea*, London, 1943, p. 119.

¹⁵ Moore, J. B., *A History and Digest of the International Arbitrations to which the United States has been a Party* (Washington, 1898) vol. 4, pp. 4338-4341.

"It is a part of the common history of the country that the States of Virginia and Maryland have from their earliest territorial existence claimed jurisdiction over these waters, and it is of general knowledge that they still continue to do so.

"The legislation of Congress has assumed Chesapeake Bay to be within the territorial limits of the United States. The acts of 31 July 1789, ch. 5 ; 4 August 1790, ch. 35 ; and 2 March 1799, ch. 128, section 11, establishing revenue districts, provided that 'the authority of the officers of the district (Norfolk to Portsmouth) shall extend over all the waters, shores, bays, harbours, and inlets comprehended within a line drawn from Cape Henry to the mouth of James River'. By section 549, Rev. Stat. U.S., the eastern judicial district for Virginia embraces the 'residue of the State' not included in the western district. The boundaries of the State include all of Chesapeake Bay south of a line running from Smiths Point to Watkins Point, and hence the eastern district must embrace so much of the bay."

18. Referring to the decision of 1793 in respect of Delaware Bay (see *infra*, para. 22) the Court noted :

"If it be said that the mere claims of a nation to jurisdiction over adjacent waters are to be accepted with some degree of hesitation, then the action in reference to the *Grange* is of much weight, for there the claim made by the United States was promptly acquiesced in by two great foreign Powers, when passions were excited, and when such acquiescence was greatly against the immediate interest of one of the combatants, as well as against the general interest of both.

"It will hardly be said that Delaware Bay is any the less an inland sea than Chesapeake Bay. Its configuration is not such as to make it so, and the distance from Cape May to Cape Henlopen is apparently as great as that between Cape Henry and Cape Charles."

19. After stressing that the question to be adjudicated was "of very considerable national importance", the Court concluded :

"Considering, therefore, the importance of the question, the configuration of Chesapeake Bay, the fact that its headlands are well marked, and but twelve miles apart, that it and its tributaries are wholly within our own territory, that the boundary lines of adjacent States encompass it ; that from the earliest history of the country it has been claimed to be territorial waters, and that the claim has never been questioned ; that it cannot become the pathway from one nation to another ; and remembering the doctrines of the recognized authorities upon international law, as well as the holdings of the English courts as to the Bristol Channel and Conception Bay, and bearing in mind the matter of the brig "Grange" and the position taken by the Government as to Delaware Bay, we are forced to the conclusion that Chesapeake Bay must be held to be wholly within the territorial jurisdiction and authority of the Government of the United States and no part of the 'high seas' within the meaning of the term used in section 5 of the act of 5 June 1872."

Conception Bay

20. This bay (in Newfoundland) is twenty miles across at its entrance, has an average width of fifteen miles and is some forty miles long. It has been claimed by Great Britain as being entirely within its jurisdiction, a claim which was upheld in 1877 by the Privy Council in the case *Direct United States Cable Co v. The Anglo-American Telegraph Co*.¹⁶ The Privy Council said :

¹⁶ Higgins and Colombos, *op. cit.*, p. 116.

"Passing from the common law of England to the general law of nations, as indicated by the text writers on international jurisprudence, we find an universal agreement that harbours, estuaries and bays landlocked belong to the territory of the nation which possesses the shores round them, but no agreement as to what is the rule to determine what is 'bay' for this purpose.

"It seems generally agreed that, where the configuration and dimensions of the bay are such as to show that the nation occupying the adjoining coasts also occupies the bay, it is part of the territory; and, with this idea, most of the writers on the subject refer to defensibility from the shore as the test of occupation: some suggesting, therefore, a width of one cannon-shot from shore to shore, or three miles; some, a cannon-shot from each shore, or six miles; some, an arbitrary distance of ten miles. All of these are rules which, if adopted, would exclude Conception Bay from the territory of Newfoundland; but also would have excluded from the territory of Great Britain that part of the Bristol Channel which in *Regina v. Cunningham* was decided to be in the county of Glamorgan. On the other hand, the diplomatists of the United States in 1793 claimed a territorial jurisdiction over much more extensive bays, and Chancellor Kent, in his Commentaries, though by no means giving the weight of his authority to this claim, gives some reason for not considering it altogether unreasonable.

"It does not appear to their Lordships that jurists and text writers are agreed what are the rules as to dimensions and configuration which, apart from other considerations, would lead to the conclusion that a bay is or is not a part of the territory of the State possessing the adjoining coasts, and it has never, that they can find, been made the ground of judicial determination. If it were necessary in this case to lay down a rule, the difficulty of the task would not deter their Lordships from attempting to fulfil it. But in their opinion it is not necessary to do so. It seems to them that, in point of fact, the British Government has for a long period exercised dominion over this bay, and that their claim has been acquiesced in by other nations, so as to show that the bay has been for a long time occupied exclusively by Great Britain, a circumstance which, in the tribunals of any country, would be every important. And, moreover (which in a British tribunal is conclusive), the British Legislature has by Acts of Parliament declared it to be part of the British territory, and part of the country made subject to the Legislature of Newfoundland."¹⁷

21. In its award, rendered on 7 September 1910, the North Atlantic Coast Fisheries Arbitral Tribunal refrained from expressing any opinion on Conception Bay,¹⁸ on the grounds that that bay had been provided for by the above-mentioned decision of the Privy Council, in which decision the United States had acquiesced.¹⁹

Delaware Bay

22. The status of Delaware Bay, which is ten miles across at its entrance and forty miles long from its entrance to the mouth of the Delaware River, was determined in connexion with the case of the British vessel *Grange*, captured in 1793 in the waters of the bay by the French frigate *L'Embuscade*. The incident

occurred while Great Britain and France were at war, the United States being neutral. The Attorney-General, E. Randolph, consulted, rendered an opinion (from which extracts are given below) to the effect that the vessel *Grange* had been captured in neutral territory:

"The essential facts are:

"That the river Delaware takes its rise within the limits of the United States;

"That, in the whole of its descent to the Atlantic Ocean, it is covered on each side by the territory of the United States;

"That, from tide water to the distance of about sixty miles from the Atlantic Ocean, it is called the *river* Delaware;

"That, at this distance from the sea, it widens and assumes the name of the *Bay* of Delaware, which it retains to the mouth;

"That its mouth is formed by the capes Henlopen and May; the former belonging to the State of Delaware, in property and jurisdiction, the latter to the State of New Jersey;

"That the Delaware does not lead from the sea to the dominions of any foreign nation;

"That, from the establishment of the British provinces on the banks of the Delaware to the American Revolution, it was deemed the peculiar navigation of the British Empire;

"That, by the Treaty of Paris, on 3 September 1783, his Britannic Majesty relinquished, with the privity of France, the sovereignty of those provinces, as well as of the other provinces and colonies;

"And that the *Grange* was arrested in the Delaware *within the capes*, before she had reached the sea, after her departure from the port of Philadelphia.

"... the corner stone of our claim is, that the United States are proprietors of the lands on both sides of the Delaware, from its head to its entrance into the sea.

"... These remarks may be enforced by asking, What nation can be injured in its rights by the Delaware being appropriated to the United States? And to what degree may not the United States be injured, on the contrary ground? It communicates with no foreign dominion; no foreign nation has, ever before, exacted a community of right in it, as if it were a main sea; under the former and present governments, the exclusive jurisdiction has been asserted; by the very first collection law of the United States, passed in 1789, the county of Cape May, which includes Cape May itself, and all the waters thereof, theretofore within the jurisdiction of the State of New Jersey, are comprehended in the district of Bridgetown. The whole of the State of Delaware, reaching to Cape Henlopen, is made one district. Nay, unless these positions can be maintained, the bay of Chesapeake, which, in the same law, is so fully assumed to be within the United States, and which, for the length of the Virginia territory, is subject to the process of several counties to any extent, will become a rendezvous to all the world, without any possible control from the United States. Nor will the evil stop here. It will require but another short link in the process of reasoning, to disappropriate the mouths of some of our most important rivers. If, as Vattel inclines to think in the 294th section of his first book, the Romans were free to appropriate the Mediterranean, merely because they secured, by one single stroke, the immense range of their coast, how much stronger must the vindication of the United States be, should they adopt maxims for prohibiting foreigners from gaining, without permission, access into the heart of their country.

"This inquiry might be enlarged by a minute discussion of the practice of foreign nations, in such circumstances. But I pass it by; because the United States, in the commencement

¹⁷ Quoted by Phillimore, *International Law*, vol. I (1879), pp. 289-290.

¹⁸ Scott, *op. cit.*, p. 190.

¹⁹ Higgins and Colombos, *op. cit.*, p. 116, quoting de Martens, *Nouveau Recueil Général*, 3rd ed. (1911), vol. 4, pp. 89-129.

of their career, ought not to be precipitate in declaring their approbation of any usages (the precise facts concerning which we may not thoroughly understand) until those usages shall have grown into principles, and are incorporated into the law of nations; and because no usage has ever been accepted, which shakes the foregoing principles.

"The conclusion then is, that the *Grange* has been seized on neutral ground. If this be admitted, the duty arising from the illegal act is restitution."²⁰

23. France consented to release the *Grange*. "Great Britain, by requesting the restoration of its captured vessel, recognized that Delaware Bay was within the jurisdiction of the United States and France, by returning the British vessel, tacitly accepted the declaration of territoriality made by the United States."²¹

Bay of El-Arab

24. This bay (in northern Egypt), which is only eighteen miles in depth, is seventy-five miles wide at its opening into the sea. In its reply to questionnaire No. 2 (1926) of the Committee of Experts for the Progressive Codification of International Law, the Egyptian Government stated that "the extent of Egyptian territorial waters was fixed at three miles by the Decree-Laws of 21 April 1926 on Fishing and Sponge-fishing, except in the Bay of El-Arab, the whole of which, according to the Decree-Law on Sponge-fishing, is included in the territorial sea."²²

25. Articles 1(b) and 4(a) of the Egyptian Decree of 15 January 1951²³ provide that the inland waters of Egypt include the waters of all bays along the Egyptian coasts, without specifying any limit.

26. The British Government protested, through diplomatic channels, against this Decree, stating that it was unable to accept it as being in conformity with the rules of international law. In its note of protest, the British Government pointed out that no historic bay "is situated in Egypt."²⁴

Hudson Bay

27. The dimensions of this bay are considerable; its breadth is about 600 miles and its length about 1,000 miles. The Canadian writer, V. Kenneth Johnston²⁵ gives the following information concerning the status of Hudson Bay:

"In 1906... notwithstanding the assumption of the world as to the status of Hudson Bay, the Government of Canada placed on its statute books a statute declaring the waters of Hudson Bay to be territorial waters of Canada (R.S.C. 1927, cap. 73, sec. 9, sub-sec. 10; Statutes of Canada, 1906, cap. 45, sec. 9 (12)). That statute is still in force in Canada without,

²⁰ Moore, *op cit.*, vol. I (1906), pp. 735-739.

²¹ Fauchille, *Traité de droit international public*, vol. I (1925), p. 381.

²² Ser. L.o.N.P. 1927, v. 1, p. 257.

²³ *Revue égyptienne de droit international*, vol. 6 (1950), p. 175.

²⁴ *Ibid.*, vol. 7 (1951), p. 91.

²⁵ "Canada's title to Hudson Bay and Hudson Strait", in *British Year Book of International Law*, 1934, p. 2.

so far as is known, any protest having been made by any foreign Government. This statute has been and presumably still is being actively enforced in Canada and in Hudson Bay as part of Canada. The Government of Canada, therefore, has appropriated and continues to appropriate Hudson Bay and presumably Hudson Strait as Canadian national waters...."

The writer maintains that, in accordance with the rules of international law, Canada has, in respect of that bay, a title based on occupation and on the acquiescence of other States in that occupation.

28. Higgins and Colombos²⁶ state that:

"...The British claim has not, so far, been expressly admitted by the United States."

And they add:

"The Treaty of 20 July 1912, which was concluded for the purpose of carrying out the award of the Tribunal in the North Atlantic Fisheries Arbitration of 1910, provides 'that it is understood that the award does not cover Hudson Bay', thus reserving all existing British rights to the bay."²⁷

Miramichi Bay

29. "Miramichi Bay is situated in New Brunswick, and has a headland width of 14.5 miles. By a New Brunswick Statute of 1799²⁸ this bay was treated as being within the adjoining county of Northumberland, and subsequent amending acts have confirmed this claim."²⁹

"In no single instance has the jurisdiction of Great Britain over these bays been challenged by any other Power than the United States, and the objection of the United States has been limited to the sole question of the extent of the fishing liberties given by the Treaty of 1818."³⁰

Bays of Laholm and Skelderviken

30. In its reply to questionnaire No. 2 (1926) of the Committee of Experts for the Progressive Codification of International Law, the Swedish Government stated:

"According to Swedish law, the whole area of any bay which indents the coast to an appreciable extent is in every case to be regarded as territorial water, and the exterior territorial waters are measured from a line drawn across the bay between the two extreme points where the bay merges into the general coast-line. During the Great War, therefore, the Swedish Government always maintained that the Bays of Laholm and Skelderviken, on the south-west coast of Sweden, were entirely Swedish territorial waters.

"In the case of the Bay of Laholm the Swedish argument was singularly strengthened by the provisions of a fisheries convention concluded between Sweden and Denmark. The rule has also been adopted by Swedish jurisprudence."³¹

²⁶ *Op. cit.*, p. 117.

²⁷ For Hudson Bay, see also Balch "Is Hudson Bay a closed or open sea?" in *American Journal of International Law*, vol. 6 (1912), p. 409; P. C. Jessup, *op. cit.*, pp. 411-12; Pitt-Cobbett, *Cases in International Law*, vol. I (1947), p. 162.

²⁸ 39 Geo. III, 5.

²⁹ 50 Geo. III, c. 5; 4 Geo. IV; c. 23; 9 and 10 Geo. IV, c. 3; 4 Wm. IV, c. 31.

³⁰ From the extract from the British case in the arbitration concerning the North Atlantic coast fisheries, 1909-1910, annexed to the Norwegian Counter-Memorial submitted to the International Court of Justice in the 1951 Anglo-Norwegian Fisheries case (vol. II, p. 271).

³¹ Ser. L.o.N.P. 1927, v. 1, p. 232.

31. The position of Sweden in regard to the bays along its coasts, and in particular to Laholm Bay, is set forth by Mr. Eliel Löfgren, then legal adviser to the Ministry of Foreign Affairs, in an opinion given on 11 February 1925 in connexion with the capture on 19 January 1925 by the Swedish authorities of the German trawler *Heinrich Augustin*, found trawling at a place situated 1.4 distance minutes outside the closing line of Laholm Bay.³²

The Zuyder Zee

32. "The Zuyder Zee in Holland lies in two portions, which may be designated the inner and outer. The latter would probably not be considered a closed sea were it not for a fringe of islands which almost completely enclose it save for narrow passages; the body of water thus enclosed is about forty miles long by twenty wide. From this area a narrow passage about nine miles wide leads into the inner portion, which is about forty-five miles long by thirty-five wide.

"These bodies of water are claimed by the Netherlands and, judging by the testimony of the writers, this claim has never been called into question..."³³

33. Fauchille³⁴ states:

"The Zuyder Zee, which is claimed by the Netherlands as its property and from the extremity of which the territorial sea extends, in the general view, to its classic distance, seems to us to be indeed a special sea, governed by the rules relating to bays, because (1) this sea is enclosed by a continuous fringe of islands, separated from each other by narrow passages; (2) it is comparable to a lake, for like a lake it freezes over, whereas the sea resists freezing. The Netherlands claim in respect of the Zuyder Zee has therefore been generally accepted."

34. The Netherlands title to this sea can be based not only on a historic right proper but also on ordinary international law. A. Chrétien,³⁵ who does not admit the theory of historic bays (see *infra*, para. 92) concedes nevertheless that certain small bays, among others the Zuyder Zee, should be regarded as subject to the full and absolute sovereignty of the coastal State. Gidel³⁶ mentions the Zuyder Zee among the maritime areas which are sometimes designated as historic "but which should not be treated as falling within that category [of historic waters] because pursuant to the rules of the ordinary international law of the seas these areas are in any case internal waters".

Norwegian bays and fjords

35. In its reply to questionnaire No. 2 (1926) of the Committee of Experts for the Progressive Codification of International Law, the Norwegian Government stated:

³² The text of the opinion is reproduced in P. C. Jessup, *op. cit.*, 413-24; also in *Fisheries Case (United Kingdom v. Norway)*, Judgement [I.C.J.] of 18 December 1951, vol. II, Annex 43, pp. 753-61.

³³ P. C. Jessup, *op. cit.*, p. 438.

³⁴ "Le droit de l'Etat sur la Mer territoriale" in *Revue générale de Droit international public*, vol. V (1893), p. 266.

³⁵ *Principes de Droit international public*, part I, Paris, 1893, p. 102.

³⁶ *Op. cit.*, p. 663.

"...The Norwegian bays and fjords have always been regarded and claimed by Norway as forming part of the territory of the Kingdom. This attitude is the necessary result of history, of local conditions along the very indented Norwegian coasts with their remarkable geographical peculiarities, and of the capital importance of a rational exploitation of the fjords and coastal archipelagos (*skjaergaard*) from the point of view of living conditions for the coastal population, and national economy. By fjords we mean not only those sea areas which are bounded on both sides by the continental coast-line, but also areas bounded by a continuous series of islands or a coastal archipelago (*skjaergaard*). Norwegian law has always held from most ancient times that these bays and fjords are *in their entirety* an integral part of Norwegian territorial waters, even should the breadth at the seaward end exceed the more or less arbitrary maxima breadths which certain countries, with a less characteristic coastline, have recently established for special purposes in view of their *own* needs and for very dissimilar reasons."³⁷

36. These claims were formulated more strongly in the Fisheries Case between the United Kingdom and Norway, decided by the International Court of Justice in its judgement given on 18 December 1951.³⁸ It will be noted that at the end of his oral reply the Agent of the United Kingdom Government stated:

"... Norway is entitled to claim as Norwegian internal waters, on historic grounds, all fjords and sunds which fall within the conception of a bay... whether the proper closing line of the indentation is more or less than ten sea miles long" (Conclusion No. 5).³⁹

37. In its judgement in that case, the Court concluded that the Svaerholthavet basin had geographically the character of a bay. As to the LoppHAVET basin, however, the Court, while not recognizing it as having the character of a bay, agreed that the historic rights claimed by Norway in respect of it were sufficient justification for the line drawn by that country (*infra*, para. 69-72).

38. The Vestfjord,⁴⁰ about 100 kilometres across at its entrance and 170 kilometres long, was the subject of a diplomatic dispute when, in 1868, the French vessel *Les Quatre Frères* was seized by the Norwegian authorities in the waters of the fjord. The French Government having protested, the Minister of the Interior of Norway wrote a memorandum to the Norwegian Minister of Foreign Affairs in which the following passage occurs:

"The fisheries in a gulf which is considered to form part of the territorial sea of Norway have been regarded as the exclusive property of this country; it would certainly not be consistent with the principles of international law if it should be possible to produce sudden changes in a legal situation which is based on the tacit knowledge of several centuries."

39. J. Mochot,⁴¹ who quotes this passage from the

³⁷ Ser. L.o.N.P. 1927, v. 1, p. 174.

³⁸ See especially the Norwegian Counter-Memorial, I.C.J., *Fisheries Case (United Kingdom v. Norway)* Judgement of 18 December 1951, vol. I, pp. 214-574.

³⁹ *Ibid.*, I.C.J. Reports, 1951, p. 121.

⁴⁰ In its judgement in the Fisheries Case, the International Court of Justice noted that "the waters of the Vestfjord, as indeed the waters of all other Norwegian fjords, can only be regarded as internal waters" (*loc. cit.*, p. 142).

⁴¹ *Le Régime des baies et des golfes en droit international*, Paris, 1938, p. 136.

Norwegian Minister's memorandum, says that "France, accepting the Norwegian contention, expressly stated that it did so solely by reason of the special configuration of the coasts of Norway and in derogation of all the rules of international law".

40. Another fjord, the Varangerfjord, which is about thirty miles across at its entrance and fifty miles long, gave rise to difficulties between Great Britain and Norway. In 1911, the British trawler *Lord Roberts* was arrested and sentenced by the Vardö court for trawling in the waters of the fjord. After the British Government had made representations, the Norwegian Government appointed a commission of inquiry. The commission concluded, on historic grounds, that the monopoly of fisheries for the benefit of Norwegian nationals in the Varangerfjord was justified by long and unchallenged usage.^{42 43}

41. Gidel⁴⁴ says that the Norwegian claims in respect of the Vestfjord and the Varangerfjord should be considered "as fully admitted, despite certain challenges (by France, in the case of the vessel *Les Quatre Frères*, 1868-69 and by Great Britain in 1869 and most recently in April 1911)".

Bays the coasts of which belong to Portugal

42. In its reply to the inquiry addressed to Governments by the Preparatory Committee for the Codification Conference (1930), the Portuguese Government stated that "Portugal regards as part of her European continental territory the bays formed by the estuaries of the Rivers Tagus and Sado, comprising the areas included between Cape Razo and Cape Espichel and between Cape Espichel and Cape Sines respectively" (see *infra*, para. 93).

Other examples of historic bays

43. The undermentioned maritime areas are likewise regarded as historic bays or are claimed as such by the States concerned:

Argentina: The River Plate estuary.⁴⁵

Australia:

Northern Australia: Van Diemen Gulf (opening: sixteen miles); Buckingham Bay (opening: twenty miles); Blue Mud Bay (opening: fifteen miles);

South Australia: Coffin Bay (opening: twelve miles);

Streaky Bay (opening: fourteen miles); Spencer Gulf (opening: forty-eight miles); Investigator Strait with St. Vincent's Gulf (opening: twenty-eight miles);

Western Australia: Exmouth Gulf (opening: thirteen miles); Roebuck Bay (opening: fourteen miles); Shark Bay (opening: fourteen miles);

Queensland: Broad Sound (opening: fifteen miles); Upstart Bay (opening: ten miles); Moreton Bay (opening: ten miles); Hervey Bay (opening: thirty-eight miles);

Tasmania: Oyster Bay (opening: fifteen miles); Storm Bay (opening: thirteen miles).⁴⁶

Dominican Republic: Bays of Samaná, Ocoa and Neyba.⁴⁷

France: Equatorial Africa: Bays of Mondah, Cape Lopez (opening: eighteen miles), Loango, Pointe Noire and Corisco (Rio Muni) and the Estuary of the Gabon; *East Africa*: Tadjura Gulf (opening: over ten miles).⁴⁸

Tunisia: Gulf of Tunis (opening: twenty-three miles),⁴⁹ Gulf of Gabés (opening: fifty miles).⁵⁰

Union of Soviet Socialist Republics: Kara Sea, Laptev Sea, East Siberian Sea and Chukchi Sea.⁵¹

United Kingdom: Bristol Channel.⁵²

United States of America: Monterey Bay,⁵³ Long Island Sound.⁵⁴

⁴⁷ Act No. 3342 of 13 July 1952, article 2 (United Nations Legislative Series, *Laws and Regulations on the Régime of the Territorial Sea*, ST/LEG/SER.B/6, p. 11).

⁴⁸ Gidel, *op. cit.*, p. 657.

⁴⁹ Gidel, *op. cit.*, p. 663.

⁵⁰ *Ibid.*

⁵¹ See A. N. Nikolaev, *infra*, para. 92.

⁵² The case of *Regina v. Cunningham* in 1859: a collision had occurred three miles from the shore of the county of Glamorgan in Wales in the neighbourhood of Cardiff at a spot where the width of the Bristol Channel is slightly more than ten miles. It was held by Cockburn, C. J., that the part of the sea where the collision had occurred formed part of the county of Glamorgan. Then, using more general language, the learned Chief Justice said: "The whole of this inland sea between the counties of Somerset and Glamorgan is to be considered as within the counties by the shores of which its several parts are respectively bounded" (Bell's *Crown Cases*, 72, 86).

The question of the juridical status of the Bristol Channel arose again in the case of the "Fagernes" [1926] P. 185; [1927] P. 311. (C.A.). A collision had occurred more than twenty miles to the east of Lundy Island and some miles to the eastward of a line drawn from Bull Point in Devon to Port Eynon in Glamorgan. The place where the collision had occurred was also roughly half way across the Bristol Channel, which in this area is about twenty miles wide. Hill, J., held that the collision had taken place in British territory. However, his judgement was overruled by the Court of Appeal [1927] P. 311, which was much influenced by the fact that the Attorney-General, when asked by the Court whether the Crown did or did not claim that particular part of the Bristol Channel where this collision had occurred as being within the territorial jurisdiction of the King, replied that it did not. (See also: P. C. Jessup, *op. cit.*, pp. 383-384; Mochot, *op. cit.*, 126-127; Pitt Cobbett, *Cases on International Law*, 6th ed., 1947, pp. 156-157, 160).

⁵³ P. C. Jessup, *op. cit.*, pp. 428-30.

⁵⁴ See *Mahler v. Transportation Co. Case* (1886), 35 N.Y. 352; *J. Duffy Case* (1926, D. C. Conn.) 14 F. (2nd) 426; P. C. Jessup, *op. cit.*, pp. 424-7.

⁴² Gidel, *op. cit.*, pp. 661-2.

⁴³ J. Mochot; *op. cit.*, pp. 136-7.

⁴⁴ *Op. cit.*, p. 661.

⁴⁵ Gidel, *op. cit.*, pp. 653-4; Emilio Mitre, *Principales Escritos y Dircursos*, 1910; Saavedra Lamas, *La crise de la codification et la doctrine argentine du droit international*, vol. I, pp. 318-32. Both Argentina and Uruguay are riparian States of the River Plate.

⁴⁶ This list of Australian bays is given by Prof. A. H. Charteris in his *Chapters on International Law*, 1940, p. 99; quoted in the Norwegian Counter-Memorial in the *Fisheries Case (United Kingdom v. Norway)*, *Judgement of 18 December 1951*, vol. I, pp. 445.

B. *Bays the coasts of which belong to two or more States*

Gulf of Fonseca

44. This gulf, which is bounded by the territories of Nicaragua, Honduras and El Salvador, is nineteen and a half miles across at its entrance between Cape Cosiguina (Nicaragua) and Cape Amapala (El Salvador). By the Treaty of 5 August 1914 between the United States and Nicaragua, the latter country granted to the former, for the term of ninety-nine years, certain rights in a portion of Nicaraguan territory bordering on the Gulf of Fonseca, as well as certain rights for the construction of an interoceanic canal. El Salvador disputed the validity of the Treaty in proceedings instituted against Nicaragua in the Central American Court of Justice. In its judgement, rendered on 9 March 1917, the Court held unanimously that the gulf in question was "an historic bay possessed of the characteristics of a closed sea".⁵⁵

45. The grounds on which this decision was based are important and, accordingly, in order that all the considerations underlying the Court's reasoning may be fully presented, some extracts from its decision are quoted textually:

"In order to fix the international legal status of the Gulf of Fonseca it is necessary to specify the characteristics proper thereto from the threefold point of view of history, geography and the vital interests of the surrounding States.

"The historic origin of the right of exclusive ownership that has been exercised over the waters of the Gulf during the course of nearly four hundred years is incontrovertible, first, under the Spanish dominion — from 1522, when it was discovered and incorporated into the royal patrimony of the Crown of Castile, down to the year 1821 — then under the Federal Republic of the Centre of America, which in that year attained its independence and sovereignty, down to 1839; and, subsequently, on the dissolution of the Federation in that year, the States of El Salvador, Honduras and Nicaragua, in their character of autonomous nations and legitimate successors of Spain, incorporated into their respective territories, as a necessary dependency thereof for geographical reasons and purposes of common defence, both the Gulf and its archipelago, which nature had indented in that important part of the continent, in the form of a gullet.

"During these three periods of the political history of Central America, the representative authorities have notoriously affirmed their peaceful ownership and possession in the Gulf; that is, without protest or contradiction by any nation whatsoever, and, for its political organization and for police purposes, have performed acts and enacted laws having to do with the national security, the observance of health and with fiscal regulations. A secular possession such as that of the Gulf could only have been maintained by the acquiescence of the family of nations; and in the case here at issue it is not that the *consensus gentium* is deduced from a merely passive attitude on the part of the nations, because the diplomatic history of certain Powers shows that for more than half a century they have been seeking to establish rights of their own in the Gulf for purposes of commercial policy; but always on the basis of respect for the ownership and possession which the States have maintained by virtue of their sovereign authority."⁵⁶

46. The Court stated further:

"The foregoing descriptions give an exact idea of how vital

⁵⁵ *American Journal of International Law*, vol. 11 (1917), p. 693.

⁵⁶ *Ibid.*, pp. 700-701.

are the interests guarded by the Gulf of Fonseca, and, if those interests are of incalculable value in making up the characteristics of an 'historic bay' applicable thereto, there are other factors what determine even more clearly that legal status. These are:

"A. The projected railway that Honduras began and which she will not abandon until this great aspiration of hers shall have been concluded. Over that railway will pass the interoceanic traffic that is to develop the rich and extensive regions of the country. Its terminal stations, with their wharves, etc., will be located very probably on one of the principal islands nearest the coast of the Gulf.

"B. El Salvador, in her turn has under her control a railroad which, starting at the port of La Unión, follows its course through important and rich departments of the Republic to connect with lines entering from Guatemala at the Salvadorean frontier.

"C. The long-projected prolongation of the Chinandega railroad to a point on the Real Estuary on the Gulf of Fonseca to expedite and make more frequent communication on that side with the interior of Nicaragua.

"D. The establishment of a free port decreed by the Salvadorean Government on Meanguera island.

"E. The Gulf is surrounded by various and extensive departments of the three riparian countries. These are of great importance because they are destined to great commercial, industrial and agricultural development; their products, like those of the departments in the interior of those States, must be exported by way of the Gulf of Fonseca, and through that Gulf must come also the increasing importations.

"F. The configuration and other conditions of the Gulf facilitate the enforcement of fiscal laws and regulations and guarantee the full collection of imposts against frauds against the fiscal laws.

"G. The strategic situation of the Gulf and its islands is so advantageous that the riparian States can defend their great interests therein and provide for the defense of their independence and sovereignty.

"*Whereas*: It is clearly deducible from the facts set forth in the preceding paragraphs that the Gulf of Fonseca belongs to the special category of historic bays and is the exclusive property of El Salvador, Honduras and Nicaragua; this on the theory that it combines all the characteristics or conditions that the text writers on international law, the international law institutes and the precedents have prescribed as essential to territorial waters, to wit, secular or immemorial possession accompanied by *animo domini* both peaceful and continuous and by acquiescence on the part of other nations, the special geographical configuration that safeguards so many interests of vital importance to the economic, commercial, agricultural and industrial life of the riparian States and the absolute, indispensable necessity that those States should possess the Gulf as fully as required by those primordial interests and the interest of national defence."⁵⁷

47. By a majority vote, the Court held⁵⁸ that the three riparian States were co-owners of the waters of the gulf, "except as to the littoral marine league which is the exclusive property of each". The Court said in this respect:

"The legal status of the Gulf of Fonseca having been recognized by this Court to be that of a historic bay possessed of the characteristics of a closed sea, the three riparian States of El Salvador, Honduras and Nicaragua are, therefore,

⁵⁷ *Ibid.*, pp. 704-5.

⁵⁸ *Ibid.*, p. 693.

recognized as co-owners of its waters, except as to the littoral marine league which is the exclusive property of each, and with regard to the co-ownership existing between the States here litigant, the Court, in voting on the fourteenth point of the questionnaire, took into account the fact that as to a portion of the non-littoral waters of the Gulf there was an overlapping or confusion of jurisdiction in matters pertaining to inspection for police and fiscal purposes and purposes of national security, and that, as to another portion thereof, it is possible that no such overlapping and confusion takes place. The Court, therefore, has decided that as between El Salvador and Nicaragua co-ownership exists with respect to both portions, since they are both within the Gulf; with the express proviso, however, that the rights pertaining to Honduras as coparcener in those portions are not affected by that decision.”⁵⁹

II. INTERNATIONAL CASE-LAW

48. The important decision of the Central American Court of Justice in the case relating to the Gulf of Fonseca has already been mentioned (paras. 44-47 above).

49. Another important case having a bearing on historic bays was the North Atlantic Coast Fisheries Arbitration between the United Kingdom and the United States; the award, dated 7 September 1910, says:

“But the tribunal, while recognizing that conventions and established usage might be considered as the basis for claiming as territorial those bays on this ground might be called historic bays, and that such claims should be held valid in the absence of any principle of international law on the subject...”⁶⁰

While the award mentioned historic bays incidentally, only Dr. Drago, in his dissenting opinion, considered the question of those bays at more length and tried to identify their characteristic features. Dr. Drago's views on the question are given elsewhere in this paper, in the section on opinions of learned authors (*infra*, para. 92).

50. In the Fisheries Case between the United Kingdom and Norway, decided by the International Court of Justice in its judgement of 18 December 1951, the theory of historic bays played an important part. The parties dealt with it both in their written and in their oral statements. And the judgement of the Court, although not treating the theory as a major issue, devotes many pages to it. Nor does the theory receive less prominence in the separate or dissenting opinions of certain judges. In this section, only the relevant portions of the judgement will be cited.

51. The first noteworthy point is that the Court was asked to rule, not on the territoriality of any particular bay or of specific maritime areas, but on a system of delimitation. The system laid down by the Norwegian Royal Decree of 12 July 1935 included in the internal waters of Norway certain sea areas which, in the view of the United Kingdom, were part of the high seas. The issue in dispute between the two parties was whether this system of delimitation was in conformity with the applicable rules of international law. And it was prin-

cipally by relying on these rules for guidance that the Court endeavoured to resolve the issue. While basing its conclusions on the principles of general international law the Court did not, however, fail to make certain statements concerning the theory of historic rights.

52. In the course of the proceedings, both parties referred to the notion of historic title, but viewing it differently. The judgement, in the recital of facts, mentions this divergence of views.

53. The Norwegian Decree of 12 July 1935 sets out in the preamble the considerations on which its provisions on delimitation are based:⁶¹

“(1) Well-established national titles of right”;

“(2) The geographical conditions prevailing on the Norwegian coasts”;

“(3) The safeguard of the vital interests of the inhabitants of the northernmost parts of the country”.

The Decree “further relies on the Royal Decrees of 22 February 1812, 16 October 1869, 5 January 1881 and 9 September 1889”.

54. Norway put forward the 1935 Decree as the application of a traditional system of delimitation, which that country claimed to be in conformity with international law. Norway did not rely upon history “to justify exceptional rights, to claim areas of sea which the general law would deny”; it invoked history, together with other factors, to justify the way in which it applied the general law.⁶²

55. “This conception of an historic title”, said the Court, “is in consonance with the Norwegian Government's understanding of the general rules of international law. In its view, these rules of international law take into account the diversity of facts and, therefore, concede that the drawing of base lines must be adapted to the special conditions obtaining in different regions.”⁶³

56. The United Kingdom also referred to the notion of historic titles, but considered such titles as derogations from general international law. In its opinion, Norway could justify its claim to part of the waters in dispute “on the ground that she has exercised the necessary jurisdiction over them for a long period without opposition from other States, a kind of *possessio longi temporis*, with the result that her jurisdiction over these waters must now be recognized although it constitutes a derogation from the rules in force. Norwegian sovereignty over these waters would constitute an exception, historic titles justifying situations which would otherwise be in conflict with international law”.⁶⁴

57. The waters which, in the British view, Norway was entitled to claim on historic grounds, are the subject of Conclusions Nos. 5, 9(a) and 11, and Alternative Conclusion II, presented by the Agent of the United Kingdom Government at the end of his oral reply. The

⁶¹ Fisheries Case (United Kingdom v. Norway) Judgement of 18 December 1951: I.C.J. Reports (1951), p. 125.

⁶² *Ibid.*, p. 133.

⁶³ *Ibid.*

⁶⁴ *Ibid.*, pp. 130-131.

⁵⁹ *Ibid.*, p. 716.

⁶⁰ Scott, *Hague Court Reports*, First Series, New York, 1916, p. 185.

waters in question should, he argued, be regarded either as internal or as territorial waters. The text of these Conclusions is here cited in full:⁶⁵

"(5) That Norway is entitled to claim as Norwegian internal waters, on historic grounds, all fjords and sunds which fall within the conception of a bay as defined in international law (see No. (6) below), whether the proper closing line of the indentation is more or less than ten sea miles long.

"(9) (a) That Norway is entitled to claim as Norwegian territorial waters, on historic grounds, all the waters of the fjords and sunds which have the character of legal straits.

"(11) That Norway, by reason of her historic title to fjords and sunds (see Nos. (5) and (9) (a) above), is entitled to claim, either as internal or as territorial waters, the areas of water lying between the island fringe and the mainland of Norway. In order to determine what areas must be deemed to lie between the island fringe and the mainland, and whether these areas are internal or territorial waters, the principles of Nos. (6), (7), (8) and (9) (b) must be applied to indentations in the island fringe and to indentations between the island fringe and the mainland — those areas which lie in indentations having the character of bays, and within the proper closing lines thereof, being deemed to be internal waters; and those areas which lie in indentations having the character of legal straits, and within the proper limits thereof, being deemed to be territorial waters."

[Second Alternative Conclusion] "II. That Norway, by reason of her historic title to fjords and sunds, is entitled to claim as internal waters the areas of water lying between the island fringe and the mainland of Norway. In order to determine what areas must be deemed to lie between the island fringe and the mainland, the principles of Nos. (6) and (7) above must be applied to the indentations in the island fringe and to the indentations between the island fringe and the mainland — those areas which lie in indentations having the character of bays, and within the proper closing lines thereof, being deemed to lie between the island fringe and the mainland."

58. The Court defined "historic waters" in these terms:

"By 'historic waters' are usually meant waters which are treated as internal waters but which would not have that character were it not for the existence of an historic title."⁶⁶

59. After stressing the special character of the Norwegian coast, the Court noted that:

"In these barren regions the inhabitants of the coastal zone derive their livelihood essentially from fishing."⁶⁷

60. The Court then considered whether the straight baselines method — the distinctive feature of the Norwegian system of delimitation which, as applied to the Norwegian coast, was approved of by the Court — was applicable to certain sea areas not possessing the character of bays. The Court said:

"It has been contended, on behalf of the United Kingdom, that Norway may draw straight lines only across bays. The Court is unable to share this view. If the belt of territorial waters must follow the outer line of the 'skjaergaard', and if the method of straight baselines must be admitted in certain cases, there is no valid reason to draw them only across bays, as in Eastern Finnmark, and not also to draw them between islands, islets and rocks, across the sea areas separating them,

even when such areas do not fall within the conception of a bay. It is sufficient that they should be situated between the island formations of the 'skjaergaard', *inter fauces terrarum*.⁶⁸

61. The court likewise rejected the contention that the maximum permissible length of straight baselines was ten nautical miles:

"... although the ten-mile rule has been adopted by certain States both in their national law and in their treaties and conventions, and although certain arbitral decisions have applied it as between these States, other States have adopted a different limit. Consequently, the ten-mile rule has not acquired the authority of a general rule of international law."⁶⁹

62. The Court did not look upon the Norwegian system of delimitation as exceptional but as the application of general international law to a specific case:

"Furthermore, apart from any question of limiting the lines to ten miles, it may be that several lines can be envisaged. In such cases the coastal State would seem to be in the best position to appraise the local conditions dictating the selection.

"Consequently, the Court is unable to share the view of the United Kingdom Government, that 'Norway, in the matter of baselines, now claims recognition of an exceptional system'. As will be shown later, all that the Court can see therein is the application of general international law to a specific case."⁷⁰

63. On the other hand, the Court said that the delimitation of sea areas "has always an international aspect"; it cannot be dependent merely upon the will of the coastal State. Although it is true that the coastal State is alone competent to undertake it, it is equally true that the validity of the delimitation with regard to other States depends upon international law. Accordingly, the Court indicated certain basic considerations that "bring to light certain criteria which, though not necessarily precise, can provide courts with an adequate basis for their decisions, which can be adapted to the diverse facts in question".⁷¹

"Among these considerations, some reference must be made to the close dependence of the territorial sea upon the land domain. It is the land which confers upon the coastal State a right to the waters off its coasts. It follows that while such a State must be allowed the latitude necessary in order to be able to adapt its delimitation to practical needs and local requirements, the drawing of baselines must not depart to any appreciable extent from the general direction of the coast.

"Another fundamental consideration, of particular importance in this case, is the more or less close relationship existing between certain sea areas and the land formations which divide or surround them. The real question raised in the choice of baselines is in effect whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters. This idea, which is at the basis of the determination of the rules relating to bays, should be liberally applied in the case of a coast, the geographical configuration of which is as unusual as that of Norway.

"Finally, there is one consideration not to be overlooked, the scope of which extends beyond purely geographical factors: that of certain economic interests peculiar to a region, the

⁶⁵ *Ibid.*, pp. 121-123.

⁶⁶ *Ibid.*, p. 130.

⁶⁷ *Ibid.*, p. 128.

⁶⁸ *Ibid.*, p. 130.

⁶⁹ *Ibid.*, p. 131.

⁷⁰ *Ibid.*

⁷¹ *Ibid.*, p. 133.

reality and importance of which are clearly evidenced by a long usage.”⁷²

64. After noting the existence and consolidation of the Norwegian system of delimitation, the origins of which go back to 1812, the Court found “that this system was consistently applied by Norwegian authorities and that it encountered no opposition on the part of other States”.

65. The passages in the Court’s judgement which deal with the continuity or consistency of the system of delimitation are here cited in full:

“The United Kingdom Government has, however, sought to show that the Norwegian Government has not consistently followed the principles of delimitation which, it claims, form its system, and that it has admitted by implication that some other method would be necessary to comply with international law. The documents to which the Agent of the Government of the United Kingdom principally referred at the hearing on 20 October 1951, relate to the period between 1906 and 1908, the period in which British trawlers made their first appearance off the Norwegian coast, and which, therefore, merits particular attention.

“The United Kingdom Government pointed out that the law of 2 June 1906, which prohibited fishing by foreigners, merely forbade fishing in ‘Norwegian territorial waters’, and it deduced from the very general character of this reference that no definite system existed. The Court is unable to accept this interpretation, as the object of the law was to renew the prohibition against fishing and not to undertake a precise delimitation of the territorial sea.

“The second document relied upon by the United Kingdom Government is a letter dated 24 March 1908, from the Minister for Foreign Affairs to the Minister of National Defence. The United Kingdom Government thought that this letter indicated an adherence by Norway to the low-water mark rule contrary to the present Norwegian position. This interpretation cannot be accepted; it rests upon a confusion between the low-water mark rule as understood by the United Kingdom, which required that all the sinuosities of the coast line at low tide should be followed, and the general practice of selecting the low-tide mark rather than that of the high tide for measuring the extent of the territorial sea.

“The third document referred to is a Note, dated 11 November 1908, from the Norwegian Minister for Foreign Affairs to the French Chargé d’Affaires at Christiania, in reply to a request for information as to whether Norway had modified the limits of her territorial waters. In it the Minister said: ‘Interpreting Norwegian regulations in this matter, whilst at the same time conforming to the general rule of the Law of Nations, this Ministry gave its opinion that the distance from the coast should be measured from the low-water mark and that every islet not continuously covered by the sea should be reckoned as a starting-point.’ The United Kingdom Government argued that by the reference to ‘the general rule of the Law of Nations’, instead of to its own system of delimitation entailing the use of straight lines, and, furthermore, by its statement that ‘every islet not continuously covered by the sea should be reckoned as a starting-point’, the Norwegian Government had completely departed from what it today describes as its system.

“It must be remembered that the request for information to which the Norwegian Government was replying related not to the use of straight lines, but to the breadth of Norwegian territorial waters. The point of the Norwegian Government’s reply was that there had been no modification in the Norwegian

legislation. Moreover, it is impossible to rely upon a few words taken from a single note to draw the conclusion that the Norwegian Government had abandoned a position which its earlier official documents had clearly indicated.

“The Court considers that too much importance need not be attached to the few uncertainties or contradictions, real or apparent, which the United Kingdom Government claims to have discovered in Norwegian practice. They may be easily understood in the light of the variety of the facts and conditions prevailing in the long period which has elapsed since 1812, and are not such as to modify the conclusions reached by the Court.

“In the light of these considerations, and in the absence of convincing evidence to the contrary, the Court is bound to hold that the Norwegian authorities applied their system of delimitation consistently and uninterruptedly from 1869 until the time when the dispute arose.”⁷³

66. And in the passage which follows the Court found that the Norwegian system had not encountered “any objection from foreign States”:

“Norway has been in a position to argue without any contradiction that neither the promulgation of her delimitation Decrees in 1869 and in 1889, nor their application, gave rise to any opposition on the part of foreign States. Since, moreover, these Decrees constitute, as has been shown above, the application of a well-defined and uniform system, it is indeed this system itself which would reap the benefit of general toleration, the basis of an historical consolidation which would make it enforceable as against all States.

“The general toleration of foreign States with regard to the Norwegian practice is an unchallenged fact. For a period of more than sixty years the United Kingdom Government itself in no way contested it. One cannot indeed consider as raising objections the discussions to which the “Lord Roberts” incident gave rise in 1911, for the controversy which arose in this connexion related to two questions, that of the four-mile limit, and that of Norwegian sovereignty over the Varangerfjord, both of which were unconnected with the position of baselines. It would appear that it was only in its Memorandum of 27 July 1933 that the United Kingdom made a formal and definite protest on this point.

“The United Kingdom Government has argued that the Norwegian system of delimitation was not known to it and that the system therefore lacked the notoriety essential to provide the basis of an historic title enforceable against it. The Court is unable to accept this view. As a coastal State on the North Sea, greatly interested in the fisheries in this area, as a maritime Power traditionally concerned with the law of the sea and concerned particularly to defend the freedom of the seas, the United Kingdom could not have been ignorant of the Decree of 1869 which had at once provoked a request for explanations by the French Government. Nor, knowing of it, could it have been under any misapprehension as to the significance of its terms, which clearly described it as constituting the application of a system. The same observation applies *a fortiori* to the Decree of 1889, relating to the delimitation of Romsdøl and Nordmøre, which must have appeared to the United Kingdom as a reiterated manifestation of the Norwegian practice.

“Norway’s attitude with regard to the North Sea Fisheries (Police) Convention of 1882 is a further fact which must at once have attracted the attention of Great Britain. There is scarcely any fisheries convention of greater importance to the coastal States of the North Sea or of greater interest to Great Britain. Norway’s refusal to adhere to this Convention clearly raised the question of the delimitation of her maritime domain, especially with regard to bays, the question of their delimitation by means of straight lines, of which Norway challenged the

⁷² *Ibid.*

⁷³ *Ibid.*, pp. 137-138.

maximum length adopted in the Convention. Having regard to the fact that, a few years before, the delimitation of Sunnmøre by the 1869 Decree had been presented as an application of the Norwegian system, one cannot avoid the conclusion that, from that time on, all the elements of the problem of Norwegian coastal waters had been clearly stated. The steps subsequently taken by Great Britain to secure Norway's adherence to the Convention clearly show that she was aware of and interested in the question.

"The Court notes that, in respect of a situation which could only be strengthened with the passage of time, the United Kingdom Government refrained from formulating reservations.

"The notoriety of the facts, the general toleration of the international community, Great Britain's position in the North Sea, her own interest in the question, and her prolonged abstention would in any case warrant Norway's enforcement of her system against the United Kingdom."⁷⁴

67. The Court accordingly arrived at the conclusion :

"...that the method of straight lines, established in the Norwegian system, was imposed by the peculiar geography of the Norwegian coast ; that, even before the dispute arose, this method had been consolidated by a constant and sufficiently long practice, in the face of which the attitude of Governments bears witness to the fact that they did not consider it to be contrary to international law."⁷⁵

68. The Court proceeded to apply the principles thus set out to certain sectors of the Norwegian coast. The United Kingdom Government had contended that certain baselines prescribed by the Norwegian Decree of 1935 did not follow the general direction of the coast or that they did not respect the natural connexion existing between certain sea areas and the land formations separating or surrounding them. These objectives related more particularly to two sectors : the sector of Svaerholt-havet and that of LoppHAVET.

69. With regard to the former, the Court said :

"...The United Kingdom Government denies that the basin so delimited has the character of a bay. Its argument is founded on a geographical consideration. In its opinion, the calculation of the basin's penetration inland must stop at the tip of the Svaerholt peninsula (Svaerholtklubben). The penetration inland thus obtained being only 11.5 sea miles, as against 38.6 miles of breadth at the entrance, it is alleged that the basin in question does not have the character of a bay. The Court is unable to share this view. It considers that the basin in question must be contemplated in the light of all the geographical factors involved. The fact that a peninsula juts out and forms two wide fjords, the Laksefjord and the Porsangerfjord, cannot deprive the basin of the character of a bay. It is the distances between the disputed baseline and the most inland point of these fjords, fifty and seventy-five sea miles respectively, which must be taken into account in appreciating the proportion between the penetration inland and the width at the mouth. The Court concluded that Svaerholt-havet has the character of a bay."⁷⁶

70. Of the sector of LoppHAVET, the Court said :

"...The LoppHAVET basin constitutes an ill-defined geographic whole. It cannot be regarded as having the character of a bay. It is made up of an extensive area of water dotted with large islands which are separated by inlets that terminate in the various fjords. The baseline has been challenged on the ground

that it does not respect the general direction of the coast. It should be observed that, however justified the rule in question may be, it is devoid of any mathematical precision. In order properly to apply the rule, regard must be had for the relation between the deviation complained of and what, according to the terms of the rule, must be regarded as the *general* direction of the coast. Therefore, one cannot confine oneself to examining one sector of the coast alone, except in a case of manifest abuse ; nor can one rely on the impression that may be gathered from a large-scale chart of this sector alone. In the case in point, the divergence between the base line and the land formations is not such that it is a distortion of the general direction of the Norwegian coast."⁷⁷

71. The Court then went on to say :

"Even if it were considered that in the sector under review the deviation was too pronounced, it must be pointed out that the Norwegian Government has relied upon an historic title clearly referable to the waters of LoppHAVET, namely, the exclusive privilege to fish and hunt whales granted at the end of the 17th century to Lt.-Commander Erich Lorch under a number of licences which show, *inter alia*, that the water situated in the vicinity of the sunken rock of Gjesbaaen or Gjesboene and the fishing grounds pertaining thereto were regarded as falling exclusively within Norwegian sovereignty. But it may be observed that the fishing grounds here referred to are made up of two banks, one of which, the Indre Gjesboene, is situated between the baseline and the limit reserved for fishing, whereas the other, the Ytre Gjesboene, is situated further to seaward and beyond the fishing limit laid down in the 1935 Decree.

"These ancient concessions tend to confirm the Norwegian Government's contention that the fisheries zone reserved before 1812 was in fact much more extensive than the one delimited in 1935. It is suggested that it included all fishing banks from which land was visible, the range of vision being, as is recognized by the United Kingdom Government, the principle of delimitation in force at that time. The Court considers that, although it is not always clear to what specific areas they apply, the historical data produced in support of this contention by the Norwegian Government lend some weight to the idea of survival of traditional rights reserved to the inhabitants of the Kingdom over fishing grounds included in the 1935 delimitation, particularly in the case of LoppHAVET. Such rights, founded on the vital needs of the population and attested by very ancient and peaceful usage, may legitimately be taken into account in drawing a line which, moreover, appears to the Court to have been kept within the bounds of what is moderate and reasonable."⁷⁸

72. There remains one further important point to be noted in the Court's judgement : this is the question of the status of a part of the waters of the *skjaergaard*, which the United Kingdom contended should constitute "territorial waters" and not "internal waters". These are, among others, the waters of the navigational route known as the Indreleia. The United Kingdom argued that the waters of this navigational route constituted a strait in the legal sense and, as such, should be treated as territorial waters. The Court observed :

"...that the Indreleia is not a strait at all, but rather a navigational route prepared as such by means of artificial aids to navigation provided by Norway. In these circumstances the Court is unable to accept the views that the Indreleia, for the purposes of the present case, has a status different from that of the other waters included in the *skjaergaard*."⁷⁹

⁷⁴ *Ibid.*, pp. 138-139.

⁷⁵ *Ibid.*, p. 139.

⁷⁶ *Ibid.*, p. 141.

⁷⁷ *Ibid.*, pp. 141-142.

⁷⁸ *Ibid.*, p. 142.

⁷⁹ *Ibid.*, p. 132.

III. DRAFT INTERNATIONAL CÔDIFICATIONS OF THE RULES RELATING TO BAYS

73. The draft codifications concerning the law of the sea prepared since the end of the nineteenth century by learned societies make specific provision for the bays which coastal States may claim as internal waters. The same is true of the draft codifications prepared under the auspices of the League of Nations. The rules formulated in most of these drafts make allowance for historic bays. They do not contain special clauses dealing with historic bays but, in most cases, mention them incidentally, in the form of an exception to the general rule recommended for ordinary bays. Nevertheless, the language used in the clause containing the exception, which differs from one draft to another, may offer some clue to the approach of the authors of the drafts to the theory of historic bays.

Most of the drafts that mention historic bays contemplate only the case of a bay the coasts of which belong to a single State.

A. Draft codifications prepared by learned societies

Institute of International Law

74. At its session held in Paris in March 1894, the Institute of International Law adopted a number of rules concerning the definition and the régime of the territorial sea. In its draft article 3, the Institute recognizes the theory of historic bays by using the terms "continuous usage of long standing" (*usage continu et séculaire*):

"Article 3. In the case of bays, the territorial sea follows the sinuosities of the coast, except that it is measured from a straight line drawn across the bay at the place nearest the opening toward the sea, where the distance between the two shores of the bay is twelve nautical miles, unless a continued usage of long standing has sanctioned a greater width."⁸⁰

75. However, in the draft regulations concerning the territorial sea in time of peace, adopted by the Institute of International Law at its Stockholm session in August 1928, the theory of historic bays is expressed by the words "international usage":

"Article 3. The territorial sea is measured...; in the case of bays, from a straight line drawn across the bay at the place nearest the opening toward the sea, where the distance between the two shores of the bay is ten nautical miles, unless international usage has sanctioned a greater width.

"In the case of bays the coasts of which belong to two or more States, the territorial sea follows the sinuosities of the coast."⁸¹

76. The first draft of this clause had contained the expression "unchallenged (*incontesté*) international usage". During the debate preceding the adoption of the article, an amendment was proposed for the deletion of the word "unchallenged". The amendment was carried and the word in question was dropped.⁸²

⁸⁰ *Annuaire de l'Institut de Droit International*, vol. 13 (1894-95), p. 329.

⁸¹ *Ibid.*, vol. 34, Stockholm session, August, 1928, p. 755.

⁸² *Ibid.*, pp. 641-642.

International Law Association

77. The draft rules relating to territorial waters, adopted by the International Law Association at its Brussels session in 1895, contain an article 3 which reproduces textually the corresponding clause of the 1894 draft of the Institute of International Law (except that the width of twelve miles is replaced by ten miles).⁸³

78. The draft convention submitted in 1926 to the Association's thirty-fourth conference by the committee appointed by the Executive Council to consider, *inter alia*, maritime jurisdiction in time of peace, uses the expression "established usage":

"Article 7. With regard to bays and gulfs, territorial waters shall follow the sinuosities of the coast, unless an established usage has sanctioned a greater limit."⁸⁴

79. The draft convention, as amended by the Conference, adopts the same expression, adding the terms "generally recognized by the nations". In addition, it introduces the idea of "occupation" into the saving clause:

"Article 7. With regard to bays and gulfs, territorial waters shall follow the sinuosities of the coast, unless an occupation or an established usage generally recognized by the nations has sanctioned a greater limit."⁸⁵

American Institute of International Law

80. Project No. 10, prepared in 1925 by the Commission set up by the American Institute of International Law for the codification of American international law, embodies the theory of historic bays. Article 6 uses the expression "continued and well-established usage":

"Article 6. For bays extending into the territory of a single American Republic the territorial sea follows the sinuosities of the coast, except that it is measured from a straight line drawn across the bay at the point nearest the opening into the sea where the two coasts of the bay are separated by a distance of — marine miles, unless a greater width shall have been sanctioned by continued and well-established usage."⁸⁶

81. The project submitted in 1933 to the Seventh International Conference of American States by the American Institute of International Law expresses the theory of historic bays in the following terms:

"Article 11. There are excepted from the provisions of the two foregoing articles, in regard to limits and measure, those bays or estuaries called historic, viz. those over which the coastal State or States, or their constituents, have traditionally exercised and maintained their sovereign ownership, either by provisions of internal legislation and jurisdiction, or by deeds or writs of the authorities."⁸⁷

⁸³ The International Law Association, *Report of the Seventeenth Conference*, 1895, p. 115.

⁸⁴ *Ibid.*, *Report of the Thirty-fourth Conference*, 1926, p. 43.

⁸⁵ *Ibid.*, p. 102.

⁸⁶ *American Journal of International Law*, 1926, Special Supplement, vol. 20, p. 318.

⁸⁷ "Project on the Territorial Sea", submitted to the Seventh International Conference of American States, 3 December 1933 (Document for the Use of Delegates, No. 4, pp. 38-41); quoted in *I.C.J. Fisheries Case (United Kingdom v. Norway)*, *Judgement of 18 December 1951*, vol. III, Norwegian Reply, p. 455; Bustamante, *The Territorial Sea*, 1930, pp. 142-143.

(Article 16 of the project provides that the same rule is to apply to straits).

Kokusaiho-Gakukwai

(*Japanese International Law Society*)

82. A draft codification adopted in 1926 by Kokusaiho-Gakukwai (The Japanese International Law Society) employs the expression "immemorial usage":

"Article 2. In the case of bays and gulfs, the coasts of which belong to the same State, the littoral waters extend seawards at right angles from a straight line drawn across the bay or gulf at the first point nearest the open sea where the width does not exceed ten marine miles, unless a greater width has been established by immemorial usage."⁸⁸

Harvard Research

83. The Harvard Research draft on territorial waters employs the expression "established usage":

"Article 22. The provisions of this convention relating to the extent of territorial waters do not preclude the delimitation of territorial waters in particular areas in accordance with established usage."⁸⁹

84. It will be noticed that this article is general in scope, and does not concern bays only. The comment on the article states:

"This article seems necessary because of historic claims made by certain States and acquiesced in by other States with reference to certain bodies or with reference to particular areas of water. The simplest case is that of an historic bay such as Chesapeake Bay or Conception Bay. It seems desirable that the convention should not interfere with historic claims of this kind based upon usage which has been established before this convention comes into force. Such claims may enlarge or diminish the extent of territorial waters. Similarly it seems desirable that it should be recognized that usages with respect to other areas may become established in the future and that well-founded claims may be based upon such established usage.

"A State may have claimed for all of its marginal seas a different measure from that which is established by this convention. Some States for instance have for many years claimed four miles as the limit of their marginal seas. This article is not designed to protect such a general claim made by a State with reference to all of its marginal seas. However, in a particular area an established usage might be proved which would entitle a State to include a wider area in its territorial waters than three miles of marginal sea."

B. Draft codifications

prepared under the auspices of the League of Nations

1. Committee of Experts for the Progressive Codification of International Law⁹⁰

(a) Draft convention prepared by Mr. Schücking

85. This draft uses the same terms as the 1894 draft of the Institute of International Law:

⁸⁸ J. Mochot, *Régime des baies et des golfes en droit international*, Paris, 1938, p. 144.

⁸⁹ *Research in International Law, Harvard Law School (Nationality, Responsibility of States, Territorial Waters)*, 1929, p. 288.

⁹⁰ This Committee was convened under a resolution adopted

"Article 4. Bays. In the case of bays which are bordered by the territory of a single State, the territorial sea shall follow the sinuosities of the coast, except that it shall be measured from a straight line drawn across the bay at the part nearest to the opening towards the sea, where the distance between the two shores of the bay is twelve marine miles, unless a greater distance has been established by continuous and immemorial usage. . . ." ⁹¹

(b) Draft convention amended by Mr. Schücking in consequence of the discussion in the Committee of Experts

86. The text of article 4 of the amended draft is similar to that of the original draft prepared by the rapporteur, except that the width of twelve miles is replaced by ten miles. In addition, the amended text of article 4 expressly provides that the waters of the bays defined in that article "are to be assimilated to internal waters".⁹²

2. Conference on the Codification of International Law (1930)

(a) Preparatory Committee⁹³

87. Basis of Discussion No. 8 prepared by this Committee was worded as follows:

"The belt of territorial waters shall be measured from a straight line drawn across the entrance of a bay, whatever its breadth may be, if by usage the bay is subject to the exclusive authority of the coastal State: the onus of proving such usage is upon the coastal State."⁹⁴

The above provision relates only to historic bays, Basis of Discussion No. 7 being concerned with ordinary bays.⁹⁵

by the Assembly of the League of Nations on 22 September 1924.

At its second session in January 1926, the Committee adopted seven questionnaires on the subjects which, in its opinion, were sufficiently ripe for international regulation. Questionnaire No. 2 dealt with territorial waters. On 29 January 1926, the Committee circulated to Governments for their comments a Sub-Committee's report on territorial waters (questionnaire No. 2). This report included, *inter alia* (1) a memorandum by Mr. Schücking, rapporteur of the Sub-Committee, with a draft convention annexed; and (2) the draft convention amended by Mr. Schücking in consequence of the discussion in the Committee of Experts.

⁹¹ Ser. L.o.N.P. 1927, v. 1, p. 58.

⁹² *Ibid.*, p. 72.

⁹³ This Committee was appointed under a resolution adopted by the Council of the League of Nations on 28 September 1927, with the terms of reference contained in a resolution of 27 September 1927 of the Assembly. At its session held at Geneva from 28 January to 17 February 1929, the Preparatory Committee examined the replies of Governments to the request for information upon the three questions on the programme of the proposed Conference: territorial waters, etc. As a result of that examination, the Committee drew up bases of discussion for the use of the Conference.

⁹⁴ Ser. L.o.N.P. 1929, v. 2, p. 45.

⁹⁵ Basis of Discussion No. 7: "In the case of bays the coasts of which belong to a single State, the belt of territorial waters shall be measured from a straight line drawn across the opening of the bay. If the opening of the bay is more than ten miles wide, the line shall be drawn at the nearest point to the entrance at which the opening does not exceed ten miles." (*Ibid.*)

88. In its observation, the Preparatory Committee noted that :

“The government replies appear to indicate that agreement can easily be reached to extend the same method of calculation to bays of a greater breadth than ten miles where the coastal State is in a position to prove the existence of a usage to that effect (historic bays).”⁹⁶

89. Bases of Discussion Nos. 7 and 8 concern bays the coasts of which belong to a single State. Basis of Discussion No. 9 concerns bays the coasts of which belong to two or more States :

“If two or more States touch the coast of a bay or estuary of which the opening does not exceed ten miles, the territorial waters of each coastal State are measured from the line of low-water mark along the coast.”⁹⁷

(b) *Report of the Second Committee*

90. In its report to the Conference, the Second Committee (Mr. François, Rapporteur), which had been appointed to study the Bases of Discussion drawn up by the Preparatory Committee, said :

“One difficulty which the Committee encountered in the course of its examination of several points of its agenda was that the establishment of general rules with regard to the belt of the territorial sea would, in theory at any rate, effect an inevitable change in the existing status of certain areas of water. In this connexion, it is almost unnecessary to mention the bays known as ‘historic bays’ ; and the problem is besides by no means confined to bays, but arises in the case of other areas of water also. The work of codification could not affect any rights which States may possess over certain parts of their coastal sea, and nothing, therefore, either in this report or in its appendices, can be open to that interpretation.”⁹⁸

IV. OPINIONS OF LEARNED AUTHORS
AND OF GOVERNMENTS

A. *Opinions of learned authors*

91. The preceding section explained how the subject of historic bays has been treated by expert bodies. The present section will cite opinions expressed on historic bays by selected authors either in personal publications, or in connexion with judicial decisions or in the course of collective efforts at codification. As far as possible, only those opinions will be cited which reflect approval or disapproval of the theory of historic bays. The views of authors on other aspects of the problem will be taken into account in part II of this memorandum.

92. The authors cited are listed in the chronological order of the publication of their works.

Vattel (1758) :⁹⁹

“All that we have said regarding the parts of the sea adjoining the coast is true more particularly and *a fortiori* of roadsteads, bays, and straits, which lend themselves even more easily to occupation and are of greater importance to the

⁹⁶ *Ibid.*

⁹⁷ *Ibid.*

⁹⁸ Ser. L.o.N.P. 1930.V.14, p. 125.

⁹⁹ *Le Droit des Gens*, 1758, Carnegie Institution of Washington, 1916, p. 251.

country's safety. I am only speaking, however, of bays and straits which are small in size, and not of those large areas of the sea that are sometimes so described, such as Hudson Bay or the Straits of Magellan, where no *imperium*, much less a right of ownership, is exercisable. A bay which can be defended at its entrance can be occupied and subjected to the Laws of the Sovereign ; indeed, it should be so occupied, for any such place is much more likely to attract the trespasser than a coast open to the winds and the turbulence of the waves.”

Kent (1878) :¹⁰⁰

“It is difficult to draw any precise or determinate conclusion, amidst the variety of opinions, as to the distance to which a State may lawfully extend its exclusive dominion over the sea adjoining its territories, and beyond those portions of the sea which are embraced by harbours, gulfs, bays and estuaries, and over which its jurisdiction unquestionably extends. . . . The executive authority of that country [the United States], in 1793, considered the whole of Delaware Bay to be within its territorial jurisdiction ; resting its claims upon those authorities which admit that gulfs, channels, and arms of the sea belong to the people with whose lands they are encompassed ; and it was intimated that the law of nations would justify the United States in attaching to their coasts an extent into the sea, beyond the reach of cannon-shot.

“Considering the great extent of the line of the American coasts, their writers contend that they have a right to claim, for fiscal and defensive regulations, a liberal extension of maritime jurisdiction ; nor would it be unreasonable, as they say, to assume, for domestic purposes connected with their safety and welfare, the control of the waters on their coasts, though included within lines stretching from quite distant headlands ; as, for instance, from Cape Ann to Cape Cod, and from Nantucket to Montauk Point, and from that point to the capes of the Delaware, and from the south cape of Florida to the Mississippi. It is certain that their Government would be disposed to view with some uneasiness and sensibility, in the case of war between other maritime Powers, the use of the waters of their coast, far beyond the reach of cannon-shot, as cruising ground for belligerent purposes. In 1793 the Government of the United States thought they were entitled, in reason, to as broad a margin of protected navigation, as any nation whatever, though at that time they did not positively insist upon more than the distance of a marine league from the sea shores ; and, in 1806, they thought it would not be unreasonable, considering the extent of the United States, the shoalness of their coast, and the natural indication furnished by the well-defined path of the Gulf Stream, to expect an immunity from belligerent warfare, for the space between that limit and the American shore. It ought, at least, to be insisted, they urged, that the extent of the neutral immunity should correspond with the claims maintained by Great Britain around her own territory, and that no belligerent right should be exercised within ‘the chambers formed by headlands, or any where at sea within the distance of four leagues, or from a right line from one headland to another.’ ”

R. Phillimore (1879) :¹⁰¹

“Besides the rights of property and jurisdiction within the limit of cannon-shot from the shore, there are certain portions of the sea which, though they exceed this verge, may, under special circumstances, be prescribed for. Maritime territorial rights extend, as a general rule, over arms of the sea, bays, gulfs, estuaries which are enclosed but not entirely surrounded by lands belonging to one and the same State . . . ”

¹⁰⁰ *Kent's Commentary*, 2nd ed. (1878), pp. 100-102.

¹⁰¹ *Commentaries upon International Law*, vol. I, 3rd ed. 1879, p. 284.

Hall (1880):¹⁰²

"It seems to be generally thought that straits are subject to the same rule as the open sea; so that when they are more than six miles wide the space in the centre which lies outside the limit of a marine league is free, and that when they are less than six miles wide they are wholly within the territory of the State or States to which their shores belong. This doctrine however is scarcely consistent with the view, which is also generally taken, that gulfs, of a greater or less size in the opinion of different writers, when running into the territory of a single State, can be included within its territorial waters; perhaps also it is not in harmony with the actual practice with respect to waters of the latter kind... In principle it is difficult to separate gulfs and straits from one another; the reason which is given for conceding a larger right of appropriation in the case of the former than of the latter, viz., that all nations are interested in the freedom of straits, being meaningless unless it be granted that the State can prohibit the innocent navigation of such of its territorial waters as vessels may pass over going from one foreign place to another. If that could be done, it might be necessary to impose a special restriction upon the appropriation of waters which by their position are likely to be so used. Such however not being the case in fact, it is the power of control which has alone to be looked to; and the power of exercising control is not less when water of a given breadth is terminated at both ends by water than when it merely runs into the land. Of practice there is a curious deficiency, and there is nothing to show how many of the claims to gulfs and bays which still find their place in the books are more than nominally alive. It is scarcely possible to say anything more definite than that, while on the one hand it may be doubted whether any State would now seriously assert the right of property over broad straits or gulfs of considerable size and wide entrance, there is on the other hand nothing in the conditions of valid maritime occupation to prevent the establishment of a claim either to basins of considerable area, if approached by narrow entrances such as those of the Zuyder Zee, or to large gulfs which, in proportion to the width of their mouth, run deeply into the land, even when so large as the Bay of Fundy, or still more to small bays, such as that of Cancale."

A. Chrétien (1893):¹⁰³

"I only recognize as integral parts of the maritime territory of the State ports, harbours and roadsteads, bays and small gulfs which penetrate into the land domain and man-made waterways which run across it and connect two seas.

...

"In cases where the entrance to a gulf or bay is sufficiently narrow to be wholly commanded by the cannon of the State holding the two shores, and where, in addition, the size of the bay or gulf is not considerable, the waters therein should be assimilated to ports, harbours and roadsteads indented into the land territory of a State. There are the same reasons for regarding them as subject to the complete and absolute sovereignty of the coastal State. This applies to the Bay of Brest in France, to Jade Bay, the Frisches Haff and the Kurisches Haff in Germany, to the Zuyder Zee in Holland, to the Danish and Norwegian fjords, and to other similar indentations.

"Gulfs and bays of large size should be treated either as non-closed internal seas or as open seas, depending on whether the width of the entrance is smaller or larger than twice the traditional range of cannon, that is to say six nautical miles of sixty to a degree. Consequently, the Gulf of Mexico, the Bay

of Biscay and the Gulf of Lions are open seas. The application of these principles to the Gulfs of Bothnia and of Finland in Europa and to Delaware, Hudson and Conception Bays in America would normally lead to the conclusion that they also are free waters. This solution, however, is not accepted by the Russian, American and English Governments, which declare them to be wholly territorial waters."

Barclay (1894-95):¹⁰⁴

In explaining the exception contained in the final clause of article 3 of the 1894 draft of the Institute of International Law (*supra*, para. 74) this author states:

"... Bays are generally not used for navigation between countries other than the coastal countries. Headlands keep them outside the open routes, separated from the high seas by a clearly defined line. There are, however, many bays which are more than ten or even sixteen miles wide and yet must necessarily be regarded by reason of their position, as under the absolute sovereignty of the coastal State. This is true of the firths of Scotland. The Bay of Cancale is seventeen miles wide; in Chaleur Bay, in Canada, the width is sixteen miles. All these bays are regarded as under the exclusive dominion of the coastal State. It is thus necessary to establish the principle that the status of a bay differs from that of the territorial sea proper."

A. Rivier (1896):¹⁰⁵

"... the portions of the sea, or the seas, which, by reason of their configuration, are called gulfs or bays, are territorial if they border on the territory of a single State and their entrance is sufficiently narrow to be wholly within the range of the coastal batteries. But where there are several coastal States, the gulf is an open sea regardless of its width at the entrance. A gulf is also an open sea, even if it is surrounded by a single State, if its entrance is too wide to be dominated from the coast. This is generally admitted to be the case where the distance between the two shores exceeds ten nautical miles.

"Territorial gulfs are governed by the principles of law which also govern internal seas not designated as gulfs. The littoral sea begins where the territorial gulf ends.

...

"The Frisches Haff and the Kurisches Haff are German, as are the Gulf of Stettin and Jade Bay. The Gulf of Riga is Russian. England has claimed territorial jurisdiction over Conception Bay (Newfoundland) and the Bay of Fundy (Canada)..."

"The Gulf of Bothnia is open sea, as are also the Gulf of Finland — although Russia claims the latter to be Russian — and Delaware and Hudson Bays, despite the contrary opinion of the American and the English. The Behring Sea is open sea."

Drago (1910):¹⁰⁶

In his dissenting opinion in the North Atlantic Coast Fisheries Arbitration between Great Britain and the United States (1910) (*supra*, para. 49), Dr. Drago states:

¹⁰⁴ *Annuaire de l'Institut de droit international*, vol. 13 (1894-95) p. 147.

¹⁰⁵ *Principes du Droit des Gens*, vol. I, Paris (1896), pp. 154-155.

¹⁰⁶ *Scott, op. cit.*, pp. 199-200.

¹⁰² *International Law*, 1880, pp. 127-129.

¹⁰³ *Principes de Droit international public*, Paris, 1893, pp. 100-103.

"So it may be safely asserted that a certain class of bays, which might be properly called the historical bays, such as Chesapeake Bay and Delaware Bay in North America and the great estuary of the River Plate in South America, form a class distinct and apart and undoubtedly belong to the littoral country, whatever be their depth of penetration and the width of their mouths, when such country has asserted its sovereignty over them, and particular circumstances such as geographical configuration, immemorial usage and above all, the requirements of self-defence, justify such a pretension. The rights of Great Britain over the bays of Conception, Chaleur and Miramichi are of this description . . ."

Epitacio Pessôa (1910) : 107

This author's draft code of public international law, submitted to the Commission of Jurists of Rio de Janeiro in 1910, admits the theory of historic bays in these terms:

"Article 54. In gulfs and bays, the territorial sea shall be measured from a straight line drawn between the two extreme points at the narrowest part of the mouth; if this part has a width exceeding ten miles, the measurement shall be taken in conformity with the preceding article and with due regard to acquired rights."

Westlake (1910) : 108

"But although this is the general rule, it often meets with an exception in the case of bays which penetrate deep into the land and are called gulfs. Many of these are recognized by immemorial usage as territorial seas of the States into which they penetrate, notwithstanding that their entrance is wider than the general rule for bays would give as a limit to such appropriation. Examples are the Bay of Conception in Newfoundland, penetrating forty miles into the land and being fifteen miles in average breadth, which is wholly British, Chesapeake and Delaware Bays, which belong to the United States, and the Bay of Cancale, seventeen miles wide, which belongs to France. Similar exceptions to those admitted for gulfs were formerly claimed for many comparatively shallow bays of great width, for example those on the coast of England from Orfordness to the North Foreland and from Beachy Head to Dunnose, which, together with the whole of the Bristol Channel and various other stretches of sea bordering on the British Isles were claimed under the name of the King's Chambers. But it is only in the case of a true gulf that the possibility of occupation can be so real as to furnish a valid ground for the assumption of sovereignty, and even in that case the geographical features which may warrant the assumption are too incapable of exact definition to allow of the claim being brought to any other test than that of accepted usage. It is sometimes said and may be historically true that all sovereignty now enjoyed over the littoral sea or certain gulfs is the remnant of the vast claims which, as we have seen, were once made to sovereignty over the open sea and which it is held have been gradually reduced to a tolerable measure through such intermediate stages as that of the King's Chambers; and the impossibility of putting the claim to gulfs in a definite general form may be thought favourable to that view. None the less however the rights which are now admitted stand on a basis clear and solid enough to distinguish and support them."

Fauchille (1925) : 109

"If the practice of many States thus seems to conflict with

the principle, which today seems to predominate among the authorities and in treaty-made law, that the only territorial gulfs and bays are those which have an entrance not exceeding ten miles in width, many authors and the statutes of some States recognize that this principle should suffer at least one exception. According to these, there exist certain gulfs and bays which, despite their great width, must be declared under the sovereignty of the State which surrounds them. These gulfs and bays are what are called *historic* or *vital* bays, as distinct from others which are referred to as *common* or *ordinary* bays. What exactly is the correct definition of a historic or vital bay? It is one of the large gulfs or bays the territorial character of which has been recognized by long-established usage and undisputed custom . . ."

P. C. Jessup (1927) : 110

"Turning to the second point raised above, — namely, prescriptive rights, — one is forced to the rather unsatisfactory conclusion that for large bays each case should be determined on its own merits and that the status of any particular bay more than six miles wide rests upon the success with which the littoral State has succeeded in pressing its claim to entire jurisdiction over that body of water. It will appear below that this general theory in its specific application has been extremely useful and there is no doubt that in so far as already established, it can not be discarded. Where the mouth of a bay is not of very great extent but the bay itself opens up widely well within the body of the country, — as is the case with the Chesapeake and Delaware bays of the United States, — it seems highly proper that the littoral State should have complete authority over the water so lying within its territory. To make such a principle generally useful for universal application, it would practically be necessary for the nations of the world to meet in conference with the assistance of geographic experts and to make a list of all the bays of the world which were to be considered entirely the property of a single country. There seems to be little chance that such a conference could be arranged or that its labours would be successful if it were to be convoked. Holding in abeyance, then, the general rule which is to govern all bays, it must be admitted that there are certain bodies of water to which individual States by general acquiescence or long usage have acquired the absolute right or title."

The same author states in a later passage :

"It is believed that it will appear from a study of this material that no established rule of international law exists as to bays except to the effect that bays not more than six miles wide are deemed territorial waters as well as those to which a nation has established a prescriptive claim. Such a prescriptive claim may be established over bays of great extent; the legality of the claim is to be measured, not by the size of the area affected, but by the definiteness and duration of the assertion and the acquiescence of foreign Powers. The evidence of international practice and usage does not indicate that a claim to a large bay is illegal."

Antonio Sanchez de Bustamante y Sirven (1930) : 111

"A solution is required for the problem of historic bays, by virtue of which the coastal State is recognized the right over them, whatever the extent of their openings. There are many in this case, both great Powers and countries less strong or materially not very great. As is natural, there is a tendency to convert into a *de jure* rule this *de facto* situation."

107 *A Codificação Americana do Direito Internacional*, vol. III, p. 36.

108 *International Law*, 2nd ed., Cambridge, 1910, pp. 191-192.

109 *Traité de droit international public*, vol. I, Paris, 1925, p. 380.

110 *The Law of Territorial Waters and Maritime Jurisdiction*, 1927, pp. 362-363, 382.

111 *The Territorial Sea*, New York, 1930, p. 99.

Gidel (1930-1934):¹¹²

"The theory of 'historic waters', whatever name it is given, is a necessary theory; in the delimitation of maritime areas, it acts as a sort of safety valve; its rejection would mean the end of all possibility of devising general rules concerning this branch of the public international law of the sea."

G. Scelle (1946-1947):¹¹³

"Without rejecting the automatic system altogether, Governments have always made a reservation regarding 'historic bays', which are the widest and of the greatest importance to their interests. They contend that these maritime areas which they have always claimed as reserved for their exclusive use and which are, in fact, closed to common traffic by an immemorial usage accepted by other States should be regarded not only as territorial waters but as internal waters. According to this view, then, the claim rests on a form of prescription.

"We believe that there are valid grounds for recognizing prescription as a mode of acquiring rights in international law. Indeed, we think that in the international system prescription is even more fundamental than in municipal systems, inasmuch as it is very generally recognized that prolonged possession of control produces effects in law. In this, as in all primitive legal systems, it is the *occupation* that lies at the root of the title. The essential difference between international law and municipal law in this respect is that in the former the period of prescription is indeterminate and is governed in each case by the test of 'reasonableness'. In any event, the onus is on the claimant State to prove its claim by showing 'immemorial' usage and 'acceptance', at least by implication, as well as the absence of any suspension or interruption."

Pitt-Cobbett (1947):¹¹⁴

"Gulfs and bays running into the territory of a single State are also commonly regarded as 'territorial waters' and hence as subject to the sovereignty and jurisdiction of the territorial Power. It is universally admitted that this is so, if the width of the gulf or bay at its point of actual junction with the open sea does not exceed six miles. The North Sea Convention of 1882, already considered, extends this to ten miles. There are, however, territorial bays and gulfs whose entrance largely exceeds this limit. Thus, as we have seen, Conception Bay, with an entrance twenty miles wide, was held to be part of British territory, and Hudson Bay, with an entrance of fifty miles, is also claimed as territorial water by Great Britain. So, too, the United States include in their 'territorial waters' Chesapeake Bay, the entrance to which is twelve miles from headland to headland; Delaware Bay, which is eighteen miles wide; and Cape Cod Bay, which is thirty-two miles wide; as well as other inlets of a similar kind. France, for special reasons, claims the Bay of Cancale, the entrance to which is seventeen miles in width. Norway claims the Varanger Fjord, with an entrance of thirty-two miles, as territorial waters. Such claims would probably be admitted by other States, subject to the body of water in question exhibiting a well marked configuration as a gulf or bay; and perhaps subject also to such claims being confirmed by prescription and acquiescence. But it would not extend to a long curvature of the coast with an open face; or to claims such as those formerly made by the Crown in England as regards the 'Kings Chambers'; or to a claim such as that put forward by the United States in the Behring Sea controversy. So far as such bodies of water are rightly regarded

¹¹² *Op. cit.*, p. 651.

¹¹³ *Droit international public*, 2nd ed., Paris, 1946-47, pp. 435-436.

¹¹⁴ *Cases on International Law*, 6th ed., 1947, p. 158.

as territorial, they will be subject alike to the sovereignty and jurisdiction of the territorial Power to the same extent and for the same purposes as those already indicated in the case of the littoral or marginal sea."

Higgins and Colombos (1952):¹¹⁵

"...The best rule appears to be that in the case of bays bounded by the territory of one and the same State, the ordinary distance of territorial waters should be generally applied and therefore a limit of six marine miles should be recognized to the littoral State. This rule is subject to the exception that on historical or prescriptive grounds, or for reasons based on the special characteristics of a bay, the territorial State is entitled to claim a wider belt of marginal waters, provided that it can show affirmatively that such a claim has been accepted expressly or tacitly by the great majority of other nations."

M. Bourquin (1952):¹¹⁶

"...But we should note immediately that it would never be possible to accept it [the ten-mile rule] without qualifying it by important exceptions. Its rigid application would so seriously upset the existing situation that it cannot even be contemplated. The number of bays the opening of which exceeds ten miles and which are nevertheless wholly within the internal waters of the coastal State is considerable. Unless we wish to accuse the States to which they belong of infringing the rules of international law, we must therefore validate their claims by recognizing an exceptional rule."

A. N. Nikolaev (1954):¹¹⁷

"In areas containing internal maritime waters or other national waters, the territorial sea is measured from the outer limit of those waters. The internal waters of the USSR include the Sea of Azov, the Gulf of Riga, the White Sea (to the south of a straight line drawn from Cape Svyatoy Nos to Cape Kanin Nos) and Cheskaya Bay (south of a line going from Cape Mikulino to Cape Svyatoy Nos).

"The author of this work is in full agreement with the Soviet scholars who regard as 'historic' and subject to the régime of the internal waters of the USSR the seas which form bays in the Siberian coast: the Sea of Kara, the Laptev Sea, the East Siberian Sea and the Chukchi Sea. Many centuries were required by Russian navigators to establish mastery over these seas, which now constitute a national waterway of the Soviet State. Through these seas passes the northern maritime route from Murmansk and Archangel to Vladivostok, which was only opened through the prodigious efforts of our heroic Soviet people. In this connexion, we should also recall the judgement delivered on 18 December 1951 by the International Court of Justice in the dispute between the United Kingdom and Norway: this judgement recognizes that the maritime route of Indreleia, which follows the Norwegian coast and was only rendered navigable by special work executed by Norway, forms part of Norwegian internal waters."

Oppenheim (1955):¹¹⁸

"Such gulfs and bays as are enclosed by the land of one and the same littoral State and have an entrance from the sea not

¹¹⁵ Higgins and Colombos, *The International Law of the Sea*, London, 1943, p. 112. (French text published in 1952.)

¹¹⁶ *Les baies historiques, Mélanges Georges Sauser-Hall*, 1952, p. 38.

¹¹⁷ *Problema territorialnykh vod v mezhdunarodnom prave* (1954) pp. 207-208.

¹¹⁸ *International Law*, 8th ed., 1955, pp. 505-508.

more than six miles wide are certainly territorial; those on the other hand, that have an entrance too wide to be commanded by coast batteries erected on one or both sides of it, even though enclosed by one and the same littoral State, are certainly not territorial. These two propositions may safely be maintained. . . .

"Gulfs and bays surrounded by the land of one and the same littoral State whose entrance is so wide that it cannot be commanded by coast batteries, and, further, as a rule,¹ all gulfs and bays enclosed by the land of more than one littoral State, however narrow their entrance may be, are non-territorial. They² are parts of the open sea, the marginal belt inside the gulfs and bays excepted. They can never be appropriated; . . ."

¹ For an exception to the rule, see the next note as to the Gulf of Fonseca."

² This is not uncontested. A few writers—see, for instance, Twisse, i, sec. 181—assert that narrow gulfs and bays surrounded by the land of two different States are territorial, the central line dividing the territorial portions. However, the majority of writers do not accept this opinion, and it would seem that the practice of States likewise rejects it, except in the case of such bays as possess the characteristics of a closed sea. Thus, in the case of *San Salvador v. Nicaragua*, the International Court of the Central American Republics (A.J., 11 (1917) pp. 693, 700-717) decided in 1917 that, taking into consideration the geographical and historical conditions as well as its situation, extent, and configuration, the Gulf of Fonseca must be regarded as 'an historic bay possessed of the characteristics of a closed sea', and that it therefore was part of the territories of San Salvador, Honduras and Nicaragua. The decision of this Court has, of course, only force with regard to the three Central American States concerned; but the United States acknowledges the territorial character of this Gulf. The attitude of other States is not known.

"As regards the Bay of Fundy, see the *Schooner Washington*, British-American Claims Commission, 1853-1855, Report of Decisions, page 170; Scott, *Cases*, p. 229."

G. *Balladore Pallieri* (1956) : 119

"As a further exception [to the foregoing principle], some States have maintained or acquired sovereignty of certain bays known as 'historic' bays. These are often quite spacious bays, the mouth being sometimes tens of miles wide, which certainly cannot be considered as part of the territorial sea on the basis of the rules governing that sea which will be set out hereunder. Claims made by States to sovereignty over such bays have thus a totally different basis and must be considered as a last and somewhat pale remnant of the ancient claim to sovereignty over the high seas. The legal basis of each of these claims to a 'historic' bay is constituted by continued usage with the explicit or implicit consent of the members of the international community. As we shall soon see, however, these are exceptional departures which do not in any way detract from the validity of the general principle [that the sea cannot form the subject of an act of appropriation]. Furthermore, these exceptions are progressively disappearing. . . . At present, only the following maritime areas appear to remain subject to sovereignty as an exception to the general principle: Conception and Chaleur Bays (Canada); Chesapeake and Delaware Bays, Monterey Bay and Long Island Sound (United States of America); the Bays of Fundy and Miramichi; Cancale or Granville Bay; the Bristol Channel (United Kingdom); Vestfjord (Norway); the Gulf of Tunis (Tunisia); the Gulf of Fonseca (Costa Rica, Honduras, Nicaragua and El Salvador); and the Zuyder Zee (Netherlands). In addition, the International Court has declared (judgement of 18 December 1951) that, under a recently established usage, Norway is authorized to measure its territorial sea from a baseline which is different from the normal baseline and by virtue of which it has more extensive sovereign rights over maritime areas."

¹¹⁹ *Diritto Internazionale Pubblico*, 7th ed. (revised) (1956), pp. 377-378.

B. *Opinions of Governments*

93. Certain Governments expressed their opinion on the subject of historic bays in their replies to the list of points prepared by the Preparatory Committee of the Codification Conference of 1930 (*supra*, para. 87):

Australia : 120

"There are certain historic bays whose width exceeds six or even ten miles which are regarded by general acquiescence as territorial waters. In these cases, the coastal belt of territorial waters is measured from a baseline drawn across the bay at the point so recognized as being the limits of national territory. In the case of bays whose coasts belong to two or more States, territorial waters should be measured from mean low-water spring tide and follow the sinuosities of the coast."

Belgium : 121

"Any claim by a State to a breadth of territorial waters greater than that agreed upon in an international convention could only be accepted if justified by undisputed international usage based on a special geographical configuration."

Canada : 122

"In the case of bays where the distance from headland to headland is more than ten miles but the bay itself cannot be entered without traversing territorial waters, the waters of such bays shall be national waters.

"In the case of bays where the distance from headland to headland is more than ten miles and the bay can be entered without traversing territorial waters, the base line is a straight line drawn across the bay at the place where the entrance first narrows to ten miles.

"An exception should be made in the case of bays which, for historic or geographic reasons, are considered as part of the inland waters of the coastal State. Here the base line is drawn from headland to headland."

France : 123

"Granville Bay is recognized to consist of territorial waters by the Fisheries Convention of 2 August 1839, concluded with Great Britain (Article 1), and by Article 2 of the Fisheries Regulations concluded on 24 May 1843 with Great Britain."

Germany : 124

"As regards 'historic bays', it would seem right in principle to require the coastal State making such a claim in respect of bays exceeding six nautical miles in width to prove that the bay has acquired the status of 'inland waters' of the coastal State through long usage generally recognized by other States."

Great Britain : 125

"By general acquiescence, certain historic bays have been recognized as forming part of the national territory, even though their width exceeds that indicated in the earlier part of the

¹²⁰ Ser. L.O.N.P. 1929.V.2, p. 117.

¹²¹ *Ibid.*, p. 120.

¹²² *Ibid.*, Supplement (a), p. 2.

¹²³ *Ibid.*, p. 160.

¹²⁴ *Ibid.*, p. 111.

¹²⁵ *Ibid.*, p. 163.

answer on this point. In the case of such bays, the territorial waters are measured from a base line passing across the bay at the place recognized as forming the limits of the national territory."

Japan : 126

"In the case of a bay or gulf the whole of which is regarded, by time-honoured and generally accepted usage, as belonging to the coastal State in spite of the fact that the distance between the two coasts exceeds ten nautical miles, the territorial waters extend seawards at right angles from a straight line drawn across the bay or gulf at the entrance."

Norway : 127

"There is no rule in Norway regarding the maximum distance between the starting-points of the base lines from which the breadth of the territorial waters is calculated. In choosing the places which, according to the Decree of 1812, are to be regarded as the extreme points, the particular circumstances of each part of the coast have to be taken into account. There may be historical, economic or geographical factors, such as a traditional conception of territorial limits, the undisturbed possession of the right of fishing, exercised by the coastal population since time immemorial and necessary for its subsistence, and also the natural limits of fishing-grounds.

...

"In this connexion, it should also be observed that all fjords, bays and coastal inlets have always been claimed as part of the Norwegian maritime territory, whatever the width at their mouth and no matter whether they are formed by the mainland or by developments of the 'Skjaergaard'. In determining the starting-points for calculating the breadth of territorial waters, the base line chosen is the lowest-water mark."

Netherlands : 128

"The Netherlands see no reason to object to the recognition of historic rights in respect of certain bays; such rights would, however, have to be precisely defined in the proposed Convention."

Poland : 129

"... Regard should also be had to established usage. If a State exercises sovereignty over a bay and no objection has been raised by other States, the waters of the bay should be regarded as territorial waters."

Portugal : 130

"There are, however, bays with a breadth largely exceeding the limits previously suggested which nevertheless are regarded in their entirety as part of the national territory of the States to which their shores belong. These are what are known as historic bays. This exception is founded on the domestic legislation of the various States, their higher interests and necessities, and long-established usages and customs. Moreover, the special position of these bays has been recognized both in judgements of the courts and in certain treaties. From a variety

of circumstances, the State to which the bay belongs finds it necessary to exercise full sovereignty over it without restriction or hindrance. The considerations which justify their claim are the security and defence of the land territory and ports, and the well-being and even the existence of the State.

"In addition, these bays are in some cases recognized spawning- and breeding-grounds of certain species of fish of high commercial and industrial value. These species would tend to disappear if no restrictions were placed on the methods of fishing. Again, such bays may be very productive fishing-grounds, and for that reason it is absolutely essential that the industry there should be regulated and controlled. As was previously stated, this would only be feasible if the sovereignty of the bays was assigned to the State owning its shores.

"It should be specially pointed out that regulation and control of this kind would also be advantageous to other States as, owing to the well-known fact of the dispersion of species, the open sea would be abundantly stocked with fish.

"Moreover, the population on the shores of certain bays enjoy the exclusive right of fishing through immemorial and unbroken usage, and fishing is their best and most remunerative occupation. The retention of this exclusive right is a matter of supreme importance for such populations.

"In the case of any bay possessing some or all of the characteristics mentioned above, no limitation is or can be placed on its breadth reckoned along the lines joining the outermost headlands. These bays belong wholly to the States concerned and form an integral part of their territory, the base line for calculating the belt of territorial waters being the line uniting the outermost points of the bay.

"In this way Portugal regards as part of her European continental territory the bays formed by the estuaries of the rivers Tagus and Sado, comprising the areas included between Cape Razo and Cape Espichel and between Cape Espichel and Cape Sines respectively."

PART II

The theory of historic bays: an analysis

I. LEGAL STATUS OF THE WATERS OF BAYS REGARDED AS HISTORIC BAYS

94. Are the waters of a bay which is regarded as a historic bay part of the "territorial sea", or are they assimilated to "internal waters"? This question is very important, for different rules govern the two parts of the sea, particularly as regards one point of vital interest in international law: the innocent passage of foreign vessels. As a general rule, States are not bound under international law, to allow such passage in their internal waters.

95. For the purpose of determining the legal status of historic bays, two distinct situations have to be considered: (a) historic bays bordering on the shores of a single State; and (b) those bordering on the shores of two or more States.

A. Historic bays the coasts of which belong to a single State

96. The distinction between the waters within historic bays surrounded by the territory of a single State and the territorial sea seems to be a well established fact. Nevertheless, the distinction has not always been formulated with all the desirable clarity. For example, the

¹²⁶ *Ibid.*, p. 168.

¹²⁷ *Ibid.*, p. 174.

¹²⁸ *Ibid.*, p. 177.

¹²⁹ *Ibid.*, p. 182.

¹³⁰ *Ibid.*, p. 184.

note addressed by the Norwegian Minister of the Interior to the Norwegian Minister of Foreign Affairs concerning the Vestfjord, states that the fjord in question "is considered to form part of the territorial sea of Norway" (*supra*, para. 38). In its reply to questionnaire No. 2 prepared in 1926 by the Committee of Experts for the Progressive Codification of International Law, the Norwegian Government stated that "Norwegian bays and fjords have always been regarded and claimed by Norway as forming part of the territory of the Kingdom". In the same paragraph, however, the Norwegian Government added that "Norwegian law has always held from most ancient times that these bays and fjords are *in their entirety* an integral part of Norwegian territorial waters" (*supra*, para. 35).

97. In its reply to the list of points prepared by the Preparatory Committee of the Codification Conference, 1930, the French Government stated that "Granville Bay is recognized to consist of territorial waters" (*supra*, para. 93). Similarly the Polish Government stated that "if a State exercises sovereignty over a bay and no objection has been raised by other States, the waters of the bay should be regarded as territorial waters" (*supra*, para. 93). The Egyptian Government said that "according to Egyptian public law, the breadth of the territorial waters is . . . , except as regards the Bay of El Arab, the whole of which is, owing to its geographical configuration, regarded as territorial waters."¹³¹

98. Some of the authorities also seem—at least, that is the impression one obtains from the language they use—to confuse the waters of historic bays with the territorial sea. For example, De Cussy regards certain maritime areas such as the Sea of Azov, the Zuyder Zee and the Gulf of Bothnia, as part of the territorial sea (*supra*, para. 12). It may well be that the confusion is often due to the looseness of the terminology employed rather than to differences of opinion on the actual principle.

99. Westlake states that many gulfs are "recognized by immemorial usage as territorial sea of the States into which they penetrate". Yet in citing certain examples, he goes on to say: "The Bay of Conception . . . which is wholly British . . . Chesapeake and Delaware Bays, which belong to the United States, and the Bay of Cancale . . . which belongs to France" (*supra*, para. 92).

100. Similarly, Pitt-Cobbett states that Conception Bay "was held to be a part of British Territory"; that Hudson Bay "is also claimed as territorial water by Great Britain"; that the United States "include in their territorial waters" Chesapeake Bay, Delaware Bay and others; that France "claims" the Bay of Cancale; and that Norway claims Varangorfjord "as territorial waters" (*supra*, para. 92).

101. The terms in which these opinions are expressed would hardly justify the conclusion that their authors necessarily assimilate the waters of historic bays to the territorial sea. The distinction between these two classes of maritime area is often obscured by defective

terminology. Areas normally regarded as "internal waters" are variously referred to as "territorial waters", "national waters" or "waters forming part of the territory". The International Law Commission has now put an end to this terminological chaos by giving each of the three parts of the sea a distinct designation: "the high seas", "the territorial sea" and "internal waters".

102. The distinction between the waters of historic bays and the territorial sea is always clearly drawn in draft codes. According to the draft codes, whether prepared by learned societies or under the auspices of the League of Nations—all of which use more or less the same formula regarding the delimitation of the territorial sea in bays—the line from which the territorial sea is to be measured in a bay is a straight line drawn across the mouth at the point nearest to the sea where the width of the bay does not exceed a given distance (ten miles, twelve miles, etc.).¹³² The fact that the territorial sea does not begin, in a bay, until a fictitious line drawn in the sea at a certain distance from the coast clearly implies that the waters situated to landward of that line are not part of the territorial sea. The same applies, therefore, to the waters of historic bays, the status of which is recognized by these draft codes as an exception (or as a possible exception) to the general rule applicable to ordinary bays. The draft convention amended by Mr. Schücking in consequence of the discussion in the Committee of Experts (*supra*, para. 86) even states expressly, in article 4, that the waters of the bays defined in that article are to be assimilated to internal waters; and the bays defined in that article are those which are bordered by the territory of a single State and in which the territorial sea is measured from a straight line drawn across the bay at the part nearest the opening towards the sea where the distance does not exceed ten miles "unless a greater distance has been established by continuous and immemorial usage".

103. The draft articles prepared by the International Law Commission¹³³ also draw a clear distinction between the waters of bays and the territorial sea. The Commission's draft assimilates the waters of ordinary bays, which it defines and for which it lays down the

¹³² The same procedure for delimiting the territorial sea in bays is prescribed in many treaties and national statutes; e.g. Treaty of 2 August 1939 between Great Britain and France, article 9 (de Martens, *Nouveau recueil général de traités*, vol. XVI, p. 254); Convention of 6 May 1882 between Germany, Belgium, Denmark, France, Great Britain and the Netherlands, article 2 (*Ibid.*, 2nd series, vol. XIX, p. 510); Treaty of 27 March 1893 between Portugal and Spain, article 2 (*British and Foreign State Papers*, vol. 85, p. 416); Treaty of 31 December 1932 between Denmark and Sweden, article 2 (*League of Nations Treaty Series*, vol. 139, p. 215).

National statutes: Brazil, Decree No. 5796 of 11 June 1940, article 17 (1) (*Collecção das leis*, 1940, vol. VI); Italy, Navigation Code of 30 March 1942, article 2 (*Gazzetta Ufficiale* No. 75, 1942).

A number of statutes classify as internal waters all bays bordering on the country's shores; some of these specify limits, others do not. See for example, the Yugoslav Act of 1 December 1948 (*Sluzbeni List*, vol. 4, No. 106, 8 December 1948, item 875, p. 1739).

¹³³ *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159)*.

¹³¹ *Ibid.*, p. 125; see also *supra*, para. 24.

applicable rules, to internal waters. Article 7, which is reproduced in its entirety above (para. 2), expressly states that the waters within a bay, the coasts of which belong to a single State and the width of which at the mouth does not exceed fifteen miles, shall be considered internal waters. In a bay with a wider opening, the only waters regarded as internal are those enclosed by a line drawn within the bay at the point where its width does not exceed fifteen miles. The article also provides for the case where different lines of a length of fifteen miles can be drawn. In that case, that line should be chosen which encloses the maximum water area within the bay. Paragraph 4 of the same article then provides that these rules do not apply to historic bays. Accordingly, following the precedent of the draft codes referred to in the preceding paragraph, the International Law Commission's draft recognizes that in the case of the so-called historic bays there may be some departure from the restrictive rules envisaged for ordinary bays.

104. The exception contained in article 7, paragraph 4, covers, in addition, certain other noteworthy cases, namely those where the straight baseline system provided for in article 5 is applied.¹³⁴ The full text of article 5 reads as follows:¹³⁵

"1. Where circumstances necessitate a special régime because the coast is deeply indented or cut into or because there are islands in its immediate vicinity, the baseline may be independent of the low-water mark. In these cases, the method of straight baselines joining appropriate points may be employed. The drawing of such baselines must not depart to any appreciable extent from the general direction of the coast, and the sea areas lying within the lines must be sufficiently closely linked to the land domain to be subject to the régime of internal waters. Account may nevertheless be taken, where necessary, of economic interests peculiar to a region, the reality and importance of which are clearly evidenced by a long usage. Baselines shall not be drawn to and from drying rocks and drying shoals.

"2. The coastal State shall give due publicity to the straight baselines drawn by it.

"3. Where the establishment of a straight baseline has the effect of enclosing as internal waters areas which previously had been considered as part of the territorial sea or of the high seas, a right of innocent passage, as defined in article 15, through those waters shall be recognized by the coastal State in all those cases where the waters have normally been used for international traffic."

105. In its draft, therefore, the Commission envisages another category of waters which it likewise describes as internal waters. These are the maritime areas lying to landward of straight baselines the drawing of which is justified by the special geographic features of the coast or, "where necessary", by economic interests "the reality and importance of which are clearly evidenced by a long usage". These provisions were drafted on the basis of the judgement of the International Court of Justice in the *Anglo-Norwegian Fisheries Case* (18 December 1951). The Court held that certain basic considerations brought to light criteria which could provide courts with an adequate basis for their decision regarding the delimitation of

the territorial sea. In the light of these considerations, the Court approved the Norwegian system of delimitation (*supra*, para. 64) prescribed by the Decree of 1935 on the grounds of "well-established national titles of right", "the geographical conditions prevailing on the Norwegian coasts" and the "vital interests of the inhabitants of the northernmost parts of the country". The Court held that the Norwegian waters situated between the baseline and the land were internal waters.^{136 137}

106. Nevertheless, the provisions of the International Law Commission's draft governing this category of internal waters are so worded that, in certain circumstances, these waters may not enjoy exactly the same status as internal waters normally enjoy, for within these internal waters created by the drawing of straight baselines, the coastal State is bound to recognize the right of innocent passage in all cases where those waters "have normally been used for international traffic".

107. In effect, the Commission has propounded a principle which could be termed the principle of the historic right of innocent passage in a specified category of internal waters. It seems, however, that this principle can only be invoked in wholly new situations. The commentary to article 5 states:

"The question arose whether in waters which become internal waters when the straight baseline system is applied the right of passage should not be granted in the same way as in the territorial sea. Stated in such general terms, this argument was not approved by the majority of the Commission. The Commission was, however, prepared to recognize that if a State wished to make a fresh delimitation of its territorial sea according to the straight baseline principle, thus including in its internal waters parts of the high seas or of the territorial sea that had previously been waters through which international traffic passed, other nations could not be deprived of the right of passage in those waters. Paragraph 3 of the article is designed to safeguard that right."

108. Article 5, paragraph 3, which is the paragraph in which this principle is stated, was non-existent in the draft articles on the régime of the territorial sea prepared by the Commission at its seventh session. The Commission inserted this paragraph in its final draft in the light of observations made by Governments. In the comments submitted by the Government of the United Kingdom, it is stated that:¹³⁸

"... Her Majesty's Government regard it as imperative that, in any new code which would render legitimate the use of baselines in proper circumstances, it should be clearly stated that the right of innocent passage should not be prejudiced thereby, even though this may involve that, in certain cases, this right shall become exercisable through internal as well as through territorial waters. Her Majesty's Government consider that the Commission would be performing a most useful function if it were to give mature consideration to the problem how the use of baselines is to be reconciled with existing rights of passage. For their part, Her Majesty's Government can only say at this

¹³⁶ *Fisheries Case (United Kingdom v. Norway), Judgement of 18 December 1951; I.C.J. Reports, 1951, p. 132.*

¹³⁷ See also the Court's ruling on the legal status of "historic waters", *supra*, para. 58.

¹³⁸ *Official Records of the General Assembly, Tenth Session, Supplement No. 9 (A/2934), pp. 43 and 44.*

¹³⁴ For the text of article 7, paragraph 4, see *supra*, para. 2.

¹³⁵ *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159), pp. 13 and 14.*

stage that, in their view, in case of conflict, the right of passage, as a prior right and the right of the international community, must prevail over any alleged claim of individual coastal States to extend the areas subject to their exclusive jurisdiction."

109. In this connexion, it is pertinent to recall the United Kingdom's admission in the Anglo-Norwegian Fisheries Case that Norway was entitled to claim as Norwegian internal waters, on historic grounds, all fjords and sunds which fell within the conception of a bay (conclusion No. 5); and that, also on historic grounds, Norway was entitled to claim as Norwegian territorial waters all the waters of the fjords and sunds which had the character of legal straits (conclusion No. 9) (*supra*, para. 57). The United Kingdom contended, however, that part of those waters, including those forming the channel known as the Indreleia, constituted an international route and that, consequently, the right of innocent passage through it could not be denied. In dealing with this last submission, the Court held that the Indreleia was not a strait at all, but rather a navigational route prepared as such by means of artificial aids to navigation provided by Norway. In those circumstances, the Court was unable to accept the view that the Indreleia had a status different from that of the other waters included in the *skjaergaard*. The Court did, however, qualify its ruling on the Indreleia by stating that it applied only "for the purposes of the present case" (*supra*, para. 72).

110. It will be noted that, in this case, the United Kingdom, in taking the view that the "historic waters" constituted an international navigational route, proposed that those waters should be assimilated not to internal waters but to the territorial sea. Accordingly, the proposal took into account the legal incompatibility between the concept of internal waters and that of the right of innocent passage of foreign vessels. On the other hand, it constitutes a departure from the rule that historic waters are internal waters.

111. The treatment of the waters of historic bays as internal waters is recognized in the decisions of national courts relating to certain bays, such as the Bay of Chaleur, Chesapeake Bay, Conception Bay and Delaware Bay (*supra*, paras. 14-23).

112. In their replies to the list of points prepared by the Preparatory Committee of the Codification Conference, 1930, several Governments expressed the opinion that the waters of historic bays were internal waters (see, for example, the replies of the Governments of Germany,¹³⁹ Canada,¹⁴⁰ Great Britain,¹⁴¹ Japan¹⁴² and Portugal¹⁴³). The majority of the learned authorities take the same view.

113. Sir Cecil Hurst¹⁴⁴ makes a special point of showing that the waters of bays are internal waters and not part of the territorial sea. In support of his argu-

¹³⁹ Ser. L.o.N.P. 1929.V.2, p. 111.

¹⁴⁰ *Ibid.*, Supplement (a), p. 2.

¹⁴¹ *Ibid.*, p. 163.

¹⁴² *Ibid.*, p. 168.

¹⁴³ *Ibid.*, p. 184.

¹⁴⁴ "The Territoriality of Bays", *British Year Book of International Law*, 1922-23, pp. 42-54.

ment, he cites, first, the opinion expressed by Lord Hale, in *De Jure Maris* (p. 1), which has been followed in various judicial decisions and which forms the substance of British doctrine on that subject:

"That arm or branch of the sea which lies within the *fauces terrae* where a man may reasonably discern between shore and shore is, or at least may be, within the body of a county and therefore within the jurisdiction of the sheriff or coroner."

114. The author also cites some judicial decisions, among them those which determine the status of Bay Conception, Chaleur Bay and Chesapeake Bay. He concludes this part of his article by saying:

"The series of precedents and authorities quoted above, all working back ultimately to Lord Hale's principle that waters *intra fauces terrae* may be within the body of a county, confirm the proposition that the interior waters of a bay are national waters¹⁴⁵ and not territorial waters, but the question of what is for this purpose a bay, that is to say, what body of water *intra fauces terrae* can be so appropriated as to become part of the national territory, must still be considered."

115. After considering the rules applicable to the bays which should be considered as forming part of the national territory, Sir Cecil concludes as follows:

"A bay for this purpose means a defined inlet, penetrating into the land, moderate in size and with both shores subject to the same sovereign. An inlet at the mouth of which one can see clearly from shore to shore may be presumed to have been appropriated as part of the national territory and will, therefore, constitute a bay; for working purposes this distance may be taken as ten miles and the line will then pass from headland to headland. In the case of a larger inlet, it lies on the territorial State to establish that it has been appropriated as part of the national territory. Where this is not proved, the line from which the territorial waters are measured will not pass from headland to headland but will cross the inlet at the spot where it first narrows to such an extent as to be obviously a bay; in practice this may be taken as the place where it first narrows to ten miles.

"All the waters lying inwards from this base line are national waters and form part of the national territory. They stand in all respects on precisely the same footing as the national territory. Waters within the three-mile limit to seawards of this base line are territorial waters. In territorial waters foreign States are entitled, to the extent recognized by international law, to the exercise of the right of passage. In national waters there is no such right."

116. Gidel¹⁴⁶ firmly insists that the waters of historic bays, like those of ordinary bays whose width does not exceed the distance adopted for determining whether or not an inlet constitutes a bay (in his opinion, ten miles), are internal waters. He expresses himself as follows:

"... a statement that a bay, for example one within two headlands fifty miles apart from each other, is a 'historic' bay, means that all the waters of that bay enclosed by that fictitious line between the two headlands are internal waters and that only from that line, representing the outer limit of 'internal waters', can the territorial sea be measured. If the bay were not 'historic', the belt of territorial sea would follow the

¹⁴⁵ By "national waters" the author means "internal waters". He uses the first of the two expressions in order to draw a clear distinction between the "marginal belt, commonly known as territorial waters, and the bay".

¹⁴⁶ *Op. cit.*, pp. 624-627.

sinuosities of the coast and, as long as those sinuosities created no small bays with a mouth wider than the distance adopted for determining whether an inlet constitutes a bay (in our opinion, ten miles), that bay would contain no internal waters besides the very small area between the low water mark and the shore. When once a bay has been held to be 'historic', all of its waters become internal waters with all the consequences which the status of internal waters entails. One consequence is that the coastal State is no longer bound to admit the 'innocent passage' of foreign vessels in the waters of that bay.

"It cannot be too strongly stressed, therefore, that 'historic' waters are not merely waters over which the coastal State claims certain rights, certain powers taken from the aggregate of the powers which together constitute what is called 'sovereignty'; there is nothing in common between the appropriation by a State of a certain area as 'historic waters' and the extension of some of that State's powers beyond its maritime territory into the part of the high seas known as the contiguous zone. In a sea area which has acquired a 'historic' character, the coastal State may wholly deny to the other members of the international community any access whatsoever to the subsoil, soil, mass and surface of the water, or the superjacent air space. Furthermore, the limits of the maritime territory of that State are advanced by an equivalent distance seawards, the baseline of the territorial sea coinciding with the outer limit of internal waters. Consequently, any claim by a State alleging a 'historic' title to a portion of the sea which is not part of its maritime territory under the generally accepted rules has extremely serious consequences for all the other States, without distinction.*"

* "As a rule, the coastal State will not in fact claim over the waters which it means to transfer to the 'historic' category all of the rights which a coastal State is entitled to exercise in its internal waters; normally, only the exercise of the right of fishing (or, in the case of certain species of marine fauna, the right of hunting) will be claimed as the exclusive prerogative of its nationals or made conditional, without discrimination on grounds of nationality, on the previous issue of a licence. Such a prohibition against foreign fishermen in a specified area of water does not prove that that area is regarded as internal waters, for international law permits the exclusion of foreign fishermen from waters forming part of the territorial sea. Such a denial of the right to fish in areas where that right had until then been exercised implies that those areas are now regarded by the coastal State as at least within its territorial sea; the coastal State must therefore show either that the breadth of its territorial sea has been increased or that the baseline of its territorial sea — the breadth of which remains unchanged — has been carried seawards; such an advance of the baseline implies a corresponding extension of internal waters. In practice, the coastal State will always adopt the latter method, which is much simpler than the former; for the extension of internal waters can be done administratively, by drawing new baselines, without disturbing the legislative provisions on the breadth of the territorial sea. The desired result can be attained by routine measures taken by the executive. The final success of the operation will depend on the nature and vigour of the reactions which it will provoke among foreign States. The ensuing diplomatic discussions will then provide the coastal State with the necessary opportunity to invoke, in more or less direct form, the theory of 'historic waters', as justifying the inclusion in its internal waters of sea areas which the ordinary rules of the public international law of the sea do not authorize it to appropriate."

117. In a later passage, Gidel stresses the incompatibility between the concept of internal waters and the exercise of the right of innocent passage by foreign vessels.

"It is always necessary to remember, in dealing with 'historic waters', the essential point that those waters are internal waters. This fact explains many aspects which would otherwise be difficult to grasp. The theory was originally evolved to apply to 'bays', and is still referred to as the theory of 'historic bays', because it was never envisaged that it might apply except in areas which, by reason of their configuration, are generally not used as major international routes of transit; the idea of internal waters and the right of innocent passage exercisable by foreign vessels are two incompatible concepts. The theory of

historic waters as internal waters has consequently never applied except to waters where this right of innocent passage is but of insignificant practical interest. That was the idea in the mind of Judge Draper in the *Alleganean* case, when he emphasized, with reference to the 'historic' Chesapeake Bay, that that Bay could not be made a roadway from one nation to another (Moore's *International Arbitrations*, vol. IV, p. 4341). And, lastly, this explains why the doctrine of historic bays is, as a general rule, never invoked except in the case of bays enclosed by the territory of a single State. For where there are several coastal States around a given bay, freedom of passage becomes a necessity and, as there can be no question of innocent passage through internal waters, the theory of historic bays, which would assimilate such an area to internal waters, cannot apply. Neither the Committee of Experts nor any of the learned societies which have examined the question of 'historic bays' ever had in mind, in that context, any bay other than one bordering on the territory of a single coastal State . . ."

118. L. Cavare¹⁴⁷ maintains that since the juridical regime of historic waters corresponds to that of internal waters there can be no right of innocent passage through these waters. The State (he says) exercises over historic waters the totality of the rights which it possesses in its internal waters. He presupposes, however, that "the existence of historic waters is contingent on one general and social condition: that the waters in question do not constitute international waterways. If they did, the position would be very different and the coastal State would be unable to prevent innocent passage in such waters."

119. Higgins and Colombos¹⁴⁸ express a similar opinion:

"The rights of jurisdiction of the littoral State over its territorial gulfs and bays should be considered to be the same as over its national waters. The State is therefore entitled to reserve fisheries to its own subjects and to prescribe and regulate the admission and sojourn of foreign vessels therein, under the same conditions. Where, however, bays or gulfs constitute an international highway, the right of innocent passage of merchant ships must be conceded by the territorial State."

120. Fauchille states the following:¹⁴⁹

"... According to a generally accepted opinion, the status of gulfs and bays varies, depending on whether they border on the land of one State or of several States, whether their entrance is or is not less than ten miles wide and whether they have or have not a historic character. Gulfs and bays which are less than ten miles wide and are surrounded by a single State, as well as those which, regardless of their width and the ownership of the surrounding coast, are historic bays, form part of the national territory of the countries on which they border; the others are nothing other than a portion of the open sea. This distinction is important in two respects: (1) From the point of view of the rights of States in gulfs and bays. If they [the gulfs and bays] are part of the territory of the coastal country, that country enjoys therein, in matters of navigation, fishing and jurisdiction, all the rights implicit in sovereignty, the scope of those rights depending on whether sovereignty is given an absolute or a relative character. If they are parts of the open sea, they must, both in time of peace and in time of war, remain open to all ships of all nations without restrictions and, as they are not subject to the jurisdiction of any single State,

¹⁴⁷ *Le droit international public positif*, vol. II, Paris, 1951, p. 514.

¹⁴⁸ *Ibid.*, p. 120.

¹⁴⁹ *Op. cit.*, pp. 386-387.

the coastal State cannot enforce its fishing regulations therein ; the principle of the freedom of the seas is then applicable in its entirety. (2) From the point of view of the determination of the territorial sea in the gulfs and bays. If these are really part of the State territory, the most landward line from which the littoral sea can be measured is the outer limit of that territory, which means from an imaginary line drawn between the outermost extremities of the coast at the orifice of the gulf or bay. If they are simply a continuation of the high seas, the territorial sea will, on the other hand, have to be measured outwards from the coasts of the gulfs or bays, over their entire curvature, following the sinuosities of the coast."

121. Oppenheim considers as "territorial" such bays as are enclosed by the land of a single littoral State and have an entrance not more than six miles wide (*supra*, para. 92). He defines the term "territorial" as follows :¹⁵⁰

"The expression 'territorial bay' must not be allowed to obscure the facts (1) that the waters contained in territorial bays, and in the territorial portions of bays not wholly territorial, are not territorial waters and part of the maritime belt, but national waters ; and (2) that the limit of the national waters is the datum line for the measurement of the maritime belt."

122. In describing the juridical consequences of the territoriality of bays, Oppenheim states :¹⁵¹

"As regards navigation, fisheries, and jurisdiction in territorial gulfs and bays the majority — rightly, it is believed — contend that the same rules of the Law of Nations are valid as in the case of navigation and fisheries within the territorial maritime belt. The right of fishery may therefore be reserved exclusively for subjects of the littoral State.¹ And navigation, *cabotage* excepted, must be open² to merchantmen of all nations, though foreign men-of-war need not be admitted unless the gulfs or bays in question form part of the highways of international traffic. But the matter is not settled, and there are some who maintain that foreign vessels may be excluded altogether from territorial gulfs and bays, or admitted only on payment of dues, rates etc."

¹ The Hague Convention concerning Police and Fishery in the North Sea, concluded on 6 May 1882, between Great Britain, Belgium, Denmark, France, Germany and Holland, by Article 2 reserves the fishery for subjects of the littoral States of such bays as have an entrance from the sea not wider than ten miles, but reserves likewise a maritime belt of three miles to be measured from the line where the entrance is ten miles wide. Practically, the fishery is therefore reserved for subjects of the littoral State within bays with an entrance much wider than ten miles. See Martens, *N.R.G.*, 2nd ser., 9, p. 556."

² But this is not universally recognized. See, for instance, Twiss i, para 181 ; Calvo i, para. 367."

123. It may be pertinent to cite the opinions of some members of the Institute of International Law on the legal status of internal waters created through the drawing of straight baselines. In his report of the "distinction between territorial waters and internal waters" submitted to the Tenth Committee of the Institute at its 1954 session at Aix-en-Provence, Mr. Frede Castberg makes the following statement :¹⁵²

"For the purpose of calculating the outer limit of its territorial sea, and especially when the object is to establish the territorial limit within which the right of coastal fishery is reserved exclusively to its population, a State may be entitled on historical, economic and social grounds, to draw long base-

lines between islands and rocks. Yet that State may conceivably decide not to regard all the waters within those baselines as internal waters, within the meaning attaching to this expression in international law. It may deem it fair or convenient to permit vessels of other States, in time of peace, too, to exercise the right of passage in a portion of the waters situated within the baselines."

124. In a footnote, Mr. Castberg refers to the following statement by Raestad :¹⁵³

"In any case, it is only natural for the foreign States concerned to object to a declaration that all the waters within the baselines are internal waters in the strictest sense."

125. Later, in his conclusion No. 4, Mr. Castberg states :¹⁵⁴

"The limits of the internal waters of the coastal State may be drawn differently for different purposes, pursuant to legislative provisions enacted by that State, provided always that such a measure does not prejudice the rights of other States, especially the right of innocent passage through the territorial sea."

126. Sir Gerald Fitzmaurice, while sharing the view expressed by Mr. Castberg in conclusion No. 4, prefers to express the idea in the following manner :¹⁵⁵

"... I would prefer to say that all waters inside the base line from which territorial waters are measured, are internal waters ; but that a further distinction is to be drawn between those internal waters which are genuinely *inland* waters (e.g., rivers, creeks, inland lakes, canals, etc.) and those which are not (e.g., large bays and waters between the mainland and islands off the coast). Generally speaking, there is no right of passage through the former waters, but there is, or should be, through the latter. (If this idea were adopted, the expressions 'internal waters' and 'inland waters', instead of meaning the same thing, as they do at present, would each have a distinct meaning.) Under no circumstances should the extension of internal waters made possible by the new base line method operate so as to impede the right of innocent passage through what would be territorial sea if the older coast-line (or tide-mark) rule were still applied."

127. Mr. J. P. A. François, on the other hand, expresses a completely contrary opinion on this question. He states in this connexion (addressing his remarks to Mr. Castberg, rapporteur) :¹⁵⁶

"... The system which you advocate would lead to the adoption of three different zones of the sea : the territorial sea, internal waters and a third zone, which is neither territorial sea nor internal waters, with a somewhat vague legal régime. I would like to dispute the suggestion that international law recognizes the existence of this third zone. International law, in my opinion, bases itself on the assumption — which is, indeed, the most logical one — that the two lines coincide. Your attempt to show the existence in international law of this third zone has not, in my opinion, succeeded. For it is not sufficient to show, as you have done, that certain States do not exercise all their rights in internal waters over the area of those waters. A State is free at any time and in any part of its territory, not to exercise the plenitude of its rights, and this abstention does not produce any essential change in the juridical status of that part of the territory. An area of the sea within the limit of the

¹⁵³ "Le problème des eaux territoriales à la Conférence pour la codification du Droit international", *Revue de Droit international*, 1931, VII, p. 134.

¹⁵⁴ *Annuaire*, vol. I (1954), p. 172.

¹⁵⁵ *Ibid.*, p. 206.

¹⁵⁶ *Ibid.*, p. 208.

¹⁵⁰ *Op. cit.*, p. 505, footnote 1.

¹⁵¹ *Op. cit.*, pp. 509-510.

¹⁵² *Annuaire*, vol. I (1954), pp. 126 and 127.

territorial sea, drawn in conformity with the rules of international law, remains internal waters, whether or not the coastal State chooses to exercise therein all the rights which it possesses. To create new 'zones' in such cases and to recognize, as you propose, 'that the limit of internal waters may be drawn differently for different purposes' can only lead to confusion. Instead of recognizing different limits of internal waters, we should, in my opinion, maintain the clear and practical rule of international law that the outer limit of internal waters coincides with the inner limit of the territorial sea, without prejudice to the freedom of the coastal State to abstain from exercising all of its sovereign rights over the whole extent of that zone."

128. Gidel also questions the views expressed by Mr. Castberg on this point. He states:¹⁵⁷

"The partitioning which you suggest in internal waters would, I fear, be most dangerous and would only introduce an element of discord on a point on which we have the good fortune to see agreement both in practice and among the authorities. Such a partitioning would imply that each coastal State could, at its pleasure, invest *its own* internal waters with a special juridical status; in this private régime governing internal waters, it would retain all the powers which it might consider advantageous while disclaiming all those creating some liability. But a régime consistent with legal principles should compose a balanced whole, in which the recipient of advantages also has to bear the disadvantages. This concept is of particular importance in international law, where the members of the international community should, in the eyes of the law, stand in a comparable position in their mutual relations..."

129. Further on, Gidel adds:¹⁵⁸

"The fact that a State chooses not to exercise in a given part of its internal waters all the prerogatives vested in it by ordinary international law, neither produces any substantial modification in the juridical status of that State's internal waters nor changes in any way the delimitation of those waters in relation to territorial waters."

130. Gidel ends his criticism of Mr. Castberg's conclusion No. 4 with these words:¹⁵⁹

"... It is not within the powers of a coastal State to invest its internal waters with a special juridical status less favourable to it than the concept of 'internal waters', as understood in international law, necessarily implies. But the coastal State remains free to forgo, either by treaty or by legislative action, the exercise of any particular prerogative which ordinary international law accords in its internal waters to the coastal State as such."

B. *Historic bays the coasts of which belong to two or more States*

131. The information on this category of bays is not very plentiful. The draft codes prepared by learned societies and those drawn up under the auspices of the League of Nations¹⁶⁰ consider solely the case of a historic bay bordering on the shores of a single State.

¹⁵⁷ *Ibid.*, pp. 219 and 220.

¹⁵⁸ *Ibid.*, p. 221.

¹⁵⁹ *Ibid.*, p. 223.

¹⁶⁰ All the Governments which replied to the Bases of Discussion prepared by the Preparatory Committee of the Codification Conference, 1930, expressed the view that, in the case of bays bordering on the territory of two or more States, the breadth of the territorial sea should be measured from the low-water mark along the coast (Basis of Discussion No. 9 and Observations of the Committee: Ser. L.o.N.P. 1929.V.2, p. 45).

The same is true of the draft of the International Law Commission, which does not deal with bays bordering on the coasts of two or more States because the Commission had not "sufficient data at its disposal concerning the number of cases involved or the regulations at present applicable to them".

132. The status of the Gulf of Fonseca, the waters of which abut on the territories of Nicaragua, Honduras and El Salvador, was settled by the judgement delivered on 9 March 1917 by the Central American Court of Justice (*supra*, paras. 44-47). This judgement, although confirming that the waters of the Gulf are of a historic character, does not attribute to them the characteristics of internal waters; rather, it tends to class them as territorial sea. The judgement recognizes that the three riparian States are "co-owners" of the waters of the Gulf, except as to the littoral marine league, which is the "exclusive property" of each. This means that the waters of the Gulf are divided into two parts: the first, which begins at the shoreline and continues for a distance of one marine league, is the territorial sea of each of the coastal States; the second, containing all the remaining ("non-littoral") waters of the Gulf, is an area of territorial sea belonging to the three States in common. The Court held that "as to a portion of the non-littoral waters there was an overlapping or confusion of jurisdiction in matters pertaining to inspection for police and fiscal purposes and purposes of national security, and that as to another portion thereof, it is possible that no such overlapping and confusion takes place". The Court decided, therefore, "that as between El Salvador and Nicaragua co-ownership exists with respect to both portions, since they are both within the Gulf; with the express proviso, however, that the rights pertaining to Honduras as *coparcener* in those portions are not affected by that decision".

133. The judgement of the Central American Court of Justice on the status of the Gulf of Fonseca contains two essential points: (1) as historic waters, the waters of the Gulf belong to the coastal States; (2) those waters have the characteristics of the territorial sea and not of internal waters. With reference to the last point, Gidel remarks:¹⁶¹

"The judgement of The Central American Court of Justice... attributes to the waters of the gulf the characteristics not of internal waters, which their status as a historic bay would normally have required, but of the territorial sea. This is a truly remarkable departure from the logical rules governing historic bays."

134. Another relevant case is that of the Bay of Fundy, a ruling on the status of which was requested from Umpire Bates, appointed under the Anglo-American Claims Convention of 1853, in consequence of the seizure of the United States vessel "Washington" at a point ten miles from the shore. The umpire, in deciding that the Bay of Fundy was not a British bay, stated:¹⁶²

"The Bay of Fundy is from 65 to 75 miles wide and 130 to 140 miles long. It has several bays on its coast. Thus the word bay, as applied to this great body of water, has the same

¹⁶¹ *Op. cit.*, p. 627.

¹⁶² Moore, *International Arbitrations*, vol. 4 (1898), p. 4344.

meaning as that applied to the Bay of Biscay, the Bay of Bengal, over which no nation can have the right to assume the sovereignty. One of the headlands of the Bay of Fundy is in the United States, and ships bound to Passamaquoddy must sail through a large space of it. The islands of Grand Menan (British) and Little Menan (American) are situated nearly on a line from headland to headland. These islands, as represented in all geographies, are situated in the Atlantic Ocean. The conclusion is, therefore, in my mind irresistible that the Bay of Fundy is not a British bay, nor a bay within the meaning of the word as used in the treaties of 1783 and 1818."

135. Dana,¹⁶³ in an opinion expressed in November 1877 to the Halifax Fishery Commissioners established pursuant to the Washington Treaty of 1871 between Great Britain and the United States, commented on this decision in these terms:

"This decision was put partly upon its width, but the real ground was that one of the assumed headlands belonged to the United States, and it was necessary to pass the headland in order to get to one of the ports of the United States."

136. Similarly, Fauchille¹⁶⁴ states:

"The arbitral award of 23 September 1854 regarding the Bay of Fundy ruled that that Bay was an open sea, not only because its opening is sixty-five to seventy-five miles wide but also, and indeed principally, because its coasts do not all belong to a single State; one of its headlands is situated in the territory of the United States, the other in the territory of Great Britain."

II. THE CONSTITUENT ELEMENTS OF THE THEORY OF HISTORIC BAYS AND THE CONDITIONS FOR THE ACQUISITION OF HISTORIC TITLE

137. The original purpose of the theory of historic bays was to exclude from the application of the general régime of bays which was then being elaborated certain bays whose status had already been settled by history. In other words, its object was to ensure that, despite the tendency to restrict the area within any large bay which could validly be deemed internal waters, the status of those bays which had already been accepted as wholly internal, on essentially historical grounds, would remain unchanged. Hence, under the theory as originally conceived, a State would be unable to lay claim to a particular bay except by relying mainly on historical evidence, by arguing from the fundamental principle: this bay belongs to me because it has always belonged to me, or because it has belonged to me for a certain time. Today, however, the theory is no longer conceived in such limited terms. In order to place certain bays outside the scope of the normally applicable rules, States no longer rely on factors of a purely historical character; they also—and sometimes even exclusively—rely on factors of a very different nature. The purpose of this inquiry is to discover the factors relied on for the purpose of determining which bays are to constitute exceptions to the rules generally accepted—or, at least, to be elaborated—with respect to ordinary bays.

138. Municipal and international case-law, draft codes and the works of the learned authorities reveal

¹⁶³ Cited by Phillimore, *International Law*, vol. I (1879), pp. 287-289.

¹⁶⁴ *Op. cit.*, p. 384.

two fundamentally different conceptions of this particular point of the problem. These conceptions are most clearly apparent in doctrine and in the works of codification, as judicial decisions have always ruled on the territoriality of certain bays or certain sea areas strictly in the light of the special circumstances of each case.

A. First conception: "usage" the sole root of historic title

139. According to this conception, the right to a bay which does not come under the general rule applicable to ordinary bays can only be founded on "usage". The supporters of this view do not, however, agree on the conditions which such usage should fulfil. One school of thought holds that national usage *per se* is a good root of historic title. Another school considers, on the contrary, that national usage cannot be a good root of historic title unless the usage was recognized, in one form or another, by the other States.

1. National usage per se a good root of historic title

140. Basis of Discussion No. 8 drafted by the Preparatory Committee of the First Conference for the Codification of International Law, 1930, in confirming the theory of historic bays, speaks only of "usage" (*supra*, para. 87).¹⁶⁵ Other drafts also base the theory exclusively on usage but take into account two additional notions: "time" and "continuity".

141. The draft adopted in 1926 by the Japanese International Law Society only takes into account the notion of time. It limits itself to the expression "immemorial usage" (*supra*, para. 82). By contrast, certain other drafts contain both the notions simultaneously. This is the case with the draft adopted by the Institute of International Law (Paris session 1894) in which the word "usage" is qualified by "continued and of long standing". The same expression recurs in the draft prepared by the International Law Association at its Brussels session (1895) and a similar one in the draft convention amended by Mr. Schücking in consequence of the discussions in the Committee of Experts. The same idea is taken up in Project No. 10 prepared in 1925 under the auspices of the American Institute of International Law (*supra*, paras. 74, 78, 80 and 85).

142. The definition of historic bays given in the project submitted in 1933 to the Seventh International Conference of American States by the American Institute of International Law refers solely to the attitude of the coastal State. It provides that bays or estuaries called historic are those over which the coastal State or States have traditionally exercised and maintained their sovereign ownership (*supra*, para. 81).

¹⁶⁵ "Basis of Discussion No. 8, drafted by the Preparatory Committee, merely stated that a historic title was acquired by 'usage'. This expression was doubtless intended to imply a peaceful and continued exercise of sovereignty. It could not have been meant as a purely national usage, considered independently of the reactions which it provokes in the international community." (*I.C.J. Pleadings, Oral Arguments, Documents, Fisheries Case (United Kingdom v. Norway), Judgement of 18 December 1951*, vol. III, Rejoinder of Norway, p. 454).

143. In its Counter-Memorial submitted to the International Court of Justice in the Fisheries case, Norway stated: ¹⁶⁶

"What essential point must a State establish in order to substantiate its claim to a bay on historic grounds? The first prerequisite of the coastal State's title is its assertion of sovereignty. It is not in itself sufficient, but it is indispensable. The other factors are but 'special circumstances', which support and justify the claim."

2. *National usage not a good root of historic title unless recognized by the other States*

144. The draft convention adopted by the International Law Association in 1926 speaks of "established usage generally recognized by the nations" (*supra*, para. 79). The draft adopted at its 1928 session at Stockholm by the Institute of International Law uses the expression "international usage". The Institute also considered the possibility of further qualifying this expression with the word "uncontested" (*incontesté*). That word, however, was finally not included (*supra*, paras. 75 and 76). In its reply in the Fisheries Case, the United Kingdom stated: ¹⁶⁷

"It is true that the word *incontesté* was dropped, but the word 'international' was retained to express the principle that *unilateral national pretention is not sufficient*. The national usage must have received *international recognition*."

145. During the debate in the Second Committee of the Codification Conference (1930) concerning the Preparatory Committee's Basis Discussion No. 8 (*supra*, para. 87), certain speakers emphasized the inadequacy of the concept of "usage" as the basis of the theory of historic bays. In the opinion of the Japanese delegation, "a mere claim on the part of the State concerned — which seems to be the sole condition according to the present text, to judge from the words 'by usage' — is not enough". For that reason, the Japanese delegation proposed that the words "long established and universally recognized" should be inserted before the word "usage". ¹⁶⁸

146. A. Raestad makes the following observation: ¹⁶⁹

"In my opinion the most important point is not when and how the occupation or usurpation of any given right in the coastal sea took place. What matters is when and how other nations gave their express or tacit consent, which transformed that occupation or usurpation into a legal title."

147. Fauchille gives the following definition of "historic or vital bays": ¹⁷⁰

"They are the large gulfs and large bays the territoriality of which has been recognized by long-accepted usage and by undisputed custom."

Later, the same author adds: ¹⁷¹

"Similarly, it is the acquiescence of States which — so it has

been held in judicial decisions — accounts for the territoriality of historic bays."

In support of this statement, Fauchille cites the judicial decisions regarding the Bays of Conception, Chesapeake and Delaware (*supra*, paras. 16-23). Then, after giving further examples of historic bays, he again states: ¹⁷²

"In cases where the coastal State has claimed sovereignty over such bays, it is the acquiescence of certain States and the absence of protest on the part of other States that have made those bays historic and have given them their territorial character."

148. Jessup also contends that: ¹⁷³

"... the legality of the claim is to be measured, not by the size of the area affected, but by the definiteness and duration of the assertion and the acquiescence of foreign Powers."

149. Gidel takes the following view: ¹⁷⁴

"... The mere fact that the coastal State advances the claim that specified waters should be regarded as its property does not in itself oblige other States to accept that claim; in the absence of any organ formally established to examine such claims and expressly authorized by each of the States concerned to render decisions, such claims can only be borne out by evidence of international acquiescence; as a general rule, prolonged usage will afford the necessary proof."

150. Higgins and Colombos express the similar view that: ¹⁷⁵

"... the territorial State is entitled to claim a wider belt of marginal waters, provided that it can show affirmatively that such a claim has been accepted expressly or tacitly by the great majority of other nations."

B. *Second conception: the vital interests of the coastal State as the possible and sole basis of the right to a bay*

151. According to Dr. Drago (*supra*, para. 92), a bay can only be considered historic if there is proof of both of the following: (1) the assertion of sovereignty, which is the basic requirement; and (2) some "particular circumstances" such as those cited by way of example, namely, geographical configuration, immemorial usage or (in Drago's view "above all") the requirements of self-defence.

152. In article 7 of the draft international convention submitted to the Buenos Aires Conference of the International Law Association in 1922 by Captain Storny the following definition of the theory of historic waters is given:

"A State may include within the limits of its territorial sea the estuaries, gulfs, bays or parts of the adjacent sea in which it has established its jurisdiction by continuous and immemorial usage or which, when these precedents do not exist, are unavoidably necessary according to the conception of article 2; that is to say, for the requirements of self-defence or neutrality or for ensuring the various navigation and coastal maritime police services." ¹⁷⁶

¹⁷² *Ibid.*, pp. 381 and 382.

¹⁷³ *Op. cit.*, p. 382.

¹⁷⁴ *Op. cit.*, p. 651.

¹⁷⁵ *Op. cit.*, p. 112.

¹⁷⁶ International Law Association, *Report of the Thirty-first Conference*, Buenos Aires, 1922, vol. 2, pp. 98 and 99.

¹⁶⁶ *Ibid.*, vol. I, p. 555.

¹⁶⁷ *Ibid.*, vol. II, pp. 623 and 624.

¹⁶⁸ League of Nations publication V. Legal, 1930, V. 16 (document C.351 (b). M.145 (b). 1930. V), p. 103.

¹⁶⁹ *La mer territoriale*, 1913, p. 167.

¹⁷⁰ *Op. cit.*, p. 380.

¹⁷¹ *Ibid.*

153. According to Captain Storny, that article is :

"... of the greatest importance ; it affirms in a more decisive form the last part of article 3 of the *Project de définition et régime de la mer territoriale* of the Institute of International Law. Clearly, too, it contains in synthesis the doctrine of historic bays, according to the manner in which the old principle was formulated by Drago. The final stipulation of the article is perfectly explicable as regards the new nations—the the American nations, for example—many of which possess long and still very thinly populated coasts, and in respect of which the condition of long-established dominion cannot be adduced, as in the case of nations which have already existed for a thousand years or more."

154. When the Second Committee of the 1930 Conference considered Basis of Discussion No. 8 (*supra*, para. 87), the representative of Portugal proposed that the Basis of Discussion should be amended by the addition of the following words :¹⁷⁷

"or if it is recognized as being absolutely necessary for the State in question to guarantee its defence and neutrality and to ensure the navigation and maritime police services."

155. In support of this amendment, the representative of Portugal pointed out that the idea of usage envisaged in Basis of Discussion No. 8 was no longer unanimously accepted and that some authors adduced not only usage but also other factors which should be taken into account in determining the character of historic bays. After referring to the opinions expressed on this subject by Dr. Drago and Captain Storny, the Portuguese representative stated :¹⁷⁸

"Generally speaking, usage must be respected, but sometimes usage may be unjustified. Moreover, if certain States have essential needs, I consider that those needs are as worthy of respect as usage itself, or even more so. Needs are imposed by modern social conditions, and if we respect age-long and immemorial usage which is the outcome of needs experienced by States in long past times, why should we not respect the needs which modern life, with all its improvements and its demands, imposes upon States ?"

156. Thus, according to this conception, the right to a bay might derive either from usage or from the vital interest of the coastal State. The State would then be entitled to claim such a right by invoking circumstances into which the historical factor does not even enter. Gidel says :¹⁷⁹

"In this way, the description 'vital bays' is gaining currency. This expression, which is placed on a footing of equality with the expression 'historic bays', sums up in one word the conditions of substance to be fulfilled by the areas in question, whereas the expression 'historic bays' suggested conditions of form only."

157. Expressing his opinion on the value of the notion of "vital bays", Gidel states :¹⁸⁰

"... claims based purely and simply on the needs or interests of the coastal State, capable of being cited as precedents by other States having coastlines with a different geographic or hydrographic configuration, would be arbitrary."

158. Another significant comment is made by Bourquin :¹⁸¹

"... If the territoriality of a bay is to be determined in the light of all the circumstances which characterize each of them, then clearly the vital interests of the coastal State must be taken into account. The formula proposed by Captain Storni and later by the Portuguese Government tends perhaps to oversimplify the issue. Instead of embracing all the factors determining the bay's character, it concentrates on only one, to which it attaches, without any reservation or proviso, a decisive influence. But whatever criticisms may properly be levelled at the formula on that score, there seems little doubt that it expresses something which is not only common sense but also good law, consistent with the practice of States, namely, that the vital interests of the State in the possession of a bay constitute, side by side with historical tradition, one of the bases on which it may rely in claiming sovereignty therein.

"But why should this factor be considered strictly within the context of 'historic titles' ? However widely the concept of a 'historic title' is construed, surely it cannot be claimed in circumstances where the historic element is wholly absent. The 'historic title' is one thing ; the 'vital interest' is another. Each has its place among the factors to be considered in determining the régime applicable to bays, but they must not be confused."

C. Various elements considered in judicial decisions dealing with the territoriality of certain bays or maritime areas

1. International cases

Permanent Court of Arbitration (1910)

159. In an award cited earlier in this paper (*supra*, para. 49), the special arbitral tribunal which decided the North Atlantic Coast Fisheries Case between Great Britain and the United States (1910) recognized that "conventions and established usage might be considered as the basis for claiming as territorial those bays... called historic bays." But this statement was only made *obiter* and the tribunal did not go into the details of the theory which it upheld in principle.

160. It is pertinent, nevertheless, to quote from the tribunal's opinion the remarks relating to the notion of "bays" in general. The dispute concerned the interpretation of the Treaty concluded between Great Britain and the United States in 1818 and the meaning of the term "bay" was one of the contested points. The tribunal held that, for the purpose of determining the question of territoriality, the interpretation must take into account all the individual circumstances which were to be appreciated in the case of the bay in question :¹⁸²

"... the relation of its width to the length of penetration inland ; the possibility and the necessity of its being defended by the State in whose territory it is indented ; the special value which it has for the industry of the inhabitants of its shores ; the distance by which it is secluded from the highways of nations on the open sea ; and other circumstances not possible to enumerate in general."

¹⁷⁷ Ser. L.o.N.P. 1930.V.16, p. 107.

¹⁷⁸ *Ibid.*, p. 106.

¹⁷⁹ *Op. cit.*, p. 629.

¹⁸⁰ *Ibid.*, p. 635.

¹⁸¹ *Op. cit.*, p. 51.

¹⁸² *Scott, op. cit.*, p. 187.

Central American Court of Justice (1917)

161. The judgement delivered by the Central American Court of Justice in 1917 regarding the Gulf of Fonseca (for an extract from this decision see *supra*, paras. 44-47) stated that that Gulf belonged to the category of historic bays because it combined all the characteristics that doctrine and the practice of States has prescribed as essential, namely: Secular or immemorial possession accompanied by *animo domini* both peaceful and continuous and by acquiescence on the part of other nations; the special geographical configuration that safeguards so many interests of vital importance to the economic, commercial, agricultural and industrial life of the riparian States; and the indispensable necessity that those States should possess the Gulf as fully as required by those primordial interests and the interest of national defence.

The International Court of Justice (1951)

162. The judgement delivered by the International Court of Justice on 18 December 1951 in the Fisheries Case between the United Kingdom and Norway contains some useful statements on this subject. In that case, the issue before the Court was not the territoriality of certain bays or maritime areas but the international validity of the Norwegian system of delimitation, which was disputed by the United Kingdom. The Court, however, in holding that the system was indeed consistent with the rules of international law, found support for its findings in the historic titles which Norway had claimed,¹⁸³ together with other circumstances, in order to justify its system.¹⁸⁴ Some passages from the judgement have already been cited (*supra*, paras. 58-67). They show the grounds on which the Court based its finding that the Norwegian system of delimitation was valid and the circumstances which it held justified Norway's contention that that system was binding on foreign States.

¹⁸³ Judge Hackworth declared that he concurred in the operative part of the judgement but desired to emphasize that he did so for the reason that he considered that the Norwegian Government had proved the existence of an historic title to the disputed areas of water (*Fisheries Case (United Kingdom v. Norway), Judgement of 18 December 1951; I.C.J. Reports, 1951, p. 144*).

¹⁸⁴ Sir Gerald Fitzmaurice makes the following comment: "The point of vital interest regarding historic rights in the Fisheries Case was that the Court recognized yet another basis of historic title—a right to certain waters, deriving not from a historic claim to a given area of sea, as such, but from a historic system of delimiting territorial waters in general which, even if it were otherwise contrary to international law, the State concerned could be said to have acquired a right to employ by long-continued usage and action in that sense, acquiesced in or anyhow not objected to, by other States." (*The Law and Procedure of the International Court of Justice, 1951-54: Point of Substantive Law, The British Year Book of International Law, 1954, p. 382*.)

In another article, Sir Gerald states: "It should . . . be noticed that since the Court had already found that the general rules of international law, as laid down by the Court, did in themselves justify the Norwegian delimitation, it was strictly unnecessary for it to go into the issue of historic rights. Nevertheless, the Court did so and found in favour of Norway on that question also. There was, however, an important difference between the doctrine of historic rights as put forward by Norway and as found by the Court." (*The Law and Procedure of the International Court of Justice, 1951-54: General Principles and Sources of Law, Ibid., 1953, p. 27*.)

2. National cases

163. Decisions of municipal judicial bodies recognizing the territoriality of certain bays have invariably been based on the special circumstances of each particular case. The section of this paper which discusses the practice of States reproduces the relevant passages from the municipal judicial decisions concerning certain bays, e.g. Chesapeake Bay, Conception Bay and Delaware Bay (*supra*, paras. 16-23).¹⁸⁵

D. The proof of historic title

1. The onus of proof

164. Basis of Discussion No. 8 drafted by the Preparatory Committee of Codification Conference, 1930, states that the onus of proving usage is upon the State which seeks to rely on it (*supra*, para. 87). In replying to the list of points prepared by that Committee (*supra*, para. 93), the German Government expressed the opinion that "as regards 'historic bays', it would seem right in principle to require the coastal State making such a claim in respect of bays exceeding six nautical miles in width to prove that the bay has acquired the status of 'inland waters' of the coastal State through long usage generally recognized by other States".

165. Gidel comments on this point as follows:¹⁸⁶

"The onus of proof rests on the State which claims that certain maritime areas close to its coast possess the character of inland waters which they would not normally possess. The coastal State is the petitioner in this sort of action. Its claims constitute an encroachment on the high seas; and it would be inconsistent with the principle of the freedom of the high seas, which remains the essential basis of the whole public international law of the sea, to shift the onus of proof onto the States prejudiced by that reduction of the high seas which is the consequence of the appropriation of certain waters by the claimant State."

166. In the Fisheries Case, the United Kingdom and Norway were in agreement that the onus of proof was upon the State claiming a historic title. They expressed different opinions, however, on the conditions which have to be made in order to discharge that onus and especially on the nature of the evidence to be produced.¹⁸⁷

2. The elements of proof

167. Since the basic element underlying the theory of historic bays—at least as that theory was originally conceived—is "usage", one must inquire how such usage can be proved. Article 11 of the project sub-

¹⁸⁵ These decisions were interpreted differently by the parties in the Fisheries Case (see, in particular, the Counter-Memorial of Norway, *I.C.J. Pleadings, Oral Arguments, Documents, Fisheries Case, Judgement of 18 December 1951*, vol. I, paras. 541, 543 and 544; the Reply of the United Kingdom, *ibid.*, vol. II, paras. 438, 440 and 441).

¹⁸⁶ *Op. cit.*, p. 632.

¹⁸⁷ *I.C.J. Pleadings, Oral Arguments, Documents, Fisheries Case, Judgement of 18 December 1951*, vol. I, Counter-Memorial of Norway, p. 556; *ibid.*, vol. II, Reply of the United Kingdom, p. 645.

mitted in 1933 to the International Conference of American States by the American Institute of International Law (*supra*, para. 81) regards as "historic" the bays over which the coastal States have traditionally exercised and maintained their sovereign ownership, either by provisions of internal legislation and jurisdiction, or by deeds or writs of the authorities. According to that definition, before a State can claim a historic title to a bay it must have exercised its sovereignty over that bay. The mere claim of sovereignty does not, therefore, suffice; to satisfy the terms of the definition, sovereignty has to be exercised effectively. On the other hand, the exercise of sovereignty can, according to the definition, be proved by reference to measures under municipal law.¹⁸⁸

168. In the Fisheries Case, Norway made the following statement:¹⁸⁹

"It cannot be seriously questioned that, in the application of the theory of historic waters, the acts of municipal authority by the coastal State occupy an essential place.

"The existence of a historic title necessarily implies the accomplishment of such acts. The basis of the title is the exercise of sovereignty, which, provided that it is peaceful and continuous, gains international recognition and takes its place in the international legal order."

169. After an analysis of the title of ownership resulting from occupation and of the title which derives from historic continuity, Norway contended that:

"In both cases, therefore, — in occupation and in prescription — the exercise of territorial sovereignty is essential.

"How can such sovereignty be asserted? First and foremost by acts of municipal authority (laws, regulations, administrative measures, judicial decisions, etc.)."

170. In its Rejoinder, when explaining its position regarding the importance of "international recognition" in the acquisition of a historic title, Norway added:¹⁹⁰

"It is certain that a State can only invoke a historic title if it is in a position to prove the existence of a *peaceful and continued* usage. A State which asserted its sovereignty over certain sea areas but failed to exercise that sovereignty effectively, or, because of the opposition of other States, did not succeed in exercising a sufficient degree of sovereignty, cannot rely on such usage. Hence, the attitude of other States is an element which should be taken into consideration.

¹⁸⁸ Bustamante, the author of the project in question, states: "... when attempt is made to determine what is to be understood by the word 'historic', some Governments maintain that to the traditional possession of the bay, there must be added the consent of other States.

"It is very dangerous, because this last condition lends itself to notable abuses. No one specifies from how many and from which States this conformity must proceed, or what is the legal value of one or various divergent opinions. In respect to a certain bay, the continuous possession of which is claimed by a coastal State by right of sovereignty, no controversies or difficulties have ever arisen, either on account of its distance from the great maritime and commercial currents of the Globe, because the opportunity of expounding and solving doubtful questions has not presented itself. It is inadmissible that such circumstances should suffice to deprive the bay of its historic character" (*op. cit.*, pp. 99 and 100).

¹⁸⁹ I.C.J. Pleadings, Oral Arguments, Documents, Fisheries Case (*United Kingdom v. Norway*), Judgment of 18 December 1951, vol. I, Counter-Memorial of Norway, para. 564, pp. 567 and 568.

¹⁹⁰ *Ibid.*, vol. III, paras. 574-576, pp. 452 and 453.

"But the Norwegian Government does not share the opinion of the United Kingdom Government either concerning the weight to be attached to that element or on the circumstances in which it becomes relevant.

...

"The United Kingdom Government regards usage as *merely evidence of the acquiescence of other States*. In that Government's view, the decisive factor, *indeed the only one capable of legitimating the claim of the coastal State, is the acquiescence of other States*.

"The Norwegian Government believes that the essence of a historic title can never be reduced to such a simple formula.

"In the explanation offered by the opposing Party, it is argued that the historic title is merged in the title based on recognition (unilateral or by treaty). Yet the legal effects of peaceful and continued usage derive from a principle very different from that applicable to recognition.

"In reasoning as it does, the United Kingdom Government seems to overlook the fact that in the creation of historic title one of the essential factors is *time*.

"In recognition, *time* plays no part whatsoever. Juridically, recognition may be instantaneous. Nor does it lose any of its force thereby, *because in recognition the decisive and only factor is acquiescence*.

"A historic title can never be acquired unless it is supported by *long usage*. In such a title, the essential factor is *duration*. Admittedly, a usage which has acquired validity with the passage of time must also have been *peaceful and continuous*. If it had not been, it would never have acquired validity. But — as the word itself shows clearly enough — a 'historic' title derives its force from history, that is to say from *the passage of time*.

"The United Kingdom Government, it is true, recognizes that this time element is necessary; but it only considers this element in the light of what it [that Government] considers the sole test: the acquiescence of other States. In its view, 'the passage of time — that is the long duration of usage — is a vital element in the title *as supplying evidence of the implied acquiescence of other States in the claim*' (para. 511 (10)). (Our italics.)

"The acquisition of juridical force through the passage of time is, however, based on something very different. It is explained by *the need for stability*.

"A situation which has subsisted peacefully over a long period comes to be regarded as permanent; it becomes part of the general legal order, unless there are compelling reasons for excluding it therefrom. In Fauchille's words 'Since the interests of the international community demand peaceful relations, the rights of States must, after a certain time, be made secure against any attack.' (*Traité de Droit international public*, vol. I part II, p. 757.)

"This principle, which stands on its own merits, independently of the acquiescence of States, certainly plays an important part in the notion of historic titles."

171. By contrast, the reply of the United Kingdom states:¹⁹¹

"... Municipal decrees and other acts of municipal authority have no higher significance in an international tribunal than as relevant facts which show an exercise of State authority *but which may or may not be sufficient to establish an international right to exercise the State authority*. Whether or not municipal decrees and other acts of State authority in fact provide evidence of a title valid in international law necessarily depends

¹⁹¹ *Ibid.*, vol. II, Reply of the United Kingdom, paras. 475-477, pp. 647-649.

not only upon the nature of the municipal act *but upon the rules of international law*. In an international tribunal the question in each case must always be: 'what interpretation is placed upon the municipal acts by international law?'

172. Further on, the Reply continues:

"...The United Kingdom Government in effect maintains that the assertion of State authority, though essential to the establishment of a claim to maritime territory, is not sufficient and that, the rights of other States being affected, their acquiescence is required..."

173. Later, under the title "An historic title to an area of sea is acquired by prescription, not by occupation" the Reply states:

"Where the claim of title is to land which is a *res nullius* and in which, therefore, other States possess no legal interest, the mere peaceful exercise of State authority in regard to the land suffices to establish the occupation. The *res nullius* is in law susceptible of occupation by the first comer and the exercise of State authority in regard to the land will be an exercise of exclusive State authority creating an appropriation binding on other States. In these cases, the sole question is whether the claimant State can establish, to use the words of the Permanent Court in the *Eastern Greenland case* (A/B 53, p. 46), '*l'intention et la volonté d'agir en qualité de souverain, et quelque manifestation ou exercice effectif de cette autorité.*' The long period of the exercise of State authority in these cases merely serves as confirmatory evidence of an occupation, which is equally valid without the long period, provided that the occupation already exists at the 'critical date', namely, the date when another State seeks to assert a rival authority (see the *Eastern Greenland case* (A/B 53, p. 45). No doubt the position will be much the same in a case where the dispute concerns a boundary the facts of which are confused or in a case where, as in the *Island of Palmas Arbitration*, the earlier status of the territory is obscure. In these classes of case the acquiescence of other States in the exercise of State authority upon which the claim of title is founded is irrelevant. The acts of State authority do not touch the rights of other States and the title is valid *ab initio*. The acts of State authority are thus *both essential and sufficient* to establish the title.

"Where, on the other hand, the claim is to waters of the sea which are not *res nullius*, the position is quite different. It matters not whether the legal status of the high seas be considered to be a *res communis*, as is the opinion of Sir Cecil Hurst, or whether it be considered to be a *res sui generis*, as is the opinion of Gidel. The legal incidents of the régime of the high seas are well understood. No one disputes that each and every State has both a right to claim for its nationals rights of navigation and fishing in the high seas and a competence to exercise exclusive jurisdiction over all vessels of its flag on the high seas. Hence, a claim to exclusive sovereignty over areas of sea beyond the generally recognized limits of maritime territory directly touches and derogates from the existing rights of other States. Such a claim is not like a claim to a *res nullius* (occupation) because it interferes with established rights. It is a case of prescription and is open to the challenge that in origin it is 'illegal and invalid', as the Permanent Court said of the attempted Norwegian occupation of Eastern Greenland (A/B 53, p. 64), because at the critical date Eastern Greenland was not *res nullius*. Where prescription is involved, it is not sufficient to prove the exercise of State authority by acts under municipal law. It is necessary to show both a long and continuous exercise of State authority and also acquiescence in that exercise by other States."

174. In his dissenting opinion in the Fisheries Case, Sir Arnold McNair states: ¹⁹²

¹⁹² Fisheries Case (*United Kingdom v. Norway*), Judgement of 18 December 1951; *I.C.J. Reports*, 1951, p. 164.

"...to constitute an historic bay it is not sufficient merely to claim a bay as such, though such claims are not uncommon. Evidence is required of a long and consistent assertion of dominion over the bay and of the right to exclude foreign vessels except on permission. The matter was considered by the British Privy Council in the case of Conception Bay in Newfoundland in *Direct United States Cable Company v. Anglo-American Telegraph Company* (1877) 2 Appeal Cases 394. The evidence relied upon in that case as justifying the claim of an historic bay is worth noting. There was a Convention of 1818 between the United States of America and Great Britain which excluded American fishermen from Conception Bay, followed by a British Act of Parliament of 1819, imposing penalties upon 'any person' who refused to depart from the bay when required by the British Governor. The Privy Council said:

"It is true that the Convention would only bind the two nations who were parties to it, and consequently that, though a strong assertion of ownership on the part of Great Britain, acquiesced in by so powerful a State as the United States, the Convention, though weighty, is not decisive. But the Act already referred to... goes further'... 'No stronger assertion of exclusive dominion over these bays could well be framed.' [This Act] 'is an unequivocal assertion of the British legislature of exclusive dominion over this bay as part of the British territory. And as this assertion of dominion has not been questioned by any nation from 1819 down to 1872, when a fresh Convention was made, this would be very strong in the tribunals of any nation to show that this bay is by prescription part of the exclusive territory of Great Britain...'"

175. Later, Sir Arnold states:

"Another rule of law that appears to me to be relevant to the question of historic title is that some proof is usually required of the exercise of State jurisdiction, and that the independent activity of private individuals is of little value unless it can be shown that they have acted in pursuance of a licence or some other authority received from their Governments or that in some other way their Governments have asserted jurisdiction through them."

176. Referring to the nature of the evidence which is required, Gidel ¹⁹³ expresses the following opinion:

"It is hard to specify categorically what kinds of acts of appropriation constitute sufficient evidence; the exclusion from these areas of foreign vessels and their subjection to rules imposed by the coastal State which exceed the normal scope of regulations made in the interests of navigation would obviously be acts affording convincing evidence of the State's intent. It would, however, be too strict to insist that only such acts constitute adequate evidence..."

177. Similarly, Bourquin ¹⁹⁴ states that:

"...The State which forbids foreign ships to penetrate the bay or to fish therein indisputably demonstrates by such action its desire to act as the sovereign.

"There are, however, some borderline cases. Thus, the placing of lights or beacons may sometimes appear to be an act of sovereignty, while in other circumstances it may have no such significance."

178. Gidel and Bourquin were referring to the award of the special arbitral tribunal convened in 1909 at The Hague to deal with the question of the delimitation of a certain part of the maritime boundary between Norway and Sweden. One of the circumstances which

¹⁹³ *Op. cit.*, p. 633.

¹⁹⁴ *Op. cit.*, p. 43.

the tribunal held to constitute evidence supporting the Swedish claim was :

"...The circumstance that Sweden has performed various acts in the [disputed waters], especially of late, owing to her conviction that these regions were Swedish, as, for instance, the placing of beacons, the measurement of the sea, and the installation of a light-boat, being acts which involved considerable expense and in doing which she not only thought that she was exercising her right but even more that she was performing her duty."¹⁹⁵

179. In the Fisheries Case, the International Court of Justice found that :

"The Norwegian Government has relied upon an historic title clearly referable to the waters of LoppHAVET [*supra*, para. 71], namely, the exclusive privilege to fish and hunt whales granted at the end of the 17th century to Lt.-Commander Erich Lorch under a number of licences which show, *inter alia*, that the water situated in the vicinity of the sunken rock of Gjesbaen or Gjesbaene and the fishing grounds pertaining thereto were regarded as falling exclusively within Norwegian sovereignty..."

180. In his separate opinion, Judge Hsu Mo pointed out that :

"With regard to the licences for fishing granted on three occasions by the King of Denmark and Norway to Erich Lorch, Lieutenant-Commander in the Dano-Norwegian Navy towards the close of the 17th century, I do not think that this is sufficient to confer historic title on Norway to LoppHAVET. In the first place, the granting by the Danish-Norwegian Sovereign to one of his subjects of what was at the time believed to be a special privilege can hardly be considered as conclusive evidence of the acquisition of historic title to LoppHAVET *vis-à-vis* all foreign States. In the second place, the concessions were limited to waters near certain rocks and did not cover the whole area of LoppHAVET. Lastly, there is no evidence to show that the concessions were exploited to the exclusion of participation by all foreigners for a period sufficiently long to enable the Norwegian Government to derive prescriptive rights to LoppHAVET."¹⁹⁶

3. Evidence of international recognition

181. It has been shown that, according to some schools of thought, international recognition is a decisive factor in the acquisition of historic title. Now the question is what form the recognition should take. Must it be universal? Must it be express, or can it be inferred from absence of opposition? And, in a case where a State has expressly recognized the territoriality of a bay, to what extent is that recognition valid *vis-à-vis* States which have abstained from lodging objections?

182. On this point Raestad says :¹⁹⁷

"Since prescription, as it is known in municipal law, does not exist in international law, except where provision is made for it in treaties, a situation which has existed for a long period is only recognized by the law of nations if the prolonged existence of that state of affairs proves the tacit consent of States ; the consent of the States most directly concerned, by reason of proximity or other circumstance, binds also the States less

directly concerned and those which acquired an interest in that state of affairs subsequently..."

183. Fauchille¹⁹⁸ makes the following comment :

"As every State has the right to renounce any right vested in it, we believe that States which have expressly consented to respect the territoriality of a bay which previously, because of its size, constituted an open sea, and consequently an area in which they were entitled to navigate freely, would be estopped from objecting to the coastal State's exercise of exclusive sovereignty in that bay. But should the territorial status of that bay also be regarded as binding on States which simply abstained from objecting? Can such abstention be equivalent to consent? This seems rather more doubtful. Many jurists have indeed disputed the soundness of the theory of historic bays. Perels, for example, states (in his *Droit maritime*, p. 35) that 'the unilateral exercise of alleged rights, even if it does not evoke any objections from other States (either because they are acting in collusion or because they are impotent to resist), can never be placed against those which have not acquiesced, either expressly or by conduct showing an unmistakable intention'..."

184. Gidel¹⁹⁹ expresses the following opinion :

"It is a particularly delicate matter to determine, in general terms, the conditions which the established 'usage' must fulfil ; it seems impossible to insist that the recognition of that usage should either be 'universal' in the strict sense of the word, or express. A single objection formulated by a single State will not invalidate the usage ; furthermore, all objections cannot be placed on an equal footing, regardless of their nature, the geographical or other situation of the objecting State..."

185. The judgement of the International Court of Justice in the Fisheries Case contains some significant statements on this subject (*supra*, para. 66).²⁰⁰ The Court held that the absence of "opposition on the part of other States" was a circumstance supporting the validity of the Norwegian system of the delimitation, of which it established "the existence and the constituent elements". The Court said in this connexion :

"The Court, having thus established the existence and the constituent elements of the Norwegian system of delimitation, further finds that this system was consistently applied by Norwegian authorities and that it encountered no opposition on the part of other States."

186. Some paragraphs later, the judgement says :

"Norway has been in a position to argue without any contradiction that neither the promulgation of her delimitation Decrees in 1869 and in 1889, nor their application, gave rise to any opposition on the part of foreign States. Since, moreover, these Decrees constitute, as has been shown above, the application of a well-defined and uniform system, it is indeed this system itself which would reap the benefit of general toleration, the basis of an historical consolidation which would make it enforceable as against all States.

"The general toleration of foreign States with regard to the Norwegian practice is an unchallenged fact..."

187. And in a subsequent passage, the Court adds :

"The Court notes that in respect of a situation which could only be strengthened with the passage of time, the United Kingdom Government refrained from formulating reservations.

¹⁹⁸ *Op. cit.*, p. 382.

¹⁹⁹ *Op. cit.*, p. 634.

²⁰⁰ As regards the attitude of the Parties on this subject, see, particularly, the Reply of the United Kingdom (vol. II, pp. 652-659) and the Rejoinder of Norway (vol. III, pp. 457-461).

¹⁹⁵ Scott, *op. cit.*, p. 130.

¹⁹⁶ Fisheries case (*United Kingdom v. Norway*), Judgement of 18 December 1951, I.C.J. Reports 1951, p. 157.

¹⁹⁷ *Op. cit.*, p. 174.

"The notoriety of the facts, the general toleration of the international community, Great Britain's position in the North Sea, her own interest in the question, and her prolonged abstention would in any case warrant Norway's enforcement of her system against the United Kingdom."

188. Sir Gerald Fitzmaurice, commenting on the Court's judgement²⁰¹ under the title "The criterion of 'absence of opposition'", makes the following statement:

"It will be seen that in these passages²⁰² the Court (in contradistinction to the more positive criteria of the minority Judges) set up the test of absence of opposition by other States. How far is this test conclusive? Clearly, absence of opposition is relevant only in so far as it implies consent, acquiescence or toleration on the part of the States concerned; but absence of opposition *per se* will not necessarily or always imply this. It depends on whether the circumstances are such that opposition is called for because the absence of it will cause consent or acquiescence to be presumed. The circumstances are not invariably of this character, particularly for instance where the

²⁰¹ "The Law and Procedure of the International Court of Justice, 1951-54: General Principles and Sources of Law", *British Year Book of International Law*, 1953, pp. 1-70.

²⁰² The passages in question are extracts from the Court's judgement which the author cites in the preceding paragraph of his article in order to show the Court's attitude on the element of "recognition" or consent. That paragraph reads as follows:

"The consent of other States necessary. While finding in favour of Norway that other States — and in particular the United Kingdom — must be held to have acquiesced in the Norwegian system of delimitation, the Court did not adopt the Norwegian theory of the absolute and conclusive character, as against all the world, of a long-continued national usage *per se*. It considered the acquiescence, the consent in some form, or at least the toleration, of other States, to be necessary. This is apparent from such passages as the following (*I.C.J. Reports*, 1951, pp. 136-7):

'The Court, having thus established the existence and the constituent elements of the Norwegian system of delimitation, further finds that this system was consistently applied by Norwegian authorities and that it encountered no opposition on the part of other States.'

and again (p. 138):

'From the standpoint of international law, it is now necessary to consider whether the application of the Norwegian system encountered any opposition from foreign States.'

Similarly (*ibid.*):

'The general toleration of foreign States with regard to the Norwegian practice is an unchallenged fact.'

and (at p. 139):

'The notoriety of the facts, the general toleration of the international community, ... would in any case warrant Norway's enforcement of her system....

'The Court is thus led to conclude that the method... established in the Norwegian system... had been consolidated by a constant and sufficiently long practice, in the face of which the attitude of governments bears witness to the fact that they did not consider it to be contrary to international law.'

The Judges delivering separate or dissenting opinions took a like view on this point. Thus, Judge Hsu Mo (*ibid.*, p. 154) referred to Norway's 'consistent past practice which is acquiesced in by the international community as a whole'. Judge Read (p. 194) said:

'If it can be shown that the Norwegian system has been recognized by the international community, it follows that it has become the doctrine of international law applicable to Norway, either as special or as regional law.'

Later (at p. 195), he spoke of a Norwegian system

'... applicable or applied to the coasts in question; known to the world; and acquiesced in by the international community.'

practice or usage concerned has not been brought to the knowledge of other States, or at all events lacks the notoriety from which such knowledge might be presumed: or again, if the practice or usage concerned takes a form such that it is not reasonably possible for other States to infer what its true character is. These proved to be the crucial points of the historic aspects of the Norwegian case."²⁰³

189. Later, in a section entitled "Protests, Admissions", Sir Gerald makes the following statement:²⁰⁴

"... in certain circumstances failure to protest may amount to an admission, and an admission may be implied from silence or inaction."

The author develops this statement by citing passages from the Court's judgements in the Fisheries Case, in the *Minquiers and Ecrehous Case* (1953) and in the case concerning the rights of United States of America nationals in Morocco (1952).²⁰⁵

E. The time factor in the acquisition of an historic title

190. Is there some specified period of time which must elapse before an historic title is acquired? Expressions such as "of long standing", "immemorial", "confirmed by time" or "well-established", which occur both in judicial decisions and in the works of authors, all suggest a fairly long period but do not give a clear indication of its exact duration.

191. Scelle,²⁰⁶ who admits prescription as a mode of acquiring rights in international law, states that the period of prescription "is indeterminate [in international law] and must in each case be submitted to the test of reasonableness".

192. Judge Alvarez,²⁰⁷ in his separate opinion in the *Anglo-Norwegian Fisheries Case*, states that:

"International law does not lay down any specific duration of time necessary for prescription to have effect. A comparatively recent usage relating to the territorial sea may be of greater effect than an ancient usage insufficiently proved."

193. Sir Gerald Fitzmaurice²⁰⁸ expresses the following view on this subject:

"... the passage of an appreciable period of time is necessary for the acquisition or formation of historic rights, because if the essential role of the historic element is to supply an inference of acquiescence on the part of other States, arising from their inactivity coupled with the passage of time — then time must be allowed to pass."

194. After citing the extract from the separate opinion of Judge Alvarez quoted above, Sir Gerald Fitzmaurice comments on it as follows:²⁰⁹

"If the emphasis is placed on the words 'comparatively' and 'insufficiently proved', this pronouncement is fully acceptable, but it is even so more applicable to the case of the formation

²⁰³ *Ibid.*, p. 33.

²⁰⁴ *Ibid.*, p. 42.

²⁰⁵ *Ibid.*, pp. 42-47.

²⁰⁶ *Op. cit.*, p. 435.

²⁰⁷ *Fisheries Case (United Kingdom v. Norway), Judgement of 18 December 1951; I.C.J. Reports, 1951, p. 152.*

²⁰⁸ *Op. cit.*, pp. 30-31.

²⁰⁹ *Op. cit.*, p. 31.

by usage of a new general rule of customary international law than to the acquisition of specific and special rights by an individual State on a prescriptive basis. Professor Lauterpacht has recognized this distinction in the following passage:¹

'However, assuming . . . that the emergence of the doctrine of sovereignty over the adjacent areas constituted a radical change in pre-existing international law, the length of time within which the customary rule of international law comes to fruition is irrelevant.² For customary international law is not yet another expression for prescription.³ A "consistent or uniform usage practised by the States in question"—to use the language of the International Court of Justice in the *Asylum Case* [*I.C.J. Reports*, 1950, p. 276]—can be packed within a short space of years. The "evidence of a general practice as law"—in the words of Article 38 of the Statute—need not be spread over decades. Any tendency to exact a prolonged period for the crystallization of custom must be proportionate to the degree and the intensity of the change that it purports, or is asserted, to effect.'

"A new rule of customary law based on the practice of States can in fact emerge very quickly, and even almost suddenly, if new circumstances have arisen that imperatively call for legal regulation—though the time factor is never wholly irrelevant: but the acquisition of prescriptive rights by individual States, contrary to the existing (and otherwise still subsisting) international order, involves different considerations and criteria, that make the passage of time, and an appreciable period of time at that, essential at any rate in all those cases (which are the type of the true prescriptive or historic claim) where the positive consent or express recognition of States cannot be shown."

¹ 'Sovereignty over the Submarine Areas', *British Year Book of International Law*, 27 (1950), p. 393."

² Or perhaps not so much irrelevant as *not* determinant *per se*."

³ This is obviously correct, but the two have important features in common. Both depend on the establishment of a practice or usage—one general and the other particular—and each derives its eventual legal sanction from some form of consent on the part of States—either general acceptance in the one case, and in the other specific recognition or tacit acquiescence. Apart from any difference in the time factor, the *method* (practice and assent) is the same both for the establishment of new customary law and for the acquisition of prescriptive or historic rights."

195. Bourquin²¹⁰ notes that, by contrast with municipal law (where the prescriptive period for usucapion is laid down by precise rules), international law does not, for the purpose of the acquisition of historic title, contain any rule laying down a specific period. He adds:

"... As far as the so-called historic bays are concerned, the question is of no practical interest. The usage on which the State relies in such a case goes back to the most distant past. It is an immemorial usage, in the strict sense of that word.

"We should not forget that the general trend of the development of the law of the sea in modern times is characterized by a gradual shrinkage of the maritime territory of States.¹ In principle, it is not the sovereignty of the State which has spread at the expense of the high seas but the high seas which have spread by absorbing areas previously subject to the authority of the State. Consequently, the waters in respect of which an historic title is claimed are not waters which the coastal State has appropriated at a more or less recent date, but waters which

¹ We are now witnessing—for reasons too elaborate to set forth here—a reverse trend, a reaction against any excessive reduction of the prerogatives of the coastal State. But from the time of the *Mare liberum* Grotius until the Codification Conference of 1930 the dominating influence had been the desire to extend the area of the high seas."

²¹⁰ *Op. cit.*, p. 49.

have always formed part of its territory and which have never been a portion of the high seas . . ." ²¹¹

196. The author cites Baldoni,²¹² who says:

"... At the time when the rule of the freedom of the seas was asserting itself, the Bays of Cancale, Chaleurs, Chesapeake, Conception, Delaware, Fonseca and Miramichi were already under the effective permanent sovereignty of the coastal States. The principle of the freedom of the seas had accordingly never applied to them. It is unnecessary, therefore, in order to explain the coastal State's title thereto, to rely on any rules of prescription or, as others believe, on some supposed special rules created as exceptions to the principle of the freedom of the high seas. The status of these bays can be explained—by analogy with our treatment of the other parts of the territorial sea—by the general rule governing occupation, the application of which, even in the present case, is not excluded by any rule of an exceptional nature. Consequently, the status of historic bays is not, as the authorities generally contend, exceptional. Their status is normal, because it derives from a fundamental principle of the law of nations. We may add, though strictly in passing, that some of these bays, such as Chesapeake and Delaware, are of such configuration and size that they can so surely be regarded as accessory to the coasts surrounding them that no further inquiry of any kind is necessary to establish that they are not subject to the principle of the high seas."

F. *The notion of continuity in the formation of a historic title*

197. As has been shown above (para. 141), some draft codes qualify the "usage" which gives rise to a historic title by the adjective "continuous". In other words, according to these drafts a historic title cannot be acquired without proof of "continuous usage".

198. In the Fisheries Case, the International Court of Justice, after having established the existence and the constituent elements of the Norwegian system of delimitation, held "that this system was 'consistently' applied by Norwegian authorities". In that connexion, it considered the documents on which the United Kingdom based its contention that the Norwegian Government had not consistently followed the principles of delimitation which, it claimed, formed its system. The Court concluded as follows:²¹³

"The Court considers that too much importance need not be attached to the few uncertainties or contradictions, real or apparent, which the United Kingdom Government claims to have discovered in Norwegian practice. They may be easily understood in the light of the variety of the facts and conditions prevailing in the long period which has elapsed since 1812, and are not such as to modify the conclusions reached by the Court.

"In the light of these considerations, and in the absence of convincing evidence to the contrary, the Court is bound to hold that the Norwegian authorities applied their system of delimitation consistently and uninterruptedly from 1869 until the time when the dispute arose."

²¹¹ Norway expressed a similar opinion in the Fisheries Case (see Rejoinder, para. 561).

²¹² "Les navires de guerre dans les eaux territoriales étrangères", Academy of International Law, *Recueil des Cours*, 1936 vol. III, pp. 221-222.

²¹³ See *supra*, para. 65.

III. SCOPE OF THE THEORY OF HISTORIC BAYS

199. The application of the theory is not limited to bays. It tends to be applied also to straits, to the waters within archipelagos and, generally, to the various areas capable of being comprised in the maritime domain of the State.

200. Article 2 of the draft convention adopted in 1936 by the International Law Association refers to all such maritime areas in general terms, as follows:²¹⁴

"... each maritime State shall exercise territorial jurisdiction within the limits hereinafter provided and not further, save to the extent that jurisdiction is conferred by... or established usage generally recognized by Nations."

201. At the eighth plenary meeting of the 1930 Conference on the Codification of International Law, Mr. Giannini, the Italian representative, said that the Second Committee:²¹⁵

"... recognized that there were historic situations — 'historic' bays, although the use of the adjective was criticized. This conception was also extended from bays to certain historic waters. It will be the first time that this adjective used in this sense will appear in official documents."

202. At the eleventh meeting of the Second Committee of that Conference, Mr. Miller, the representative of the United States of America, criticized the expression "historic bays". In his view:²¹⁶

"Both words are inaccurate — both 'historic' and 'bays'. It is a question, so far as the latter word is concerned, of waters, not merely waters that either from habit or technical definition are called bays, but waters by whatever name they may have generally or technically have been called. Furthermore, the word 'historic' is an inaccurate word, because it is not only a question of history, it is also a question of the national jurisdiction of the coastal State. That, I submit, is the question involved in regard to these waters, and the continual use of the expression 'historic bays', with mention of one or two bays here and there in different parts of the world, has led to a great deal of confusion of thought as to the principles which are involved."

203. The United States delegation consequently submitted an amendment to Basis of Discussion No. 8, in the following terms:²¹⁷

"Waters, whether called bays, sounds, straits, or by some other name, which have been under the jurisdiction of the coastal State as part of its interior waters, are deemed to continue a part thereof."

204. It should be noted that in the Fisheries Case the International Court of Justice recognized as consistent with international law the Norwegian argument

that all the waters²¹⁸ within the limits drawn by the Decree of 1935 were historically Norwegian waters.

205. A statement of special significance in this context is that made by the Court regarding the LoppHAVET basin, which it refused to characterize as a bay (*supra*, paras. 70-71):

"Even if it were considered that in the sector under review the deviation was too pronounced, it must be pointed out that the Norwegian Government has relied upon a historic title clearly referable to the waters of LoppHAVET..."

206. And later:

"The Court considers that, although it is not always clear to what specific areas they apply, the historical data produced... lend some weight to the idea of the survival of traditional rights reserved to the inhabitants of the Kingdom... Such rights, founded on the vital needs of the population and attested by very ancient and peaceful usage, may legitimately be taken into account in drawing a line which, moreover, appears to the Court to have been kept within the bounds of what is moderate and reasonable."

PART III

Various suggestions made at the First Codification Conference of The Hague (1930) for the solution of the problem of historic bays

207. The Preparatory Committee of the First Codification Conference of The Hague (1930) suggested that "it would be convenient that at the Conference the Governments should state what are the bays which they claim to be historic bays and what are the roadsteads for which they claim to have the territorial-waters belt measured from the exterior boundary of the roadstead".²¹⁹

208. At the eleventh meeting of the Second Committee of that Conference, held on 28 March 1930, Mr. Giannini, the Italian representative, submitted a proposal in the following terms:²²⁰

"The Conference expresses a *voeu* that the Communications and Transit Committee should appoint a special Committee to study what are the so-called historic bays, and what is their present *de facto* and *de jure* situation, with a view to collecting the data necessary to codify their legal status at a subsequent Conference for the Codification of International Law."

209. In 1930, Antonio Sanchez de Bustamante y Sirven prepared a study of the territorial sea²²¹ which was transmitted, through the American Institute of International Law, to the First Codification Conference

²¹⁴ Report of the Thirty-fourth Conference, 1926, p. 43. See also article 12 of the draft contained in *Harvard Research* (*supra*, para. 83), articles 11 and 16 of the draft submitted in 1933 to the Tenth International Conference of American States (*supra*, para. 81) and the Report of the Second Committee of the Codification Conference, 1930 (*supra*, para. 90).

²¹⁵ Ser. L.o.N.P. 1930.V.14, p. 53.

²¹⁶ Ser. L.o.N.P. 1930.V.16, p. 107.

²¹⁷ *Ibid.*

²¹⁸ All the Norwegian coastal waters within the straight base-lines following the general direction of the coast. The Court stressed that the Norwegian coast meant the outer contour of the "skjaergaard", i.e. "all the islands, islets, rocks and reefs...". Furthermore, "within the 'skjaergaard', almost every island has its large and its small bays; countless arms of the sea, straits, channels and mere waterways serve as a means of communication for the local population...". (*Fisheries Case (United Kingdom v. Norway), Judgement of 18 December 1951, I.C.J. Reports, 1951, p. 127.*)

²¹⁹ Ser. L.o.N.P. 1929.V.2, p. 64.

²²⁰ Ser. L.o.N.P. 1930.V.16, pp. 112-113.

²²¹ *The Territorial Sea*, 1930 (already cited).

of The Hague. In this study, the eleventh chapter of which contains a "Project of Convention" on the juridical regime of the territorial sea, the author states: ²²²

"It appears necessary that the Convention should define these historic bays, in order that it be their fundamental element, the exercise or uninterrupted sanction of their character, that determines the recognition of this quality. The permanent right of the coastal State may be proved, both by the provisions of its internal legislation, if it has such, and by acts of jurisdiction and of government as well as by declarations previous to the signing of the proposed Convention by the competent authorities.

"Some means must, however, exist so as to avoid future abuses, as well as discussions and conflicts. With this aim, the Project of Convention establishes that every country having historic bays, within the definition that it contains, shall specifically state this on depositing its ratification. And as claims from third parties may arise, the opportunity to try them and the jurisdiction to decide them must not be passed over in silence. These claims we shall in due time discuss and formulate in view of the maximum extent of territorial waters."²²³

Article 11 of the "Project of Convention" gives a definition of historic bays (*supra*, para. 81). The other relevant articles are 18 to 25, which are worded as follows: ²²⁴

"Art. 18. Territorial sea has an exterior maritime zone three miles wide, of sixty to the degree of longitude on the Equator, and starting from the interior limits indicated in this Convention.

"Art. 19. The contracting States which maintain, for all purposes or for some, a greater extent which has been fixed previous to the signing of the present Convention, shall declare

²²² *Ibid.*, p. 100.

²²³ *Ibid.*, pp. 109-111.

²²⁴ *Ibid.*, pp. 143-144.

this extent when depositing their respective ratification or when adhering to same.

"Art. 20. Such declaration shall be communicated at once by the Secretariat of the League of Nations to all other contracting or adhering States, which may oppose it within a period of six months from the notification, if not in accord with the conditions established in the foregoing article.

"Art. 21. Each State ratifying the present Convention or adhering thereto after the said declaration has been made, shall also be notified in the same manner, and may oppose it within the six months that follow its notification or adhesion, or take part in the current legal procedure, save in the event of an already existing judicial or arbitrary decision.

"Art. 22. The opposition shall be communicated to the Secretariat of the League of Nations, which shall notify thereof the remaining contracting parties or adherents.

"Art. 23. The opposing State shall be obliged, within another six months following reception of advice of opposition by the Secretariat of the League of Nations, and if it has not solved the difficulty through direct diplomatic negotiations between those interested, to submit it to the decision of third parties, in the manner established in the Conventions which it has in force with the opposed State, and, in the absence of this, to the Permanent Court of International Justice, if both of them were signatories of the Statute. In the event that neither of these cases should be applicable to them, the difference shall be submitted to arbitration.

"Art. 24. The procedure adopted according to the foregoing article, shall be immediately notified by the opposing State, and authentic copies of documents recording the results shall be furnished to the Secretariat of the League of Nations, and the latter shall also immediately transmit these copies and notify the other contracting States or adhering to the Convention, that may take part in the same procedure, although without intervening in the appointment of the arbitrary Court or in the organization and constitution of any other means of conciliation or decision that may have been accepted.

"Art. 25. The rules established in the foregoing articles 19 to 24 shall be applicable also to the bays, estuaries and straits comprised in articles 11 and 16 of the present Convention."

SCIENTIFIC CONSIDERATIONS RELATING TO THE CONTINENTAL SHELF

MEMORANDUM BY THE SECRETARIAT OF THE UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

(Preparatory document No. 2)

[Original text : English]
[20 September 1957]

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Introduction

1. The United Nations Organization requested on 18 April 1957 the preparation of a working document on the subject of: Topographical and Geological description of the Continental Shelf and Other Submarine Regions adjacent to the Coast; the document being envisaged for use during an International Conference of Plenipotentiaries charged with examining the Law of the Sea.

2. To meet this request of the United Nations, UNESCO convened a meeting of experts (Drs. A. Guilcher, Nancy, France; P. H. Kuenen, Groningen, Netherlands; F. P. Shepard, La Jolla, California, United States of America—Dr. V. P. Zenkovitch, Moscow, Union of Soviet Socialist Republics, also invited but unable to attend), to whom a preliminary draft text prepared under contract by Dr. Guilcher, with the advice of Drs. P. Tchernia and M. Eyriès, was submitted for review. The present paper is the result of the combined work of the above experts,¹ who collaborated in bringing about amendments to the preliminary draft.

3. It appeared to the experts that a document carrying precisely the requested title would not be the most useful that could be conceived for the projected Conference. It is not so much a systematic description that should be furnished (such a description would be in any

¹ It should be noted that the experts limited themselves to purely scientific considerations and that the memorandum should not be considered as a statement of the views of UNESCO regarding the legal questions involved.

case either very long or very incomplete), as the elements that could lead to such a definition, and permitting the plenipotentiaries to choose, in full awareness of all the circumstances, the borderlines or criteria for the borderlines, which they require, as well as the elements for evaluating the part of the sea-bottom situated beyond the continental shelf for their juridical status.

4. For this reason, it was thought useful to modify the title and the substance of the requested document, and to adopt the one used in the heading. It will be found that the report includes a descriptive part, or more exactly, that precise examples are given with reference to each aspect of the problem to be examined. It is in fact necessary, since natural topographical features are concerned here, to go beyond abstractions. However, in principle, the report is not primarily descriptive.

5. The following items are treated: the continental shelf as a legitimate concept; the problem of the borderline between the shelf and the slope; the problem of irregularities of the topography of the shelf; the problem of "other submarine regions adjacent to the coast", and of isolated submarine rises in the sea.

I. CONTINENTAL SHELF AS A LEGITIMATE CONCEPT

6. Attention is first drawn to the definitions adopted by the International Committee on the Nomenclature of Ocean Bottom Features, published by Wiseman and Ovey (Definitions of features on the deep-sea floor, *Deep-Sea Research*, Vol. I, No. 1, Oct. 1953, p. 11-16).

"Continental shelf, shelf edge and borderland. The zone around the continent, extending from the low-water line to the depth at which there is a marked increase of slope to greater depth. Where this increase occurs, the term shelf edge is appropriate. Conventionally, its edge is taken at 100 fathoms, or 200 metres, but instances are known where the increase of slope occurs at more than 200 or less than 65 fathoms. When the zone below the low-water line is highly irregular, and includes depths well in excess of those typical of continental shelves, the term continental borderland is appropriate.²

Continental slope. The declivity from the outer edge of the continental shelf or continental borderland into great depths.

² This point will be discussed further in paragraph 40.

Continental terrace. The zone around the continents, extending from the low-water line, to the base of the continental slope.

Island shelf. The zone around an island or island group, extending from the low-water line to the depths at which there is a marked increase of slope to greater depths. Conventionally, its edge is taken at 100 fathoms, or 200 metres.

Island slope. The declivity from the outer edge of an island shelf into great depths."

7. In French, "continental shelf" is translated equally often *plateau continental* and *plateforme continentale*. "Continental slope" is traditionally translated *talus continental*, but it seems better to say *pente continentale*, an expression which does not prejudice the origin of this relief, which is still disputed and which no doubt is not invariable. In fact, *talus* seems to imply a built-up declivity. "Continental terrace", which comprehends both continental shelf and continental slope, can be rendered by *marge continentale* (Bourcart, *Géographie du fond des mers*, Paris, 1949; Guilcher, *Morphologie littorale et sous-marine*, Paris 1954); besides, the expression "continental margin" is used in English (e.g. Umbgrove, *The Pulse of the Earth*, The Hague, 1949); this term seems to us even preferable in that language. The equivalents of other terms are:

"Shelf edge": *bord de la plate-forme*;

"Borderland": *bordure continentale*;

"Island shelf and slope": *plate-forme and pente insulaire*.

8. In spite of the difficulties of defining the borderline between the continental shelf and the continental slope (see under section II below), it is incontestable that the concept of continental shelf corresponds to a real feature. As a general rule, there exists in fact a shallowly submerged zone along the edge of continents, of which the mean slope is markedly less steep than beyond, leading to the deep-sea floor. The reality of this feature can be demonstrated by the percentages of terrestrial surface occupied by three depth zones of the oceans (according to Svendrup, Johnson and Fleming, *The Oceans*, New York, 1942).

From 0 to 200 metres :	7.6 per cent	} 8.5 per cent
„ 200 to 1000 metres :	4.3 per cent	
„ 1000 to 2000 metres :	4.2 per cent	

9. Since the area covered by bottoms lying between 0 and 200 metres is only slightly less than that between 200 and 2,000 metres, a range of depth that is nine times as great, it is evident that the average slope is much steeper beyond 200 metres than nearer shore. These figures are liable to be somewhat modified by continued soundings in years to come, but it can be affirmed that they will not change significantly, and that the general conclusions drawn from them will not be altered.

10. The outer limit of the continental shelf will be discussed in section II. Meanwhile the depthline of 200 metres will be retained as the margin. Thus defined the shelf is very unequally distributed around the continents. It can be of a width of several hundred kilometres, as off the Guianas, and, in other cases, can be limited to 1 or 2 kilometres or even be completely lacking (western coast of Corsica, and off the Alpes-

maritimes, on the south-east coast of France). It is important however to emphasize that total absence of the continental shelf is a rare feature, and that the shelf usually exists not only off flat coasts like north Siberia or south Argentina, but also off a number of mountainous coasts like that of Galicia on the north-west side of the Iberian Peninsula, where the shelf extends to a width of about twenty kilometres in spite of the fact that immediately inland there are found heights reaching from 400 to 600 metres. It is however true that is particularly off mountainous coasts that the shelf may be missing (principle of the continuity of subaerial and submarine topographies).

11. It seems unnecessary to include in this report separate consideration of island shelves, since the juridical problems raised by the continental shelf apply also to them.

12. Finally the existence should be noted of shallow seas between islands and/or continents. These areas incontestably form parts of the continental shelf. In some cases the islands form the raised margin of the continental shelf (e.g. Farilhoes off Portugal, Taiwan off China, Aru Islands south of New Guinea). In other cases the area can be considered a flooded part of the continent (e.g. Gulf of Paria; Baltin; White Sea; North Sea; Persian Gulf; sea between the Sunda Isles, Malacca and Gulf of Siam; Yellow Sea; Gulf of Tartary; sea between New Guinea and Australia). Those areas merge imperceptibly and without any change in character morphologically or geologically with the adjoining shelves facing the wide oceans. Hence no doubt can arise as to their belonging to the shelf.

II. THE PROBLEM OF THE BORDERLINE BETWEEN THE CONTINENTAL SHELF AND THE CONTINENTAL SLOPE

13. Here the concern is with an essential problem: is it legitimate to fix the limit of the continental shelf along the 200 metre line (or 100 fathom line which comes to almost the same thing) based on topographic data? Can one adopt a line of demarcation topographically or otherwise, that would be universally valid?

14. An examination of this problem applied to the seas of the world as a whole was made by Shepard (*Submarine Geology*, New York, 1948). Shepard reached the following conclusions (p. 143-144): the edge of the shelf, that is to say, the depth at which the greatest change in the slope occurs, on the average at 72 fathoms (133 metres); the average slope of the shelf is 0° 07', and is a little steeper in the inner half than in the outer; on the continental slope, on the other hand, the average slope is 4° 17' for the first 1000 fathoms of the slope (*ibid.*, p. 187). It appears therefore, according to these data, that the traditional limit of 200 metres is too deep, at least for an average.

15. However, actual figures can depart considerably from this average, and it is certain that the continental shelf reaches depths varying very much from place to place, and can in certain cases attain relatively great depths. Thus, around the Antarctic, "a depth of two to three hundred fathoms (370 to 555 metres) is commonly found before the break of slope which marks the edge-

of the continental shelf" (Ewing and Heezen, in *Antarctica in the International Geophysical Year*, American Geophysical Union, Washington, 1956, p. 75). Off western and north-western Australia, the Sahul Shelf descends to a depth of 555 metres (300 fathoms) in certain places, whereas in other places the shelf edges are much shallower (R. W. Fairbridge, The Sahul Shelf, Northern Australia, *Journ. Roy. Soc. West. Australia*, XXXVII, 1953, p. 1-33.—M. A. Carrigy et R. W. Fairbridge, Recent sedimentation, physiography and structure of the continental shelves of Western Australia, *ibid.*, XXXVIII, 1954, p. 65-95). Other poorly sounded areas which may represent deep shelves could possibly be included in continental borderlands which are discussed later (para. 40). The continental shelf off Norway, where depths are fairly variable even in the relatively flat parts, can be considered as a "glaciated shelf", which is a special type also discussed later (para. 20).

16. Furthermore, Bourcart has emphasized the great difficulty sometimes encountered, according to his view, of defining the outer edge of the shelf (Note *sur la définition des formes du terrain sous-marin*, Deep-sea Research Vol. 2, January 1955, p. 140-144). He admits that there exists sometimes a very marked line of demarcation occurring at depths varying from place to place, as has already been seen. The example can be cited of the Arabian shelf in the Red Sea, 200 kilometres south of Jidda, which is only 50-80 metres deep, and which suddenly drops off beyond this with a very sharp discontinuity of slope to depths of 640 to 730 metres, where there is a second step (Nesteroff and Guilcher, *Morphologie et géologie du Banc Farsan*, *Annales de l'Institut Océanographique*, Vol. 30, 1955, p. 1-100). However, Bourcart also says: "*La côte française de la Méditerranée ne nous donne aucun exemple de plateau continental qui soit limité par un abrupt net. Le seul cas est celui des abrupts par où se terminent vers le haut les canyons*". Thus, he continues, in the Gulf of Lions we have "*une pente convexe qui débute vers 100 mètres et passe par un maximum à 500-600 mètres. Elle devient concave vers 2000-2100 mètres*". He concludes that in many cases the distinction between the continental shelf and the continental slope is either difficult or impossible.

17. This difficulty pointed out by Bourcart does certainly exist in certain regions, but these are quite exceptional. Even in the Gulf of Lions (French Mediterranean coast), the charts published by Bourcart himself (*Contribution à la connaissance du socle sous-marin de la France le long de la côte méditerranéenne*, *Comptes rendus du 19e Congrès Géologique International*, Alger, 1952, Section IV, p. 25-63) show that in this region the shelf and the slope can be separated. In the north-west Gulf of Mexico, of which a fine chart in two sheets has been published by Mrs. Gealy (Topography of the continental slope in north-west Gulf of Mexico, *Bull. Geol. Soc. America*, Vol. 66, 1955, p. 203-228), the slope shows a rapid increase beyond about 75 fathoms (140 metres), and there again, the limits could be traced with sufficient accuracy. The Porcupine Bank, off Ireland, is a much more delicate case, over which soundings as yet unpublished have been made recently (March 1957). This bank has, generally

speaking, a long slope that is regularly convex towards the great depths of the Atlantic, which extends at least to a depth of 800 metres. This feature may be seen also, for the south-western tip of this Bank, in the Chart of the north-east Atlantic published by Hill (*Deep-Sea Research*, Vol. 3, No. 2, April 1956). To define the edge of this bank would be a difficult operation. This is an extreme case.

18. The difficulties seem to proceed in large measure from the fact that the continental margins (shelves and slopes) do not appear to have the same origin, and as a consequence to have the same structure. For the problem of origins, reference for details is made to Shepard, *op. cit.*, Bourcart, *Géographie du fond des mers*, Kuenen, *Marine Geology*, New York, 1950, Guilcher, *op. cit.* A first type, of which the existence is established beyond doubt, is that formed by sedimentation of a few thousand metres thick on a subsiding foundation. A representative case is the shelf off the east coast of the United States, well explored by means of seismic prospecting methods. The base of the Cretaceous deposits, which is 900 metres below sea-level at the entrance of Chesapeake Bay, is found to be at a depth of 3,900 metres at the outer edge of the shelf, with younger sediments on top in the shape of a wedge forming the terrace. Likewise, the coastal shelf of the northern Gulf of Mexico, also well studied by many deep wells and by seismic prospecting, is formed by a mass of Tertiary sediment many thousands of metres thick. Salt rises up through these sediments from below in the form of salt domes, forming slight mounds at the surface. These cases of built-up shelves are not among those whose outlines are difficult to define.

19. A second type is due primarily to erosion, the cutting by waves of coastal terraces during times of lowered sea level caused by glaciers on the continents. The terraces were formed at various levels down to about 100 metres below the present sea level. After the sea level returned the terraces have been partly smothered by sediment but can still be found by an acoustic probe which shows the thickness of surficial sediments. Shelves of this type are mostly very narrow, a few kilometres wide. Examples are found off southern California and probably in many other areas.

20. A third type occurs off most glaciated coasts (Shepard, *op. cit.* chap. 5). These shelves are very irregular, containing many basins and troughs which have depths greater than 200 metres even near the coasts. (H. Holtedahl, *On the Norwegian continental terrace, primarily outside Møre-Romsdal*, Bergen, 1955; O. Holtedahl, *The submarine relief off the Norwegian coast*, Oslo, 1940). Shallow banks, including islands are found on the outer parts of these shelves. These banks are important sources of fish, for example the Grand Banks.

21. A fourth type is that of flexured continental margins, caused by the bulging up of the continent and concomitant downwarping of the submerged part. According to Bourcart (*op. cit.*) and Jessen (*Die Randschwellen der Kontinente, Ergänzungsheft 241 zu Petermanns Mitteilungen*, Gotha, 1943), this type is seen along many coasts of the world, and in particular in various points on the African coast: mountains found

along the periphery of this continent for instance in Gabon and in Angola, would represent the projecting parts of the flexure, and at least for the case of Angola, this explanation appears to be correct. Bourcart believes that the south-eastern coast of France (Provence, Niçois) is of the same type. He has proposed the same for the Atlantic coast of Morocco, but there his conclusions have been challenged by various authors. However this may be, the flexured continental margins are not in principle built up, at least not to the same degree as the preceding type; very gentle convexity of this edge may be encountered.

22. A fifth type is that of margins consisting of a series of step faults, probable examples of which are found along the coasts of Queensland in Australia, and possible examples along the Arabian coast on the Red Sea, at least in certain places (Nesteroff and Guilcher, *op. cit.*). In this case, one finds immediately at the foot of the shelf a deeper area of varying depth, intermediate between the shelf and the deep-sea floor. Sedimentation on this stepped area can obliterate the steps to a greater or smaller degree according to the case, but the sedimentation is not as thick as in the first type. The difficulties of delineation would often be quite small.

23. A sixth is the basin and range type, where the topographic relief is formed by blockfaulting and possibly folding. These basins and ranges run parallel or nearly parallel to the coast. The most typical example is found along the southern coast of California. (Shepard and Emery, *Submarine Topography off the California Coast*, 1941, Special paper No. 31 - Geological Soc. of America). The question remains as to how far the whole area consisting of crests and depressions forms part of the continental shelf: we will return to this question in par. 40. In other regions folds may perhaps play a more important rôle than faults. It has been suggested by Bourcart and Glangeaud (*Morphotectonique de la marge continentale nord-africaine*, *Bull. Soc. Géol. de France*, (6) IV, 1954, p. 751-772) that recent folds may have contributed to form the Algerian coast.

24. In spite of these diversities of origin the continental shelf has a remarkably even marginal depth, usually lying between 100 and 150 metres. This uniformity is probably the result of wave erosion during glacial stages of low sea level and in part delta building at these same stages. Some scientists believe that the depths represent the lowest level at which the waves can transport sediments at present. Many shelves have been affected somewhat by crustal warping, particularly by slow subsidence. Others have been built up since the Ice Age by deposition. In the coral sea areas as in Northern Australia the growth of corals has greatly decreased shelf depths.

25. Faced with these difficulties, should one adopt a non-morphological and non-bathymetrical criterion, and base it for instance on the geological nature of the bottom or upon the aquatic inhabitants? This does not appear feasible. As regards the nature of the bottom, it follows from the foregoing remarks how extreme the differences in composition must be. Rock of all kinds, coarse fragmentary matter, sand, coral reefs, mud covering, etc., are all known to occur extensively. As to bottom inhabitants, numerous organisms have a wide

range covering most of the shelf and the upper part of the slope.

26. It does not seem advisable on the other hand to propose a definition of boundaries corresponding to the technical possibilities of exploitation of the soil and submarine sub-soil, and this for two reasons. Firstly, rapid technical advances of exploiting the mineral resources of the sea are being made so that the limit thus defined would be on the outward move all the time. Moreover, this limit would depend on local current and wave conditions, so that there would be the greatest confusion concerning the suggested definition. Secondly, the possibility, already realized, of exploitation by oblique drilling and mining from the land deprive the suggested definition of all meaning.

27. In spite of the above, is it still possible to propose to jurists a general rule for defining the boundaries? It is suggested to keep to the morphological criteria, notwithstanding the difficulties encountered in this domain. A few criteria are proposed that are at the same time almost universally valid and in accordance with the actual bottom relief.

Proposed Method for Defining the Boundary of the Continental Shelf

Case 1: The soundings are insufficient for tracing the depth contours: in this case the continental shelf is limited by agreement to the depth of 100 metres until the establishment of charts with precise contours.

Case 2: Soundings are sufficient, that is to say, there are no points in the area in question which are more than 5 kilometres distant from a line not parallel to the coast along which the depth is known in a continuous manner.

Case 2 a: The great majority of continuous echo sounding profiles running from the coast to oceanic depths show a clearly marked break in slope at the outer edge of the shelf at less than — 600 metres. Often this break is seen to be double, with the most marked angularity found in the deeper of the two. This point (in the case of two, the one most pronounced) marks the edge of the shelf.

Case 2 b: If any doubt exists as to the position or existence of such a break at less than — 600 metres, the following procedure should be followed: The contours are traced at depth intervals of 50 metres (or 25 fathoms) in the range between — 50 and — 800 metres. A set of lines normal to the contour is drawn, spaced at 10 kilometres intervals measured along the 200 metre contour. The *two shallowest* consecutive contours are selected satisfying the following condition: The distance between the two contours, measured along the line of maximum slope, is less than 1/10th of that, similarly measured, between the two extreme contours of — 50 and — 800 metres. A border point is then marked on each of the lines mentioned, midway between the shallowest of those two contours and the next one on the shallow side. The outside limit of the continental shelf is defined by the broken line, traced on a chart based on the Mercator projection, formed by joining by straight lines the border points obtained in the above manner.

28. *Remarks:* In case 1, the 100 metre depth is

chosen because it is the shallowest normally found at the break of slope in imprecise charts. In case 2 b, the proposed rule would appear to permit the definition of borderlines even where the outer edge of the shelf is gently rounded, that is, where a clear break in slope is lacking. They can be applied validly also to island shelves, whether they may be small islands or continental islands of the Madagascar type.

The above rules are so devised as to provide an incentive for carrying out sounding surveys in less well chartered areas of the shelf.

III. THE PROBLEM OF IRREGULARITIES IN THE SHELF

29. The term shelf or platform does not necessarily imply an absolutely flat relief, but only a configuration where, except in glaciated areas, the unevenness is not very considerable: 100 metres at most, and usually of lesser order. If we were to insist on absolutely flat areas between the coast and the outer limits suggested above, we would not find very many continental shelves in the world. Besides, isolated rises and depressions of a much greater scale can be found on the shelves; but in continental terminology, it is admitted that such heights and depressions do not form part of the platform.

30. Shallowly embedded submarine valleys (some 40 or 50 metres deep) that are found on the shelves in different parts of the world should certainly be considered as integral parts of the shelves. Examples are found on the shelf off the mouth of the Hudson River, in the Java Sea between Java, Sumatra and Borneo, in the Arafura Sea, north of Australia, and in front of Guinea. These valleys (so-called shelf channels), cut by subaerial rivers during the Pleistocene period at a time when glaciation caused a lowering of the sea level, are but a witness of the fact that the shelf is a borderline area alternately submerged and exposed, a true extension of the neighbouring continents. Another evidence of the mixed origin of the shelves is the existence on various shelves of hills of glacial origin and of Quaternary Age (north-east coast of North America, North Sea, Baltic Sea). There are also channels of fluvial or other origin, which have been excavated to greater or lesser extent by tidal current scour.

31. The case of isolated and narrow but deeper depressions is more controversial. Such depressions are found scattered in certain seas, examples being the Hurd Deep in the English Channel (172 metres), and the multitude of small trenches in the North Sea (Devil's Holes, Swatch Way, Fladen Trough etc. — with depths up to 274 metres), whose origin is not yet well known. In the Baltic Sea also, there exist such isolated depressions, examples being the Ulvö Trough, the Åland Sea Trough (Giere, *Die Entstehung der Ostsee*, Königsberg, 1938), with depths reaching 250 metres and in exceptional cases even exceeding 300 metres (355 metres in the Åland Trough, according to the Union of Soviet Socialist Republics' Atlas, 2nd Edition, Moscow, 1955). It will no doubt be unanimously agreed that these isolated deeps form part of the shelf in which they are embedded, so long as they do not occupy more than a very small part of the sea bottom and are encircled by much shallower depths.

32. However, certain continental shelves are marked by much deeper and bigger depressions than those cited above. Three categories can be distinguished: a) the depressions that communicate with the deep sea beyond the outer edge of the shelf only over a sill at the level, or nearly at the level of the shelf floor; b) wide flat-floored troughs lacking a sill in the outer part; c) the narrow canyon-like valleys which slope out to the deep-sea floor.

a) The depressions of the first kind are frequent on continental shelves in higher latitudes that have been glaciated. They are sometimes longitudinal and thus form a kind of large trough parallel to the general direction of the coast, for example around Norway (O. Holtedahl, *op. cit.*; H. Holtedahl, *op. cit.*), sometimes transversal, and thus correspond to the openings of fjords, for example, the coast of British Columbia (Shepard, *op. cit.*). The glaciers of the Ice Age are evidently responsible for the modelling.

b) The depression of the second type so far as known are all off glaciated coasts, for example the Cabot Strait Trough, south of Newfoundland, discussed below (para. 35).

c) Depressions of the third type, much more numerous but narrower, are the submarine canyons, concerning which a considerable literature is in existence (see general works already cited): they are valleys with a V-shaped cross-section, often ramified, deeply embedded in the shelf, with relative depths of several hundred metres, sometimes even exceeding 1,000 metres. They are thus distinguished from the "shelf channels" described in para. 30. Furthermore, they have a very steep and irregular longitudinal profile, but, generally, without very marked counter-slopes. Many submarine canyons only cut into the fringe of the continental shelf without penetrating deeply into it; but others traverse it almost completely and nearly reach the coast or even enter the mouths of certain rivers, as is the case of the Congo Canyon on the west coast of Africa, the Gouf de Cap Breton, off the south-western coast of France; and the canyons off California.

33. The problem whether these various depressions do or do not form part of the continental shelf is one which will arise in many areas since submarine canyons exist in a considerable number of regions; they are known to be found on the coasts of both Americas, many Mediterranean coasts, coasts of east and west Africa, off the entrance of the English Channel, in the Beaufort Sea, around the Philippines, Japan, etc. (chart of canyons known in 1939 in Shepard, *op. cit.*, p. 210; this chart has now become very incomplete. Many other examples of canyons in the works, already cited, of Kuenen, Shepard, Bourcart, Guilcher). Though the exploitation by man of their bottom and sides are not as yet begun nor envisaged, it is foreseen that jurists will one day be faced with this problem.

34. From the morphological point of view, when a depression of the first type mentioned above is concerned, that is, one communicating with the ocean over a sill nearly level with the shelf, it would seem reasonable to consider this depression as constituting a part of the shelf, even if the depression is very deep. In this case the depression is perhaps anomalous to the

shelf, it is true, but totally enclosed therein. It is suggested that the depressions in the Norwegian shelf should not be dissociated therefrom because they form an integral part of the shelf from the morphogenetic point of view and many continue far inside the coast-line as fjords. It is also suggested that the Norwegian Trough forms part of the North Sea Shelf because of its sill.

35. A more difficult problem arises concerning depressions of the second type, that is, extending across to the break in slope without a sill. A type example is provided by the trough coming out of the Gulf of St. Lawrence through Cabot Strait. The depths along the entire length of this trough are in excess of those of the shelf on either side, and the trough has a width of about 100 kilometres. On the other hand, the trough is morphologically related to the shelf. Furthermore, the depths are not in excess of many of the basins on other glaciated shelves and it would be difficult to draw a line between this trough and the numerous other troughs of the glaciated shelves. However, the problem of the inclusion of this kind of trough in the continental shelves is more controversial than the preceding case.

36. The situation is very different from that of submarine canyons which tend to slope continuously out from their head to the deep-sea floor, thus forming part of the continental slope. The narrow upper part of submarine canyons, although belonging technically more to the slope than to the surface of the terrace, could nevertheless be considered part of the surrounding shelf from the point of view of convenience for international legislation.

37. In this regard, the notion of the straight baseline might be taken into consideration. This is the baseline from which the width of territorial waters are calculated in the case of deep coastal indentations.³ The question would then be to know what would be the width of the indentation in the shelf beyond which a straight line should be drawn from one side to the other, to define the limits of the shelf at this point. The critical width to be adopted should be discussed by jurists.

IV. THE PROBLEM OF "OTHER SUBMARINE REGIONS ADJACENT TO THE COAST"

38. An attempt to furnish the scientific elements that would serve to define such regions puts one in a difficult position, since what "regions" exactly are in question? The commentaries concerning the article 67 of the Articles concerning the Law of the Sea⁴ might throw some light on the matter. It is stated in para. (2) of the commentary on article 67 that the International Law Commission had envisaged the use of an expression other than "continental shelf" for the case where "technical developments in the near future might make it possible to exploit the resources of the seabed at a depth of over 200 metres...".

³ See article 5 of the Articles concerning the law of the sea in the report of the International Law Commission covering the work of its eighth session, *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159)*, p. 13.

⁴ *Ibid.*, p. 41.

39. The considerations discussed above make it clear that only confusion could arise from such a procedure. If, notwithstanding, the future Conference on the Law of the Sea should not limit legislation to the continental shelf, it is obvious that morphological considerations would then no longer play any part.

40. A special problem arises in the case of the continental borderlands, concerning which the area off southern California provides the type example. Here the basins and troughs are quite different from those of the glaciated shelves. They are clearly due to block-faulting and their depths are intermediate between shelf and deep sea. On the other hand, some of the ridges rise to shelf depths and even include islands. It is also important to note that the feature corresponding to the continental slope lies seaward of the continental borderland. A case somewhat comparable to the borderland is found in the Bahama Banks where even deeper troughs than those off California are found in between some of the island banks.

41. If the legislation is not limited to the shelves and borderlands, it might be useful to attempt to define here the notion of the continental slope, that is to say, the part of the sea bottom immediately adjacent to the shelf, and constituting together with it the continental margin. The definition of the International Nomenclature Committee was given in section I. As in the case of the shelf, the question of the outer boundary is posed. This boundary is relatively easy to draw if one keeps to general lines; but if an exact borderline has to be traced, serious difficulties are encountered, even greater than in the case of the shelf. This stems from the state of our knowledge and from the nature of things.

42. Our knowledge of the sea bottom is the less precise as the depth and the distance from the coast increase. At first the approaches of the coasts were sounded to meet the requirements of surface navigation; then the adjacent shelf was explored for fishing, for submarine navigation, with the view to eventual exploitation of the sub-soil, or because the scientific study thereof was fairly easy; going deeper, the available data rapidly dwindles due to the fact that the above reasons do not apply, or at least do not apply to the same degree. It is today quite in the domain of fancy to think of defining exactly the outline of the base of the continental slope, except in rare and particularly favourable cases. We will not even venture to quote a reference figure for the depth, since this varies in a range very much wider than in the case of the outer edges of the shelf.

43. In the favoured regions where precise soundings have been made, the slope appears to terminate in a fairly gradual fashion, that is to say, with a concave profile and an easing off of the slope. This is not encouraging for those who would wish to trace a line of demarcation separating the slope from the great depths. This arises, at least in part, from the existence of very numerous submarine canyons cutting the slope. These canyons are the places where sediment slumping and turbidity currents (spasmodic currents, formed of water charged with sediments) occur, sometimes the two together (numerous works of Kuenen on this subject;

similarly those of Shepard, with somewhat differing conclusions), which have either cut the canyons or at least maintain them open by periodically evacuating the sediments that tend to fill them. The two cases perhaps coexist: certain canyons can be attributed to other causes than turbidity currents in their origin (subaerial erosion by rivers prior to submersion), specially where they cut through hard rock.

44. Great fans exist beyond some of the canyons. These are in general gentle sloping and smooth, but are cut by shallow valleys. Some of the latter are continuations of the submarine canyons.

45. It must be said, however, that the study of the slope is very useful for the knowledge of the shelf. In fact, the exploitation of the whole body underlying the shelf and slope, which comes to the same as saying the exploitation of the continental margin, can certainly profit greatly not only from drilling results, but also from geophysical studies (which are made on the surface and do not require boring); but the latter can also be backed up by exploration of the natural sections constituted by the canyons, where samples may be taken which reveal the internal structure of the margin.

46. It could also be said that the upper part of the slope is susceptible to exploitation from the viewpoint of fisheries, but possibly not the whole slope. Off western Europe, it does not seem profitable to trawl at depths exceeding 600 to 700 metres. This limit, however, may not be the same everywhere.

47. Finally, another question is raised: that of isolated rises and ridges occurring in oceanic basins. These accidents of topography are very numerous, and they sometimes cover considerable surfaces. When they are situated very far from continents or islands, and when they are at the same time separated from them by depths of several thousand metres, they would probably not pose questions for the jurists, and it is not considered useful to discuss them here. But all are not of this kind.

48. Thus, there exist rises isolated by great depths but relatively near to exposed lands that are inhabited and appropriated. This is the case of the Rockall Bank, situated in the Atlantic, 57°N., separated from the British Isles by depths exceeding 1,000 metres over a width of several hundred kilometres, but located less than 400 kilometres away from the Outer Hebrides and less than 300 from St. Kilda. This bank is covered by less than 200 metres of water over a very wide area, and from it emerges a steep rock that is almost unapproachable, and is only suitable for a lighthouse-type building (which has never been built). The United Kingdom is said to claim sovereignty over this rock (this must be verified by jurists) and in this case the Rockall Bank would be likened to an island shelf. To the north-east of the Rockall Bank there exists another bank (see Hill, Chart of the North East Atlantic cited earlier), separated from the former by depths of 700 to 800 metres, whose slopes do not seem to be very steep, and this bank too extends over a wide area at less than 500 metres depth. The question is to know how far the bank to the north-east of Rockall can be considered "adjacent to the coast" if the Rockall Bank is admitted to be an island shelf; and if Rockall does not have the status of an island, could its bank be considered to be

adjacent to the British Isles from its proximity to it, in spite of the depths that separate it? The same question can be raised for the Rosemary Bank, 59°N (north-west of the Scottish coast). There again the problem is not of a nature to be discussed here and solved, but mention of their existence is made for the reference of jurists, and some topographical and bathymetrical elements are provided for their guidance. Comparison in this case should be made with the southern California borderland, where similar ridges exist.

49. As regards the ridges traversing oceanic basins, a good example is that of the Iceland-Faeroe Ridge, knowledge of which has recently been improved (Dietrich, *Ueberströmung des Island - Färöer Ruckens in Bodennähe . . . Deutsche Hydrographische Zeitschrift*, Vol. 9, 1956, pp. 78-89). This ridge, of a length of about 300 kilometres, is covered throughout by less than 500 metres of water, and in certain parts over the Rosengarton Bank by less than 300 metres. The ridge is, however, separated by a marked slope from the island shelves of Iceland and of the Faeroes, which do not descend below 200 metres. The question therefore is to know whether they are not to be considered as an extension of those two shelves, and this would be a reasonable conclusion if the rule 2 b proposed earlier for defining the limits of the continental shelf is adopted. If the ridge is considered to be an extension of the shelf, it would mean that the criterion based on the break in the slope is to be abandoned when dealing with these island shelves. This leads to a new difficulty, that of stepped continental fringes: should the limit be at the edge of the first step, or the second? If the second lies below 600 metres, it would be natural to leave it out, and this has been done for the coast of Saudi-Arabia on the Red Sea (see section II); but in the case of the Iceland-Faeroe Ridge, one may well hesitate because the depth is less.

50. In conclusion, the problems which the jurists will be facing will often be very complicated and very difficult to solve because a great variety of particular cases will be encountered. Nature does not lend itself—in fact, it is very far from lending itself—to classification and to definition of strict borderlines as desired by man, and that is why some of the questions raised in this paper have been left open.

51. The report has summarized what is now known about the continental shelf, but it should be emphasized that this knowledge is very incomplete. Despite extensive recent investigation of the sea floor, the need for unrestricted research along biological, geological, geophysical and hydrographic lines is very acute. The answers to the foregoing problems as well as the intelligent utilization of the resources of the shelf are dependent on free investigations with as much international co-operation as possible.

ADDENDUM

52. Professor V. Zenkovitch, of the Institute of Oceanology, Academy of Sciences of the USSR, who was unable to take part in the discussions held between the experts during the preparation of the paper, later submitted comments on the paper; these comments are reproduced in this addendum. His comments were

circulated to the authors of the paper, who submitted counter-comments, the substance of which is also set forth below.

Comments by Professor V. Zenkovitch

53. It seems that the method of defining the limits of the continental shelf proposed in paragraph 27, No. 2, is not suitable. There exist shelves which descend abruptly from the coast down to depths from 150 to 200 metres and then extend in a broad flat platform. Shelves of this nature are known in the Barents Sea and the Sea of Okhotsk. If they were to be defined according to the proposed method these platforms at depths of between 200 and 400 metres would be excluded. In such complicated cases as these (where the borders of the shelf do not have a clear profile curve), it would no doubt be better to define the border by means of conventional isobaths of 100 to 200 metres.

54. Furthermore, in order to solve the question of irregularities of other sea bottoms (troughs, isolated rises, depressions, including canyons), that would necessitate inclusion in the area of the shelf, the jurists would have to know to what extent such irregularities are frequent, and what are their average and maximum dimensions. It seems that the absence of such information is a shortcoming of the presented document, and that the specialists should be able to provide the necessary data within a relatively short time.

Substance of counter-comments by Professor André Guilcher, Professor P. H. Kuenen and Dr. F. P. Shepard

55. Professor Guilcher considers that the transmission of Professor Zenkovitch's comments to the United Nations should serve to fill gaps remaining in the report, at least partly, particularly in the case of the first comment. With regard to the second, Professor Guil-

cher's opinion is that sufficient explanations are given in paragraphs 31 to 35 of the report.

56. Professor Kuenen writes as follows:

"Professor Zenkovitch has drawn attention to an important point in our UNESCO shelf report, concerning the definition in paragraph 27.

It seems to me that the deep platforms he mentions will not give trouble in cases falling under 2a. For if there is a clearly marked outer edge then this edge will be adopted as the outer margin. But if the outer edge of such a deep shelf is ill defined case 2b arises and Professor Zenkovitch is right that in such a case the definition would exclude this shelf, which in my opinion is clearly not the intention of our report. Perhaps one could add after '— 800 metres' in the first sentence of case 2b: 'but leaving out of account the slope from the platform to the adjoining coast and thus only considering the outer margin of the shelf'.

I have no charts on which to judge this problem, but I hope this addition would largely satisfy Professor Zenkovitch's objections, without upsetting the plan of the report."

57. Dr. Shepard's views are that, with regard to the first comment, the cases 2a and 2b dealt with in the proposed method of defining the shelf edge amply cover the case of double break in slope to which Professor Zenkovitch draws attention. Dr. Shepard further points out that the situation of a shelf with depths between 200 and 400 metres has been given due consideration in the report.

58. With regard to the second comment, the opinion is given that the details suggested for inclusion in the report by Professor Zenkovitch would be extremely difficult to give, and if they were provided in full, they would prove to be too voluminous to be convenient for reference by the participants in the International Conference.

THE ECONOMIC AND SCIENTIFIC BASIS OF THE PRINCIPLE OF ABSTENTION

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Introduction

1. In response to a request by the Secretariat of the United Nations, the following report is presented covering the Economic and Scientific Basis of the Principle of Abstention. Preparation of this report has required reference to a number of different articles. These are listed alphabetically by authors as a bibliography at the end of the paper and are referred to at appropriate places by the author's name followed by the year in which the article was published. The principal references have been the *Papers presented at the International Technical Conference on the Conservation of the Living Resources of the Sea*¹ and the report² of that Conference held at Rome in 1955 which together present an excellent summary of the basic problems of world fisheries today. It seems essential however in dealing with a matter of such importance as the abstention principle that the original sources of information upon which the principle must be based should also be listed.

2. Examination of the literature, as far as it has been

possible for me to pursue the subject, indicates that no work has been published which could be construed as furnishing an economic basis for abstention. An informal conference of representative economists from Canada and the United States of America and fisheries biologists held at the School of Fisheries, University of Washington, on 15 May 1957 was completely concerned with reconciling differences in the basic thinking of the two groups with regard to the development of methods of conservation which would permit a more economic operation of fishing fleets within the limits of restrictions required to conserve a fishery and to maintain it at its level of maximum sustained yield. The economic basis presented below is founded primarily upon my personal views, and is restricted by an apparent lack of work on this subject by economists. Several brief references in the International Law Commission's report covering the work of its eighth session³, in the report of the Rome Conference and in the papers presented at that Conference are insufficient in my mind to provide an economic basis for the principle of abstention. At present, therefore, it is my opinion that the principle of abstention should be developed solely upon the so-called "scientific basis", which is that of conservation of our marine resources and the production of the maximum amount of food from the sea. A short summary of the economic factors mentioned at various times in connexion with the abstention principle is included for reference.

I. THE PRINCIPLE OF ABSTENTION

3. The principle of abstention was first formulated in the "International Convention for the High Seas Fisheries of the North Pacific Ocean", a treaty between Canada, Japan and the United States, signed in Tokyo in 1952. The full text of the treaty is reproduced in the United States Department of State publication, *Treaties and Other International Acts Series* No. 2786, dated 9 May 1952. The pertinent part of article IV is reproduced below for ease of reference.

"1. (b) With regard to any stock of fish which the Commission determines reasonably satisfies all the following

* This paper was prepared at the request of the Secretariat of the United Nations but should not be considered as a statement of the views of the Secretariat.

¹ United Nations Publication, Sales No. : 1956.II.B.1.

² United Nations Publication, Sales No. : 1955.II.B.2.

³ *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159).*

conditions, a recommendation shall be made as provided for in Article III, Section 1 (b) :

“(i) Evidence based upon scientific research indicates that more intensive exploitation of the stock will not provide a substantial increase in yield which can be sustained year after year ;

“(ii) The exploitation of the stock is limited or otherwise regulated through legal measures by each Party which is substantially engaged in its exploitation, for the purpose of maintaining or increasing its maximum sustained productivity ; such limitations and regulations being in accordance with conservation programmes based upon scientific research ; and

“(iii) The stock is the subject of extensive scientific study designed to discover whether the stock is being fully utilized and the conditions necessary for maintaining its maximum sustained productivity.”

4. The principle of abstention was first placed before the International Law Commission in the report of the International Technical Conference on the Conservation of the Living Resources of the Sea at Rome (para. 61) as a special case of the problems created by new entrants into a fishery under conservation management.

“61. A special case exists where countries, through research, regulation of their own fishermen and other activities, have restored or developed or maintained stocks of fish so that their productivity is being maintained and utilized at levels reasonably approximating their maximum sustainable productivity, and where the continuance of this level of productivity depends upon such sustained research and regulation. Under these conditions, the participation of additional States in the exploitation of the resource will yield no increase in food to mankind, but will threaten the success of the conservation programme. Where opportunities exist for a country or countries to develop or restore the productivity of resources, and where such development or restoration by the harvesting State or States is necessary to maintain the productivity of resources, conditions should be made favourable for such action.”

5. In paragraph 62 of the same report the provisions of the International North Pacific Convention, under which abstention may be justified, are paraphrased as follows :

“62. *Existing procedures.* The International North Pacific Fishery Commission provides a method for handling the special case mentioned above. It was recognized that new entrants in such fisheries threatened the continued success of the conservation programme. Under these circumstances the State or States not participating in fishing the stocks in question agreed to abstain from such fishing when the Commission determines that the stock reasonably satisfies all the following conditions :

“(a) Evidence based upon scientific research indicates that more extensive exploitation of the stock will not provide a substantial increase in yield ;

“(b) The exploitation of the stock is limited or otherwise regulated for conservation purposes by each party substantially engaging in its exploitation ; and

“(c) The stock is the subject of extensive scientific study designed to discover whether it is being fully utilized, and what conditions are necessary for maintaining its maximum sustained productivity.

“The Convention provides that, when these conditions are satisfied, the States which have not engaged in substantial exploitation of the stock will be recommended to abstain from fishing such stock, while the States engaged in substantial exploitation will continue to carry out the necessary conservation measures. Meanwhile, the abstaining States may participate in fishing other stocks of fish in the same area.”

6. Comparison of section (a) as stated above with Article IV, section 1 (b) (i) of the International North Pacific Treaty indicates the omission in section (a) above of the last words in the corresponding section of the treaty “which can be sustained year after year.” While the last three words are redundant if it is specified that the increase in yield must be sustained, this omission would defeat the purpose of the paragraph (a) as will be shown below.

7. The comments by Canada on article 31 of the provisional articles concerning the regime of the high seas⁴ repeat paragraphs 61 and 62 of the report of the Rome Conference including the omission noted above in paragraph (a).

8. The provisions of the International North Pacific Treaty were designed to fit specific problems faced by Canada, Japan and the United States of America in the North Pacific Ocean. A more general proposal was framed by the United States of America in its comments on the provisional articles concerning the régime of the high seas⁵ which rephrases the problem of abstention and the requirements for application of the principle. The United States proposal was restated more clearly in the presentation made by Mr. Edmonds at the 356th meeting of the International Law Commission on 30 May 1956⁶ which outlined the following text for part of article 27.

“3. Where, within reasonable limits, the maximum sustainable yield under current conditions of any stock of fish is already being obtained and the maintenance and further development of such yield is dependent on the conservation programme, including research, development and conservation being carried on by the State or States whose nationals are substantially fishing such stock, States not so fishing or which have not done so within a reasonable period of time, excepting the coastal State adjacent to the waters in which this stock is found, shall abstain from fishing such stock. In the event of disagreement as to whether a particular stock meets the above qualifications for abstention, the matter shall be referred for arbitration as provided in article 31.

“4. The arbitral commission shall reach its decision and make its recommendations under paragraph 3 of this article on the basis of the following criteria :

“(a) Whether by reasonably adequate scientific investigation it may be determined that certain conservation measures will make possible the maximum sustainable yield ;

“(b) Whether the stock is under reasonable regulation and control for the purpose of making possible the maximum sustainable yield, and whether such yield is dependent upon the programme of regulation and control ; and

“(c) Whether the stock is, within reasonable limits, under such exploitation that an increase in the amount of fishing will not reasonably be expected to result in any substantial increase in the sustainable yield.”

9. The commentary on article 53 in the report of the eighth session of the International Law Commission (A/3159, p. 35) is a composite of all of these proposals ; paragraphs (a) through (d) of section 4 and section 5 of this commentary are set forth below:

⁴ *Yearbook of the International Law Commission* 1956 vol. II (A/CN.4/SER.A/1956/Add.1), p. 42.

⁵ *Ibid.*, p. 91.

⁶ *Ibid.*, vol. I (A/CN.4/SER.A/1956), p. 122-123.

"4. The report of the Rome Conference also described a procedure now in operation which provides a method for handling this special case. This procedure, under the designation 'principle of abstention', was proposed by certain Governments for inclusion in the Commission's fishery articles. This proposal provided that:

"(a) When States have created, built up, or restored productive resources through the expenditure of time, effort and money on research and management, and through restraints on their own fishermen, and

"(b) The continuing and increasing productivity of these resources is the result of and dependent on such action by the participating States, and

"(c) Where the resources are being so fully utilized that an increase in the amount of fishing would not result in any substantial increase in the sustainable yield, then:

"(d) States not fishing the resources in recent years, except for the coastal State, should be required to abstain from fishing these stocks as long as these conditions are fulfilled.

"(5) The Commission recognized that both this proposal, the purpose of which was to encourage the building up or restoration of the productivity of resources, and the proposals of some other Governments, based on the concept of vital economic necessity, may reflect problems and interests which deserve recognition in international law. However, lacking the necessary competence in the scientific and economic domains to study these exceptional situations adequately, the Commission, while drawing attention to the problem, refrained from making any concrete proposal."

10. Comment on the significance of variations in phraseology of the different proposals requires an understanding of the scientific basis of fisheries conservation and the clarification of terms used. The scientific basis of fisheries conservation is in fact the scientific basis of the principle of abstention.

Definition of a stock

11. The principle of abstention in all the proposed versions is applied to "stocks of fish". The terms "stock" and "population" are considered by Schaefer (1955)* to be synonymous and are defined by him as a homogeneous group of members of the same species occupying a continuous environment, interbreeding freely within that environment and reacting as a unit to changes in population size whatever the cause of such changes may be. In the report of the Rome Conference (para. 21) stocks are defined by inference as "independent or semi-independent populations, which constitute the natural biological units of the resource to be dealt with by a conservation programme." (International Technical Conference - Rome, 1955). In the practical application of conservation and in establishing the principle of abstention the term "stock" must be interpreted according to local conditions. These conditions may be defined by the nature of a fishery, by the relationships between the environment and the species of fish exploited, or by the relationships between different species of fish all of which are taken by a single type of gear or which may be taken by several different types of gear which operate as a series of fisheries on all the species together.

12. In the herring fisheries of the North Atlantic

* All references indicated with an * are to be found in the Bibliography annexed to this document.

Ocean and of the Northeast Pacific the fishery is for all practical purposes confined to a single species. The same is true of the cod fishery of the North Atlantic, the halibut fishery of the Northeastern Pacific, the king crab fishery of the North Pacific, and many others although all of these fisheries undoubtedly operate on a number of separate stocks. The choice of species to be taken is entirely in the hands of the fishermen and in general the only species taken is the one sought and for which the gear is best adapted. In these fisheries the strict definition of stocks given above, which applies only to a particular group of members of a single species, would apply.

13. On the other hand, in many other fisheries several species are unavoidably taken in a single type of gear operated in a single locality. While some choice may be exercised by the fishermen in the depth at which the gear is operated, or in season or area of operation, practical considerations of management make it impossible to separate the species in designing a management programme. Examples of such a fishery would be the bottom trawl fisheries in the North Sea or in any locality, where all fish living on or close to the sea floor in the path of the trawl, and which are too large to escape through the trawl's mesh, will be at least represented in the catch. The fishermen can obtain catches that are predominantly of one species in some areas, and the more skilful ones can in some places take almost pure catches of a desirable fish, but normally the catches are mixed and management must recognize this mixture of species. Under such circumstances the stock may be defined as a combination of species that forms a fairly distinct population unit which reacts as a whole to changes in population size of all species.

14. In other cases where one species is very much more important than all others taken, in both value and volume of catch, management necessarily may be aimed primarily at the conservation of that one species. Two examples of such a fishery are the salmon fishery of Bristol Bay in which all five species of Pacific salmon are taken but which is dominated by the single species of red salmon (*Oncorhynchus nerka*). The salmon fisheries of the Fraser River also include all five species of Pacific salmon but are dominated by the large stocks of sockeye salmon (*Oncorhynchus nerka*) and pink salmon (*Oncorhynchus gorbuscha*).

15. The salmon fisheries in the boundary waters of the United States and Canada which exploit principally the different species of salmon that spawn in the Fraser River also exemplify the case of many types of gear fishing for several species but all of which comprise a single fishery. The two most abundant species as noted above are the sockeye and pink salmon. These are taken by purse seines, traps (on the southern end of Vancouver Island only), gill nets, and reef nets as they migrate through the Strait of Juan de Fuca, through the San Juan Islands, Strait of Georgia and finally into the Fraser River. While the larger runs of the two species are somewhat separated in time of appearance in the fishery, the most practical method of regulation is by restricting the time of fishing (aside from restrictions imposed on gill net mesh size) to permit desired escapement.

16. In multi-species fisheries, stocks have to be defined on the basis of units of all the more important species. This is justified since in most cases all of these species react in somewhat the same manner as a stock composed of a single species. In this case, all of the species involved would have to occupy the same type of environment (as in bottom fishes) or would have to be of closely related species (as in the salmon fisheries).

17. A primary requisite for management of a fishery is that the stock, whatever its nature, be capable of clear definition. That is, it must be possible to establish the geographical limits of the area occupied by a particular stock. To be effective these geographical limits must be defined whether or not the fishery covers the entire range of the stock. During particular seasons, or periods of the life history of a species, migrations of the stock may take it out of range of the fishermen who seek it. This is true of the salmon stocks of the Pacific Coast of North America. The American net fisheries for these species are restricted to a particular part of the salmon life history since the fish spend much of their life in the Pacific Ocean far out of range of the United States and Canadian fishing vessels which by law are required to operate only along the eastern Pacific shores. In general the salmon only move into this restricted range of the fishermen as they reach maturity and full growth and begin final migration to their spawning streams.

18. Application of the principle of abstention to a stock of fish implies that the stock is capable of conservation management and it was recognized by the International Technical Conference at Rome that the basic unit for conservation management is the population or stock. It may be presumed that neither conservation regulations nor the principle of abstention would be effective if applied to only parts of stocks of fish. This would happen only if such stocks had not been defined geographically, or were incapable of definition at present, such as tuna stocks which, like the albacore, apparently range over wide reaches of the oceans.

II. SCIENTIFIC BASIS OF FISHERIES CONSERVATION

19. The scientific basis of fisheries conservation is covered in some detail in the *Papers presented at the International Technical Conference on the Conservation of the Living Resources of the Sea* (see Michael Graham, pp. 1 and 56, M. B. Schaefer, pp. 14 and 194) but will be summarized briefly here. The theory upon which this principle is founded was developed during the last forty years. Beginning with Baranov (1918)*, these principles were further elaborated and extended by Hjort, Jahn and Ottestad (1933)*, E. S. Russell (1942)*, Graham (1935)*, Thompson and Bell (1934)*, Ricker (1944)*, Schaefer (1954 a and 1954 b)*, and Beverton and Holt (1956)* and many others. The comparatively recent development of these principles is associated with the growth of fisheries technology during the last thirty years which has developed such efficient fishing techniques that their effect on the stocks of fish is unmistakable in some fisheries. Significant proportions of some fish populations are now harvested and, when not controlled, fishing has resulted in reducing the size of some of those

populations so far as to make their harvest uneconomical. The cost of capturing and landing fish at the low levels of abundance which have resulted has in some cases been found to be greater than the value of the fish (see Thompson and Freeman (1930)*, Thompson, Dunlop and Bell (1931)*, and Thompson and Bell (1934)*).

20. The science of fisheries biology has shown that this type of exploitation of our fishery resources is not only uneconomical but is also wasteful since it prevents these same stocks of fish from producing as much as they can if they are utilized in accordance with their productive capacities.

21. As will be noted in the simple example to be developed below, a fishery may grow and expand for many years without experiencing either full development or depletion. It is well recognized that the growth of a fishery requires a diminution in size of population which is usually shown by a decrease in the average catch per unit of fishing effort. But this decline does not indicate that the stock has been depressed below its level of maximum yield.

The theory of fishing and the productive capacity of a stock of fish

22. The scientific basis of the principle of abstention is identical with the theory of fishing and its relationship to the productive capacity of a stock of fish. It is shown by Schaefer (1955, page 34, equation (1))* that in its simplest terms the productive capacity of a stock of fish is determined by the balance which exists between the rates of growth, reproduction (recruitment), natural loss and fishing.

Growth rate

23. While the growth rate is limited by the genetic structure of any species, it has been found to be less in crowded populations where the amount of food produced by the environment is not sufficient to meet the full needs of the population (Alm, 1946)*. As the population is thinned by fishing, growth increases (Anderson, 1938)* until it reaches the maximum of which the species is capable in that environment.

Rate of natural mortality

24. Thinning a population by fishing also reduces the rate of natural loss or mortality. This rate will be at its maximum in a virgin population and will fall as the number of old fish is reduced and as the population becomes composed of a larger proportion of young vigorous, rapidly growing individuals. As noted by Schuck (1949)*, the rate of natural loss may be very low in commercial sizes of fish which are subjected to an intensive fishery.

Rate of recruitment

25. The rate of reproduction or recruitment is affected by the density as well as by the size of the population. With the environment crowded to its full capacity, little room remains to support large numbers of young fish and, even though the numbers of eggs

produced may be great in such a population, the number of young fish which usually survive under such conditions is relatively small. In addition, the number of eggs produced by marine fishes, in general, is closely related to size so that slow-growing females mature at a later age and, because of their smaller size at any age, will produce fewer eggs than younger, faster-growing females in a population of reduced magnitude. The rate of reproduction in an efficiently fished population will, therefore, be greater because of the greater number of eggs produced by individual females which grow faster and mature younger than in a crowded population and, above all, because the survival rate of the young will also increase as more room becomes available for them.

Natural fluctuations

26. It is recognized that variations in the complex environment of fishes will result in variations in all three of the above factors (growth, natural mortality and rate of reproduction), particularly in the numbers of young fish which survive to adult sizes (Hjort, 1926, and Tait, 1955)*. These variations are recognized as "natural fluctuations" in population size and are usually expressed in the population itself as variations in the relative number of survivors produced during different spawning years. A particularly favourable year may give rise to an abundant year class of fish which in biological terms may become a "dominant year class" because it is present in larger numbers than both the older and younger year classes, often for a period of some years (Hjort, 1926)*.

27. In the most highly developed fisheries, the fishery takes such a large proportion of the stock that its effect is of much more importance than the natural fluctuations.

Changes in a fish population caused by a fishery

28. The response of a fish population to the development of a fishery can be measured by the total amount of the catch each year, by the changes in amount of fish caught per standardized unit of fishing effort, and by correlated biological changes in the population itself. Most obvious among the biological changes are the number of fish of different ages that are taken in the catches. Beginning with a virgin fishery which has not been previously fished, the following changes may be expected over a period of years during which the total amount of fishing is gradually increased: The total catch will increase for a time; the catch per unit of fishing gear will decrease steadily as the number of units fished is increased; the relative numbers of older and larger fish in the catch will decrease steadily; with some variations to be expected if dominant year classes are present and if the species has a short life and only a few year classes are present at one time. As indicated above, these changes will be modified by the combined effects of the increase in growth rate and rate of survival of young and the decrease in rate of natural loss.

Increased productivity during early development of a fishery

29. A fishery will reduce the size of the population

existing on a fishing bank. During its early development, the removal of old and diseased fish, the reduction in competition for space and for food, and the reduction of the average age of the population will actually increase the productive capacity of the population. This productive capacity of the stock determines the weight of fish produced each year in excess of that which is required to maintain the stock at a constant size. In a virgin population which supports no fishery, there is no excess, since the weight of fish produced is just sufficient to replace natural losses. However, as the stock size is reduced and the productive capacity increases as described above, this excess weight will increase as growth increases and natural losses decrease.

Overfishing causes a decrease in productivity

30. If the intensity of fishing, or, in other words, the total amount of gear run in the area occupied by our stock continues to increase each year, we can expect that eventually a point will be reached where the genetic potential for growth of the species will have been fully expressed and no further increase in growth rate will result from additional thinning of the stock. In addition, the capacity of the environment for producing food will not be used to its fullest if the stock becomes so small that all of the food is not utilized. If the natural losses are also reduced to zero or near zero on fish of commercial sizes, even though the production of young is maintained, the population will have passed its point of maximum productivity. Further increase of fishing will remove fish at smaller and smaller sizes, will prevent their full development through growth, and will then result in a decrease in the total catch. Thus, if a fishery which had been stabilized at its level of maximum productivity were then subjected to a greater amount of fishing, the total catch would fall to a lower level. Moreover, the amount of fall would be directly related to the increase in amount of fishing.

Illustration of the theory of fishing using a theoretical model of a stock

31. These relationships are illustrated by the hypothetical population and fishery shown in table I and figure 1. This model is constructed after a pattern similar to that used by Graham (1955). But Graham's model merely shows that, under the assumed circumstances, less fishing will yield a greater catch. The present one is designed to illustrate the full cycle of development of a fishery in a very simple and diagrammatic manner from a low fishing mortality rate of 10 per cent to a condition of overfishing. This model also illustrates the benefit to be derived from adjusting the amount of fishing to the stock's productive capacity.

Basic rates used for the model

32. Because of the lack of precise data on any one fishery concerning the exact interactions of all of the various rates, the model described below is a composite of information taken from several publications dealing with different species. The growth rate (average weight at each age) is that of the California sardine (Clark,

1928 and Phillips, 1948)*; the natural mortality of 30 per cent at the lowest fishing intensity corresponds with an estimate made by Thompson and Bell* for halibut in Western Alaska. The decrease in natural mortality agrees roughly with Schuck's work* which indicates that natural mortality is very low in commercial sizes of haddock on Georges Bank off the eastern coast of the United States, in a population being fished at a rate of roughly 50 per cent per year. No change is made in number of fish in the youngest age class (rate of recruitment) at different levels of abundance nor is the rate of growth altered. This would reduce the relative increase in productivity of the stock that would occur because of increased growth rate in the early stages of the developing fishery and would also slow down the rate of decline at higher rates of fishing, because, except for species which mature at a very young age, the spawning stock would be greatly reduced at the highest fishing levels and recruitment could be expected to decrease.

33. With these limitations, the model illustrates clearly the events that can be expected to occur within a population at different levels of exploitation by a fishery. It shows the condition of the stock in terms of the relative numbers of each age of fish which survive under each set of conditions as well as the total catch, catch per unit of gear, and the relative number of units of gear that would be fished.

34. The situation illustrated in each column in table I and shown by each set of points in figure 1 is commonly known as a "condition of stability". In other words, when a stock of fish is exploited at the same level of fishing intensity year after year, it will become stabilized in size, catch, catch per unit of effort, and number of fish in each group if environment is relatively constant and natural fluctuations relatively small. Again, for simplicity, we have assumed environmental effects and recruitment to be constant. The length of time required for a stock to become stabilized at a new level of fishing will, in general, correspond to the number of ages of fish that will be represented in the catch at the new level of fishing. If we were to assume that fishing and other factors were altered suddenly between the different levels shown in table I, we could expect the conditions shown in each column to have become stabilized only after the passage of a period of years corresponding to the number of ages represented in each column. For example, if the rates of mortality were suddenly changed from $F = 10\%$, $N = 30\%$ (columns 2 and 3), to the conditions shown in columns 4 and 5, a total of sixteen years would be required before the total catch, catch per unit of effort, and relative numbers of fish at each age would be as shown in columns 4 and 5. If the change were to the condition shown in column 10, the change would require only six years to have its full effect. Therefore if a fishery had changed, over a period of years, to assume exactly the different rates of fishing shown in table I and figure 1, and if the changes in population size had brought about the changes indicated in natural mortality, neither the total catch nor catch per unit of effort would have followed the exact course indicated on figure 1. The values shown in each column would be approached gradually through a series of changes similar to those shown in table II and figure 2.

Manner of operation of various mortality rates

35. These various rates of mortality act in the same manner as ordinary rates of compound interest, and table I corresponds in general nature to the tables computed by insurance companies to determine rates of survival and death in human populations. Computation of the catch uses the same principles and requires the use of exponential rates to determine what portion of the total deaths (deaths caused by both natural and fishing losses) will appear in the catch. These processes are discussed in detail in Thompson and Bell*, Graham (1936)*, Baranov (1918)*, and Ricker (1944)* and will not be dealt with further here.

Changes in the numbers of fish of each age in the stock

36. The most striking change that may be noted in table I in the populations (P) and the catch (C) are the numbers of fish in the different ages that appear in both the population and catch. These may be seen in columns 3 to 20 in table I. In a stock that has a natural mortality rate of 30 per cent but is fished at a rate of only 10 per cent per year, eighteen different age classes are represented in the population and in the fishery as is shown in columns 2 and 3. As the natural mortality rate decreases and the rate of fishing increases, the total number of age classes represented in both the catch and the population decreases until, at a rate of 50 per cent fishing with no natural mortality, only twelve age classes are represented in the stock. If the fishing mortality is raised to 80 per cent, the number of age classes present in the stock and in the catch is reduced to six. In a very intensive fishery, the fish are caught before they can grow very old so that the stock is comprised entirely of very young fish.

37. The effect of this change in the relative numbers of fish of different ages is shown in the total catch that appears at the bottom of each column in the table and is also illustrated in figure 1. As the intensity of fishing increases, the total catch increases from approximately 45,000 units at a fishing level of 10 per cent to a total catch of 165,000 units at a rate of fishing of 50 per cent. At still higher levels of fishing, however, the effects of the rapid decline in numbers of older fish in the population begin to appear so that the total catch declines at fishing rates above 50 per cent.

38. In this particular model, therefore, the maximum yield in the total weight of fish caught occurs somewhere in the neighbourhood of a fishing rate of 50 per cent. The model illustrates that at levels below 50 per cent an increase in the rate of fishing will result in an increase in yield, and this increased yield can be maintained year after year indefinitely as long as the rate of fishing is not increased beyond the rate of about 50 per cent per year. However, a stock that conforms in all respects to this model, and for which the rate of fishing has been established at a level of at least 50 per cent per year, will produce a smaller catch if the rate of fishing is increased beyond 50 per cent.

Changes in the average catch per unit of fishing effort

39. It has been shown by Baranov (1918)* and others that the rate of fishing—that is, the number of

units of gear that are run per unit of time in a particular area occupied by a stock of fish—will be proportional to the exponential rate of fishing. Thus, in the model, the relative amount of fishing, that is the relative numbers of units of gear that would be fished each year, would correspond to an exponential rate of fishing that can be calculated from the logarithms of the annual rates indicated at the head of each column by methods given by Baranov. Dividing these figures for number of units of gear into the total catch taken at each level of fishing gives the average catch per unit of effort. This again has been shown to be directly proportional to the average stock present in any fishing season (Beverton and Holt (1956) *). This average catch per unit, as is shown in each column in table I and also in figure 1, decreases uniformly from the high point which corresponds to the lowest rate of fishing to a minimum which corresponds to the highest rate of fishing. In other words, the total weight of fish present on the banks decreases uniformly as the intensity of fishing increases. The intensity of fishing or number of units of gear fished is represented by the line of figure 1 labelled "effort".

Comparison of total yield, catch per unit of effort and effort expended

40. The different values assumed by total catch and catch per unit of effort at different levels of fishing are the result of all the complex factors which act upon the stock. In the model, the fishery was assumed to be the principal variable. This is true in many fisheries. Even in those fisheries where natural changes may be of great importance, changes in rate of fishing would have the same effect on rates of mortality, catch and stock, although an increase in importance of natural changes could superimpose fluctuations upon those caused by the fishery and might result in random changes that would have no relationship to changes in fishing. This would tend to obscure the effects of fishing on the stock and would increase the difficulty of measuring those effects but would not necessarily make such measurement impossible.

41. The important relationship is seen in the existence of a level of fishing at which the yield of the stock is a maximum. Below that level of fishing the yield increases with more fishing and above that level the yield decreases as the amount of fishing increases.

42. The course of events is also reversible. If a fishery has become stabilized at a high level of effort corresponding in our model to a fishing rate greater than 50 per cent per year, the total catch can be increased by the expenditure of less effort. This apparent paradox has been illustrated by the regulation of the Pacific halibut fishery (Dunlop, 1955) *.

43. If the effort is reduced sufficiently in the model to lower the rate of fishing below 50 per cent per year the total yield will then decrease. On the contrary if the fishing effort is held constant at any level, the stock will become adjusted to that level of fishing and after a period of time the catch will become constant and remain constant as long as the yield is held constant. If it is desired to increase the yield from a fishery that has been stabilized at a population level below that which corresponds to its maximum level of productivity

(i.e., above 50 per cent annual fishing rate in the model) it would be necessary to take less than the sustainable yield at the current stock level. For example, in table I the sustainable catch at the 70 per cent level of fishing is 131,308 units per year. To increase the productive level of this stock it would be necessary to take less than 131,308 units for several years. The excess weight produced by the stock would be added to the population and would result in a larger population with a larger potential yield. This is just a different way of saying that the rate of fishing would have to be reduced to increase the yield in this stock which was being fished at a rate of 70 per cent per year.

Effects of heavier fishing on the production of spawn

44. While the above relationships are most important in understanding the effects of different amounts of fishing upon a stock, it may be of interest to digress for a moment and to consider the resulting changes in the numbers of fish of different ages which will be represented in the stock when it is stabilized at different fishing intensities. It may be seen in table I that the largest number of age classes is found at the lowest rate of fishing and the smallest number at the highest rate of fishing. The increase in weight of catch from the lowest fishing rate to that of 50 per cent per year is associated with an increase in the numbers of fish caught. However, at rates above 50 per cent the total weight caught decreases in spite of the capture of the same number of fish at all levels of fishing. There is no need to discuss these rather complex relationships further except to note that the greatest change in numbers of fish is in the older age classes which are responsible for the production of spawn.

45. The change that occurs in weight of fish in the stock is great because the larger, older fish which weigh more, feel the full effect of any change in fishing throughout their life span. A change in rate of fishing has a cumulative effect with increasing age. This fact takes on greater significance as the number of age classes represented in population increases and as the age at which maturity is attained and eggs are first produced increases. Thus, the female halibut of the Northeast Pacific first matures at an age of eight years. Since they are first taken in the fishery at about four years of age, an increase in mortality rate would be effective for at least four years before the females begin to produce eggs. The egg-producing capacity of this species increases in proportion to their weight and roughly in proportion to the cube of their length. Thus, Thompson and Bell * calculated that an increase of from 20 per cent to 40 per cent in fishing rate would result in decreasing the weight of halibut older than eight years of age in the population, the age of first maturity, to about 15 per cent of their total weight at the lower rate of fishing. In the example shown in table II, the increase of fishing rate from 50 per cent per year to 70 per cent per year completely eliminates the fish above age seven. The number of eggs and young produced each year would be in proportion to the total weight of the older fish in the population.

46. The reduction in amount of spawn produced at higher levels of fishing may not be important if survival

rates are high in young fish or if the amount of spawn produced, even by small numbers of spawners, is sufficient to provide the number of young required. It can accelerate the decline in size of population and hence the decline in total catch at high levels of fishing if the production of spawn is lowered sufficiently to affect recruitment. This may be seen in various salmon fisheries and was apparently approached in one group of halibut stocks (Thompson and Van Cleve, 1937)*.

Effect of a sudden change in rate of fishing; the temporary increase in total yield

47. The relationship illustrated in table II and figure 2 are the basis for the provision in the International Convention for the High Seas Fisheries of the North Pacific Ocean (article IV, section 1 (b) (i)) that: "Evidence based upon scientific research indicates that more intensive exploitation of the stock will not provide a substantial increase in yield which can be sustained year after year." The last phrase was omitted in the report of the Rome Conference (para. 38, sentence (a)); but this phrase forms an essential part of this concept. This is illustrated by the changes that would take place in total catch if a fishery, stabilized at the level shown in columns 10 and 11, were suddenly subjected to an increase in fishing that would raise the fishing mortality rate of 70 per cent (columns 14 and 15). These changes are shown in table II and figure 2. The first year after the rate of fishing is increased from 50 per cent per year to 70 per cent per year, the total catch is about 1,500 units or 9 per cent higher than before although the catch per unit of effort falls to about 50 per cent of its value before the change. The changes that take place in the catch per unit of effort measure the changes occurring in the average total weight of stock present on the banks during each fishing season following the change in the rate of fishing and these values fall steadily as soon as the rate of fishing is increased. But at any level of fishing, a sudden increase of fishing intensity will be followed by an increase in total catch. This increase is because of the capture of fish which otherwise would have formed a part of residual population remaining on the banks after fishing is completed. It furnishes evidence that the population is being reduced in size.

48. If the increase in fishing rate is between fishing levels below those which result in the maximum sustained yield, a permanent increase can be expected. If fishing is already at or above the level of maximum sustained yield, an increase in fishing rate will result in only a temporary increase in total yield. This increase will be followed by a decline in yield to a level lower than was obtained at the lower rate of fishing.

The relation of conservation to abstention

49. It may be inferred from the above discussion that the definition of the level of maximum sustained yield or of the relationship between yield and amount of fishing for any stock would require a profound knowledge of the biology of the stock as well as of the characteristics of the fishery to which that stock is subjected. Application of this knowledge in an effective management programme would certainly involve

restraints on the fishermen to control the rate of fishing if the productivity of the resource required rebuilding or if it were desired to stabilize the stock at any level of yield. This would require a programme of research and management using the most modern techniques of fisheries biology and would involve the expenditure of a great deal of effort, time and money to acquire the necessary data, perform the required analyses, and to design, put into effect and establish adequate checks on the management programme of almost any stock of marine fish (A/3159, p. 35, commentary to article 53, para. 4 (a)).

50. There is some question whether absolute proof could be established that "the continuing and increasing productivity of these resources is the result of and dependent on such action by the participating states", (A/3159, p. 35, commentary to article 53, para. 4 (b)). This proof is not required in the North Pacific Convention. In the latter it is only required to prove by scientific research that more intensive exploitation of the stock will not result in a substantial increase in the sustained yield and that the fishery is being regulated through legal measures, etc. and that such regulations are based upon scientific research. The abstention requirements referred to in the International Law Commission report are therefore much more stringent than are those provided in the treaty.

51. If proof should be available that the productivity and condition of the stock is a result of the programme of research and management, it would in most cases only become clear after some years of regulation of the fishery. One exception would be found in proof of the effect of the management of salmon stocks. The result of restricting salmon fishing may be immediately evident in the number of spawning fish which are permitted to escape the fishery. Lack of regulation can prevent the escapement of any salmon or of too few fish to maintain the stock. On the other hand, many years of careful study would probably be required to prove the relationship for a stock of slowly growing fish like the halibut which may have as many as twenty or more age classes represented in the catch.

52. It is evident from the discussion above that, if sufficient data were available to determine the relationship of the yield to stock size and intensity or amount of fishing, it could be established whether the "resources are being so fully utilized that an increase in the amount of fishing would not result in any substantial increase in the sustainable yield" (A/3159, p. 35, commentary to article 53, para. 4 (c)). To qualify for abstention under this requirement the fishery would have to be stabilized at or above the level of maximum sustained yield. In the model this would correspond to a fishing rate of 50 per cent or more per year. Under this condition as noted above an increase in the amount of fishing would cause a decline in the sustained yield after a temporary increase in catch.

Application of the model to the principle of abstention

53. Let us consider the hypothetical case of a stock of fish which has been exploited for many years by one or two States. The fishery, we will assume, has passed through the normal history of rapid development to a

state of over-fishing so that the catch as well as the yield per unit of effort has declined. The States involved had then undertaken an extensive programme of biological investigation of the stock which proved that the reason for the decline in production had been excessive fishing. Following this discovery, let us say that the States had agreed upon a programme of regulation based upon the results of their research programme which provided for the limitation of fishing through such devices as limitation of the total catch that could be taken each year, prohibiting the use of destructive fishing gear, prohibiting the capture of undersized fish, and the closure of spawning grounds, spawning seasons, and nursery areas to fishing, etc. As a result of these regulations which were carefully monitored by an extensive and continuing research programme, the stock was rebuilt and stabilized at a level which was producing the maximum yield of which the stock was capable. The stock would comply, therefore, in all respects with the requirements of abstention, the research programme fulfilling in general the requirements set up by Schaefer (1955)*.

54. If now, another State should desire to share in the fishery and should begin fishing this stock which historically had been conserved and maintained by the original fishing States through the expenditure of large amounts of money and much effort on research and by restrictions imposed on their fishermen, there is little doubt that the entire conservation programme would be in danger and the continued productivity of the stock would be imperilled.

55. If the abstention principle were applied, however, the new State would refrain from taking the species under regulation but would be free to exploit other species in the same area which did not fulfil the requirements of abstention. The original fishermen would continue to obtain the maximum yield which the stock in question was capable of producing. In addition, any new fishermen could produce additional food from the other species available on the same fishing grounds. The world's food supply would be increased, and the fishermen of all participants would be benefited. A good example of such a situation is found in Bristol Bay where the Japanese and Canadians abstain from fishing salmon which are taken by fishermen of the United States, but, on the other hand, the Japanese participate in the fishery for king crab (*Paralithodes camtschatica*).

III. THE ECONOMIC BASIS OF THE ABSTENTION PRINCIPLE

56. Many purely economic reasons are considered to be sufficient reason for controlling fisheries. Where markets are limited a sudden influx of fish can cause a glut. Continuation of unrestricted fishing will cause a collapse of price to fishermen and may result in the waste of fish. Many conservation systems prohibit the wilful waste of fish and to prevent such waste the catch may be limited. More often the industry itself may limit the amount of fish they will purchase from fishermen or if they own the boats and gear will limit the catch the fishermen may take.

57. In addition, the price of fish is usually related to

the size of the fish taken in the catch. Limits may be placed by the buyers and by fishermen on the numbers of small fish that may be landed because of the higher cost of handling the small fish and because of the smaller price they command in the market. This is similar to other closures that may be imposed by the industry or by conservation agencies to prevent the capture of fish during seasons or in areas where their condition is unsuitable for marketing. This would apply to closed seasons for the Dungeness crab of the Eastern Pacific (*Cancer magister*) during periods of the year when large numbers of them shed their carapace, and the quality of the meat becomes too poor to market.

58. Closures may also be imposed to prevent losses incurred through dangerous conditions during stormy periods of the year. These also relieve the industry from the expense of maintaining crews to handle small amounts of fish that may be brought in by more venturesome fishermen. These small amounts cannot be handled or marketed economically, but if one dealer continues to handle fresh fish during a period of reduced landings, all of his competitors will be forced to do likewise to prevent loss of market outlets. This was probably the original reason for the imposition of a winter closed season on the Pacific halibut in the provisions of the original treaty between the United States of America and Canada on this species (see paragraph 86 below).

59. There are also many economic ramifications of any programme of conservation. For example, in some cases if no programme of conservation were instituted an entire industry can suffer economic extinction. Moreover, stabilization of the catch of any species of fish at a certain level will have widespread ramifications in the stabilization of the fishery that depends upon that species, as well as upon the entire processing and marketing organization that places the product in the hands of the consuming public. Promotion of the most efficient utilization of a fishery would fall into this class. The most efficient utilization of a fishery infers full utilization of boats and gear to obtain a catch that will bring the largest return on the investment in time and gear to the most fishermen. Many complicated problems are involved in determining the desirable level at which any fishery should be stabilized to bring about this result. One of the greatest sources of trouble would, of course, be the variations with time, in ratio of cost of operations to value of catch. In addition, economic levels vary in different countries, and some States are faced with the need of providing work for the most men even though at a low income level. Others are more concerned with the more efficient use of manpower through use of as much mechanical equipment as possible.

60. It appears to be impossible at the present time to cover all, or even a significant part, of the possible variations in these situations in general provisions that would permit the use of this criterion as a basis for abstention. The present state of knowledge in the field of fisheries economics is summarized by Crutchfield (1956)*.

61. It is difficult to visualize how such situations could be used as a basis for the principle of abstention

and it is my personal view that attempts to found this principle on such a basis would lead only to confusion. Economic conditions vary widely from one State to another and a condition of glut in a fishery of one State might be relieved by the participation of another. The same may be said for the other economic reasons for regulation mentioned above.

Vital economic necessity

62. The only purely economic reason which, in the writer's opinion, might justify application of the principle of abstention is that of vital economic necessity, an example of which is described by Paul Hansen (1955)* in his report presented to the Rome Conference. The situation described by Paul Hansen indicates that the natives of Greenland are entirely dependent for the necessities of life on the fish and mammals living along the coast. Under the primitive and strenuous conditions of their life, the natives cannot compete with fishermen from other countries who invade the Greenland waters and their very existence would be threatened if the living resources of the sea, upon which they depend, were over-exploited.

63. A similar situation is described by Gilbert and O'Malley (1921) from a survey made of the Yukon River in Alaska in 1920 to investigate the possible relationship of the operation of a commercial cannery in the mouth of the Yukon River in 1919 and the failure of the natives inhabiting the Yukon drainage to obtain sufficient salmon for their winter needs in that year. Conditions for commercial fishing at the mouth were found to be less favourable in 1920 and the catch of salmon by the cannery and used for export from Alaska was much less than in 1919. The conclusion was reached that if the cannery had not operated on the Yukon in 1919 there would have been enough salmon to supply the needs of the natives. Moreover, it was found that the only reason there was sufficient fish in 1920 for both cannery and native use was because of a larger run and the smaller take by the cannery.

64. The place salmon play in the economy of the inhabitants is described vividly by the following excerpts from their report.

"Taking the river as a whole, a distinct hardship is imposed on whites and natives alike when the king salmon run is below normal.

"Unquestionably, however, the chum furnishes by far the larger share of the dried salmon. Along some stretches of the river almost complete dependence is placed on this species, locally known as the dog salmon and the 'silvers.' The higher grade of chums, known as 'silvers', form the staple dog food throughout the Yukon country. All traders handle them and may deal in from 5 to 50 tons in a year.

"The dependence of the native and white population on the salmon supply of the Yukon admits of no question in the minds of any who have acquaintance with the conditions of life in the great interior of Alaska. The natives have other sources of food, but the salmon form their main provision for the winter — their insurance against starvation when other sources of food fail them, as they not infrequently do. No one who inquires into the matter can doubt that if the supply of Yukon salmon should become seriously curtailed widespread suffering and death would in many seasons be visited on the natives.

"The whole scheme of things in the sparsely populated Yukon wilderness is predicated on the dog, and the use of the dog necessitates dried salmon.

"The dog is as essential in Alaska as is the horse in other regions, and the only acceptable dog feed is dried salmon. Various substitutes have been tried out when salmon could not be procured. They were used extensively by the 'dog-mushers' of 1919, when dried salmon often could not be had at any price. Fresh meat was used, and enormous numbers of caribou and moose were slaughtered for this purpose. But it is impossible to carry sufficient meat for many days, and the supply is precarious. Furthermore, the dogs do not thrive and work well on this diet. A diet of cereals and fat in some form was extensively used. Stocks of rice, flour, corn meal and bacon were heavily drawn on. Dogs traveled well on a ration of corn meal and bacon, but the expense was almost prohibitive, and there was the labor of cooking up each night in camp a meal for the dogs after the exhausting travel of the day with the temperature perhaps 50° below zero and a weary famished team waiting to be fed. Dried salmon forms a light condensed food which contains all the elements needed to keep a hard-working team in excellent condition, and it is always ready to be fed without preparation. There is no acceptable substitute, and there is not in Alaska any divergence of opinion on this subject. No single need in the interior of Alaska is more generally or more urgently felt than dried salmon for its various uses."

65. On the basis of their survey, Gilbert and O'Malley recommended that fishing for export from the area be prohibited on the Yukon and off its mouth. As a result of this recommendation and of annual surveys made since then by the United States Government, commercial fishing for export from Alaska has been restricted in the area of the Yukon River. During 1957, the commercial fishermen of the United States were limited to a catch of 65,000 king salmon in the Yukon River and to 6,000 kinds in the Kuskokwim River. It is estimated that in the same year the native fishermen took about 250,000 king salmon and about 1,000,000 chum salmon from the Yukon River alone for their personal use. This represents a total catch of between 15,000,000 and 16,000,000 pounds of fresh salmon from this river.

66. Still another situation is presented by Iceland, whose people are dependent upon the fisheries for their livelihood. As stated by the delegation of Iceland to the United Nations in the Sixth Committee⁷: "The coastal fishing grounds have always been the foundation of Iceland's economy and it can be said, without any hesitation, that without them the country would not be habitable." While Iceland recognizes the benefit to be derived from ensuring the maximum sustained yield from a stock, they are faced with a situation where the requirements of the coastal State and of the other States fishing in the coastal area are not satisfied by the maximum yield. Under such circumstances, they propose that the coastal State should have exclusive jurisdiction over the fisheries for a distance from the coast sufficient to meet their needs. Iceland also stated⁸ that "there has to be a clear-cut distinction between two things, i.e. the conservation problem and the utilization problem. If there is a conflict of interests as to the latter, the coastal State should have priority up to a reasonable distance regardless of whether that area is called ter

⁷ *Official Records of the General Assembly, Eleventh Session, Sixth Committee, 494th meeting.*

⁸ *Ibid.*

ritorial sea, contiguous zone, superjacent waters of the continental shelf or something else."

67. Obviously, Iceland, in separating the problems of utilization and conservation and by holding for exclusive jurisdiction over a limited part of the continental shelf is not intending to deal with whole stocks of fish. Their problem presents conditions which differ from those covered by all forms of the proposed abstention principle since its solution involves exclusive use by the coastal State regardless of the length of time other States have participated in their fisheries.

68. There are probably very few isolated localities in which vital economic necessity would be as clearly evident as in the Greenland and Yukon River areas. Undoubtedly, the fisheries along such shores as the coast of India could be shown to be vitally necessary to the villages of fishermen that use them. The fisheries of Iceland present still another degree of economic importance to an entire nation. However, to meet the requirements of the proposed abstention principle, it would be necessary to question whether the dependent States or fishermen were fully utilizing the fish stocks or were only fishing a part of them. The same questions would then have to be answered, the same data collected, and the same problems solved as in establishing the scientific basis of abstention. It does not appear, therefore, that abstention as proposed could be justified upon a basis of vital economic necessity alone.

69. Other methods probably could be found which would be better suited to protect the interests of people who may be economically dependent upon fishing part or even all of a stock of fish but who could not necessarily comply with the requirements of full utilization and detailed knowledge of the biology of the stock and of its fishery. Some other method certainly should be used to cover problems involving exclusive jurisdiction over coastal fisheries when the coastal State continues to share any part of the stock with others, and where the interests of the coastal State take precedence over priorities of others in the exploitation of the stocks.

Examples of the application of the principle of abstention

70. A greater understanding of the principle of abstention may be gained from the history of the fisheries to which it has been applied. Consideration of all of the fisheries covered by the International Convention for the High Seas Fisheries of the North Pacific Ocean would require several volumes. Sufficient background should be provided by a brief description of two examples; the salmon fisheries of Bristol Bay and the halibut fishery of the Northeastern Pacific, both of which are well documented.

(a) The salmon fisheries of Bristol Bay

71. Bristol Bay is located to the north of the Alaska Peninsula and is the southeastern extremity of the Bering Sea. The name is usually applied to the area lying east of a line running north from Port Moller to Cape Newenham.

72. All five species of the Pacific salmon (genus

Oncorhynchus) found on the Pacific Coast of North America are taken in Bristol Bay. These are the chum (*Oncorhynchus keta*), the coho (*Oncorhynchus kisutch*), pink (*Oncorhynchus gorbuscha*), king (*Oncorhynchus tshawytscha*), and red (*Oncorhynchus nerka*). The red salmon are by far the most important species, making up an average of about 95 per cent of all salmon taken in that area. As far as can be determined from published data, the relative importance of the other four species in the fishery is a measure of the varying sizes of the runs as they occur in the Bay.

Development of the fishery

73. The salmon has always been important in the diet of the natives of Alaska, but in 1880, about thirteen years after the purchase of Alaska from Russia by the United States, a commercial fishery was started on Bristol Bay for the purpose of salting salmon. The first cannery was established there in 1884. The ease of handling and marketing canned salmon and its acceptance by the public resulted in the steady growth of production from 400 cases packed in 1884 to 133,418 cases in 1891 (Moser, 1901)*. The increase in pack was more rapid after 1892 and reached a peak of over 25 million fish in 1917, of which almost 98 per cent was red salmon.

74. The numbers landed in succeeding years fluctuated widely, almost reaching the 1917 level in several years. The catch finally rose to another peak in 1938 when over 24.7 million red salmon were packed. Since 1938, the total catch of all species and especially of red salmon in Bristol Bay has shown a downward trend.

75. This decline in catch was not because of a decline in fishing effort or interest but has been associated with a decline in the size of the runs. It has also been due in part to a gradual restriction of the fishery by more strict regulations designed to provide an adequate escapement of adult fish to the spawning grounds. The regulations up to 1924 are outlined by Rich and Ball (1929)* and show that the first measures protecting adult salmon in Alaska were adopted by the United States Congress on 2 March 1889 and prohibited the erection of dams or other obstructions in salmon streams. The regulations increased in complexity and effectiveness each year from that time onward as the fishery became more intense throughout the territory of Alaska and as knowledge of the life history of the salmon and the relation of fishing practices to its conservation became clarified.

76. The method of approach to regulation was altered by the passage of the so-called White Act in 1924, which gave the Secretary of Commerce broad powers to limit the size and character of fishing gear, limit the catch, limit the time, means, methods and extent of fishing, and also required that not less than 50 per cent of all fish running into streams where counting stations were maintained must be allowed to pass through the fishery, enter the streams, and spawn. The provisions of this act gave more effective protection to the salmon than had been given previously.

77. The continued development of improved fishing techniques and increase in the amount of fishing gear

more than compensated for the growing restrictions of fishing and were at least partially responsible for the extreme variations in yield noted above as well as for the steady decline in size of the runs after 1938.

Entrance of the Japanese into Bristol Bay

78. During the early 1930's, the Japanese began fishing for king crab and trawling for bottom fish in the Bering Sea along the western boundary of Bristol Bay. The Japanese soon began to show interest in taking salmon as well and in 1936 began a research programme to investigate the salmon fisheries of Bristol Bay.

79. With a catch that seemed to be more variable each year, with rising costs of production and faced with continued increases in regulatory restrictions, the fishing industry of the United States objected strenuously to the entrance of a new group of fishermen into a fishery which they had previously fished alone and which they had developed. Moreover, in order to preserve the fishery they were sacrificing fishing time and fishing areas, and were submitting to many other restrictions to reduce the strain on the stocks. Feeling ran high, forcing the Governments of the United States and Japan to intervene (U.S. Department of State, 1954 a)* with the result that in 1938 the Japanese Government agreed informally not to fish or to "investigate" further the salmon fisheries of Bristol Bay (U.S. Department of State, 1954 b)*. There was at no time any question of the right of the Japanese to fish king crab or bottom fish in this area although United States fishermen had also participated in these fisheries to a limited extent; the protest against new fishermen was confined entirely to the salmon fisheries which had a long history of development and regulation, and had proven to be clearly limited in its potential productivity.

80. At the end of World War II, the Salmon Industry of Alaska viewed with concern the continued failure of increasing governmental restrictions on fishing in Bristol Bay to halt the decline in abundance of the species and in 1947 undertook to assess themselves to support a biological investigation of the Bristol Bay fisheries. Their objective was to supplement the work that had been in progress since the beginning of the fishery by the United States Government, to discover the causes of the decline in salmon stocks, and to assist in developing methods of rebuilding the stocks to their level of maximum productivity.

81. This programme has been performed by a group of scientists from the University of Washington, operating under a contract with the Alaska Salmon Industry. It has been supported by the cannerymen of Bristol Bay who, each year, donate to the programme a certain amount of money for each case of salmon packed. These funds have supported a programme that is closely co-ordinated with the work of biologists of the United States Fish and Wildlife Service, and is now assisting in providing answers to many puzzling facets of salmon biology. It now appears that these two programmes will furnish a basis for the formulation of methods of regulation that will permit the rebuilding of the Bristol Bay salmon runs.

Life history of the salmon

82. The difficulties involved in accomplishing this end are directly related to the biology of the Pacific salmon. While the life history of the five American species varies in detail, they agree in that all species spawn in fresh water streams. The adults enter these streams from the sea and migrate varying distances upstream to lay their eggs and fertilize them in holes they dig in the gravelly stream beds. The eggs are covered over again by the digging activity primarily of the female salmon. After spawning, the adults of both sexes of all Pacific salmon invariably die. After a few weeks or months in the gravel, the young salmon hatch from the eggs; and, remaining in the gravel until the stored food is used up, they then work their way out of the gravel into the stream. In the case of coho, king and sockeye (as well as chum salmon in the Yukon River), the spawning locality may be hundreds or even several thousand miles from the sea. After different periods of time, the young salmon make their way back to the sea where they complete most of their growth and on maturity return to the same stream from which they arose as young, to complete the spawning act and die.

The relation of salmon life history to conservation

83. The important peculiarities of the Pacific salmon life history are that they spawn only once, that all species require access to fresh water to spawn and reproduce, and that individual runs or races of salmon move into specific areas or streams at certain times each year. This peculiar life history requires careful adjustment of fishing operations to permit the escapement of a part of each race. The proportion of each race that can be taken will vary but indiscriminate fishing in areas where races are not separated can result in the over-fishing of certain races. To avoid this result, the United States fisheries officials have now undertaken to restrict Bristol Bay fisheries to areas where they have found that the races bound for the different rivers are almost completely isolated. Regulation of these unit fisheries is then formulated to permit escapement of the desired numbers of all segments of these runs. Canadian and United States net fishermen have been restricted by law to operate within coastal waters along the Pacific Coast of North America. While it has been found possible to capture commercial quantities of salmon on their feeding grounds on the high seas, these two Governments consider that effective conservation of salmon requires the control of fishing as far as possible on separate stocks so that sufficient escapement may be permitted from each one. This is found to be almost impossible when the fish are exploited by nets on the high seas where the stocks seem to intermingle widely.

84. Here then is a fishery that historically has been fished by one nation. It is particularly vulnerable to over-exploitation because the entire stock moves into streams for breeding purposes. As this migration passes into the accessible inshore waters and finally into the shallow streams it could easily be fished out by unrestricted fishing. As the fishery has developed and has demonstrated its effects upon the stocks of fish, regulations have been developed, based upon biological

research, which are aimed at permitting the fullest use of the stocks commensurate with their productive capacities. During recent years, the industry itself has supported its own programme of biological research to assist the responsible government agency in solving the many difficult problems associated with stabilizing the fishery and stocks at the level of maximum sustained yield. As a matter of interest, the amounts spent by the United States Government during the last thirty years for management and research on Alaska salmon resources have been over \$18,000,000. Since 1947, the Alaska Salmon Industry has provided more than \$800,000 for the support of biological research on Bristol Bay stocks of salmon alone. Additional funds also have been spent by the industry for research on salmon stocks in other areas of Alaska.

(b) *The halibut fishery of the North-eastern Pacific*

85. The history of the halibut fishery of the west coast of the United States, Canada and Alaska was reviewed by Dunlop (1955)* at the International Technical Conference at Rome. He described how the fishery was developed by Canadian and United States fishermen beginning in 1888 when railroads were completed to West Coast ports permitting rapid shipment of fresh halibut to the large eastern United States and Canadian market centres.

86. The fishery developed rapidly as the technology of handling the product and of fishing was developed. By 1915, sufficient concern had arisen from the growing scarcity of halibut on more accessible banks along the coast of British Columbia to cause the Government of that province to sponsor a biological investigation to determine the cause. The final result of that investigation and of later developments in the fishery was a fisheries treaty between Canada and the United States of America which was concluded in 1923.

87. A commission was appointed by the two Governments to give effect to the treaty, and this commission undertook to sponsor a biological research programme of its own, beginning in 1924. The investigations that followed were supported equally by the Canadian and United States Governments and formed the basis for a new treaty, adopted in 1930, that gave the commission power to regulate the fishery. Another treaty in 1937 and still another in 1953 modified regulatory procedures as the investigations of the commission's staff developed a better foundation for management through an increasing understanding of the biology of the stocks. Each succeeding treaty has broadened the regulatory powers of the commission, enabling it, in each case, to adapt the regulations more closely to the peculiarities of the fishery and to mould the regulations into a pattern more closely in keeping with the biological needs of the stocks.

88. The results of this work are well known since these are the first and, as yet, only stocks of a marine species of fish that are regulated successfully on a sound basis of scientific research. The recovery of the halibut stocks from the low level of abundance reached in 1930 to three times that level off the coast of British Columbia and Southeastern Alaska, and to twice that level in the Gulf of Alaska, has been associated with a marked

increase in the total catch. The improved regulations of 1954 which enabled the better use of all stocks on the banks raised the catch to 71.2 million pounds. This must be compared with the 44.2 million pounds produced by the full effort of the fishing fleet in 1931. The increase in abundance has been sufficient to permit taking this greater amount of fish with only a fraction of the effort required in 1931. This fraction was 50 per cent in Area 2 and 65 per cent in Area 3.

89. The variations of total catch and catch per unit of effort during the past decade indicate that the fishery is now just about at the level of maximum sustained yield. This cannot be stated definitely now because of deficiencies in our knowledge of the complex relationships between the stocks of fish, their environment and the fishery. The continuing studies of the commission, with observations of the results of management, should in themselves go far to measure these relationships, just as they furnished the first demonstration of the validity of the concepts of fisheries population dynamics elucidated by Baranov.

Significance of abstention in the halibut fishery

90. The important fact concerning this fishery is that it has been regulated for twenty-six years by an international commission which is operating under a treaty between the two countries which share in the fishery. These regulations, based upon detailed biological investigations, have been directly responsible for rebuilding this fishery from a depleted state which had resulted from a prior lack of regulation and lack of knowledge concerning the productive capacity of the stocks. These regulations have been successful because of sacrifices made by United States and Canadian fishermen. The two fleets, at any time since regulations have been imposed, have been capable of taking much more halibut than has been permitted by the commission. The efficient use of the halibut stocks, and the most efficient use of the world's fishing fleets, would seem to point to the application of the principle of abstention in this fishery where new, outside effort would not only lower the efficiency of the two fleets already operating on these stocks but could result in no increase in the production of fish.

91. It is of interest that since 1924 a total of over \$2,500,000 has been appropriated by Canada and the United States for biological research and management of the halibut fishery.

IV. SUMMARY

92. The scientific basis of the principle of abstention lies in the fundamental laws of fisheries population dynamics, according to which if a fishery is stabilized at its level of maximum yield, it will produce less fish if the intensity of fishing is increased. However, a sudden increase in fishing will result in a temporary rise in total catch while the stock is being reduced in size to a new low level.

93. The economic problems in the world's fisheries have not been investigated sufficiently to provide a sound basis for abstention on this ground except perhaps

in the restricted field of vital economic necessity. This would include only those fisheries which are essential for the support of a particular group of people. However, even this criterion would require evidence of complete utilization which in turn would involve the same information as the scientific basis of abstention. It appears that other and better methods might be found of protecting the rights of people in case of vital economic need.

94. In any application of the principle of abstention the stocks concerned must be clearly defined geographically. Sufficient data must have been gathered to prove the need for conservation, and research and management programmes must be in force which meet the most rigid requirements so far set for any conservation programmes. These requirements are that it must be possible to demonstrate that the regulations are responsible for stabilizing and restoring the stocks. Moreover, the research programme must establish the size of the maximum sustainable yield. The principle provides a simple solution of problems involving the most efficient use of fisheries, the production of the most food from the sea, and the establishment of conditions conducive to intelligent conservation and use of our natural marine resources.

95. As set forth in the report of the International Law Commission, it prohibits the whimsical exclusion of enterprising fishermen from under-exploited fisheries. It can actually stimulate a more intelligent approach to fisheries exploitation as well as management through the requirement of scientific proof of the validity of regulations, of the condition of the fishery, and of the geographic range as well as conditions of stocks of fish on which it is based, as well as requiring establishment of the level of maximum sustained yield for the stocks in question. With this stimulus, many fisheries research programmes now in progress would have to be examined more carefully for objectives, methods and scope. Many would have to be completely altered to fulfil the requirements outlined by the International Technical Conference in Rome. As a result, many fisheries which are now producing far below their potential because of lack of management or even because of mismanagement, could probably be brought back to a substantial level of production.

96. To a conservationist, it seems regrettable that all fisheries management programmes cannot be placed under the same requirements of practical accomplishment as are demanded of anyone requesting abstention for any fishery. It would raise the scientific level of most fisheries programmes and at the same time would impose a heavy penalty on improperly conceived, inadequately supported or poorly executed research or management programmes.

ANNEX

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TABLE I

Number of fish in the population (P) and numbers caught (C) from each age class in a population showing the average weights at each age given in column 1, with constant recruitment of 2000 at age 1.

The numbers shown correspond to values that could occur at each level of natural (N) and fishing (F) mortality after the population and fishery had become stabilized at that level.

1 Wt.	2 Age	N = 30%		N = 25%		N = 20%		N = 10%		N = 0		N = 0		N = 0		N = 0		N = 0	
		F = 10%	F = 20%	F = 20%	F = 30%	F = 40%	F = 50%	F = 60%	F = 70%	F = 75%	F = 80%								
		3 P	4 C	5 P	6 C	7 P	8 C	9 P	10 C	11 P	12 C	13 P	14 C	15 P	16 C	17 P	18 C	19 P	20 C
51	1	2000	169	2000	349	2000	541	2000	762	2000	1000	2000	1200	2000	1400	2000	1500	2000	1600
86	2	1260	106	1200	210	1120	303	1080	412	1000	500	800	480	600	420	500	375	400	320
122	3	794	67	720	126	627	170	583	222	500	250	320	192	180	126	125	94	80	64
151	4	500	42	432	75	351	95	315	120	250	125	128	77	54	38	31	23	16	13
163	5	315	26	259	45	197	53	170	65	125	62	51	31	16	11	8	6	3	2
174	6	198	17	156	27	110	30	92	35	62	31	20	12	5	4	2	2	1	1
189	7	125	11	93	16	62	17	50	19	31	16	8	5	1	1				
199	8	79	7	56	10	34	9	27	10	16	8	3	2						
205	9	50	4	33	6	19	5	14	5	8	4	1							
208	10	31	3	20	3	11	3	8	3	4	2	1							
215	11	20	2	12	2	6	2	4		2	1								
220	12	12	1	7	1	3		2		1									
230	13	8	1	4		2		1											
235	14	5		3		1	2	1											
243	15	3		2	2	1		1											
250	16	2	1	1		1													
	17	1		1															
	18	1																	
Number caught		457		872		1230		1656		2000		2000		2000		2000		2000	
Total weight caught		45,486		82,577		110,136		144,073		165,162		146,222		131,308		125,017		119,391	
Catch in weight/unit		431.7		370.1		308.8		282.0		238.3		159.6		109.1		90.2		74.2	
Number of units of gear		105		223		357		511		693		916		1,204		1,386		1,609	

TABLE II

Changes occurring in total catch, catch per unit of effort, and in population following a change in rate of fishing.

The number of fish of each age which would occur in the population (P) and which would be taken in the catch (C) at different rates of fishing are shown in each column for each year after the sudden change in fishing rate.

Years following sudden change		1		2		3		4		5		6		7					
Annual fishing rate	Annual natural mortality	F = 50 N = 0		F = 70 N = 0															
		1 Wt.	2 Age	3 P	4 C	5 P	6 C	7 P	8 C	9 P	10 C	11 P	12 C	13 P	14 C	15 P	16 C	17 P	18 C
51	1	2000	1000	2000	1400	2000	1400	2000	1400	2000	1400	2000	1400	2000	1400	2000	1400	2000	1400
86	2	1000	500	600	420	600	420	600	420	600	420	600	420	600	420	600	420	600	420
122	3	500	250	300	210	180	126	180	126	180	126	180	126	180	126	180	126	180	126
151	4	250	125	150	105	90	63	54	38	54	38	54	38	54	38	54	38	54	38
163	5	125	62	75	52	45	31	27	19	16	11	16	11	16	11	16	11	16	11
174	6	62	31	38	27	22	15	13	9	8	6	5	3	5	3	5	3	5	3
189	7	31	16	19	13	11	8	7	5	4	3	2	1	2	1	2	1	1	1
199	8	16	8	9	6	6	4	3	2	2	1	1	1	1	1	1	1		
205	9	8	4	5	3	3	2	2	1	1	1	1							
208	10	4	2	2	1	1	1	1	1	1									
215	11	2	1	1	1	1													
220	12	1		1															
Stock		3999		3200		2959		2887		2866		2859		2858		2856			
Number caught		2000		2237		2070		2020		2006		2000		2000		2000			
Weight caught		165,162		166,653		142,994		134,841		132,438		131,333		131,333		131,134			
Catch/unit		238.3		138.4		118.8		112.0		110.0		109.1		109.1		108.9			

FIGURE 1

Total catch, catch per unit of effort, and total amount of gear run at different rates of fishing in a model fishery

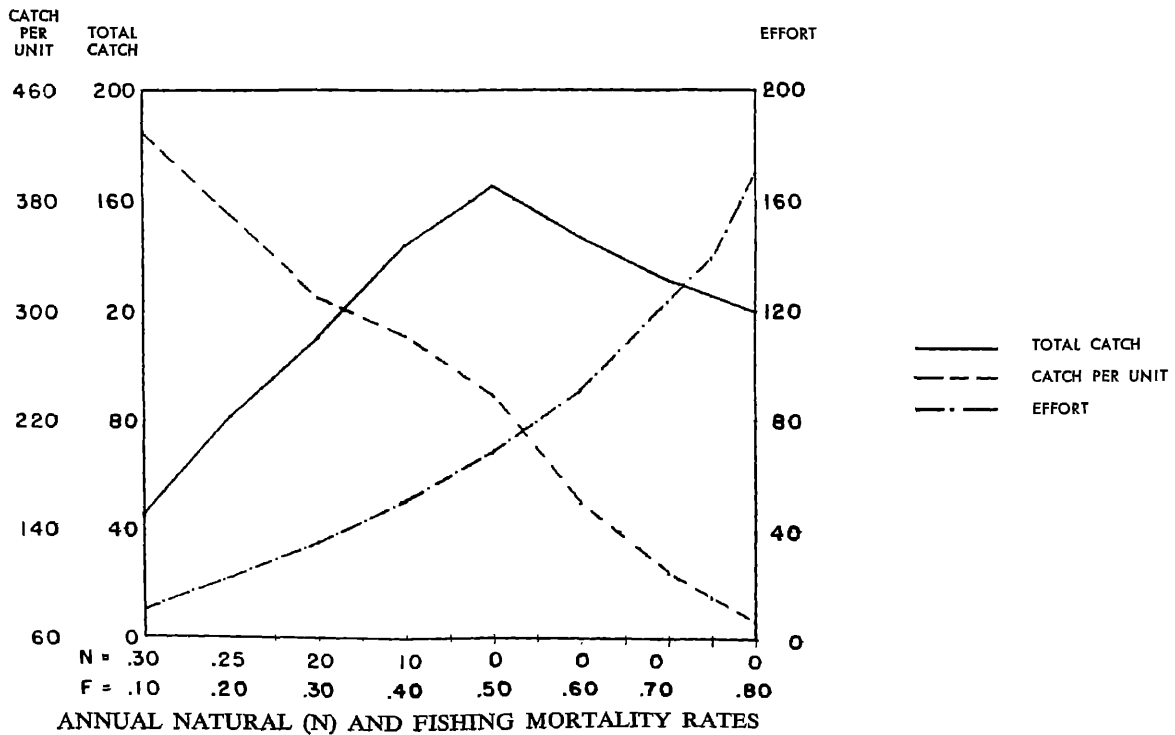
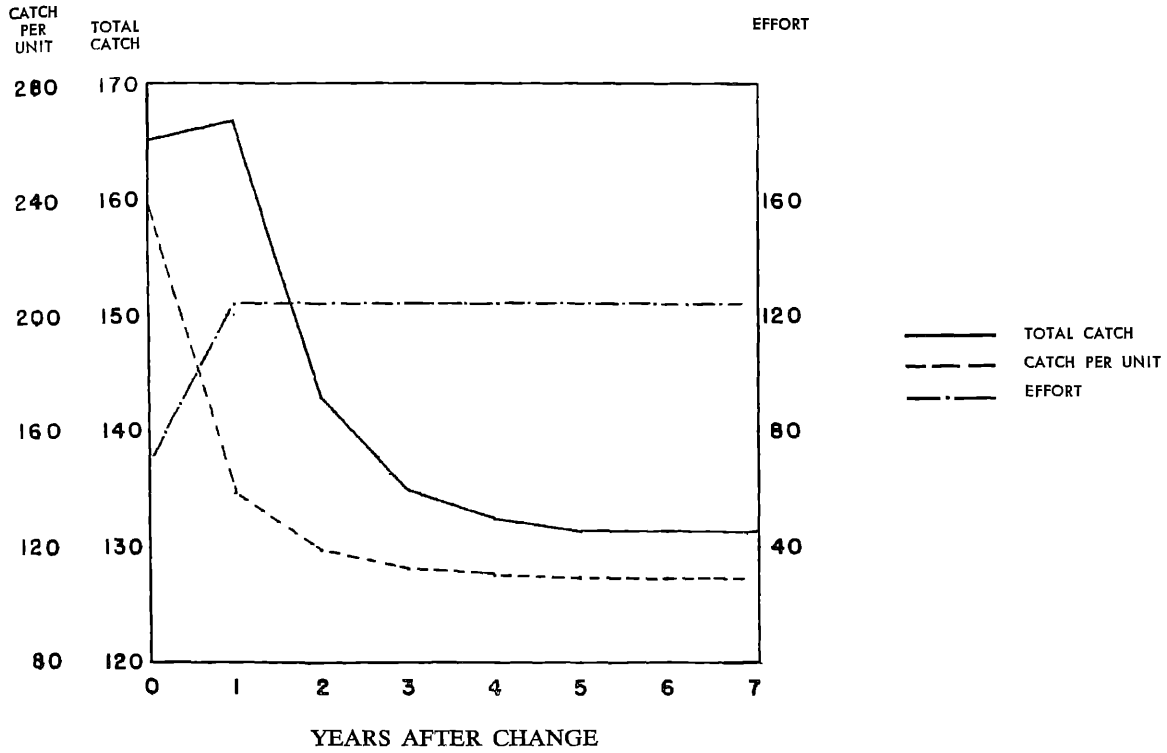


FIGURE 2

Changes that could be expected to occur in total catch, catch per unit of effort, and amount of gear run each year (effort) in the years immediately following a sudden change in the rate of fishing from 50 per cent per year to 70 per cent per year



THE LAW OF THE AIR AND THE DRAFT ARTICLES CONCERNING THE LAW OF THE SEA ADOPTED BY THE INTERNATIONAL LAW COMMISSION AT ITS EIGHTH SESSION

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(Preparatory document No. 4) *

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Introduction

1. The articles concerning the law of the sea which the International Law Commission (hereinafter called "the Commission") adopted at its eighth session contain many references both explicit and implicit, to the international law of the air currently in force. In addition, the effect of some of the articles is to extend to aircraft and to air navigation certain notions hitherto applied only to ships and to sea navigation.

2. In its commentaries, the Commission points out that it did not "study the conditions under which sovereignty over the airspace [above the territorial sea] . . . is exercised", and that it also "refrained from formulating rules on air navigation" over the high seas, because "the task it set itself in the present phase of its work is confined to the codification and development of the law of the sea".

* This paper was prepared at the request of the Secretariat of the United Nations but should not be considered as a statement of the views of the Secretariat.

3. In order to enable the Conference which is to consider the draft articles adopted by the Commission (hereinafter called "the draft") to appreciate the relationship between these articles and the law of the air, it may be useful to make a comparative study of the relevant provisions of air law contained in international conventions now in force, in the national legislation of certain countries, in the rules prepared by international organizations or by specialized agencies of the United Nations in pursuance of their powers under international conventions and, finally, in certain rules and practices established by custom.

4. This study will be divided into two parts, corresponding to the two parts of the draft, since there exists between the airspace above the territorial sea and the airspace above the high seas the same essential difference—as noted by the Commission in its commentary to article 1—as between the régime of the territorial sea and that of the high sea.

PART I

The Airspace above the Territorial Sea

I. THE JURIDICAL STATUS OF THE AIRSPACE ABOVE THE TERRITORIAL SEA

5. The principles set forth in articles 1 and 2 of the draft are—as stated by the International Law Commission in its commentary to article 1—those underlying a number of multilateral conventions which constitute the basis of existing air law; the territorial sea is assimilated to other parts of the territory of sovereign State and the State's sovereignty consequently extends to the airspace over the territorial sea.

6. These fundamental principles are stated in article of the Paris Convention relating to the Regulation of Aerial Navigation (13 October 1919):¹

¹ The report submitted by the Legal, Commercial and Financial Sub-Commission to the Aeronautical Commission of the Peace Conference explains the origin of this article as follows:

"The first question before the Sub-Commission was whether to accept the principle of the freedom of the air or that"

"Article 1. The High Contracting Parties recognize that every Power has complete and exclusive sovereignty over the air space above its territory.

For the purpose of the present Convention, the territory of a State shall be understood as including the national territory, both that of the mother country and of the colonies, and the territorial waters adjacent thereto."²

The same text appears in article 1 of the Ibero-American Convention relating to Air Navigation signed at Madrid on 1 November 1926. The Pan-American Convention on Commercial Aviation, signed at Havana on 20 February 1928, reproduces only the first paragraph and makes no reference to territorial waters.³

7. Finally, the Chicago Convention on International Civil Aviation of 7 December 1944, at present in force, contains the following two articles:

"Article 1. The Contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory.

"Article 2. For the purposes of this Convention the territory of a State shall be deemed to be the land areas and territorial waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such State."

8. The language of the articles of the various international conventions cited above is generally regarded as showing that the Contracting States expressly recognized a rule of customary international law.⁴

9. According to these texts, the subjacent State's sovereignty is "complete and exclusive", i.e. unrestricted. During the discussion of the draft at the seventh session of the International Law Commission (1955), the question arose, following an observation of the Netherlands Government, whether article 2 should contain a second paragraph similar to that in article 1 ("This sovereignty is exercised subject to the conditions prescribed in these articles and by other rules of inter-

sovereignty over the air. The Paris Convention of 29 June 1910 had not taken any decision on this point. The new text proposes a solution. But whereas the opinion held in the majority of countries before the war favoured the principle of the freedom of the air, the present proposal of the Legal Sub-Commission would make the airspace subject to the complete and exclusive sovereignty of the subjacent territory. It is only where the column of air lies over a *res nullius* or *res communis*, like the sea, that the air becomes free.

"Accordingly, the airspace is subject to the same legal régime as the subjacent territory. Where such territory is that of a particular State, the airspace is subject to the sovereignty of that State. In the case of the high seas, which are subject to no State's sovereignty, the airspace above the sea is as free as the sea itself."

Recueil des Actes de la Conférence de la Paix, part VII. A (1) Aeronautical Commission, pp. 428-429.

² The Paris Convention and the other Conventions mentioned in paragraph 6 use the term "territorial waters", which the Commission has replaced by the more accurate term "territorial sea".

³ English versions of these two Conventions appear as annexes C and D to the draft minutes of the extraordinary session of the International Commission for Air Navigation held in June 1929 (ICAN Publications).

⁴ Mr. François' first report on the territorial sea (A/CN.4/53), prepared for the fourth session (1952) of the International Law Commission, did not contain any reference to the airspace. After several members had pointed out that the coastal State's sovereignty over the airspace above the territorial sea was acknowledged as a rule of international law by international conventions, article 3 of the first draft (which became article 2 of the present draft) was duly amended. See A/CN.4/SR.165, paras. 57 to 73; A/CN.4/SR.172, paras. 14 to 32.

national law"). After a discussion, the Commission held that there existed in international law no limitation on the sovereignty exercised over the airspace⁵ and decided not to add a second paragraph.

10. Article 2 of the draft is therefore fully consistent with existing air law. The commentary to that article nevertheless calls for an observation. The commentary states that "this article is taken, except for purely stylistic changes, from the regulations proposed by the 1930 Codification Conference". In reality, however, the next text introduces a change of terminology which, at least as far as the French version is concerned, is not "purely stylistic".

11. Article 2 of the draft contains the expression *espace aérien* whereas in article 2 of the 1930 draft regulations we find the expression *espace atmosphérique*.⁶ The expression *espace atmosphérique* was the one consistently used by the Aeronautical Commission when drafting the 1919 Convention⁷ and the one which naturally appears in article 1 of that instrument. The same expression has been used by various States in their national legislations.⁸ At the Chicago Conference, the matter was never discussed by the Conference itself and the Drafting Committee, working in English, merely reproduced the English text of article 1 of the Paris Convention with the sole difference that "airspace" was condensed into a single word.⁹ No definition of airspace (*espace atmosphérique* or *espace aérien*) can be found in any international convention whatsoever.

12. During the fourth session of the International Law Commission, Mr. Hudson expressed doubts whether the term "airspace" (*espace aérien*) was appropriate in the light of modern developments in the aeronautical field; he added that a United States writer had recently suggested that "airspace" should be replaced by "flight-space" (*espace de vol*). This new term received no support whatsoever.¹⁰

13. Ever since the attention of jurists was first drawn to the progress made in aeronautics and astronautics, and particularly since the announcement of the launching of man-made satellites and of plans for inter-planetary travel, the term "airspace" (*espace aérien*) has given rise to much controversy and to varying interpretations regarding its upper limit.

14. The term *espace atmosphérique* cannot, of course, indicate accurately the height to which the subjacent State's sovereignty may extend, inasmuch as the upper limit of the atmosphere varies from one part

⁵ A/CN.4/SR.295, paras. 22 to 34.

⁶ The English texts of article 2 of the draft and article 2 of the 130 draft regulations both use the expression "airspace".

⁷ *Recueil des Actes de la Conférence de la Paix*, part VII. A (1), Aeronautical Commission.

⁸ E.g., Bolivia, Colombia, Ecuador and Spain.

⁹ At Chicago, the only authentic text signed by the representatives was the English text. The trilingual text provided for by the Convention itself has never been drafted. For purposes of publication of the Convention in the *United Nations Treaty Series*, however, the Secretariat prepared a French text using the expression *espace aérien*. This text has since been used, pursuant to a resolution adopted on 19 February 1952 by the Council of the International Civil Aviation Organization (ICAO), for the internal purposes of that organization and in its communications with member States.

¹⁰ A/CN.4/SR.172, para. 31.

of the globe to another and scientists differ in their estimates of its thickness. But the term *espace aérien* is most commonly construed to mean the space extending *ad infinitum*. ICAO itself seems to support this interpretation; its technical rules, adopted by the ICAO Council in pursuance of its powers under the Chicago Convention and called "Annexes" or "Standards and Recommended Practices", contain definitions, applicable to the rules themselves, in which the terms "control zone" and "control area" are defined as "a controlled airspace extending upwards from the surface (or from a specified height above the surface) of the earth".¹¹ The English text is clearer in this respect than the French.¹² The same idea is to be found in various ICAO publications, especially in the regional plans adopted by the Council which describe the control zones, control areas and controlled airways; the altitude to which control extends is sometimes stated to be unlimited, although the effective exercise of control is obviously dependent on the equipment available.

15. Despite its vagueness, the term *espace atmosphérique* justifies the inference—at least in theory—that above the atmosphere air traffic is free. By contrast, the use of the term *espace aérien*, interpreted as extending *usque ad infinitum*, could hinder the future progress of aeronautics and astronautics. Admittedly, the Chicago Convention applies at present to conventional aircraft only (balloons, airships, aeroplanes and helicopters). The Convention itself does not define the term "aircraft" and the ICAO Council has adopted a definition similar to that contained in the Paris Convention (annex A), viz: "any machine that can derive support in the atmosphere from the reactions of the air". This definition, which appears in various annexes to the Chicago Convention,¹³ is not applicable to man-made satellites, to rockets (whether guided or unguided) or to any other device capable of moving through space without requiring support from the reactions of the air; in any event, there are at present no regulations governing the movement of such devices or objects—which are not aircraft within the meaning of the definition adopted by ICAO—even through the atmosphere. Article 8 of the Chicago Convention, which forbids the flying of pilotless aircraft over the territory of a Contracting State without its authorization, is not applicable, since these objects are not aircraft. Two remarks, however, seem pertinent. In the first place, the annexes to the Convention (with one exception which will be noted later in connexion with the high seas) are not binding on States; States may consequently adopt definitions and rules different from those adopted by ICAO provided they give notification to that organization of the departures in question. Secondly, the Council, having the powers to amend any rule or annex, can prepare a new definition of "aircraft" which will include all the other objects and thus make the articles of the Convention, and the annexes thereto, applicable *ipso facto* to such objects.

¹¹ See chapter 1 (Definitions) of annex 2 (Rules of the Air) and of annex 11 (Air Traffic Services).

¹² *Espaces aériens contrôlés s'étendant verticalement à partir de la surface (ou d'un niveau déterminé par rapport à la surface)*.

¹³ Annexes 6, 7 and 8.

16. This is not the solution generally envisaged by jurists, who prefer to suggest a division of the airspace into superimposed zones and a consequent restriction of the extent thereof subject to the absolute sovereignty of the subjacent State. This question, however, which has already been discussed in writing by several authorities,¹⁴ does not appear to be strictly pertinent in connexion with article 2 of the draft, since the draft merely states that the sovereignty of a coastal State over the territorial sea extends also to the airspace above the territorial sea. In any event, it seems that the problems raised by the movement through outer space of various devices used chiefly for purposes of scientific observation—though ultimately also for transport—should be regulated by a convention. Such a procedure appears to have the unanimous support of the jurists who have examined the question. President Eisenhower referred to it in his State of the Union Message of 10 January 1957, and Mr. Henry Cabot Lodge mentioned the question in the disarmament programme submitted to the United Nations on 14 January 1957.

II. CONDITIONS APPLICABLE TO AIR NAVIGATION ABOVE THE TERRITORIAL SEA

17. The Commission did not examine the conditions governing the exercise of sovereignty over the airspace above the territorial sea. A summary of these conditions, as set forth in the Chicago Convention and its annexes, may therefore be of assistance in the discussion of article 2 of the draft and of other articles of part I, especially those relating to the right of innocent passage.

18. Since the airspace above the territorial sea is wholly assimilated to the airspace above the territory, the movements of aircraft (flight, take-off and landing) in both spaces are subject to identical conditions. Aircraft do not enjoy in the airspace above the territorial sea the right of innocent passage enjoyed by ships in the territorial sea itself.

19. During the discussion of the draft in the Commission, a member asked the Rapporteur whether he might not consider the possibility of extending the right of innocent passage to the airspace. Mr. François replied that the conventions on air navigation did not recognize the principle of innocent passage, and that it had been recognized at the 1930 Hague Codification Conference that there was no customary law on innocent passage through the air above a territory.¹⁵

20. It is true that the Paris Convention of 1919 stipulated in article 2 that "each Contracting State undertakes in time of peace to accord freedom of innocent passage above its territory to the aircraft of the other Contracting States, provided that the conditions

¹⁴ See John C. Hogan, "Space Law Bibliography", in 23 *Journal of Air Law and Commerce* (1956), pp. 317-325; John C. Hogan, "Legal terminology for the upper regions of the atmosphere and for the space beyond the atmosphere" in *American Journal of International Law* (1957), pp. 362-375; Myres S. McDougal, "Artificial satellites: a modest proposal", in *American Journal of International Law* (1957), pp. 74-77. See also the letters addressed to the editor of *The Times* (London) by Mr. John C. Cooper and Mr. Christopher Shawcross, in the issues of 2 and 5 September 1957.

¹⁵ A/CN.4/SR.172, paras. 18, 21 and 22.

laid down in the present Convention are observed". It is also true that the Madrid Convention of 1926 (article 2) and the Havana Convention of 1928 (article 4) contained similar provisions. But all these provisions constituted contractual undertakings between States and not an act of recognition of a rule of international law, as was the case with the provisions on sovereignty over the airspace.

21. None of the articles of the Chicago Convention of 1944 gives a right of innocent passage to aircraft of the Contracting States; the Convention contains, however, numerous provisions concerning the movements of aircraft, especially part I (Air Navigation) and article 68 in part III (route to be followed above the territory of a State). All these provisions imply that the subjacent State enjoys complete and exclusive sovereignty.

22. In the first place, certain categories of aircraft may not fly over the territory of another Contracting State except with its permission or authorization and must comply with the stipulated conditions. The categories of aircraft in question are the following:

(a) State aircraft (military, customs and police aircraft (article 3, para. (c));¹⁶

(b) Civil aircraft engaged in "scheduled international air services", which are also required, when within the territory of a Contracting State, to follow the route and use the airports designated by that State (article 68);

(c) Pilotless aircraft.

23. Aircraft of Contracting States not engaged in "scheduled international air services" are the only ones which, under article 5 of the Convention, have "the right . . . to make flights into or in transit non-stop across its [a Contracting State's] territory and to make stops for non-traffic purposes without the necessity of obtaining prior permission". This right, however, is made subject to so many conditions and saving clauses designed to safeguard the sovereign rights of States that its value is greatly restricted.¹⁷

24. Aircraft of all categories, whether or not requiring prior permission for the purpose of entering the airspace of a Contracting State, must also comply with the various conditions laid down in the Convention;

¹⁶ Although article 3, para. (a), states that the Convention shall be applicable only to civil aircraft and shall not be applicable to State aircraft, para. (c) of the same article lays down a rule concerning State aircraft specifically.

¹⁷ Article 5. "Each Contracting State agrees that all aircraft of the other Contracting States, being aircraft not engaged in scheduled international air services, shall have the right, subject to the observance of the terms of this Convention, to make flights into or in transit non-stop across its territory and to make stops for non-traffic purposes without the necessity of obtaining prior permission, and subject to the right of the State flown over to require landing. Each Contracting State nevertheless reserves the right, for reasons of safety of flight, to require aircraft desiring to proceed over regions which are inaccessible or without adequate air navigation facilities to follow prescribed routes, or to obtain special permission for such flights.

"Such aircraft, if engaged in the carriage of passengers, cargo, or mail for remuneration or hire on other than scheduled international air services, shall also, subject to the provisions of article 7, have the privilege of taking on or discharging passengers, cargo, mail, subject to the right of any State where such embarkation or discharge takes place to impose such regulations, conditions or limitations as it may consider desirable."

here again, the primary emphasis is on State sovereignty. Aircraft must, as a general rule, observe the laws and regulations of the subjacent State (see in particular articles 11, 12 and 13). They must respect the prohibited or restricted areas which States have the right to establish above their territories for various reasons (article 9).¹⁸ The competent authorities of a State have the right to search aircraft of the other Contracting States on landing and departure, and to inspect the certificates and other necessary documents (article 16). The ICAO Council admittedly has the power, under article 54 (1) of the Convention, to adopt international regulations designated as annexes or international standards and recommended practices but, with one exception to which reference is made later (see para. 33), these regulations are not *ipso facto* binding on States.¹⁹ Various articles of the Convention naturally enjoin each Contracting State to observe them, but only "so far as it may find practicable" (article 28) or "to the greatest possible extent" (article 12); States can consequently depart from the provisions adopted internationally, provided they notify ICAO of the differences between their regulations and the international standards.

PART II

The Airspace above the High Seas

25. The articles of the draft regarding the high seas touch upon air law in several different ways. One article seeks to confirm in explicit terms a principle of existing air law which has never yet been formulated in any treaty, namely, the freedom to fly over the high seas. Other articles which contain explicit references to aircraft, air traffic and the airspace tend to establish new rules of air law; this applies to the articles on piracy, hot pursuit, pollution of airspace and the continental shelf. Finally, certain articles which do not themselves refer to the airspace or to aircraft deal with subjects already covered by existing rules of air law which are worth summarizing.

I. FREEDOM TO FLY OVER THE HIGH SEAS

26. Neither the Paris Convention, nor the Madrid and Havana Conventions, nor the Chicago Convention, contain any provision confirming the freedom of flight over the high seas.

27. The Aeronautical Commission of the Peace Conference (1919) had, however, stated in the report of its Legal, Commercial and Financial Sub-Commission²⁰ that "it is only where the column of air lies over a *res nullius* or *res communis*, like the sea, that the

¹⁸ Numerous prohibited or restricted areas are situated above territorial seas, especially around military ports; some of these even extend into the high seas (see para. 40).

¹⁹ This is the difference between the annexes to the Chicago Convention and the annexes to the Paris Convention, the provisions of which, together with any amendments introduced thereto by the International Commission for Air Navigation, were binding on the Contracting States as from the date of their notification.

²⁰ *Recueil des Actes de la Conférence de la Paix*, part VIII. A (1), Aeronautical Commission, pp. 428-429.

air becomes free . . ." and that "the airspace above the sea is as free as the sea itself".

28. During the discussions in the International Commission for Air Navigation at its extraordinary session of June 1929, the Commission "recognized that flight over the sea, outside territorial waters, is free".²¹

29. The minutes of the Chicago Conference contain no record of any discussion on this subject, but the representatives present seem to have regarded the principle as already established for, under article 12 of the Convention, the right to make rules relating to the flight and manoeuvres of aircraft over the high seas is vested not in the Contracting States but in ICAO; furthermore, the rules established by ICAO are binding on the said States.

30. Article 27 of the draft contains in its second sentence the following statement:

"Freedom of the high seas comprises, *inter alia* :

" . . .

"(4) Freedom to fly over the high seas."

This provision confirms a principle of customary international law, which the Commission itself emphasizes in the first paragraph of its commentary to article 27:

"Freedom to fly over the high seas is expressly mentioned in this article because the Commission considers that it follows directly from the principle of the freedom of the sea."²²

31. Paragraph (5) of the same commentary to article 27 states:

"Any freedom that is to be exercised in the interests of all entitled to enjoy it must be regulated. Hence, the law of the high seas contains certain rules, most of them already recognized in positive international law, which are designed, not to limit or restrict the freedom of the high seas, but to safeguard its exercise in the interests of the entire international community."

This statement applies *mutatis mutandis* to the freedom to fly over the high seas.

32. Article 12 of the Chicago Convention (*vide supra*, para. 29) contains a provision governing the flight of

²¹ See International Commission for Air Navigation, Extraordinary Session of June 1929, draft minutes, p. 217, annex K, under article 1.

²² Mr. François' first reports on the high seas contained no reference to the freedom to fly over the high seas. At the Commission's seventh session, however, it was proposed that the draft should contain an enumeration of certain freedoms, including—in second place—the "freedom to fly over the high seas for peaceful purposes". The drafting Committee at the same session maintained that provision, but listed it as the fourth freedom (*see* A/CN.4/SR.293, paras. 43, 44, 45, 52; A/CN.4/SR.320, para. 23). During the examination of the Commission's draft report on the work of the session, the question of including in article 27 the freedom to fly over the high seas was discussed again. The provision was finally maintained after the Rapporteur had stated that the following commentary would be inserted:

"The Commission did not examine the question of freedom to fly over the high seas because that matter will be dealt with when the Commission comes to codify air law."

After some redrafting, the text finally adopted is the one which appears under article 27 (commentary (1)); it reads as follows:

"...the Commission has, however, refrained from formulating rules on air navigation, since the task it set itself in the present phase of its work is confined to the codification and development of the law of the sea."

(*see* A/CN.4/SR.326, paras. 32 to 52, and A/CN.4/SR.329).

aircraft over the high seas. This article provides that "each Contracting State undertakes to adopt measures to ensure . . . that every aircraft carrying its nationality mark, wherever such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force . . . Over the high seas, the rules in force shall be those established under this Convention. Each Contracting State undertakes to insure the prosecution of all persons violating the regulations applicable".

33. The rules which the aircraft of Contracting States must observe over the high seas are contained in annex 2 to the Chicago Convention (Rules of the Air). This is confirmed in the ICAO Council's resolutions of adoption of annex 2 (April 1948) and amendment No. 1 to the said annex (November 1951). In any case, the foreword to the annex expressly provides that "over the high seas . . . these rules apply without exception", which means that Contracting States can only enact regulations consistent with them and may not notify ICAO of any departures therefrom.²³

34. Annex 2 contains some general rules which are of a mandatory nature only in the airspace above the high seas but which could equally well apply—provided they do not conflict with the rules enacted by the adjacent State—in the airspace above land and the territorial sea. It also contains some specific rules concerning operations by aircraft on the surface of the water, including the high seas; these rules are designed to prevent collisions with other aircraft or with ships and the annex expressly extends to aircraft the International Regulations for Preventing Collisions at Sea adopted by the International Conference on the Safety of Life at Sea (1948). Finally, an appendix specifies the lights to be displayed by aircraft on the surface of the water.

35. Other annexes to the Convention which contain provisions on the movement of aircraft above the high seas include the following:

Annex 11 (Air Traffic Services);

Annex 12 (Search and Rescue);²⁴

Annex 6 (Operation of Aircraft—International Commercial Air Transport).²⁵

36. The only rules so far enacted by the Council of ICAO pursuant to article 12 which are mandatory in the airspace over the high seas are those contained in annex 2, although the documents of the Chicago Conference would seem to indicate that the authors of the Convention had more ambitious intentions. Some of the provisions of annex 2, however, themselves implicitly require strict compliance with other rules of great

²³ Governments generally make these rules compulsory even for their military pilots. *See* Supplementary Flight Information Document (North Atlantic Zone) of the United States Air Force and the Royal Canadian Air Force (section V - A 3 (a)). *See* also the article by Prof. H. Drion entitled "The Council of ICAO as international legislator over the high seas", in the *set* of articles published in honour of A. Ambrosini, Milan, 1955.

²⁴ This annex provides for the establishment and operation of search and rescue services and reproduces the provisions of the International Convention of 1948 on the Safety of Life at Sea.

²⁵ This annex, which lays down regulations for the operation of aircraft, contains provisions on flights over water.

importance to the safety of aircraft over the high seas ; thus, for example, the pilot in command of an aircraft must comply with instructions received from the air traffic control services set up by virtue of annex 11.

37. These services, generally set up on the recommendation of ICAO, control aircraft movements not only over the territories of the member States of ICAO, but also over great stretches of the world's seas which fall within the various control regions or control zones or are traversed by controlled airways. This is particularly true over the North Atlantic and the North Pacific,²⁶ where aircraft are subject to control regardless of the altitude at which they may be flying.

38. The rules contained in annex 2 and the traffic control measures, both of which in effect represent restrictions on the absolute freedom of flight, are all designed to insure the safety of aircraft over the high seas. They are being applied without any difficulty by all the States Parties to the Chicago Convention. They correspond to the regulations which article 34 of the draft requires States to issue with respect to ships.

39. Controversies have, however, arisen with regard to certain rules governing flight over the high seas which States have enacted unilaterally. The controversial issues, which may come up at the Conference, are the following :

(a) The establishment on the high seas of prohibited, restricted or dangerous areas ; and

(b) The establishment of off-shore identification zones, extending into the high seas, wherein every aircraft must identify itself on entry.

40. In certain zones established in various parts of the world, generally near the coasts but also sometimes over parts of the high seas, flight is either restricted or wholly prohibited ; the restriction or prohibition may be permanent or limited to a specified period, specified days or specified hours. These zones are generally used for the training of military pilots or for firing exercises, and sometimes for combined air-naval operations. The notices to airmen announcing the establishment of these zones do not appear to have elicited any protests from other States, any more than notices to mariners regarding naval manoeuvres.²⁷

41. The atomic weapons tests conducted in the Pacific since 1947 have, however, given rise to much discussion. After the United States authorities had selected Eniwetok Atoll for these tests, an area of some 30,000 square miles above the high seas was declared to be a danger area for a period of one year ; this period was subsequently extended "until further notice". In 1953, the area itself was extended to include Bikini atoll and increased to 50,000 square miles. Finally, in March 1954, the danger area was further extended to

cover 400,000 square miles. In 1957, the United Kingdom authorities, in their turn, established a danger area around Christmas Island, which is at least as large as the Bikini-Eniwetok area. There has been much controversy among jurists as to whether the establishment of such areas is compatible with the freedom of the seas ;²⁸ protests have been made, particularly by the Japanese Government, and questions have been asked in the House of Commons in London.²⁹

42. In considering these danger areas, we must look into the relevant provisions of the law of the air and the regulations at present governing air traffic. Although the Chicago Convention (article 9) gives each Contracting State the right, for certain purposes, to prohibit or restrict air traffic over some areas of its territory, there are no provisions in this or any other Convention giving States such rights over the high seas. Annex 2, which prescribes flight rules to be observed by aircraft, contains a provision (standard 3-1-6) stating that "aircraft shall not be flown over areas where there are flight restrictions, the particulars of which have been duly published, except in accordance with the conditions of the restriction or by permission of the appropriate authority of the State imposing the restriction". According to the definitions contained in chapter 1 of annex 2, a prohibited area or a restricted area means "a specified area within the land areas of a State or territorial waters adjacent thereto". Annex 2 thus contains no indirect recognition of a right to establish prohibited or restricted areas on the high seas.

43. In the Pacific Ocean, however, the Governments of the United States and of the United Kingdom have not established any prohibited or restricted areas ; they have only established "danger areas", the extent of which has been announced in ordinary notices to airmen. The notion of a "danger area", which is not mentioned in the Chicago Convention, was introduced into the ICAO regulations by the Council, which gave the following definition of the term in chapter I of annex 2 : "A specified area within or over which there may exist activities constituting a potential danger to aircraft flying over it".³⁰ Since this definition does not specify that such areas must be situated within the limits of a State's land domain or territorial sea, a State is free to establish them also on the high seas. There is, however, no provision in annex 2 which makes it compulsory for aircraft to respect these areas.

44. The protests made in this connexion concentrate not so much on the alleged illegality of the establishment of such areas under international law as on the dangerous consequences of atomic tests : the pollution of the airspace, the contamination of the sea and of the fish, the danger of accidents to persons venturing into

²⁶ See : ICAO document 7674, Air Navigation Plan, North Atlantic Region, chart ATS 2 and table 1, and ICAO document 7700, Air Navigation Plan, Pacific Region, chart ATS 2.

²⁷ Thus, a prohibited zone of more than 6,000 square miles, a large part of which extends over the sea, was set up by the Australian Defence Act of 1952 in the region of the Monte Bello Islands (Western Australia) as a site for tests of atomic weapons. Persons entering the zone without permission are liable to penalties as high as seven years' imprisonment. This measure does not seem to have elicited any protest.

²⁸ See, in particular, two articles which appeared in the *Yale Law Journal* (April 1955, pp. 629-710) : one by Mr. Emanuel Margolis, entitled "The hydrogen bomb experiments and international law" and the other by Prof. Myres S. McDougal, entitled "The hydrogen bomb tests in perspective : lawful measures for security".

²⁹ See *Parliamentary Debates* (Hansard), House of Commons, vol. 550, col. 29 (12 March 1956).

³⁰ There are, throughout the world, several hundreds danger areas ; the extent of these and the reasons for their establishment are given in navigation manuals citing the relevant notices to airmen.

such areas, etc. The Commission, in mentioning this subject, merely states in paragraph 3 of its commentary to article 27: "Nor did the Commission make any express pronouncement on the freedom to undertake nuclear weapon tests on the high seas. In this connexion, the general principle enunciated in the third sentence of paragraph 1 of this commentary is applicable"; the principle mentioned is that "States are bound to refrain from any acts which might adversely affect the use of the high seas by nationals of other States".

45. In this connexion, we should point out that, strictly from the point of view of air transport—and leaving aside the consequences of the nuclear tests themselves—the damage caused to aviation by the establishment of these danger areas in the Pacific appears to have been very slight. There are no scheduled airlines in the immediate vicinity of the Christmas Island area. As to the Bikini-Eniwetok area, the route followed by the aircraft of a United States airline between Guam and Wake Island had to be deflected well to the north of the danger area, making it necessary for two or three flights weekly to follow a route fifty miles longer throughout the duration of the 1954 tests.³¹

46. There is also another danger area in the Caribbean and South Atlantic region, which is used as a proving-ground for rockets and guided missiles launched into space from sites in Florida. This vast firing-range, which was established by successive agreements between the United Kingdom and the United States,³² at first covered only the Bahamas, but was later extended to St. Lucia and finally to Ascension Island. It now extends farther than 4,000 miles from Florida and can be used for tests with inter-continental missiles. Although many airlines of various nationalities cross this zone, it does not appear to have given rise to any protests.

47. The identification zones mentioned in paragraph 39 above also restrict the freedom to fly over the high seas, but it can hardly be said that their purpose is to ensure the safety of air traffic. These zones, known as air defence identification zones, were established in 1950-1951 by the Governments of the United States and Canada off their coasts on both the Atlantic and the Pacific Oceans (the United States zones are now called ADIZ and the Canadian zones CADIZ). The Canadian zones are some 100 nautical miles wide and the United States zones between 200 and 300 miles wide. These zones extend as follows: on the Atlantic side, from 66° North (Baffin Land) to 28° North (Florida); on the Pacific side, from 53° North (north of Vancouver) to 28° North (Mexican frontier) and around Alaska.³³

³¹ See Myres S. McDougal, *op. cit.*, p. 683.

³² See Agreement of 21 July 1950 (*United Nations Treaty Series*, vol. 97, No. 1351); Agreement of 15 January 1952 (*Ibid.*, vol. 127, No. 1697); Agreement of 24 February and 2 March 1953 (*Ibid.*, vol. 172, No. 2249); Agreements of 25 June 1956 (United Kingdom Command Papers Nos. 9810 and 9811). See also the article in the *New York Times* of 25 March 1957 entitled "Little peril seen in missiles tests".

³³ For a complete description of the United States zone see part 620 of the Civil Aeronautics Regulations (sub-part C); the Canadian zones are described in section 2.11 of the rules published in NOTAM 22/1955.

48. The rules which must be observed by aircraft wishing to enter or present in these zones are set forth in the following documents: as regards Canada, in the Rules for the Security Control of Air Traffic, published in the form of a Notice to Airmen (NOTAM);³⁴ as regards the United States, in the regulations made by the Civil Aeronautics Administration pursuant to an Executive Order issued by the President in the exercise of his powers under the Civil Aeronautics Act of 1938. Under these regulations, all aircraft about to enter or present in a United States or Canadian air identification zone must inform the competent authorities of their identity and flight plan and comply with a number of formalities. In the Canadian zones identification is compulsory for all aircraft, but in the United States zones it is only required of aircraft bound for United States territory. In the latter case, there are also some exceptions in the case of aircraft flying below a certain altitude or operating at reduced speeds. In Canada, non-compliance with these regulations renders an aircraft liable to interception by military aircraft; in the United States, such breaches are punishable with a fine not exceeding \$10,000 or imprisonment not exceeding one year, or both such fine and imprisonment.

49. The statutory instruments relating, respectively, to the ADIZ and the CADIZ each state that they contain "rules which have been found necessary in the interest of national security to identify, locate and control" all civil aircraft operated within the areas in question.³⁵ Commentators have endeavoured to justify these rules by invoking the doctrines of necessity and of self-defence; they have tried to prove that the rules in question do not conflict with the Chicago Convention or with any rule of positive international law and that they do not injure the interests of other States.³⁶ It is doubtful, however, whether they are compatible with the articles of the draft. One commentator describes these zones as "contiguous air space" zones and, in support of his contention defending their lawful character, cites a statement by Professor Gidel.³⁷ It would nevertheless seem that the air inspection zones

³⁴ The legality of these rules has been questioned because the powers of the Minister of Transport under the Aeronautics Act (sections 3 and 4) are not exercisable beyond the limits of Canadian territorial waters.

³⁵ United States Regulations, part 620.1 (b); Canadian Rules section 1.1.

³⁶ See, especially S/Ldr. John Taylor Murchison, *The Contiguous Air Space Zone in International Law*, a general survey published by the Department of National Defence, Ottawa, December 1955. See also Myres S. McDougal, *op. cit.*, p. 671.

³⁷ The commentator in question is S/Ldr. Murchison and the passage he cites states:

"The speed of aircraft, the altitude at which they fly and the possibilities of using telephotography for illicit reconnaissance are such that the coastal State must be in a position, in order to safeguard its security, to take in the airspace much more stringent measures of protection than those which suffice in dealing with ships. Consequently, it is not only the air over the contiguous zone, where the coastal State has already introduced measures in the interests of its security, that should be regarded as the "contiguous airspace" in which that State may impose the controls or prohibitions necessary to protect the safety of its land domain or territorial sea against trespassing foreign aircraft; this "contiguous airspace" is something considerably vaster, the extent of which may be determined by the coastal State in terms that forestall the trespass." (Gidel, *Le droit international public de la mer*, vol. 111, book III, p. 461.)

(ADIZ and CADIZ) can hardly be regarded as airspaces connected with the sea areas which the Commission terms "contiguous zones" since, according to article 66 of the draft, the latter areas may not extend beyond twelve miles and the coastal State may only exercise control therein for the purpose of preventing and punishing infringements of its customs, fiscal or sanitary regulations. The Commission clarifies its views on this point in paragraph 4 of its commentary to article 66, when it states:

"(4) The Commission did not recognize special security rights in the contiguous zone. It considered that the extreme vagueness of the term 'security' would open the way for abuses and that the granting of such rights was not necessary. The enforcement of customs and sanitary regulations will be sufficient in most cases to safeguard the security of the State. In so far as measures of self-defence against an imminent and direct threat to the security of the State are concerned, the Commission refers to the general principles of international law and the Charter of the United Nations."

The unilateral measures taken by Canada and the United States should consequently be judged in the light of these general principles. We should add that, since their adoption in 1950, these measures have not given rise to any protest.

II. ARTICLES OF THE DRAFT WHICH REFER TO AIRCRAFT OR TO THE AIRSPACE

A. Piracy

50. According to articles 38 to 49 of the draft, it is possible for an aircraft to commit acts of piracy in the same manner as a ship and so to become a pirate aircraft, liable to all the resulting consequences.

51. There is, as yet, no treaty provision which mentions the possibility of an aircraft being considered a pirate aircraft. The 1927 report on piracy of the Subcommittee of the League of Nations' Committee of Experts for the Progressive Codification of International Law contains no reference to aircraft,³⁸ although the Romanian reply to the Committee's questionnaire stated:

"Nevertheless, the word 'aircraft' might be added, especially as it is quite possible that piracy may be practised in the future by means of hydroplanes. Though confined at present to the *high seas and unowned territory*, the notion of piracy by aircraft may find a new application in the future if certain regions of the air above State territory are ultimately to be regarded as free."³⁹

References to aircraft can also be found in the articles relating to piracy in the Spanish Penal Code of 8 September 1928 (article 252) and the Mexican Penal Code of 13 August 1931 (article 146).⁴⁰

52. The notion of pirate aircraft was first expressly recognized at the international level in the draft convention on piracy prepared in 1932 by a group of the Harvard Law School Research in International Law under the direction of Professor Joseph Bingham. All the articles refer to ships, which are defined in article 1, para. 5 as follows: "The term 'ship' means any water

craft or aircraft of whatever size". The comment to article 1 adds that "In time aircraft may become the most efficient means of piratical attack".⁴¹

53. In this sixth report on the régime of the high seas, Mr. François reproduced a part of the Harvard draft convention and extended the notion of piracy to attacks committed in the air or from the air. This extension gave rise to lengthy discussions in the Commission, resulting in the adoption of articles 38 to 45 of the draft and the relevant commentaries. These may be summarized as follows:

(a) Acts of piracy can be committed by aircraft, if such are directed against ships on the high seas;

(b) Acts of piracy committed by an aircraft against a ship on the high seas are assimilated to acts committed by a pirate ship;

(c) Acts committed in the air by one aircraft against another aircraft can hardly be regarded as acts of piracy (the Commission adds: "In any case, such acts are outside the scope of these draft articles");

(d) The definition of a pirate ship applies also to a pirate aircraft;

(e) A pirate aircraft, like a pirate ship, retains its national character, except where the legislation of the State of registration regards piracy as a ground for loss of nationality;

(f) A seizure on account of piracy may only be carried out by warships or military aircraft.

54. This extension to aircraft of the provisions relating to piracy has not yet evoked any observation or criticism on the part of the States to which the draft was submitted.

B. Right of hot pursuit

55. The right of pursuit, which is not disputed in international law, was the subject of article 11 of the draft adopted by the Second Committee of the 1930 Codification Conference. That article, however, did not elaborate on the nature of the pursuing craft. The first texts prepared by the Rapporteur of the Commission refer to the exercise of the right of pursuit by ships only. The question of pursuit by aircraft was raised at the Commission's eighth session, by the Governments of Iceland, Norway and the United Kingdom.⁴² It was pointed out that many countries at present used aircraft to patrol their territorial seas, particularly for fishery protection purposes, that when they spotted an offender, the aircraft normally summoned surface craft to carry out the pursuit and that such use of aircraft was gradually becoming widespread.

56. After lengthy discussions,⁴³ the Commission adopted a text (article 47, para. 4 of the draft) stipulating that the right of hot pursuit may be exercised not only by warships or other ships on government service specially authorized to that effect, but also by military aircraft or other aircraft on government service with the same authority. The Commission notes, in paragraph 2 (d) of the commentary to article 47, that it

³⁸ Ser. L.o.N.P. 1927.V.1, pp. 116-119.

³⁹ *Ibid.*, p. 211.

⁴⁰ See the texts of these articles in *American Journal of International Law*, October 1932, section 2, pp. 780 and 1009.

⁴¹ *Ibid.*, p. 768.

⁴² See *Yearbook of the International Law Commission* (1956), vol. I (A/CN.4/SER.A/1956), p. 52, para. 35.

⁴³ *Ibid.*, pp. 52-58.

“dealt with the right of hot pursuit of a ship by aircraft” and that “in spite of the dissenting opinions of some of its members, it felt able to recognize the lawfulness of such a practice, provided it is exercised in accordance with the principles governing its exercise by ships”.

57. The provisions relating to the lawful exercise of the right of hot pursuit by an aircraft are contained in article 47, paragraph 5. The ship pursued must have been ordered to stop while it was still in the territorial sea or the contiguous zone (depending on the nature of the suspected offence) and the aircraft must have been in a position to give a visible and comprehensible signal to that effect, signals by wireless being barred. This question of the signal to be given is one on which international agreement is especially desirable, in order to avoid confusion with the signals which civil aircraft are required to give in conformity with ICAO rules. The commentary also recommends (para. 2(e)) that the aircraft should establish the position of the ship pursued at the moment when hot pursuit commences and mark that position by physical means—for example, by dropping a buoy.

58. Finally, aircraft are not merely granted a general authority to co-operate with ships of the same State in the pursuit of a ship which has committed an offence or is suspected of having committed one; the aircraft giving the order to stop is also expressly required actively to pursue the ship until a ship of the coastal State, summoned by the aircraft, arrives to take over the pursuit, unless the aircraft is itself able to arrest the ship (article 47, para. 5(b)).

C. Pollution of the airspace

59. No comment is necessary, from the point of view of air law, on the recommendation, contained in article 48, paragraph 3, that all States should co-operate in drawing up regulations with a view to the prevention of pollution of the airspace above the seas, resulting from experiments or activities with radioactive materials or other harmful agents.

60. In preparing such regulations, the possible effects of the pollution of the airspace on the safety of aircraft must no doubt be taken into account.

D. Continental shelf

61. Articles 67 to 73 of the draft, particularly articles 69, 71 and 73, also raise issues of air law. Article 69 expressly refers to the airspace above the superjacent waters of the continental shelf; article 71 deals with installations constructed on the continental shelf by the coastal State, the safety zones around them and the measures necessary for their protection; and article 73 provides for the settlement of disputes that may arise concerning the interpretation or application of the preceding articles.

62. In the course of the discussion on Mr. François' second report on the régime of the high seas,⁴⁴ in 1951, the Commission decided that it would be desirable, although not strictly indispensable, to indicate that there

must be no interference with the freedom of the air in the airspace above the superjacent waters of the continental shelf. On the proposal of Mr. Hudson, the following text was adopted:

“The exercise by a coastal State of control and jurisdiction over the continental shelf does not affect the legal status of the airspace above the superjacent waters.”

This text became article 4 of the draft articles on the continental shelf contained in an annex to the Commission's report on the work of its third session;⁴⁵ the text was accompanied by the following commentary:

“The object of article . . . 4 is to make it perfectly clear that the control and jurisdiction which may be exercised over the continental shelf for the limited purposes stated in article 2 [exploitation and exploration of its natural resources] may not be extended to . . . the airspace above them [the superjacent waters].”

63. At its fifth session (1953), after consideration of the comments of Governments, the Commission adopted⁴⁶ a slightly amended text. Then, at its eighth session, the text was again revised and became article 69 of the present draft:

“The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters as high seas or that of the airspace above those waters.”

The following commentary explains the full significance of article 69:

“Article 69 is intended to ensure respect for the freedom of the seas in face of the sovereign rights of the coastal State over the continental shelf. It provides that the rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters as high seas or of the airspace above the superjacent waters. A claim to sovereign rights in the continental shelf can only extend to the sea bed and subsoil and not to the superjacent waters; such a claim cannot confer any jurisdiction or exclusive right over the superjacent waters, which are and remain a part of the high seas. The articles on the continental shelf are intended as laying down the régime of the continental shelf, only as subject to and within the orbit of the paramount principle of the freedom of seas and of the airspace above them. No modification of or exceptions to that principle are admissible unless expressly provided for in the various articles.”

64. The text of article 69 thus confirms that the régime of the airspace above the high seas is that recognized implicitly in the Chicago Convention.

65. Article 71 provides for certain exceptions to the general principle laid down in article 69. It states that “the coastal State is entitled to construct and maintain on the continental shelf installations necessary for the exploration and exploitation of its natural resources, and to establish safety zones at a reasonable distance around such installations and take in those zones measures necessary for their protection”. Paragraph 3 specifies that such installations do not possess the status of islands and have no territorial sea of their own, while paragraph 4 adds that the State concerned must

⁴⁵ *Official Records of the General Assembly, Sixth Session, Supplement No. 9 (A/1858)*, p. 18.

⁴⁶ See A/CN.4/60 and *Official Records of the General Assembly, Eighth Session, Supplement No. 9 (A/2456)*. During the fifth session, Mr. Cordova pointed out that the Inter-American Juridical Committee had recently made a study of the subject of the continental shelf and had produced a draft recognizing that the sovereignty of the coastal State extended to the continental shelf and to the elements above and below

⁴⁴ A/CN.4/L.42.

give due notice of any such installations constructed and maintain permanent means for giving warning of their presence.

66. Article 71, paragraph 5, and the relevant commentary, make it clear that the exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, and that neither the installations themselves nor the safety zones around them may be established in narrow channels or where interference may be caused in recognized sea lanes essential to international navigation. In the opinion of the Commission, safety zones should not exceed a radius of 500 metres. Neither article 71 nor its commentary, however, refer to air traffic and, consequently, a safety zone established around installations situated on the surface of the sea can presumably include part of the superjacent airspace. Such a safety zone or space may thus be assimilated to a prohibited, restricted or danger area, depending on the regulations enacted by the State concerned, and may even have no upward limit. We saw above that, on the high seas, such areas have been established in practice although there is no treaty provision authorizing their existence.

67. Naturally, the provisions of paragraph 5 should apply equally to air navigation, and safety zones extending upwards above the installations on the continental shelf should not interfere with recognized air routes.

68. Finally, we should mention the current construction, about 150 miles off the United States coasts, of a chain of radar towers, called "Texas towers", which resemble the oil installations in the Gulf of Mexico; the first of these towers is now in place. These structures, affixed to the sea bed, are not intended for the exploration or exploitation of the resources of the continental shelf and cannot therefore be assimilated to the installations referred to in article 71 of the draft. Neither are they islands within the meaning of article 10, since the commentary to that article states that technical installations built on the sea bed are not considered islands.⁴⁷

69. Article 73 makes provision for the settlement of disputes that may arise concerning the interpretation or application of the articles relating to the continental shelf, that is to say articles 69 and 71 discussed above. Such disputes are to be submitted to the International Court of Justice at the request of any of the parties, unless they agree on another method of peaceful settlement. Certain disputes concerning air navigation may thus fall outside the competence of the ICAO Council, which is only entitled to act in connexion with disputes arising out of the interpretation and application of the Chicago Convention and its annexes; the parties can, of course, voluntarily refer the dispute to the Council, such reference being "another method of peaceful settlement".

⁴⁷ See the article by Mr. Cacopardo on the international legal status of radar islands in *Rivista Aeronautica*, November 1955, pp. 1201-1214.

III. OTHER ARTICLES OF THE DRAFT

70. As far as the other articles of the draft are concerned, those relating to penal jurisdiction in matters of collision,⁴⁸ the slave trade, the right of visit, fishing and submarine cables and pipelines are solely concerned with the law of the sea. On the other hand, the provisions of the articles relating to the nationality of ships, the immunity of warships and other government ships, and the duty to render assistance, have their corresponding provisions in air law.

A. Nationality

71. The Chicago Convention contains provisions concerning the nationality of aircraft which are similar to those of article 29 of the draft: aircraft have the nationality of the State in which they are registered, and registration must be made in accordance with the national legislation of the State concerned (articles 17 and 19). Unlike article 31 of the draft, however, article 18 of the Chicago Convention provides that an aircraft cannot be validly registered in more than one State, which means that it cannot possess more than one nationality.

B. Immunity of warships and of other government ships

72. Article 32 of the Paris Convention of 1919 stipulated that a military aircraft authorized to fly over the territory of another Contracting State enjoyed in principle, in the absence of special stipulation, the privileges customarily accorded to foreign warships. No similar provision is contained in the Chicago Convention, but the question is usually covered by bilateral arrangements.

C. Duty to render assistance

73. In accordance with article 25 of the Chicago Convention, each Contracting State undertakes to provide such measures of assistance to aircraft in distress in its territory as it may find practicable.⁴⁹ Article 25 adds that "each Contracting State, when undertaking search for missing aircraft, will collaborate in co-ordinated measures which may be recommended from time to time pursuant to this Convention". Since the signing of the Chicago Convention, ICAO has set up a vast network of search and rescue services covering not only the territories of the Contracting States but also the high seas.

74. Finally, as a result of the work of the International Technical Committee of Aerial Legal Experts (CITEJA), a Convention for the Unification of Certain Rules relating to Assistance and Salvage of Aircraft or by Aircraft at Sea was signed at Brussels on 29 September 1938. The provisions of this Convention, which are similar to those of the first part of article 36 of the draft, read as follows:

⁴⁸ A draft convention on collisions between aircraft has been prepared by the Legal Committee of ICAO; one of its articles deals with jurisdiction in cases of collision on the high seas. See ICAO document LC/Working Draft 544 (article 10).

⁴⁹ The Paris Convention of 1919 merely provided that "with regard to the salvage of aircraft wrecked at sea the principles of maritime law will apply, in the absence of any arrangement to the contrary".

“Any person exercising the functions of commanding officer aboard an aircraft shall be bound to render assistance to any person who is at sea in danger of being lost, in so far as such person may do so without serious danger to the aircraft, her crew, her passengers, or other persons.

“Every captain of a vessel shall be bound... to render assistance to any person who is at sea in danger of being lost on an aircraft or as the consequence of damage to an aircraft.”

Unfortunately, this Convention never came into force.⁵⁰

75. There is no doubt that article 36 of the draft

applies to any person found at sea in danger of being lost aboard an aircraft or in distress as a result of an air accident.

⁵⁰ In 1948 and 1949, the Legal Committee of ICAO, at the request of the ICAO Council, resumed the study of the problem with a view to the preparation of a new convention; a report was submitted to the Council, but no action was taken. For a summary of the discussions, see ICAO document LC/Working Draft 106, pp. 2-5.

COMMENTS BY GOVERNMENTS ON THE DRAFT ARTICLES CONCERNING THE LAW OF
THE SEA ADOPTED BY THE INTERNATIONAL LAW COMMISSION
AT ITS EIGHTH SESSION

(Preparatory document No. 5)

[Original text: Various]
[23 October 1957]

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NOTE BY THE SECRETARY-GENERAL

1. The General Assembly at its eleventh session, on 21 February 1957, in connexion with the agenda item "report of the International Law Commission on the work of its eighth session: (a) final report on the régime of the high seas, the régime of the territorial sea and related matters", adopted resolution 1105 (XI). By that resolution it was decided that an international conference of plenipotentiaries should be convoked to examine the law of the sea. In paragraph 7, the Secretary-General was requested to invite appropriate experts to advise and assist the Secretariat in preparing the Conference, with terms of reference, *inter alia*:

"(a) To obtain, in the manner which they think most appropriate, from the Governments invited to the conference any further provisional comments the Governments may wish to make on the Commission's report and related matters..."

2. Accordingly, after consultation with the experts, a letter was sent on 25 March 1957, on behalf of the Secretary-General, to the Governments invited to the

Conference, requesting them to send to him before 31 July 1957 any further provisional comments they might wish to make.

3. The present document reproduces the texts of comments received from the following Governments: Austria, Canada, Chile, Cuba, Czechoslovakia, Denmark, Germany, Federal Republic of, Iceland, India, Italy, Morocco, Nepal, Norway, Peru, Poland, Sweden and the United Kingdom of Great Britain and Northern Ireland.

4. Comments received after 22 October 1957 are reproduced as addenda to the present document, as follows: Netherlands (A/CONF.13/5/Add.1), China (A/CONF.13/C.5/Add.2), Ethiopia (A/CONF.13/5/Add.3) and Thailand (A/CONF./13/5/Add.4).

COMMENTS BY GOVERNMENTS

1. Austria

LETTER FROM THE PERMANENT MISSION OF AUSTRIA
TO THE UNITED NATIONS, DATED 20 AUGUST 1957

[Original: English]

In connexion with articles 29 and 30 of the draft codification of the law of the sea, the Austrian Government would like to suggest consideration of the principle that Governments may have the right to grant permission to fly the national flag when their own nationals charter an unmanned and unequipped ship registered in a foreign port (bare boat charter).

In the Austrian federal law of 17 July 1957, regarding the right to fly the flag of the Republic of Austria, this procedure is provided in the case that an Austrian national charters such a ship for a term not shorter than one year.

2. Canada

NOTE VERBALE FROM THE DEPARTMENT OF EXTERNAL
AFFAIRS OF CANADA, DATED 10 SEPTEMBER 1957

[Original: English]

The Canadian Government desires to say that it considers that the increased interest of States in the exploitation of the resources of the sea, and the con-

sequent need for conservation and regulation of these resources along with the need to preserve the principle of the freedom of the seas, calls for a reappraisal of the existing law of the sea and subsequent agreement on generally accepted rules, whether they be existing rules reaffirmed or revised or entirely new rules. Accordingly, the Canadian Government welcomes the convoking of an international conference to examine the law of the sea and proposes to be represented at this Conference, as the Secretary of State for External Affairs informed the Secretary-General on 17 April 1957. Regarding the International Law Commission's report on the law of the sea, the following are the views of the Canadian Government on *some* of the recommendations of the Commission :

A. Breadth of the territorial sea and contiguous zone (articles 3 and 66)

The Canadian Government considers that any new rules must meet the essential needs of coastal States. The three-mile limit is not adequate for all purposes. It is not adequate for the enforcement of customs, fiscal and sanitary regulations. It is also not adequate for the protection and control of fisheries. The Commission has recognized in article 66 the need for extended jurisdiction in respect of the enforcement of customs, fiscal and sanitary regulations. The Canadian Government considers it to be fully as important that the rules of international law should provide adequately for the regulation and control of fisheries off the coast of any State. One way of providing for this would be by accepting, for general application, the twelve-mile breadth for the territorial sea. That would allow for complete fishery, customs, fiscal and sanitary control and regulation within that limit and dispense with the need for any provisions along the lines of those contained in article 66. It is recognized, however, that a general extension of the breadth of the territorial sea to twelve miles could have consequences of importance with regard to the freedom of sea and air navigation. Instead, therefore, of having a general adoption of the twelve-mile breadth for the territorial sea, an alternative approach which would not affect the rights of navigation by sea or by air would be to agree on a contiguous zone of twelve miles as recommended by the Commission, but with the modification that, within that zone, the coastal State should have the exclusive right of regulation and control of fishing. Rights over fisheries accorded by such a zone should, in the view of the Canadian Government, be as complete as those that are afforded to a coastal State within the limits of territorial waters.

B. Straight baselines (article 5)

This recommendation is acceptable to the Canadian Government as reflecting the decision of the International Court of Justice in the Anglo-Norwegian Fisheries Case.¹ The Canadian Government agrees that the employment of straight baselines as outlined by the Commission should be recognized universally as being a proper means of establishing the datum-line for

¹ *Fisheries Case, Judgment of 18 December 1951, I.C.J. Reports 1951, p. 116.*

measuring the territorial sea or contiguous zone, in appropriate cases.

C. Continental shelf (article 67)

In its final report on the law of the sea, (A/3159, section III, para. 2, p. 40), the International Law Commission stated that it "accepted the idea that the coastal State may exercise control and jurisdiction over the continental shelf, with the proviso that such control and jurisdiction shall be exercised solely for the purpose of exploiting its resources..." The Commission believed, however, that the legal boundary of the continental shelf should be a fixed limit in terms of the depth of the superjacent waters because a boundary defined in terms of the admissibility of exploitation, as the Commission's first draft of 1951 proposed, would "lack the necessary precision and might give rise to disputes and uncertainty". The 200-metre depth was selected by the Commission as the limit of the continental shelf because it considered that this depth is where the continental shelf in a geological sense "generally" comes to an end and that the limit proposed would be sufficient for all practical purposes at present.

Against the contingency that exploitation of the sea bed at depths greater than 200 metres might prove technically possible, the Commission recommended at its eighth session that the continental shelf in the legal sense might be considered as extending beyond the 200-metre depth mark to areas at greater depths where the superjacent waters admit of the exploitation of the resources of the sea bed of these areas.

This additional provision reintroduces the uncertainty which led the Commission to favour a fixed limit in terms of the depth of superjacent waters for determining the legal boundary of the shelf. It is considered that the foreseeable possibilities of exploitation at greater depths than 200 metres might be provided for without sacrificing the element of certainty concerning the extent of States' rights to exploit the resources of the sea bed. It is understood that in 90 per cent of instances, excluding polar regions, the edge of the continental shelf is well-defined geographically. It is suggested, therefore, that in these cases the boundary of the shelf should be its actual edge. Where, however, the edge of the shelf is ill-defined, or where there is no shelf in a geographical sense, the boundary might be set at such a depth as might satisfy foreseeable practical prospects of exploitation.

It should be added that this suggestion might also solve the special problem raised by the International Law Commission regarding submerged areas of a depth less than 200 metres which are separated from the main shelf by narrow channels. While the scarcity of soundings in many areas makes it impossible to be definite concerning the number of such submerged areas it is thought that if the actual edge of the shelf were considered to be the boundary, by far the greater number of these "islands" would then be included as part of the shelf and would so not create a special problem.

D. High seas fishing (articles 51, 52, 53 and 56)

Article 51

There is a possibility that, in a given area, the nationals of one State could be exploiting one kind of

living marine resource and, at the same time, the nationals of another State could be exploiting another kind of resource. The article, as presently drafted, does not seem to take account of such a situation. It refers to an area rather than to a particular resource. A more explicit statement appears to be desirable.

Article 52

The article, as drafted, might be interpreted as applying only to a case where the nationals of two or more States fished the same stock or stocks of fish in any one area. In some instances, to provide adequate conservation measures it would be desirable to have them applied to the same stock of fish even though it were fished in different areas. A clarification in wording is therefore suggested.

The criterion suggested by the Commission (see para. 1 of its commentary to article 52) for invoking the procedure envisaged in this article is that a State be "regularly engaged in fishing". Under article 53, an existing régime does not apply to a newcomer unless he is engaged in substantial fishing (see para. 2 of the Commission's commentary on article 53). It would seem reasonable therefore that under article 52 a State ought only to be allowed to call for the establishment of a régime if it is engaged in substantial fishing, subject of course to articles 54, 55 and 56.

Article 53

The article, as drafted, would make conservation measures adopted pursuant to articles 51 and 52 applicable to other States only in the case of fishing for the same stocks of fish in the same area. From the conservation point of view, the provision is inadequate. It is the stocks of fish which must be protected regardless of the fact whether they are fished in the same area or not.

In paragraph 2 of the Commission's comment on this article, it is stipulated that the regulations should be applicable to newcomers only if they engage in fishing on a scale which would substantially affect the stock or stocks in question. It would be preferable to have this stipulated in the article, for instance, by adding after "any of the interested parties" in paragraph 2 the words, "engaged in the fishing on a substantial basis".

Article 56

Although there may, in certain circumstances, be some justification for a State not engaged in fishing in an area not contiguous to its coast requesting a fishing State to take certain conservation measures, care should be taken that this request would not extend to measures necessarily having to be taken within the boundaries of the fishing State. This article, therefore, should be qualified to indicate that the fishing State would be under no obligation to take measures within its boundaries.

The Government of Canada is of the opinion that the Commission's articles on fishing should be subject to the "abstention principle" which was considered at the Technical Conference on the Conservation of the Living Resources of the Sea held in Rome in 1955 and which is stated in the report of the Conference² (paras. 61-62), namely:

² Report of the International Technical Conference on the Conservation of the Living Resources of the Sea (United Nations Publication, Sales No: 1955.II.B.2.) p. 7.

"61. A special case exists where countries, through research, regulation of their own fishermen and other activities, have restored or developed or maintained stocks of fish so that their productivity is being maintained and utilized at levels reasonably approximating their maximum sustainable productivity, and where the continuance of this level of productivity depends upon such sustained research and regulation. Under these conditions, the participation of additional States in the exploitation of the resources will yield no increase in food to mankind, but will threaten the success of the conservation programme. Where opportunities exist for a country or countries to develop or restore the productivity of resources, and where such development or restoration by the harvesting State or States is necessary to maintain the productivity of resources, conditions should be made favourable for such action.

"62. The International North Pacific Fishery Commission provides a method for handling the special case mentioned above. It was recognized that new entrants in such fisheries threatened the continued success of the conservation programme. Under these circumstances the State or States not participating in fishing the stocks in question agreed to abstain from such fishing when the Commission determines that the stock reasonably satisfies all the following conditions:

"(a) Evidence based upon scientific research indicates that more extensive exploitation of the stock will not provide a substantial increase in yield;

"(b) The exploitation of the stock is limited or otherwise regulated for conservation purposes by each party substantially engaging in its exploitation; and

"(c) The stock is the subject of extensive scientific study designed to discover whether it is being fully utilized, and what conditions are necessary for maintaining its maximum sustained productivity. The Convention provides that, when these conditions are satisfied, the States which have not engaged in substantial exploitation of the stock will be recommended to abstain from fishing such stock, while the States engaged in substantial exploitation will continue to carry out the necessary conservation measures. Meanwhile, the abstaining States may participate in fishing other stocks of fish in the same area."

All the above comments are, of course, provisional at this stage. The fact that comments have not been submitted on other matters does not indicate that the remainder of the draft articles are necessarily acceptable to the Canadian Government as they now stand. The comments are submitted with a view to facilitating the exchange of views among countries that will be essential in working out agreed provisions on the law of the sea.

3. Chile

LETTER FROM THE PERMANENT MISSION OF CHILE TO
THE UNITED NATIONS, DATED 19 JULY 1957

[Original: Spanish]

Before proceeding to the substance of my reply, I wish to place on record expressing our Government's great appreciation for the work done by the International Law Commission. The study entrusted to it was not an easy one. It related to a subject which is complex in itself and to a field of law which has been constantly influenced in its development by interests of various kinds, where it has not always been possible to say definitely what rules are capable of being codified and what rules are still in the stage of progressive development. Finally, this field of the law has, in recent years, received the impact of new trends which have their origin in the same considerations as those that have

traditionally guided the development of the law of the sea and which are now striving to find definite expression in rules of law.

The International Law Commission, thanks to its ability, wisdom and diligence, succeeded in preparing draft articles of exceptional merit on the subject; the conclusions it reached constitute, for the greatest part, the most felicitous formulation of definitively established principles of international law; and if, in some respects, the results of its studies were not satisfactory, at least from our point of view, the reason is that the Commission wished to adhere too strictly to the rules regarded as classical, without giving due weight, as it was not authorized to do, to new aspects which affect present needs and which demand that the principle of law giving them the necessary protection should be duly formulated.

The chief difficulty encountered by the International Law Commission in its task was how to define the breadth of the territorial sea; and if we could analyse the causes of this difficulty in detail we would find that the statement made in the previous paragraph is fully justified. The Commission recognizes that international practice is not uniform as regards the delimitation of the territorial sea; it makes the *a priori* affirmation that international law does not permit an extension of the territorial sea beyond twelve miles; and it adds that many States do not recognize a breadth greater than that of their own territorial sea. In the light of the diversity of the rules of law governing the subject, it concludes that it cannot take any decision as to the breadth of the territorial sea.

The considerations underlying these conclusions on the part of the International Law Commission were primarily of a legal character. Nor could they have been otherwise, for the Commission's task was essentially legal in character. There are, however, other considerations — including economic and political considerations — and it is these which account for the decision to broaden the scope of the forthcoming conference on the law of the sea. If, on the one hand, we consider the problem of the territorial sea from the economic aspect, we enter immediately into the problem of the conservation of marine resources, the problem which has caused many States to extend the breadth of their territorial sea. If, on the other hand, we study it from the political point of view, we enter into the problem of freedom of navigation, which is of interest chiefly to the great naval Powers.

Taking these aspects into account, one can readily appreciate how difficult it is to work out a formula that, in keeping with what are known as classical or traditional principles, succeeds simultaneously in solving the various problems involved in the extension of the territorial sea. The difficulty is even greater if one considers that the great naval Powers are also the owners of large fishing fleets. Hence, there is a conflict which cannot be composed by juridical formulae so long as — before any attempt is made to solve it in law — its true causes are not duly inquired into. As the law gradually evolves new rules to deal with each problem of the sea, particularly the problem of the conservation of marine resources, the extent of the territorial sea will become less important and it will be easier to arrive at a uniform agreed solution for all

countries in conformity with present trends of international law.

Meanwhile, my Government considers that there is not at present any generally accepted rule of international law determining the extent or breadth of the territorial sea and, furthermore, that there are absolutely no grounds for considering that international law does not permit an extension of the territorial sea beyond twelve miles.

Article 7, paragraph 2, of the International Law Commission's report provides that, for the purpose of the waters within a bay being considered internal waters, the mouth of the bay, the coasts of which belong to a single State, should be fifteen miles wide. In our opinion this distance is exceedingly short, especially if it is borne in mind that not even a moderately precise definition has been given of "historic" bays, a definition which is absolutely necessary in order that States may specify what is their position concerning this point.

With reference to articles 8 and 9 of the draft, concerning ports and roadsteads, my Government considers that, inasmuch as in certain localities it is difficult to draw any precise distinction between a port and a neighbouring roadstead, roadsteads should have the same legal status as ports and their waters should be treated, like those of ports, as internal waters.

With regard to groups of islands (article 10), a subject on which the Commission was unable to agree, my Government considers that where the islands of an archipelago are separated by narrow passages and surrounded by treacherous waters navigable only by ships of small tonnage, those waters should constitute internal waters.

In cases where both coasts of a strait belong to one and the same State along their entire length, then, under article 12, paragraph 3, the whole strait will belong exclusively to the single coastal State, irrespective of the distance separating the two coasts; nevertheless innocent passage should be allowed to vessels of other countries if the strait in question normally serves for purposes of navigation between two parts of the high seas or constitutes the entrance to a gulf or bay which has other coastal States.

In part II of the Commission's report, article 27 states that the freedom of the high seas comprises, *inter alia*, freedom of navigation, freedom of fishing, freedom to lay submarine cables and pipelines and freedom to fly over the high seas. On this article my Government would not have to offer any comment were it not to point out that it should be provided that these freedoms are or may be subject to restrictions. In that way there would be a clear stipulation laying down a principle which the International Law Commission itself accepted in its report when it drew up rules that affect, principally, the freedom of navigation — the only fundamental freedom on the seas.

As regards article 29, more elaborate provision would be necessary to specify the characteristics which a vessel should possess for the purpose of being held to have the nationality of a particular State.

The provisions of article 47 on the right of hot pursuit also need to be supplemented. The article should contain some provision dealing with the exercise of the right of hot pursuit in case of breach of the rules which may be in force in specified areas to ensure the conservation

marine resources. Furthermore, since reference is made to hot pursuit of a ship by an aircraft and since the freedom to fly over the high seas has been included as one of the freedoms of the sea, some provision should be added to deal with hot pursuit of an aircraft by another aircraft.

Articles 49 to 59, inclusive, of the report concern the right to fish and the conservation of the living resources of the sea. My Government considers that these articles treat of the principal problem to be discussed at the coming conference. It will depend on the manner in which this problem is dealt with and on the way in which it is resolved whether or not it will be possible to work out agreements concerning the other aspects of the law of the sea, particularly the delimitation of the territorial sea. We recognize that these provisions constitute a great advance, striking evidence of the speed of the evolution of this branch of the law of the sea; but this evolution has not reached the end of its course. It is not sufficient to recognize the special interest of the coastal State in the maintenance of the productivity of the living resources in any area of the high seas adjacent to its territorial sea; it is also necessary to proclaim the coastal State's right to conserve the marine resources in a zone lying off its coasts which is delimited in the light of technical or scientific considerations. One cannot claim to place on a footing of virtual equality distant States which, by reason of the freedom of the high seas and the freedom to fish, seek to protect the financial interests of large concerns, and the coastal State, which, while also actuated by motives of financial gain, is in addition concerned with the subsistence and the common weal of its population.

Lastly, in connexion in particular with the contiguous zone and the continental shelf, my Government wishes to reiterate the comments made in a letter dated 8 April 1952.³

In replying in the above terms to your request, my Government wishes to state that the opinions expressed at this juncture are of a provisional character and may be superseded by the view which may be formed concerning these problems, in consequence of fresh evidence or situations, in the course of the discussions in the conference convened for March 1958.

4. Cuba

TRANSMITTED BY A LETTER FROM THE PERMANENT MISSION OF CUBA TO THE UNITED NATIONS, DATED 1 MAY 1957

[Original: Spanish]

I. Territorial sea

A. Juridical status

The Government of Cuba notes with satisfaction that the International Law Commission has recognized the sovereign character of the rights enjoyed by the State in the belt of sea adjacent to its coast, described as the "territorial sea". Such a conception of the status of this marine area is consistent with the practice of States and

was expressly confirmed by The Hague Codification Conference of 1930. Not only does sovereignty constitute the characteristic feature of the territorial sea, but it is indeed the essential element which distinguishes that sea from other marine areas, where the coastal State is accorded other rights.

The sovereignty of the coastal State over its territorial sea is subject to one single fundamental limitation: it must not hamper innocent passage by ships of foreign nationality. In this connexion, the Government of Cuba is also of the opinion that the provisions contained in article 15 *et seq.* of the Commission's draft are consistent with international law and practice.

B. Breadth and limits of the territorial sea

The Government of Cuba is aware of the difficulties which the Commission encountered in trying to formulate a rule on this matter. It recognizes that, as regards the delimitation of the territorial sea, the practice of States is not uniform and that the problem should be considered further with a view to finding a satisfactory solution.

In the opinion of the Cuban Government, the Conference, in considering article 3 of the Commission's draft, will have to take into account, *inter alia*, the following principles and considerations:

1. The question of the breadth of the territorial sea is not a domestic matter but one of international law. The coastal State is not free to fix the breadth unilaterally since, in the words of the International Court of Justice in the Anglo-Norwegian Fisheries Case, "the validity of the delimitation with regard to other States depends upon international law".⁴

2. Any extension beyond the traditional limits must take into account not only the interests of the coastal State but also the general interests of the international community. In particular, due regard should be paid to the "historic" fishing rights of third States the nationals of which have, since time immemorial and without interruption, engaged in fishing in the areas of the high seas affected by the extension.

3. Within the territorial sea the coastal State not only enjoys rights but is also bound to discharge certain obligations and responsibilities.

4. In present-day conditions, having regard to the development of the international law of the sea, the coastal State also enjoys or may be accorded other rights, beyond the outer limit of its territorial sea. These rights include the State's rights in the "contiguous zone", the rights necessary for the exploitation of the continental shelf, of submarine areas contiguous to islands (the "insular" shelf) and of other submarine areas, and the rights relating to the conservation of the living resources of the sea. Without doubt, the existence or recognition of these rights may render an extension of the territorial sea unnecessary and unjustifiable.

5. Where the breadth fixed by a coastal State for its territorial sea gives rise to a conflict between the interests of the coastal State and those of third States, the dispute should be submitted for settlement in accordance with the methods and procedures prescribed

³ Official Records of the General Assembly, Eighth Session, Supplement No. 9 (A/2456), p. 43.

⁴ I.C.J. Reports 1951, p. 132.

by international law for the peaceful settlement of disputes between States.

C. *Groups of islands (archipelagoes)*

The Government of Cuba regrets that the Commission was unable to formulate a provision concerning the delimitation of the territorial sea around a group of islands or archipelago. The Government of Cuba has taken note of paragraph 4 of the commentary to article 10 of the draft, in which the Commission points out that article 5, concerning straight baselines, may be applicable to groups of islands lying off the coast. It is to be hoped, however, that the Conference will complete the text with a provision envisaging groups of islands pure and simple, and that it will set forth an objective criterion analogous to the one now applicable to off-shore archipelagoes. The case for which provision has to be made is that of groups of islands or archipelagoes constituting a single geographical and economic entity; this naturally excludes shoals and islands which, even though forming part of the territory of the State, are widely dispersed and outside the area occupied by the principal group. The latter cases will continue to be governed by the traditional rule, which recognizes that every island has its own territorial sea.

II. *The continental shelf and other submarine areas*

A. *Nature and scope of the rights enjoyed by the coastal State*

The Government of Cuba accepts the criterion adopted by the Commission in defining the submarine areas over which the coastal State enjoys rights and agrees that those rights are of a sovereign nature. On this point, it should be noted that the definition in article 67 corresponds in essentials to that approved by the Inter-American Specialized Conference at Ciudad Trujillo⁵ and that it ensures equality among all coastal States.

Furthermore, the Government of Cuba noted with special satisfaction the Commission's recognition of the fact that the coastal State enjoys sovereign rights solely for the purpose of exploring and exploiting the natural resources of those areas and that, consequently, those rights do not affect the legal status of the superjacent waters as high sea, or that of the airspace above those waters. Certain States have claimed that those rights extend to the so-called "epicontinental" waters, but the great majority of States have shown themselves opposed to that claim and consider that such waters are part of the high seas and are subject to the legal rules applicable thereto.

B. *Natural resources of the submarine areas*

The text of the draft (article 68) refers merely to the "natural resources" of the continental shelf, whereas the commentary explains that the term includes "mineral resources" and the species known as "sedentary", that is to say those permanently attached

to the bed of the sea, but does not cover bottom-fish and other fish which occasionally have their habitat at the bottom of the sea or are bred there. The Government of Cuba accepts this criterion, but hopes that the Conference, when it comes to a scientific study of the subject, will include this specification in the article proper, in order to eliminate all future doubt regarding the living species which belong to the sea bed and those which are subject to the rules applicable to the superjacent waters.

III. *Conservation of the living resources of the high seas*

The provisions of the Commission's draft on this subject certainly represent a radical departure from the traditional concept of the freedom of fishing. The Government of Cuba recognizes, however, that the problem of the conservation of those resources and the development of modern fishing methods have made it necessary to revise the traditional concept, which allowed absolute and unrestricted freedom in the exploitation of such marine wealth. The provisions of the draft represent an effort to subordinate the right accorded to the coastal State to certain conditions and limitations, designed to guarantee the rights of others against excesses or abuses on the part of the coastal State and against the unilateral adoption of conservation measures which might prove unnecessary or inappropriate. The stipulation of such conditions and limitations would secure to the other States a safeguard without which the practical success of the draft might be prejudiced.

The Conference should carefully consider, among other provisions, paragraph 2 of article 58, under which measures unilaterally adopted would remain in force pending a decision by the arbitral commission for which provision is made in the draft. It is submitted that unilateral measures to which any of the States affected by them has entered an objection should not become obligatory until the arbitral commission has convened and approved them.

Furthermore, the Government of Cuba considers that the draft should contain a provision to the effect that the measures referred to in article 53 should not be applicable to new participants in the exploitation of any given stocks of fish or other marine resources unless they engage in fishing on a scale which substantially affects the stocks or resources in question. Such a recommendation had already been made by the Commission itself, in paragraph 2 of the commentary to article 53.

5. *Czechoslovakia*

LETTER FROM THE PERMANENT MISSION OF CZECHOSLOVAKIA TO THE UNITED NATIONS, DATED 5 AUGUST 1957

[Original: English]

The comments of Czechoslovakia with regard to the draft codification of the rules of international law applying to the régime of the sea, as well as its views on general issues related to the question of the codification of the law of the sea, were submitted by the Czechoslovak delegation to the eleventh and to preceding

⁵ *Final Act of the Inter-American Specialized Conference on "Conservation of Natural Resources: The Continental Shelf and Marine Waters", Ciudad Trujillo, March 15-28, 1956 (Washington, D.C., Pan-American Union, 1956).*

sessions of the General Assembly during the consideration of the report of the International Law Commission on the work of its eighth session and on the work of its preceding sessions. The Czechoslovak Government requests that these comments be taken into account in the elaboration of the repertory prepared by the group of experts.

The Czechoslovak Government reserves its right to submit its observations and eventual proposals regarding the legal regulation of the question of free access to the sea of land-locked countries at a later time after a more detailed study of all the aspects of this matter.

6. Denmark

TRANSMITTED BY A LETTER FROM THE PERMANENT MISSION OF DENMARK TO THE UNITED NATIONS, DATED 5 AUGUST 1957

[Original: English]

The following comments are intended to replace the observations previously made by the Danish Government on the provisional reports of the International Law Commission.

Article 1

According to this article, the sovereignty of a State extends to a belt of sea adjacent to its coast, described as the territorial sea.

This principle is acceptable, provided that it does not preclude the possibility of fixing the breadth of the belt differently for the different relations in which a State exercises sovereignty over the parts of the sea nearest to its coast. According to Danish law and practice, Denmark maintains, for the purpose of customs control, a limit of the territorial sea which is normally four nautical miles from the coast, while in other respects the limit of the territorial sea is generally three nautical miles from the coast. In other words, the territorial sea as a concept of international law should not necessarily be regarded as a uniform concept, but should be variable according to the different functions it serves.

Article 2

No comment.

Article 3

In the opinion of the Danish Government it would be desirable—as recommended by the International Chamber of Shipping in its statement of 27 April 1955⁶—to reach international agreement on a definite and not too wide limit of the territorial sea. However, the Danish Government are in agreement with the Commission's statement to the effect that no uniform international practice can be shown to exist as regards the breadth of the territorial sea.

In these circumstances and in the light of existing practice, the Danish Government take the following view:

The existing legal position is not tantamount to complete freedom for each State to decide the breadth of its territorial sea. This was the opinion expressed by

the International Court of Justice in its decision of the Anglo-Norwegian Fisheries Case. Thus, a State cannot, by altering the rules which it has so far applied for the delimitation of its territorial sea, incorporate any large areas which have hitherto been high seas into its own territorial waters, to the detriment of the interests of other States. On the other hand, it cannot be equitable to bind those States which have so far maintained a territorial sea of, say, three nautical miles to that limit indefinitely, irrespective of other States maintaining a considerably broader territorial sea. Hence, a certain limited extension by a State of its territorial sea cannot be considered unreasonable when such extension is motivated by weighty national considerations, and it can be effected without infringing upon the established interests of other States in the waters involved. Such extensions should not, however, exceed the limits generally observed in neighbouring waters and it should not be exorbitant as compared with the rules practised by other States, notably those whose coasts are adjacent to the waters in question.

One of the essential elements in the determination of the breadth of the territorial sea must necessarily be the economic importance of the territorial sea to the coastal population. In its decision of the Fisheries Case, the International Court of Justice recognized that such economic factors were relevant to the application of a system of straight baselines. Under such a system, maritime areas which would otherwise belong to the high sea may be included in the territorial sea, with the consequence that the economic exploitation of these areas are reserved for nationals of the coastal State. Once the relevance of such economic factors has been recognized, it seems hardly justifiable to limit the application of this principle to the problem of straight baselines. Vital economic interests of the coastal population may require that the areas of the sea reserved to that population be extended by other means than a system of long baselines, in particular by the adoption of a wider breadth of the territorial sea. This would be the case, for instance, outside a coast which has no hinterland offering reasonable means of existence to the local population, in particular the coasts of isolated islands or groups of islands of which the inhabitants practically entirely depend upon the natural resources of the sea for their livelihood. In such exceptional circumstances it would seem reasonable to allow the coastal State to fix a wider breadth of the territorial sea than the breadth normally adopted for other coastal areas.

In view of the fact that a State not only has certain rights but also a number of obligations in respect of its territorial sea, the Danish Government suggest that it should be provided expressly that a State shall not limit its territorial sea to less than a breadth of three nautical miles.

Article 4

No comment.

Articles 5 and 7

These two articles seem to cover certain identical situations. A special rule on bays which, on the basis of geometrical computations, lays down general conditions for drawing a baseline across the mouth of an

⁶ *The Shipping World*, vol. 132, p. 486.

indentation, will hardly provide a satisfactory solution to the problems posed by the widely different geographic conditions which obtain where coastlines are irregular. It should be considered whether the rule laid down in article 5 would not be adequate for all cases of irregular coastlines and thus make it possible to dispense with article 7 altogether. If necessary, the word "deeply" before "indented" in the second line of article 5 could be deleted.

In particular, objections may be raised to the provisions of paragraphs 2 and 3 of article 7, which lay down that the baseline at the mouth of a bay should not exceed fifteen miles. Such a rule does not sufficiently take account of the great varieties of geographic conditions which may obtain where coasts are indented. Although there may not normally be any need for baselines longer than fifteen nautical miles, it may in certain circumstances be justifiable to draw a longer closing line, for instance where geographical conditions are such that no other baseline would be easily recognizable by the navigator on the spot. Furthermore, economic and defence factors, which may legitimately be taken into consideration, may in certain cases require the application of a baseline exceeding fifteen miles.

The last phrase of paragraph 1 of article 5 provides that "baselines shall not be drawn to and from drying rocks and drying shoals". It will be very difficult to implement a provision of this nature on coasts where the range of the tide is considerable. At least in Danish theory and practice such rocks and shoals are used in several cases—and this is believed to be in full conformity with international law—as basis for the calculation of limits of fishing zones, etc. Further the said rule does not appear to be compatible with the rule in article 4, which establishes that the breadth of the territorial sea is measured from the low-water mark. For these reasons the phrase should be deleted.

Articles 6 and 8

No comment.

Article 9

Since 1912 the Roads of Copenhagen have been declared Danish internal waters, *cf.* Royal Decree No. 293 of 20 December 1912, Sect. 1 (c), paragraph 2, and Royal Ordinance No. 356 of 25 July 1951 governing the admission of foreign warships and service aircrafts to Danish territory in time of peace, paragraph 3.

Article 10

In its comments on article 10, the International Law Commission mentions the question of formulating a special rule for groups of islands. In the opinion of the Danish Government it should not be necessary to formulate such a rule, because the principle underlying article 5 implies that straight baselines may be drawn between the islands of a group. Article 5 should possibly be amended so as to preclude any doubt. It would not appear reasonable to make a distinction between islands lying off a coast and islands forming an independent group. Incidentally, any such distinction would be difficult to maintain from a geographical point of view because an island may be so large that in the application of the said principle it should rank equally with a mainland.

Article 11

No comment.

Article 12

With regard to straits whose coasts belong to the same State it must be permissible, under the general principle laid down in article 5, to draw straight baselines across the strait near its mouths. The drawing of such baselines should not affect the normal right of free passage through the strait, *cf.* article 5, paragraph 3.

Articles 13 and 14

No comment.

Articles 17 and 24

Paragraph 4 of article 17 refers to the right of innocent passage through international straits. The provision applies to all vessels, including warships. The Danish Government fully accept the basic principle of the right of innocent passage through international straits, but would find it very desirable that the provision be drafted so as to indicate, in exact terms, that the right of passage through an international strait does not imply permission for any navigation other than passage, and applies only in the normal sailing route. This could be achieved by formulating the paragraph as follows:

"There must be no suspension of the innocent passage of foreign ships *through those parts of a strait which are* normally used for international navigation between two parts of the high seas."

The Danish Government thus agree that, in time of peace, warships should be accorded the right of innocent passage through international straits. It is the view of the Danish Government, however, that the recognition of this right does not debar a State from taking, in certain areas, reasonable measures for the protection of its security, provided that such measures do not amount to a prohibition or to a suspension of the right of innocent passage, *cf.* paragraph 4 of article 17. The requirement of previous notification, for example, would be within the scope of such reasonable measures. Hence, the Danish Government believe that the Commission has gone too far by suggesting, in its commentaries on article 24, that the coastal State "may not make the passage of warships through such straits subject to any previous authorization or notification".

In the view of the Danish Government it cannot be regarded as an interference with the innocent passage of a warship through an international strait when for special reasons, for instance security reasons, such passage is made subject, not to any authorization, but merely to previous notification through diplomatic channels. Such notification would only serve to give evidence of the innocent character of the intended passage.

Articles 18 and 19

The Danish Government regret that the provisions against discrimination referred to in the commentaries on these articles have not been included in the rules formulated by the Commission, especially in article 19. Irrespective of the reasons given in the commentaries for omitting these provisions, the Danish Government maintain that it would be useful to have the principle of non-discrimination clearly established.

Article 20

It would be desirable if two additional sub-paragraphs (d) and (e), of the following tenor could be inserted in paragraph 1 of this article after sub-paragraph (c):

"(d) If the crime has been committed by or against any other person than the captain of the ship or a member of the crew or by or against any person who is a national of the coastal State; or

"(e) If the crime committed is homicide or another felony involving risks or serious bodily harm."

The Danish authorities are aware that the proposed provisions appear to be at least partially covered by sub-paragraphs (a) and (b), but nevertheless consider it reasonable to have the jurisdiction of the coastal State unambiguously established in the case mentioned.

Articles 21-23 and 25-28

No comment.

Article 29

The Danish Government welcome the proposal for establishment of international rules to ensure that ships are not registered under the flag of a State on the basis of purely formal consideration; the nationality indicated by the registration and flag of a ship should represent a genuine link between the ship and the country of registration, the latter assuming responsibility for the observance of certain standards, notably with regard to the inspection of and the service on board such ships. In this connexion, the Danish authorities emphasize that the implementation of the proposed rules, which assumes the existence of certain guarantees or evidence of the actual relationship of the ship with the State concerned, may serve to support the various endeavours of international shipping circles (including the Danish shipping trade) to prevent the nationality and registration of a ship from being established on the basis of such mere formalities as to come within the concept of "flag of convenience".

In one particular relation this question has been discussed at the Preparatory Technical Maritime Conference held in London in September/October 1956: viz. in relation to the International Labour Organisation and the maritime conventions adopted under the auspices of the ILO. The Conference adopted a draft resolution which emphasizes the responsibilities that the country of registration should assume with regard to the safety and social conditions of mariners employed in ships flying the flag of the country.⁷

Articles 30-32

No comment.

Article 33

The Danish Government cannot accept that State-owned vessels used in commercial service should be allowed, in any field whatsoever, a more favourable status in international law than privately-owned merchant ships. The question is of a great practical significance inasmuch as the merchant fleet of several States must be regarded as State-owned. In the opinion of the Danish Government State-owned and privately-

owned merchant ships should have equal status in all respects.

Article 34

Regardless of the broad general scope of this article, the Danish authorities feel that it has the practical significance of impressing upon those States which have not ratified or carried into effect such international regulations as the Safety Convention of 1948 the importance of observing a certain minimum standard, cf. the commentaries on article 29 above.

Article 35

Although objections may be raised against the rule contained in this article to the effect that disciplinary or penal proceedings may only be instituted against the person responsible before the authorities of the flag State or of the State of which the person concerned is a national, the Danish Government will not oppose this rule.

Articles 36-46

No comment.

Article 47

Paragraph 2 of this article provides that "the right of hot pursuit" ceases as soon as the ship pursued enters the territorial sea of its own country or of a third State. It would not appear to be reasonable if the resumption of pursuit should be precluded by the pursued ship seeking temporary refuge, in sight of the pursuer, in the territorial sea of a third country. To discontinue the right of pursuit a real stay in the territorial sea of a third country of say twenty-four hours or a stay in port, however short, should be required. Any such stay in port could be substantiated by means of the clearance papers of the ship.

Paragraph 3 of this article provides that hot pursuit shall not be deemed to have begun unless the pursuing ship has "satisfied itself by bearings, sextant angles or other like means that the ship pursued or one of its boats is within the limits of the territorial sea or, as the case may be, within the contiguous zone". In the opinion of the Danish Government teletechnical aids (radar, decca, loran, etc.) should also be mentioned expressly; these new aids for the fixing of a ship's position must be regarded as being at least as accurate as those used so far, and in several cases even more accurate.

Moreover, it does not appear to be sufficiently clear whether the provision also applies to cases where pursuit of a foreign ship is commenced in the territorial sea by a ship of the pursuing State on account of offences committed previously. According to the internal rules applied by the Danish Fisheries Inspection Service such pursuit is permissible.

Insofar as cases of this nature may be regarded as covered by the general rules of the draft, it would be desirable if specific rules were introduced laying down certain time-limits, *inter alia*, because it will often be difficult after the lapse of several years to procure the evidence required. Several countries thus require ship's logs to be preserved for short periods, ranging from two to five years.

Article 48

No comment.

⁷ International Labour Organisation, Preparatory Technical Maritime Conference, Reports III/1, III/2: Flag Transfer in Relation to Social Conditions and Safety, Genève, 1956.

Articles 49-60

In the opinion of the Danish Government, the particular Danish interest in the preservation of the fauna of the arctic regions makes it very desirable that the proposed convention should apply to marine mammals such as whales, walruses and seals in conformity with its purpose of protecting and developing the living resources of the sea. It has been noted with satisfaction that this has been expressed in the present draft, and the Danish Government can, therefore, on the whole accept the principles embodied in these articles.

Article 59

According to this article, the decisions of the arbitral commission shall be binding. On the other hand, the article leaves the following questions open: who is to supervise the observance of the provisions, and what coercive measures may be applied against countries which refuse to abide by the decisions and against the fishermen of such countries. In the opinion of the Danish Government, the efficacy of the whole arbitral system will depend on a satisfactory solution of these questions.

Articles 60-65

No comment.

Article 66

The Danish Government wishes to point out that the report of the International Law Commission leaves open a problem which is of particular interest to Denmark, namely, the scope of the jurisdiction accorded to a coastal State by reason of its responsibility to take measures for the safety of navigation.

As the waters round the Danish coasts are comparatively shallow at a great distance from the nearest coast and contain many shoals and reefs constituting a danger to navigation, the Danish Government have assumed responsibility for marking the fairways by means of light-vessels, buoys, etc., far beyond the Danish territorial sea. This particular responsibility rests partly on an old-established practice and partly on the express provision contained in article 2 of the Treaty of 14 March 1857, on the Abolition of the Sound Dues, under which the Danish Government were obliged to preserve and maintain "... the buoys and beacons now existing which serve to facilitate navigation in the Kattegat, the Sound and the Belts" and, moreover, "in future, as heretofore, in the general interest of navigation to take up for serious consideration whether it might be useful and convenient to alter the location and form of these ... buoys and beacons or to increase their number, everything without any charge to foreign shipping". By agreements between the Danish Lighthouse Authority and the corresponding authorities of the neighbouring countries, the area for which each country is responsible has been delimited for the waters outside the territorial sea.

In order to meet this responsibility efficiently and safely, the Danish authorities must be able to ensure that the regulations they have issued for this purpose can be enforced against everyone navigating the said waters, irrespective of nationality. As examples of such regulations may be mentioned:

(a) Prohibition of jettison of rubbish, cargo, ballast, ashes or the like in places where it may cause a reduction of the depth of the fairway to such a degree as to endanger free navigation;

(b) Rules on the placing of pound net stakes, including prohibition against placing such stakes in fairways where they may constitute a danger to navigation;

(c) Prohibition of establishing, without permission, such sea-marks and similar objects in the fairways as may obstruct navigation;

(d) Prohibition against destruction or damage of established sea-marks and against using sea-marks for mooring or for securing fishing tackle, etc.;

(e) Rules on the removal of wrecks and rendering them harmless, including the right of making the salvage of wrecks abandoned by the owner conditional on special permission by the Danish authorities. (Only such rules will provide the necessary assurance that the salvage contractor carries out the salvage with due regard to the safety of navigation and, particularly, provides the necessary depth of water over any wreckage left.)

Under general rules of international law, it is beyond doubt that such regulations can be enforced against Danish nationals outside the territorial sea. It is, however, obvious that the efficacy of the rules would be materially impaired if objection is raised to their enforcement by the Danish authorities against foreign nationals. Experience—especially since 1945—has proved the need for regulating and supervising the salvage of wrecks by foreign contractors in those parts of the high seas where Denmark is responsible for the buoying of the fairways.

The Danish Government would therefore propose the addition of a new article worded as follows:

"A State which by international agreement or custom has assumed responsibility for buoyage and similar measures to ensure the safety of navigation in fairways outside the territorial sea shall be entitled to issue such regulations as are necessary to meet this responsibility and to enforce them against anybody, irrespective of nationality, who navigates in these waters."

Articles 67-70

No comment.

Article 71

According to this article the exploitation of the continental shelf must not result in "any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea". The Danish Government attach great importance to this overriding principle and, in particular, to the provision of paragraph 4 according to which due notice must be given of any installations constructed on the continental shelf. With respect to the safety zones around such installations, it seem preferable to provide expressly in the article, what is now mentioned in the commentaries only, that the radius of such safety zones should not exceed 500 metres.

Articles 72 and 73

No comment.

7. Germany, Federal Republic of

NOTE VERBALE FROM THE OFFICE OF THE PERMANENT OBSERVER OF THE FEDERAL REPUBLIC OF GERMANY, DATED 18 SEPTEMBER 1957

[Original: German]

In view of the short time at its disposal, the Federal Government has not been able to study more than a few of the questions to which the draft articles relate. Accordingly, the Federal Government reserves the right to make further comments at a later stage, particularly regarding the problems of the continental shelf and the territorial sea.

The Federal Government would like the order of the individual articles to be carefully reconsidered and would suggest that parts I and II (dealing, respectively, with the territorial sea and the high seas) should be preceded by a general part containing provisions relating to all questions common to the territorial sea and the high seas, e.g., the nationality and the immunity of ships.

In addition, the Federal Government would like to submit the following comments and suggestions concerning the articles specified below:

Article 5, paragraph 1

While reserving more specific comment concerning this article for a subsequent occasion, the Federal Government would like to ask already at this juncture whether it might not be advisable to delete the words "to any appreciable extent" in the third sentence.

Article 15

The Federal Government considers it desirable that a general saving clause should be inserted concerning the validity of the rules contained in existing agreements relating to the laws of war and neutrality.

Article 15, paragraph 3

The Federal Government proposes the following text for article 15, paragraph 3:

"Passage is innocent so long as the ship does not use the territorial sea for committing any acts prejudicial to the security of the coastal State or contrary to the present rules."

Article 17, paragraph 1

The Federal Government is somewhat critical of the present wording:

"...or to such other of its interests as it is authorized to protect under the present rules and other rules of international law..."

and would suggest that the question whether this text is really consistent with the principles underlying the convention should be more closely examined and that the article should be drafted in more precise terms.

Article 20

The Federal Government would welcome an examination of the compatibility of the provisions in their present form with certain more far-reaching obligations arising out of bilateral or multilateral extradition agreements.

Article 22

The Federal Government proposes that the words "ships for commercial purposes" should be replaced by the words "ships operated for purposes other than those connected with the exercise of government functions".

Article 23

The Federal Government ventures to suggest that perhaps this article should deal also with the immunity of government ships operated for purposes connected with the exercise of government functions.

In addition, the Federal Government proposes that the present wording should be amended to read:

"The rules contained in sub-section A and in article 19 shall also apply to government ships operated for purposes connected with the exercise of government functions."

Article 24

The Federal Government proposes the following text for article 24:

"The coastal State may make the passage of warships through the territorial sea subject to previous notification. The provisions of articles 17 and 18 shall apply *mutatis mutandis*. Such notification shall not be required for passage through straits normally used for international navigation between two parts of the high seas."

A further point to be considered is whether this article is not also the proper context for a provision relating to the immunity of warships (this observation would not, of course, apply if the convention should be preceded by a general part dealing with these questions, which are common to the territorial sea and the high seas).

Article 28

As the provisions in this article do not apply to the high seas only, the Federal Government proposes the following wording:

"Every State has the right to sail ships under its flag."

Article 29, paragraph 1

The Federal Government considers that it would be desirable if the third sentence of paragraph 1 could be amended to read:

"Nevertheless, for purposes of recognition of the national character of the ship by other States, there must exist a genuine link between the State, the ship and its owner."

Article 30

The Federal Government suggests that perhaps the following sentence should be added, to take account of the prevailing practice:

"At the request of a warship, the flag shall be shown."

Article 31

The Federal Government points out that the treatment of ships without a nationality is not regulated by this article; some express provision governing the status of such ships is probably desirable.

Article 32, paragraph 2

The Federal Government considers that the words "for the purposes of these articles" should be replaced by the words "for the purposes of this convention" and suggests that this paragraph, amended as proposed, should be transferred from article 32 to article 24.

Article 33

The Federal Government proposes that the words "whether commercial or non-commercial" should be deleted, and that the passage should read:

"...used only on government service for purposes connected with the exercise of government functions...".

Article 35

The Federal Government would point out that article 35 departs in certain respects from the provisions of articles 1, 2 and 3 of the Brussels Convention for the Unification of Certain Rules relating to Penal Jurisdiction in matters of Collision or other Incidents of Navigation (1952).

Article 41

The Federal Government would like to inquire whether the words "it is intended" are designed to refer exclusively to subjective elements (*mens rea*). Perhaps the wording should be reconsidered.

Article 45

The Federal Government proposes the following text:

"A seizure on account of piracy may only be carried out by warships, government ships exercising special supervisory functions or military aircraft."

Article 47, paragraph 1, second sentence

The Federal Government suggests that the second sentence of article 47, paragraph 1, should be redrafted to read:

"Such pursuit must be commenced when the foreign ship or one of its boats is within the internal waters or the territorial sea of the pursuing State and may only be continued outside the territorial sea if the pursuit has not been interrupted."

Article 48, paragraph 1

The wording of paragraph 1 does not appear to be adequate. Accordingly, in view of the terms of article 50, the Federal Government suggests that consideration should be given to the question whether this paragraph might be re-worded to cover other kinds of waste water harmful to the living resources of the high seas.

Article 51 et seq.

The Federal Government welcomes regional agreements for the conservation of the living resources of the high seas and considers that such regional agreements can be reconciled with the principles of the freedom of the seas and their common use by all. The Federal Government is carefully considering whether this object can be achieved by the provisions of sub-section B. It warmly welcomes the idea of instituting arbitration procedure to settle this problem. So far as the individual articles of sub-section B are concerned, however, the Federal Government reserves detailed comment.

Article 61-65

In the opinion of the Federal Government it would, perhaps, be desirable to add a provision specifying that the laying and re-laying of submarine cables and pipelines must not improperly obstruct shipping, fisheries and other activities utilizing the waters in question.

8. Iceland

NOTE VERBALE FROM THE MINISTRY FOR FOREIGN AFFAIRS OF ICELAND, DATED 7 AUGUST 1957

[Original: English]

The Government of Iceland accepts the invitation to participate in the Conference.

The views of the Icelandic Government concerning

the report of the International Law Commission were stated by the Icelandic representative in the Sixth Committee on 10 December 1956 (reproduced below).

On this occasion the Ministry would once more draw attention to the following:

The most important problem as far as the Icelandic Government is concerned is the question of coastal jurisdiction over fisheries. Necessary conservation measures should of course be adopted, but the coastal State should have a priority on the utilization of the coastal fisheries up to a reasonable distance regardless of whether that area is called territorial sea, contiguous zone, superjacent water of the continental shelf or something else. The distance might very well vary in different countries in view of economic, geographic, biological and other relevant considerations. This matter is particularly clear where the coastal population as in the case of Iceland is dependent on the coastal fisheries for its livelihood.

Statement by the Icelandic representative in the Sixth Committee on 10 December 1956, on the subject of the report of the International Law Commission

It will be recalled that, in 1949, the Icelandic delegation to the Assembly emphasized the fact that all the aspects of the law of the sea were so closely related that only a study of all those aspects would give a complete picture of the various problems involved. At that time, and again in 1953 and 1954, some delegations were of the opinion that the various problems could be separated and dealt with independently. Some maintained, e.g., that the problem of the seabed and subsoil of the continental shelf could be dealt with as such. My delegation from the beginning insisted that this was not the correct view. In its comments to the International Law Commission in 1952, the Icelandic Government pointed out that it considered it unrealistic that foreigners could be prevented from pumping oil from the continental shelf but that they could not in the same manner be prevented from utilizing or even destroying other resources which are based on the same seabed. In order to prevent any prejudicing effects in this matter, the Icelandic delegation opposed separate treatment of the seabed and subsoil of the continental shelf.

It seems fortunate that the Assembly, on the advice of the Sixth Committee, consistently decided that the unity should be preserved when those problems were being dealt with. Indeed, in the report of the International Law Commission covering its eighth session,⁸ it is stated:

"Judging from its own experience, the Commission considers — and the comments of Governments have confirmed this view — that the various sections of the law of the sea hold together, and are so closely interdependent that it would be extremely difficult to deal with only one part and leave the others aside."

In the consolidated draft on the law of the sea numerous difficult problems are dealt with in a way which is quite acceptable to my delegation. Generally speaking, the draft — as far as it goes — is a valuable contribution to this very difficult area of international law.

⁸ Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159), chap. II, para. 29.

In our opinion some of the proposed articles can be improved, *e.g.*, the provisions concerning drying rocks as base-points. But generally speaking, the Commission's draft is worthy of support.

In one extremely important matter, however, the Commission has not proposed a definite solution. I am here referring to the problem of the extent of coastal jurisdiction over fisheries. The Commission has refrained from drafting definite articles concerning this problem, partly because it felt that it did not have technical competence to do so and partly, perhaps, because it felt that political considerations were involved. Thus, the problem remains unsolved and a solution must be found. Since this is a problem to which the Icelandic Government has drawn attention from the beginning, my delegation will limit its observations at the present stage to this fundamental aspect of the draft.

At first there seemed to be a tendency within the Commission to ignore or at least to deal very unrealistically with the problem of jurisdiction over fisheries. The Commission in those earlier stages seemed to think that the problem of jurisdiction over fisheries could be solved by, on the one hand, the exclusive rights of the coastal State within its territorial sea and, on the other, the adoption of articles concerning conservation measures on the high seas which would be equally binding to all nations fishing in a given area. In other words, within the territorial sea the coastal State would have privileges as far as fishing was concerned. Outside the territorial sea all parties, including the coastal State, would be in the same position as far as fishing was concerned. At first sight this may seem very reasonable, but from a practical point of view the question immediately arises: What if the breadth of the territorial sea has not been determined in any way whatsoever with regard to fisheries? Of course it is necessary and to everyone's benefit to ensure the maximum yield of the fish stocks both within and outside the territorial sea. But what if the requirements of the coastal State and other States in the coastal area are not satisfied by the maximum yield? Why then should the priority position of the coastal State be limited to a certain area called the territorial sea if the breadth of the territorial sea has not been determined with any regard whatsoever to this fundamental matter?

In the report of the Commission on the work of its eighth session it is fair to say, this problem meets with much more understanding than before. On page 38 of the report the following statement is found:

"The Commission's attention had been directed to a proposal that where a nation is primarily dependent on the coastal fisheries for its livelihood the State concerned should have the right to exercise exclusive jurisdiction over fisheries up to a reasonable distance from the coast having regard to relevant local considerations, when this is necessary for the conservation of these fisheries as a means of subsistence for the population. It was proposed that in such cases the territorial sea might be extended or a special zone established for the above-mentioned purpose.

"After some discussion of this problem the Commission realized that it was not in the position fully to examine its implications and the elements of exclusive use involved therein. The Commission recognized, however, that the proposal, as in the case of the principle of abstention (see commentary to article 53) may reflect problems and interest which deserve recognition in international law. However, lacking competence

in the fields of biological science and economics to adequately study these exceptional situations the Commission, while drawing attention to the problems, has refrained from making any concrete proposals."

My delegation would certainly agree with the proposition that, where a nation is primarily dependent on the coastal fisheries for its livelihood, the State concerned should have the right to exercise exclusive jurisdiction over fisheries up to a reasonable distance in view of local conditions and it does not matter to us whether the area in question is called the territorial sea or not. We would also agree with the abstention principle. As a matter of fact the quotation from the report which I have just made, represents the crux of the problem as my delegation sees it. There has to be a clear-cut distinction between two things, *i.e.*, the conservation problem and the utilization problem. If there is a conflict of interests as to the latter, the coastal State should have priority up to a reasonable distance regardless of whether that area is called territorial sea, contiguous zone, superjacent waters of the continental shelf, or something else.

The distance might very well vary in the different countries. Some might be content with three miles, others — and certainly the majority — would want more. We think that the statement of the Icelandic Government of 1952 is still correct. It reads as follows:

"The Government of Iceland does not maintain that the same rule should necessarily apply in all countries. It feels rather that each case should be studied separately and that the coastal State could, within a reasonable distance from its coasts, determine the necessary measures for the protection of its coastal fisheries in view of economic, geographic, biological and other relevant considerations."

This, in our view, would be the only realistic way of dealing with this matter.

If Iceland is taken as an example of the issue involved it is easy to get a clear picture of the problem.

It is a well-known fact that Iceland is a barren country. No mineral resources of forests exist, and agriculture is limited to sheep-raising and dairy-farming and the products are barely sufficient for local consumption. Consequently, most of the necessities of life have to be imported and financed through exports, 97 per cent of which consist of fisheries products. Indeed, it is as if nature had intended to compensate for the barrenness of the country itself by surrounding it with rich fishing grounds. Iceland is situated on a platform or continental shelf, whose outlines roughly follow those of the coast itself and which provides ideal conditions for spawning areas and nursery grounds, thus ensuring, if over-fishing is prevented, a continuous supply of important food fishes.

The coastal fishing grounds have always been the foundation of Iceland's economy and it can be said, without any hesitation, that without them the country would *not* be habitable. Therefore, there is no doubt that if the survival of the Icelandic people is to be secured, it is of fundamental importance to conserve the fish stocks in Icelandic waters.

In view of these facts it is of importance to note that, although the protection of fish stocks in Icelandic waters was quite adequate in former times, it was disastrously reduced at the very time when it was most needed. This unfortunate development can be briefly summarized.

The Icelandic Government has on several occasions drawn attention to the fact that, from 1631 to 1662, foreigners were prohibited from fishing to a distance of at least twenty-four miles (four leagues) from the coast, and at that time all bays were also closed to foreign fishing. From 1662 to 1859, the distance was reduced to sixteen miles. The development may also be described by saying that, in the seventeenth, eighteenth and part of the nineteenth century, the Icelandic fishing limits were four leagues, the league at first being the equivalent of eight miles, later six and finally four miles. In the latter part of the nineteenth century, the enforcement of the prevailing limits by the Danish authorities became inefficient and, in 1901, they concluded an agreement with the United Kingdom which specified the ten-mile "rule" for bays and three miles fishery limits around Iceland. These limits were applied until the agreement was terminated in 1951, after the Icelandic Government had given due notice in accordance with the terms of the agreement. For many years it had then been clear that the fish stocks were rapidly decreasing due to over-fishing, so that if positive steps were not taken the country's economic foundation would be faced with ruin. Therefore, the Icelandic Parliament in 1948 adopted a law authorizing the Ministry of Fisheries to establish explicitly bounded zones within the limits of the continental shelf of Iceland and to issue the necessary regulations for the protection of the fish stocks within the zones. It was considered reasonable to use the continental shelf in this connexion because the outlines of the shelf follow those of the coast, and a topographic chart shows quite clearly that the continental shelf is the platform of the country and must be considered to be a part of the country itself. On this platform are found some of the most valuable spawning grounds and nursery areas in the world. It is a fact well known to all fishery biologists that these shallow areas constitute the source on which the great off-shore fisheries in Iceland are based. In 1952, regulations were issued on the basis of this continental shelf law, where straight baselines were drawn across the bays and the fishery limits were drawn four miles seaward from these baselines. Within these limits, all foreign fishing has been prohibited as well as Icelandic trawl and seine fishing. Although these regulations were opposed by four European countries they have been strictly enforced, and it is the considered opinion of experts in this field that these protective measures have resulted in a complete reversal of the development.

The decline of the fish stocks before the conservation measures were taken was clear and followed the same pattern as the decrease of the stocks between the two World Wars, when the total catch of haddock and plaice in this area was reduced by about 80 per cent.

The beneficial effects of the measures appeared almost immediately and have been enjoyed by all nations fishing at Iceland for more than four years now.

In a memorandum issued by the Icelandic Government in October 1955, it was emphasized that the total catch of demersal fish taken from Icelandic waters rose sharply in 1953 and the catch per unit of effort also showed a clear upward trend for the most important of the species which make the main basis of the fisheries off Iceland.

If we consult the latest statistical figures regarding the

most important food fishes, we find that there is still a clear improvement from 1954 to 1955.

Nobody who is concerned with fishing in Icelandic waters would like to imagine how the situation would be now if no conservation measures had been taken. We know the evil development before 1914, we also remember the steady decrease of the fish stocks between the wars and, indeed, we were faced with rapidly approaching ruin in the beginning of the fifties. As time passes it becomes more and more evident that the steady, general and increasing improvement cannot be ascribed to stock fluctuations. It is the fruit of the conservation — of the protection of the young fish.

As already stated, the measures which have been taken are based on the continental shelf law so that they can only be considered partial steps within a wider framework. Further measures have for some years been under consideration, and there is not the slightest doubt in the mind of the Icelandic Government that, as far as international law is concerned, it would be perfectly legal and a matter of self-preservation to extend the present four-mile limits considerably. While, for instance, twelve miles would undoubtedly be perfectly legal, no specific distance has been decided upon as yet.

The policy of the Icelandic Government in these matters has met with objections in some quarters where particularly conservative notions are cherished in this field. It has been said that this policy is contrary to international law, that international law in general specifies the so-called ten-mile rule in bays and a territorial sea of three miles, that outside those limits fishing is free for all, and that all that is required is to adopt conservation measures through international agreements which would be equally applicable to all. It seems clear that these ideas are most strongly advocated by nations who are more interested in fishing off the shores of other countries and these ideas are therefore clearly based on their own self-interest. If that particular self-interest were common to a great majority of the members of the international community, then it would probably find expression in the rules of international law. Whatever may have been the situation in the past, my delegation is firmly convinced that today the overwhelming majority of the Members of the United Nations do not support these ideas and consider that, if they were ever valid as rules of international law, they are now quite obsolete.

In this connexion, a fundamental distinction must, as already stated, be made between two different things. On the one hand there is the problem of conservation of the fish stocks. From a scientific point of view there seems to be pretty common agreement as to what measures are required to ensure the maximum sustainable yield. Theoretically, such measures could be taken either unilaterally or through international agreements with exactly the same effect. From a practical point of view, however, experience has shown that it has been extremely difficult to get nations to agree on the adoption of measures of this kind. The Over-fishing Conventions of 1937 and 1946 provide clear examples of this nature. As a matter of fact, while the nations concerned were debating these matters for a period of some fifteen years, the people of Iceland watched the systematic destruction of the fish stocks in the very areas regarding which the over-fishing problem was being

debated on the international level. With that experience in mind, my delegation feels that the coastal State, having the greatest interest in maintaining the resource, is in the best position to adopt and enforce the necessary measures although, of course, international agreements will have to complete the picture as far as the actual high seas are concerned. In that sense, the conservation articles of the International Law Commission draft would be a valuable contribution as a supplement to coastal jurisdiction.

The other problem to which I referred relates to the situation where, in spite of adequate measures to sustain the maximum yield, that maximum yield is not sufficient to satisfy the requirements of all those who are interested in fishing in a given coastal area. In that case, which is the crux of this entire matter, we maintain that the proper solution is not to take some arbitrary number of miles equally applicable to all coasts and call it the territorial sea on the basis of some considerations which have nothing to do with fisheries, and say that within that area the coastal State has priority but outside it the situation is the same for all. This procedure seems so clearly unreasonable that it should not be necessary to provide any further arguments. The different coastal areas are so variable that it is neither reasonable nor realistic to put them all in the same straitjacket and our contention is, as already stated, that each coastal State should itself determine its fishery limits on the basis of all relevant considerations. The standard objection against this proposition is that such a formula would lend itself to abuse so that excessive demands would be made even in the absence of any real need. From that point of view it has been suggested that some arbitral body should be empowered to make the final decision. Various proposals of this nature were defeated within the International Law Commission itself and it would indeed be difficult, if not impossible, to entrust this task to such a body unless the criteria upon which a decision should be based were quite specific. On the other hand, if such specific criteria can be found, the need for the arbitration body diminishes accordingly. For instance, in the case of Iceland nobody can dispute the fact that the entire economy of the people is based on the coastal fisheries. Also, it is clear that the country is situated far away from other countries, and that the platform or continental shelf provides the necessary environment to produce the fisheries resources. In such a case it would seem quite reasonable to do exactly what the Icelandic Government has already done, which is to claim the necessary control over the fisheries within the limits of the continental shelf and to exclude foreign fishing within that area as far as is necessary in order to satisfy the Icelandic requirements on a priority basis.

My Government has followed the work of the International Law Commission in this field with the greatest interest for many years. It has always been our understanding that the intention was to deal with the complete report of the Commission at the General Assembly. In 1949, the Assembly passed a resolution requiring the Commission to study simultaneously the régime of the territorial waters and the régime of the high seas. In 1953, the Assembly passed another resolution to the effect that it would not deal with any aspect of these matters until all the problems involved had been studied by the Commission and reported upon by it to the

Assembly. And, finally, in 1954 as we all know, the Assembly passed still another resolution, the first operative paragraph of which :

“Requires the International Law Commission to devote time to the study of the régime of the high seas, the régime of territorial waters and all related problems in order to complete its work on these topics and submit its final report in time for the General Assembly to consider them as a whole in accordance with resolution 798 (VII) at its eleventh session”.

Consequently, we have taken it for granted that the Assembly would deal with this whole matter. On the other hand, the Commission itself has suggested that a special conference be convened to consider some of the problems involved. Several of the previous speakers have supported this view, and we now have before us a draft resolution proposing this procedure. The main argument seems to be that many technical questions are involved in which expert advice would be needed, and it could not be expected that lawyers should have the necessary competence in this respect. As we see the problem, it was never expected that the International Law Commission would have technical qualifications regarding all the problems and, indeed, during its course of labour the Commission has had the benefit of advice from experts in geography on its own initiative and, not so long ago, a special world conference was called to deal with the problem of the living resources of the sea in order that the Commission might benefit from technical advice in that particular field. If the Commission felt that it needed expert advice in some other field during the many years of its work on this subject, it surely could have said so before now. Be that as it may, surely all the Governments who are interested in this problem know what their views are and, as far as we can see, their views could be submitted through this Committee just as well as through a special international conference. The main argument for that course of action is that an unnecessary delay would be prevented and in this field such a delay becomes even more dangerous. Within a very short time we may see huge factory ships equipped with electrical apparatus capable of inflicting tremendous destruction upon the fish stocks, and we may also see various other modern devices which will make the present regulations for the size of meshes of fishing nets completely inadequate and unrealistic. Developments in this field are extremely rapid and certainly the time has come to face these problems and do something about them. That is why in this question of vital interest the Icelandic delegation as a matter of principle has been instructed to vote against the proposal for a special conference which has been submitted to us.

9. India

NOTE VERBALE FROM THE MINISTRY OF EXTERNAL
AFFAIRS OF INDIA, DATED 12 AUGUST 1957

[Original: English]

In respect to the question of conservation of living resources of the seas, the Government of India feel that it is appropriate to make a distinction between such areas of the high seas which are within a belt of 100 miles from the territorial sea of a coastal State or States (to be known as coastal high seas), on the one

hand, and such portions of the high seas which do not fall within such belt on the other. As regards the coastal high seas, the principles that may be adopted may well be as follows :

(a) The coastal State shall have the pre-emptive right to take conservation measures in specified areas within all such belts for the purpose of preservation of living resources ;

(b) If such measures are taken by a coastal State, other States fishing or interested in fishing in that area may approach the coastal State for negotiations with regard to adoption of such measures ;

(c) Any measures adopted by the coastal State for preservation of living resources shall be applicable equally to the nationals of the coastal State and nationals of other States that may be fishing or may wish to fish in that area ;

(d) If the coastal State has not adopted any measures for conservation of the living resources, any State fishing or interested in fishing in any area may approach the coastal State for taking conservation measures in such areas.

The reasons for such views are :

(i) A coastal State has naturally a more vital interest in the preservation of living resources of the coastal high seas as its nationals are more dependent on such living resources for their food ;

(ii) Measures taken by a coastal State can be more appropriately enforced by such a State than any other State ;

(iii) Enforcement of conservation measures framed by any State or States other than the coastal State may lead to political, legal and other disputes between the States concerned ;

(iv) Since a coastal State has a special interest in the coastal high seas as already recognized by the International Law Commission, it would be unfair on coastal States if such States are not given the first opportunity or enforcing the conservation measures.

These comments are, however, provisional and Government of India reserve the position as to their stand during the international conference of plenipotentiaries.

Territorial sea

Article 3

In view of the differing views held by various countries on the question of the breadth of the territorial sea, the Government of India are of the view that the maximum breadth of the territorial sea should be fixed at twelve miles and, within that limit, each country, whatever the geographical configuration of its coastline, should have freedom to fix a practical limit. The Government of India are greatly interested in this question and are strongly of the view that the traditional limit of three miles is not sufficient in the present circumstances. But, at the same time, they are of the opinion that any extension of territorial sea beyond twelve miles is not justified. The Government of India have recently extended the breadth of India's territorial sea to the extent of six miles.

Articles 7, 8 and 9

The provisions of these articles are still under consideration of the Government of India.

Article 13

In view of the position of some riverline ports where the conditions in the estuary are peculiar, a proviso should be added to this article to the following effect :

" Provided that if there is a port located at or near the mouth of a river or the estuary into which a river flows, the territorial sea shall be measured from the outermost limits as may be notified by the Government or the port authority of its jurisdiction over the port, in the interest of pilotage and safe navigation to and from the ports."

Article 15

The Government of India are of the view that the following clause ought to be added at the end of paragraph 1 :

" except in times of war or emergency declared by the coastal State."

Article 18

The Government of India are of the view that the words "with the laws and regulations relating to transport and navigation" should be omitted and in their place the following clauses should be substituted :

"(a) The traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment ;

"(b) The safety of traffic and the protection of channel and buoys ;

"(c) The protection of the waters of the coastal States against pollution of any kind caused by ships ;

"(d) The conservation of the living resources of sea ;

"(e) The rights of fishing, hunting and analogous rights belonging to the coastal States ;

"(f) Any hydrographical survey."

Article 19

The Government of India would like to reserve comments on this article.

Régime of the high seas

Article 27

The Government of India are of the view that it is desirable to clarify that the freedoms enumerated in this article are to be enjoyed in conformity with the rules of international law. The position as it exists today is that the freedom of the high seas is subject to certain recognized exceptions in international law, including the right of a coastal State to adopt measures necessary for self-defence. Some of these exceptions find place in the subsequent articles, and it does not appear to be the intention of the International Law Commission to introduce any basic changes in the existing position. To put the matter beyond controversy, the Government of India would suggest the insertion of the following clause at the end of this article :

" These freedoms shall be enjoyed in conformity with the provisions of these articles and other rules of international law." It would appear that a similar provision has been made in article 1, paragraph 2, relating to the régime of the territorial sea.

Articles 49 to 56

The Government of India are greatly interested in the provisions of these articles and, whilst they have no comments to offer on the provisions of articles 49 and 50, the Government of India are of the view that the

basis of articles 51, 52, 53 and 56 are unacceptable. Although article 54 recognizes the fact that a coastal State has a special interest in the maintenance of the productivity of the living resources in any area of the high seas adjacent to its coasts and the right of such a State to take conservation measures under article 55, the articles do not go far enough to protect the legitimate interests of the coastal State and, in particular, of the under-developed areas with expanding population and increasingly dependent for food on the living resources of the seas surrounding the coasts. The Government of India are of the view that a coastal State should have the pre-emptive right of adopting conservation measures for the purpose of protecting the living resources of the sea within a reasonable belt of the high seas contiguous to its coasts. Unless such a right of the coastal States is recognized, States with well-developed fishing fleets may indulge in indiscriminate exploitation of the living resources of the sea contiguous to the coast of another State, much to the detriment of that State and its people. The Government of India consider that it will be undesirable to confer a right on a State to adopt conservation measures or establish conservation zones in seas contiguous to the coasts of another merely because its nationals have engaged in the past in fishing in such areas. The primary right and duty of conservation of living resources should rest with the coastal State in respect of areas contiguous to the coasts. The Government of India do not deny the right of other States to fish in the high seas contiguous to the coast of another but, where conservation measures have been adopted by the coastal State, other States should approach the latter for suitable agreement in this regard. The Government of India feel that the exercise of such a right by a coastal State will be in general interest of the international community and will not in any way interfere with the freedom of *bona fide* fishing in the high seas enjoyed by all the States.

Articles 57 and 59

The Government of India would consider these articles after a decision has been reached on the question of arbitral procedure.

Article 60

The Government of India would prefer to reserve their comments on this article.

Continental shelf

Article 73

The Government of India are of the view that the provisions of article 73 may not be suitable for adoption in every case and this should be subject to the acceptance of the jurisdiction of the International Court of Justice by each country.

10. Italy

TRANSMITTED BY A NOTE VERBALE FROM THE
PERMANENT MISSION OF ITALY TO THE UNITED NATIONS,
DATED 7 AUGUST 1957

[Original: French]

Breadth of the territorial sea

Having regard to the many opinions expressed on this

subject and mindful of the fact that a useful comparison of the various views can only be made at a general conference, the Italian Government reserves its right to make concrete suggestions at the forthcoming conference itself.

Nationality of ships

Some further clarification seems necessary of the notion of the "genuine link" mentioned in article 29. The article should therefore enumerate, not as formal requirements but by way of illustration, some of the conditions which have to be fulfilled before that "genuine link" can be said to exist. It should be possible to determine these conditions from a comparative study of the provisions in force in the principal maritime States, and in that way it should be possible to arrive at a common denominator acceptable to the majority.

Immunity of other government ships

It is apparent from the text of article 33 that the Commission decided to assimilate ships used on commercial government service to warships for purposes connected with the exercise of powers on the high seas by States other than the flag State.

We consider that the assimilation is not sufficiently justified, for in the case in question the activities carried on by those using the ship might be of an essentially private nature.

Hence the category of State ships should be kept within the limits laid down by the Brussels Convention of 10 April 1926 concerning the immunity of State-owned vessels.

Piracy

Article 39 of the draft states that illegal acts (of violence, etc.) committed by the crew or the passengers of a private ship or a private aircraft against a ship on the high seas or in territory outside the jurisdiction of any State are acts of piracy. But it does not provide for the converse: namely, that the illegal acts in question directed by a private ship against an aircraft are also to be considered piracy.

We think it advisable to draw the Commission's attention to this point because the commentary on the article shows that this particular case has not yet been studied.

The ships or aircraft which should be considered pirate ships or aircraft:

To prevent the definition of pirate ships given in article 41 from covering only ships permanently engaged in acts of piracy, it would be advisable to replace the principle of intended use by that of actual use, which has the advantage of making provision also for the case of occasional use for piracy.

Seizure on account of piracy:

As far as article 45 is concerned, we propose that the power of seizure should be extended also to ships performing official duties, such as customs control and policing; this would be consistent with the provisions of article 47, paragraph 4.

Living resources of the high seas:

In order to limit the excessive prerogatives extended

to the coastal State by article 55, we propose two alternative solutions :

(a) The coastal State should not be entitled to adopt the measures referred to in article 55 until after a favourable arbitral decision ; or

(b) The measures adopted unilaterally by the coastal State should be suspended *de jure* as soon as any other State lodges objections.

Composition of the arbitral commission :

We propose, as a means of improving and expediting the arbitral procedure envisaged in article 57, that the names of members qualified to serve on the arbitral commission should be kept on a panel drawn up after consultation with States, in a manner analogous to that employed in the Permanent Court of Arbitration.

Submarine cables and pipelines

As regards article 61, paragraphs 1 and 2, we consider that provision should be made, in view of technical advances, not merely for the laying of telegraph or telephone cables and oil pipelines, but rather, by a more general wording, for the laying of any kind of submarine cable or pipeline.

Contiguous zone

The rule concerning the contiguous zone is not acceptable in its present form, chiefly because it does not satisfy the requirements of action to curb smuggling.

It may be pointed out that Italy has a territorial sea six miles wide, but its customs supervision zone extends up to twelve miles from the coast. In the latter zone full jurisdiction to enforce the customs laws is now exercised.

In view of Italy's geographical position and the configuration of its coasts, the diminution, as provided for in the draft, of the powers granted to the coastal State in the contiguous zone would make the measures for the prevention and punishment of smuggling ineffectual.

The draft article concerning the contiguous zone could be accepted by Italy if it was amended to read as follows :

"On the high seas adjacent to its territorial sea the coastal State may exercise the control necessary to prevent and punish infringement of its customs, fiscal or sanitary regulations. Such control may not be exercised at a distance beyond twelve miles from the baseline from which the breadth of the territorial sea is measured."

This question also has a bearing on article 47. According to the commentary to that article, the majority of the Commission considers that the most favourable construction that can be placed on the draft text, from the point of view of the coastal State, is that pursuit may only be undertaken if the ship committed the offence in question in internal waters or in the territorial sea ; "acts committed in the contiguous zone cannot confer upon the coastal State a right of hot pursuit".

We consider that, as far as customs control is concerned, such an interpretation appears excessively restrictive and that the right of hot pursuit should be

recognized also in cases where the ship committed the offence in the contiguous zone.

Finally, we consider that the convention should contain transitional provisions to deal with the situation prevailing at the time when the rules applicable at the entry into force of the convention are to be superseded by the new régime established by the convention itself.

11. Morocco

NOTE VERBALE FROM THE MINISTRY OF FOREIGN AFFAIRS OF MOROCCO, DATED 2 AUGUST 1957

[Original : French]

... the Ministry has the honour to state that, as yet, no limit to the territorial sea has been laid down in Morocco, except that for fishing purposes the limit of territorial waters was fixed at six (6) sea miles by an article of a *Dahir* (*Dahir* of 31 March 1919).

This state of affairs seems, therefore, to be eminently favourable and should enable our country to discuss international agreements concerning the law of the sea and to accede to the international conventions being prepared, since it is bound by scarcely any precedents.

It would seem that whatever comments could be made on the text proposed by the International Law Commission have been made, and the draft submitted by that Commission at its eighth session is apposite, with the exception of article 3, which remains vague and will require further elaboration during the forthcoming discussions.

Nevertheless, despite its undoubted interest in the conference, Morocco will be unable to consider participating in it.

12. Nepal

LETTER FROM THE MINISTRY FOR FOREIGN AFFAIRS OF NEPAL, DATED 12 JUNE 1957

[Original : English]

Though international law does not seem so far to provide for the right of free access to the sea for land-locked countries, it has been granted in practice by common courtesy or convention. What is conceded in actual practice should, in our opinion, be put in the form of law because such a step alone can ensure the real protection of this vital right of the land-locked countries. The persons concerned with the codification of international law should consider the possibility of inserting suitable clauses in the codification of the law of the sea with regard to the right of access to sea of the land-locked countries. The study of this question has been neglected in the past and this important right has not yet been incorporated in international law. This was the line of argument adopted by our representatives when the subject came up for discussion in the Sixth and Second Committees at the eleventh session of the General Assembly. It was further urged by our representatives that the land-locked States should be

entitled, not only to the normal right to communication, but also to the right of free passage without restrictions in the territorial seas and the related right of free passage over land.

13. Norway

LETTER FROM THE PERMANENT MISSION OF NORWAY
TO THE UNITED NATIONS, DATED 12 AUGUST 1957

[Original: English]

These comments should replace all comments previously submitted by Norway to the International Law Commission's different draft articles on the law of the sea. Such previous Norwegian comments, both in writing and orally, in the Sixth Committee of the General Assembly, should accordingly be disregarded in the preparation of the systematic review of the comments of Governments to the draft.

General

The International Law Commission, in paragraph 32 of its report (*cf.* its commentary to part I, section III), confirms that "the draft regulates the law of the sea in time of peace only". This should be made clear in the text itself.

It would facilitate the reading and application of the text if it opened with a definition of certain frequently recurring terms.

In the first place, the terms "territorial sea", "high seas" and "internal waters" (of which the two latter are now defined in article 26) might be defined in an opening article. It should anyway be stated expressly in the text that the term "territorial sea" does not include internal waters.

Similarly, the terms "merchant vessel", "private vessel" (used in articles 39 and 40) and "government ship" should be defined and then used consistently. In this connexion, it should be made clear that the term "merchant vessel" includes fishing vessels (*cf.* the commentary to article 15) and other private vessels not used for trading purposes. It should also be made clear whether the term "merchant vessel" includes government ships used for commercial purposes. As for the term "government ships", reference is made to the Norwegian comments to articles 33 and 23.

Article 3

The Norwegian Government wishes to support efforts to prevent unreasonable extensions of the breadth of the territorial sea. In its opinion a close proximity to the territory is inherent in the very concept of territorial sea. In its judgement in the Anglo-Norwegian Fisheries Case, the International Court of Justice pointed out that one of the "basic considerations inherent in the nature of the territorial sea" is "the dependence of the territorial sea upon the land domain. It is the land which confers upon the coastal State a right to the waters off its coasts".⁹ Exorbitant claims in regard to the breadth

of the territorial sea are incompatible with this basic concept.

On the other hand, the Norwegian Government would consider it futile to seek general agreement on rules governing the extent of the territorial sea which would deprive any country of stretches of its territorial sea over which today it enjoys uncontested jurisdiction. Thus the Norwegian Government would find it impossible to accept a breadth of less than four miles for its own coasts.

Article 5, paragraph 1

It does not appear clearly from the text of the article that the fourth sentence, "Account may..." etc.) establish and exception to the third sentence only and not to the condition laid down in the first sentence, (*cf.* para 4 of the commentary.)

The last sentence of paragraph 1, providing that drying rocks and drying shoals cannot be used as points of departure for the drawing of straight base lines, should be deleted. Its content is contrary to obtaining principles of international law. The International Court of Justice, in its judgement in the Anglo-Norwegian Fisheries case, held that the method employed for the delimitation of the Norwegian fisheries zone and the baselines fixed in application of this method are in conformity with international law.¹⁰ Some of these baselines are drawn from drying rocks (the International Law Commission does not appear to have been aware of this fact (*see* Yearbook, 1956, I, p. 185, and II, p. 25)). Reference is made especially to the discussion of drying rocks in the judgement.¹¹

If the question is viewed from the standpoint of the progressive development of international law, there does not seem to be any reason for the introduction of a development of the proposed kind. The Commission, in paragraph (8) of its commentary, argues that, if drying rocks are used as basepoints, "it will not be possible at high tide to sight the points of the baselines". The same difficulty will arise, however, when drying rocks are used as points of departure for measuring the extension of the territorial sea as proposed in article 11. Seafarers must anyway acquaint themselves with the position of drying rocks in order to avoid them.

Article 7, paragraph 1

Paragraph 1 of this article is not clear and does not reflect obtaining principles of international law. The order of the last two sentences of paragraph 1 should in any case be reversed, in order to make it clear that the sentence beginning with the words "Islands within" relates to the second sentence.

Articles 7 to 9

The object of these articles must be to establish maximum limits which the coastal State is not allowed to exceed. The word "shall" in articles 7, paragraph 1, 7, paragraph 3, and 8 and the words "are included" in article 9 should be amended accordingly.

⁹ *I.C.J. Reports 1951*, p. 133.

¹⁰ *Ibid.*, p. 143.

¹¹ *Ibid.*, p. 128.

Article 12, paragraph 1

It is stated in paragraph (7) of the commentary that "the rule established by the present article does not provide any solution for cases in which the States opposite each other have adopted different breadths for their territorial seas". It is difficult to see how this commentary could be reconciled with the actual wording of the article.

As now drafted, the article would seem to apply regardless of whether the two States in question have adopted the same or different breadths for their territorial seas, the only condition being that their coasts "are opposite each other at a distance less than the extent of the belts of territorial sea adjacent to the two coasts".

It is clear, however, that if the two States maintain different breadths, the rule will in some instances lead to an absurd result. Suppose two States, of which one claims six and the other three miles, oppose each other at a distance of eight miles. The proposed rule would in that case lead to the surprising result that the latter State would get a broader territorial belt than it claims.

And such cases could arise irrespective of whether or not agreement is reached on a maximum breadth of the territorial sea. Different breadths would still be possible, inasmuch as the actual delimitation of the territorial sea, within the maximum limits imposed by international law, must be left to the discretion of each individual State.

The foregoing should make it reasonably clear that it is impossible actually to determine the dividing line between the territorial seas of two opposing States by a rule of international law.

The natural solution for the problems of conflicting claims in such cases would seem to be a provision to the effect that no State is entitled to extend the boundary of its territorial sea beyond the median line or, to put it differently, that no State is entitled to include in its territorial sea waters which are closer to the baseline of another State than to its own.

Article 14

The article gives rise to the same difficulties in respect of States which have adopted different breadths of their territorial seas, as does article 12, paragraph 1. Indeed, if the common land frontier ends at the inland end of a bay, there may be no clear-cut difference between the two cases. The boundary proposed by the International Law Commission would stop at the outer edge of the territorial sea of the State claiming the lesser breadth, and would therefore not prevent the State claiming a wider breadth from including in its territorial sea coastal waters lying closer to the coast of the former State than to its own.

For the same reasons as outlined in the Norwegian comments to article 12, paragraph 1, article 14 must provide a workable rule also for cases in which the States concerned have adopted different breadths for their territorial sea. The article should not attempt to determine where the boundary line goes, but merely lay down the maximum limit beyond which the States concerned may not extend their territorial seas. Like article 12, paragraph 1, this article should confine itself

to providing that no State is entitled to extend the boundary of its territorial sea beyond the median line (*i.e.*, the line of equidistance).

Since the problems treated in articles 12, paragraph 1, and 14 are substantially the same, it would seem more appropriate to merge the articles into one.

The general principle enunciated above does indeed afford a basis for the settlement of conflicting claims in respect of the delimitation, not only of the territorial seas, but also of the contiguous zones, the continental shelves and the zones in which coastal States may exercise special rights in respect of fisheries (articles 54, 55 and 60). It might therefore be worth considering whether it would not be best to solve all such conflicts in one single article applicable to them all.

Article 20, paragraph 1

There does not seem to be sufficient reason why the coastal State should be allowed to exercise jurisdiction as envisaged, in sub-paragraph (a) unless the consequences of the crime extend to its territory.

If this point of view is adopted, sub-paragraphs (a) and (b) might as well be amalgamated and be so worded as to provide that the coastal State may exercise penal jurisdiction if the consequences of the crime extend to its land or sea territory.

The particular cases, referred to in paragraph (5) of the commentary, where the flag State might be interested in the exercise of jurisdiction by the coastal State, would seem to be adequately covered by sub-paragraph (c) of the article.

Article 21

It should be provided that the owner of the vessel is entitled to compensation if the claim for which arrest was made is disallowed by final judgement (*cf.* articles 44 and 46, para. 3).

Article 23

It ought to be made quite clear whether government ships used for non-commercial purposes are to enjoy the same immunity as warships in the territorial sea. If that is the intention, it would seem natural to give the coastal State the right in their case also (*cf.* article 24) to make the passage subject to previous authorization or notification.

Article 33

While it would seem to follow from articles 22 and 23 that government ships are to enjoy immunity from arrest in the territorial sea only if operated for non-commercial purposes, article 33 provides that on the high seas the immunity shall extend to all "ships owned or operated by a State and used only on government service, whether commercial or non-commercial". The Norwegian Government is of the opinion that government ships used for commercial purposes must be assimilated to private ships, not only in territorial waters, but also on the high seas. This should at least be the rule in respect of the contiguous zone. There is no reason why the immunity rule should not be the same in the territorial sea and the contiguous zone.

In view of its categorical formulation ("for all purposes"), article 33 could also easily be construed to imply a restriction of the right of hot pursuit enunciated in article 47. If differential immunity rules are maintained, it should be made clear that it is the rule to which the ship is subject at the spot where the pursuit is commenced which is determinative.

While articles 22 and 23 speak of "government ships", article 33 speaks of "ships owned or operated by a State, etc.". If this difference in wording is intended to convey any difference in meaning, this should be made clear. As far as the Norwegian Government is able to judge, there is no valid reason for not using the same form of words in both contexts.

It should be specified that if the ship does not have the clear appearance of a warship, officials of the State entitled to exercise jurisdiction may board the ship, if this is necessary in order to verify its status, *cf.* article 46, paragraph 2.

Article 44

It appears from the International Law Commission *Yearbook*, 1956, II, pp. 19-20, and I, p. 48, that the Commission decided to bring the wording of article 44 (then article 19) into line with article 46, paragraph 3 (then article 21, paragraph 3). This decision, however, has not been implemented in the text of article 44, which still retains the terms "without adequate grounds" and "State".

Articles 49 to 59

The Norwegian Government wishes to present the following general comments:

1. Fisheries are at present regulated by a number of regional agreements concluded in most cases between all or the majority of the States fishing in the area concerned. Whaling is regulated on a global basis by an agreement adhered to by seventeen Governments, including all States engaged in pelagic whaling.

It would seem to be a consideration of primary importance that the proposed over-all international regulation must not in any way hobble or hinder the effectiveness of existing and future special agreements, and that it should promote the conclusion of new special agreements when required for conservation purposes. The over-all regulation must in particular be so worded as to make it clear that the new rights created by the proposed articles cannot be exercised as between the parties to any special agreement which already covers the conservation of the stock of fish and the area in question.

2. If conservation measures are to be binding upon States other than those which established them (articles 52, paragraph 2, 53 and 55), they must satisfy conditions which must be defined precisely in order to leave no more room than absolutely necessary for discretion (The criteria formulated in article 55, paragraph 2, with reference to a special case, or those suggested, for general application, in the commentary to article 58, do not seem adequate for the purpose.) Many interested States would otherwise probably find it impossible to accept the text. And in so far as the text might nevertheless become effective, it would charge

the arbitral commission, provided for in article 57, with an extremely difficult task.

3. The conservation measures cannot be based on biological criteria alone, as apparently envisaged in the present draft (articles 55 and 58). In this connexion, the Norwegian Government wishes to draw attention to two important difficulties.

During the Rome Conference on the Conservation of the Living Resources of the Sea, it was demonstrated that very detailed and extensive investigations will often be necessary in order to determine the need for conservation measures, and that further development of maritime research will be required to provide sufficiently reliable scientific evidence. But even if those conditions are met, the scientists may still find room for doubt in regard to the conclusions to be drawn from such findings and in regard to what measures of conservation they might indicate.

Account must also be taken of the technical and economic conditions of the fishing industries of the countries concerned, as has been done in the existing special agreements and in the regulations adopted under these. The matter is complicated by the great differences which exist in the various countries in regard to methods of fishing and fish processing, consumption habits and marketing conditions. Thus, one particular restriction may hit one country hard, while it may affect other countries to a far lesser extent. Consequently a regulation may be discriminatory in fact, even if it is not discriminatory in form.

4. It seems difficult to reconcile the wording of article 53, paragraph 1, with the interpretation given in paragraph (2) of the commentary.

5. As long as no conclusion has been arrived at in regard to the breadth of the territorial sea, the Norwegian Government must reserve its position on the proposal in article 55 that the coastal State be empowered to adopt measures of conservation unilaterally.

The Norwegian Government would at all events be unable to agree to such an encroachment on the freedom of the high seas unless the proposed right is checked by an unqualified right for interested States to text by arbitration whether the conservation measures conform to the prescribed criteria. The privilege should, moreover, be confined to apply within a certain, reasonable, distance from the coast and should never apply to waters which are closer to the coast of another State (*cf.* the Norwegian comments to article 14).

A reasonable geographical limitation appears all the more necessary after the deletion, at the eighth session of the International Law Commission, of the qualification (contained in the corresponding article of the draft adopted at the seventh session) to the effect that the right should pertain only to the coastal State "having a special interest in the maintenance of the productivity of the living resources in any area of the high seas contiguous to its coasts".¹² It was precisely in reliance on this proviso that the Commission, at its

¹² *Official Records of the General Assembly, Tenth Session, Supplement No. 9 (A/2934), p. 14, art. 5.*

seventh session, deleted an express geographical limitation (*cf.* A/3159, p. 33, para. 15).

Another—apparently unforeseen—consequence of this deletion may be that the right could be exercised even in respect of coasts in the Antarctic, where there is no population whose interests require protection. In this region, there does not seem to be any conceivable ground for conferring such a right on the coastal State. And the extension of the rule to this particular region would probably lead to frustration of the conservation measures established through the International Whaling Convention.

The proposed articles appear to have been drafted primarily with a view to fishing. The special problems which arise in respect of whaling and seal-catching do not seem to have been taken sufficiently into account. Being operated by a small number of catching units, whaling is amenable to other methods of conservation and control than those applied to fisheries.

Attention is also drawn to the problems which were raised at the eighth meeting of the International Whaling Commission at London in July 1956, and which are summarized in the report of its Technical Committee (see annex).

Article 60

The article fails to specify the kind of regulations which are envisaged and the purpose for which they may legitimately be enacted and enforced. Inasmuch as articles 50-59 are generally applicable to all conservation measures, it is natural to assume that article 60 must concern regulations of a different kind. The natural interpretation would seem to be that the article relates to the technical questions concerning the safeguarding of fishing equipment, the prevention and reconciliation of conflicts between fishermen and between fishermen and other users of the sea. On this point, however, the article must be made clear.

The article is, by its terms confined to equipment embedded in the floor of the sea. At least in the North Atlantic Ocean, however, the most important practical problems are connected with fishing gear, such as long lines and nets, anchored to the floor of the sea, but not permanently embedded in it. Such gear is very often destroyed by trawlers and other vessels passing over. If a special right is accorded to the coastal State in regard to equipment embedded in the floor of the sea, it is difficult to see why this right should not also be extended to apply, in the same circumstances, to long lines and nets.

In its present form the article imposes no clear limitations on the right of the coastal State. The right should at least be subject to the same limitations as the rights which may be conceded in respect of the continental shelf. In particular, geographical maximum limits must be laid down.

Article 62

The terms "necessary precautions" in the last sentence appear too restrictive.

Article 63

If it is intended to establish a responsibility which will

be independent of culpability, certain limitations ought to be considered, *e.g.*, in respect of the responsibility of owners of older cables *vis-à-vis* owners of newer cables.

Article 66

It should be made clear, preferably in a general provision, that the control may not be exercised in waters which are closer to the baseline of another State than to the baseline of the State exercising the control, *cf.* the Norwegian comments to article 14.

Articles 67 and 68

These articles fall within the province of progressive development of international law, and constitute a still farther departure from the obtaining rules than the comparable articles on fisheries in articles 49-59.

The Norwegian Government has some difficulty for its part in seeing the necessity of granting to the coastal State "sovereign rights" for the purpose of exploiting the natural resources of the continental shelf. Whether and to what extent it will be necessary or reasonable to grant special privileges of the proposed kind to the coastal State seems to be a question which is intimately dependent on the solution which is given to the problem of the breadth of the territorial sea.

If such rights are to be granted to the coastal State, it would seem to be an indispensable condition that the zone within which they would be exercised, should be far more clearly defined than in the present wording of article 67. In view of the uncertainty of geological criteria, and in view of the fact that the reasons advanced in favour of these special privileges for the coastal State apply only in the neighbourhood of its coast, it might seem preferable to define the zone by a fixed maximum distance from the coast. The problem of reconciling the non-geological interpretations, given by the Commission in its commentary, with the text of the article, would then not arise.

Article 72

Reference is made to the Norwegian comments to articles 12, paragraph 1, and 14 on the delimitation of the territorial sea of two opposing States. Like these articles, article 72 is unnecessarily complicated, because it attempts to determine the actual border line, rather than to lay down the maximum limit beyond which none of the States concerned may extend their jurisdiction. The natural and adequate way of proceeding would be to provide that no country is entitled to extend its continental shelf so as to comprise any part of the sea which lies nearer to the coast of another State, or, as suggested in the Norwegian comments to article 14, to rely on a general provision to that effect, applicable to all rights of the coastal State.

Article 73

The Norwegian Government agrees entirely that there must be no question of according special privileges of the proposed kind to the coastal State unless the rights inherent in the concept: "freedom of the high seas" are safeguarded by appropriate provisions for compulsory judicial settlement of disputes.

Annex

INTERNATIONAL WHALING COMMISSION

Report of the technical committee

1. The Committee met five times and was attended by the representatives nominated at the first plenary meeting of the Commission by the following delegations:

Australia, Canada, Japan, Netherlands, Norway, Panama, Union of South Africa, United Kingdom of Great Britain and Northern Ireland, United States of America and Union of Soviet Socialist Republics.

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37. The Norwegian Commissioner referred to the correspondence between the Secretary of the Commission and the United Nations Organization about the deliberations of the International Law Commission in relation to the draft articles prepared by them on the régime of the high seas. He recognized that it was not possible for the Technical Committee, or for the Commission itself, to take any positive action with regard to the eighth session report (copies of which had been made available to Commissioners) but he felt it would be useful to draw the attention of Commissioners to it and to ask them to discuss its recommendations, from the point of view of the whaling industry, with their Governments.

38. The Committee agreed that it was not empowered to make any recommendations regarding the substance of the International Law Commission's report nor to discuss its merits. All it could do was to draw attention to the ways in which the draft articles contained in the report might affect the whaling industry. In discussion, the following points were made :

(a) Article 26 of the régime of the high seas¹³ referred to arbitration arrangements for States engaged in fishing the same stocks of fish in any area of the high seas. If these articles were brought into force, was it possible that such States could take a disagreement to arbitration even if that disagreement arose within a commission ?

(b) Article 29¹⁴ enabled a coastal State to take the initiative in undertaking conservation measures. Might other countries have to conform to these measures, even if they were members of a convention in force in the area of the seas concerned ?

(c) The comment on article 27¹⁵ made reference to the "principle of abstention". Could the whale fishery be regarded on an example of a fishery where this principle might apply ?

(d) In the seventh Session report, article 29 had only provided for coastal States to take unilateral action to introduce conservation measures if they could demonstrate that they had a special interest in the conservation of the living resources of the area of the high seas concerned. This condition had now been removed from the article.

(e) As regards the provisions for arbitration contained in articles 25 to 33 A,¹⁶ it seemed that there might be two or more conventions for a particular area of the high seas whose provisions were not identical. The question then arose as to which convention would be binding on newcomers to the areas concerned.

(g) Article 29 referred to the interest of the coastal State but did not contain any definition as to the area of the high seas which could be regarded as adjacent to the territorial sea of

the State concerned. Might the fact that no limitation on adjacent waters was defined enable two or more States to seek to impose unilateral conservation action in the same area of the high seas ?

39. The Australian Commissioner objected strongly to the discussion and considered that the matter was outside the jurisdiction of the Commission.

14. Peru

LETTER FROM THE MINISTRY OF FOREIGN AFFAIRS OF PERU, DATED 5 AUGUST 1957

[Original : Spanish]

The subsequent comments on some of the regulations proposed therein should be construed and understood in a spirit of appreciation and esteem for the work accomplished by the Commission. These comments, in keeping with the request made, are of course strictly provisional and do not commit or limit the position and attitudes which the Government of Peru may consider desirable to adopt at the prospective conference.

First, I should mention that the draft is not concerned solely with codification, in the limited sense of the word, but includes completely new chapters and provisions. It is both a codification and an instrument *de lege ferenda*.

With reference to this latter aspect, the Government of Peru would have preferred the document to make more extensive and fuller allowance for the new developments in international law which favour the coastal State. With respect to the utilization of the mineral resources of the continental shelf, the Commission accords to the coastal State those broader rights which it denies that State in the matter of the conservation and exploitation of the living resources of the sea adjacent to its coast. We may take it that it did not do so because it was not within its scope to consider the technical, biological, economic and political aspects, which are to be dealt with in the forthcoming conference.

A fundamental problem in any formulation of the law of the sea is the determination of the breadth of the territorial sea. From the discussion in the Commission and the General Assembly it is evident how difficult it is to agree on a single general rule applicable equally to all countries, in all cases and in all seas. Article 3 of the draft doubtless represents an advance over the one the Commission had previously approved. Although not containing a precise rule, nor really constituting a regulation, nor offering a solution to the problem, the provision still inclines toward a rule that is to be valid *erga omnes*. The Commission concludes "that international practice is not uniform as regards the delimitation of the territorial sea" (article 3, para. 1) but considers that the breadth of the territorial sea should be fixed by an international conference. In this respect, the Government of Peru favours the rule laid down in the "Declaration of Mexico City of the Principles governing the Régime of the Sea"¹⁷ and believes

¹³ Article 52 in the final draft (A/3159).

¹⁴ Article 55.

¹⁵ Article 53.

¹⁶ Articles 52 to 59.

¹⁷ Final Act of the Third Meeting of the Inter-American Council of Jurists, Mexico City, Mexico, January 17-February 4, 1956 (Washington D.C., Pan American Union, 1956), p. 36.

that, in conformity with present reality and with the recognition that "practice is not uniform", one ought to recognize that "each State is competent to establish its territorial waters within reasonable limits, taking into account geographical, geological and biological factors, as well as the economic needs of its population, and its security and defence".

The single rule of an invariably identical breadth is based primarily on considerations of juridical interpretation. Yet, if the problem is to be settled justly and realistically in the rules under discussion, other factors, too, must be taken into account, including economic and political factors. As the development of international law produces rules which settle the various problems of maritime law, especially those concerning conservation and the rights of the coastal States, it will become easier to solve the problem of the breadth of the territorial sea.

The Commission itself has recognized the interdependence of these two problems. Politically, their connexion is evident and they may be solved by means of a frank approach in the light of present realities. If it should prove possible to recognize an authentic right vested in the coastal State by virtue of which that State is able to protect effectively the resources in the vicinity of its coast, then the question of the determination of the breadth of the territorial sea would not present the characteristics which it now displays. Unfortunately, there was some reluctance to deduce the rules which flow logically from the recognition of the coastal State's interest.

The Commission, at its eighth session and in its report, admitted for the first time the special interest of the coastal State—a special interest peculiar to the coastal State *qua* coastal State and not shared by other States. It has therefore an objective character, not requiring proof.

Article 54, paragraph 1, clearly and categorically confirms the principle, but the regulations relating to the coastal State's acknowledged right, which is the consequence of its special interest, do not really fulfil their purpose. The number and nature of the conditions by which this right is hedged about are such as to render it practically nugatory. The stipulation that there must be an "urgent need" for the measures and the proviso that there must be prior negotiations with other States deprive the coastal State's right to adopt measures of conservation of all practical value. If the problem is considered in terms of present political realities and not in purely theoretical terms, these conditions will make it impossible for a small State to adopt successfully any necessary conservation measures if these are capable of affecting the commercial interests of a great Power. The provisions proposed by the Commission are of little present or practical value to the coastal States; they seem to be inspired by the interests of the fishing enterprises and to reflect the now very dubious notion of the inexhaustibility of the sea's resources. Present realities and the new destructive methods of fishing demand different rules, rules safeguarding the definite interest of the coastal State, which cannot remain indifferent to the prospect of extinction of the resources of its coastal waters. Once the coastal State's interest, which coincides

with mankind's, is recognized, the acknowledged principle should be incorporated in regulations in such a way that the coastal State has the power under certain conditions to adopt unilateral conservation measures in the high seas contiguous to its coastal waters.

15. Poland

LETTER FROM THE PERMANENT MISSION OF POLAND
TO THE UNITED NATIONS, DATED 3 OCTOBER 1957

[Original: French]

The comments contained in the enclosed document have only a preliminary character and do not exhaust the observations arising in connexion with the report of the International Law Commission.

One of the important problems dealt with in the draft is that of the breadth of the territorial sea. The work of the International Law Commission represents a substantial achievement, but article 3 of the draft is still open to reservations.

The comments of maritime States which the International Law Commission took into account are of great diversity; they range from the proposition that the uniform breadth of the territorial sea should be fixed at three miles to the proposition that the territorial sea should be coextensive with the continental shelf or that its breadth should be fixed at 200 miles. This diversity proves that international law has not, as yet, recognized the existence of any rule established by custom or by treaty stipulating a uniform breadth of the territorial sea for all countries. The present situation derives from the historical development of national practice in this field, which has always sought to safeguard the political and economic interests of the coastal State and to ensure the freedom of navigation and fishing. The right of coastal countries to establish the breadth of their territorial sea was confirmed by the decision of the International Court of Justice of 18 December 1951 in the *Anglo-Norwegian Fisheries Case*.¹⁸

The International Law Commission's draft very rightly recognizes the institution of a contiguous zone, which permits the coastal State to assert, outside its territorial sea, certain clearly defined rights against foreign ships. However, the draft concedes to the coastal State only such rights as are necessary for the protection of its customs, fiscal and sanitary interests. This formula does not take into account the recognized practice of a number of States which have established a contiguous zone for the additional purposes of coastal defence and safeguarding their security, which are matters of considerable importance to States with a narrow belt of territorial sea.

It should be recognized that in the contiguous zone the coastal State enjoys the right to make provision for

¹⁸ *I.C.J. Reports 1951*, p. 116.

its coastal defence and security in the same manner as it is entitled to protect its customs, fiscal and sanitary interests. The validity of this argument is borne out by the time-honoured practice of a number of countries and by the opinion of learned authors on international law.

For States which base their economic system on socialist State ownership, the immunity of State-owned ships is an important matter. Economic activity, including the commercial operation of ships constitute one of the essential functions of the socialist State. That activity should therefore enjoy the same protection as is extended to all other official State activities and any commercial vessel performing economic functions which is the property of a socialist State should be considered immune.

The principle of the immunity of State-owned property should be recognized as a rule of international law which is supported by numerous decisions of municipal courts. The immunity of State ships operated for commercial purposes is especially important at a time of coexistence of countries with different economic systems. The principle of the immunity of those ships becomes one of the fundamental elements of the peaceful use of the seas.

The International Law Commission's draft does not recognize the validity of this principle in all of the maritime areas covered by the codification. State ships operated for commercial purposes have very rightly been recognized as immune on the high seas; there, they enjoy the same absolute immunity as warships. In the territorial sea, however, this just principle is said not to apply. As the draft stands, the special rules governing the rights of innocent passage of merchant ships and particularly those concerning criminal and civil jurisdiction apply also by virtue of article 22, to government ships operated for commercial purposes. In that respect, therefore, the proposed article 22 is open to reservations.

Some reservations must also be expressed with regard to the definition of piracy. The classical form of piracy committed for gain is now largely a thing of the past. The period between the two World Wars witnessed the appearance of new forms of piracy, such as the acts of piracy committed during the Spanish Civil War in the years 1936-1938 and those perpetrated in the China seas in recent years, the victims of which have included two Polish merchantmen. The definition adopted in article 39 does not cover these modern forms of piracy, which are expressly declared to constitute piracy in a number of international agreements.

The Polish Government also has certain misgivings regarding some of the rules on the protection of the living resources of the sea and reserves its right to submit concrete proposals thereon at the forthcoming Conference.

These preliminary comments are submitted without prejudice to the position of the Government of the Polish People's Republic at the Conference itself. Furthermore, the Polish Government reserves its right to state its view both on the questions mentioned above and on other points.

16. Sweden

LETTER FROM THE MINISTRY OF FOREIGN AFFAIRS
OF SWEDEN, DATED 31 AUGUST 1957

[Original: French]

The views of the Swedish Government on the earlier versions of the International Law Commission's draft were communicated in its three letters of 7 May 1953,¹⁹ 12 April 1955²⁰ and 4 February 1956.²¹ While still adhering to the opinions stated in those communications, the Swedish Government wishes to make the following additional comments on some of the articles of the final draft.

Article 3

In its earlier communications mentioned above, the Swedish Government contended, and is still of the opinion, that there is no uniform measurement of the territorial sea applying equally to all States, but that certain limits established by practice are nevertheless generally accepted and cannot be exceeded without violation of the principle of the freedom of the seas. The Swedish Government is of the opinion that the principal traditional limits of the breadth of the territorial sea are those of three, four and six nautical miles, which have all been claimed by different countries for many years. The Swedish Government itself has maintained the four-mile limit since 1779.

The Swedish Government does not consider that a general limit of twelve miles is justified by international law. It supports the solution proposed by Mr. J. P. A. François, the Special Rapporteur, in his first report on the territorial sea (A/CN.4/53) viz. that the territorial sea of a coastal State cannot be extended beyond six miles. A maximum limit of six miles would not only be consistent with international practice but, in the Swedish Government's view, would also eliminate the risks of an infringement of the principle of the freedom of the seas by certain States claiming an exaggerated extension of their territorial limits.

Article 5

The wording of this article has also been fully commented on by the Swedish Government in its earlier communications. The Swedish Government tried to show, in particular, and again wishes to stress, that the notion of internal waters is, first and foremost, geographical. The expression "internal waters" means the stretches of the sea which are so closely linked to the land domain that they can be assimilated thereto. This has certain immediate consequences in law. By reason of the homogeneity of these waters and the land domain the two are governed by the same rules. Consequently, there can be no right of innocent passage in internal waters, as there is in the territorial sea; and it

¹⁹ A/CN.4/71/Add.1.

²⁰ *Official Records of the General Assembly, Tenth Session, Supplement No. 9 (A/2934)*, p. 37.

²¹ *Yearbook of the International Law Commission, 1956, vol. II (A/CN.4/SER.A/1956/Add.1)*, p. 70.

is also self-evident that the straight baselines which constitute the outer limits of internal waters must, in the same way as the land domain, serve as points of departure for the delimitation of the territorial sea.

The International Law Commission's draft, however, although essentially based on these principles, also states that account may be taken, where necessary, of the economic interests of the coastal population. The Swedish Government stressed in its communication of 4 February 1956 that it considers this provision in the draft to be very debatable. If the aim is to serve the interests of the coastal fishermen or, more exactly, to favour the fishermen of one coastal State at the expense of the fishermen of other coastal States, a more satisfactory solution would seem to be to provide in explicit terms for what is intended in the final analysis: namely, an extension of the outer limits of territorial waters.

In addition, the Swedish Government has certain reservations regarding the rule proposed by the Commission under which baselines may not be drawn to and from drying rocks or drying shoals. Such features are used in certain instances for the drawing of the baselines of the Swedish territorial sea and any change in the present system would create some difficulties. The Swedish Government believes that the imposition of such a rule is not warranted and would, therefore, prefer to see the draft amended to state that baselines may be drawn to and from such features. This amendment would have the further advantage of bringing the article in question into line with the corresponding provisions of article 11, which states that drying rocks and shoals which are within the territorial sea may be taken as points of departure for measuring its extension.

Articles 51-53, 55, 56, 57, 58

As regards the régime of the high seas envisaged in the Commission's draft, the Swedish Government wishes, in the first place, to stress that it regards the introduction of measures for the conservation of the living resources of the high seas as absolutely essential. It is, accordingly, prepared to endorse the principles stated in *articles 51 to 53* of the Commission's draft. It is constrained, however, to object strongly to *article 55*, which provides that the coastal State may adopt unilateral measures affecting fishing in any area of the high seas adjacent to its territorial sea. In certain circumstances, those measures would even be binding on other States.

In the opinion of the Swedish Government, there is no reason whatsoever for granting to the coastal State, any more than to any other State, the right to take measures for the regulation of fishing outside the limits of its territorial sea, that is to say in free waters. On the high seas, the right to engage in fishing is enjoyed on a footing of equality by the nationals of all States. This principle is indeed recognized in *article 55*, for it states that the special measures which may be adopted by the coastal State on the high seas must not discriminate against foreign fishermen. In any case, the Commission's draft contains in *articles 51 to 53*, several provisions regarding the measures to be taken for the conservation of the stocks of fish in the high seas. Since these provisions apply to the sea up to the limits of the territorial sea of the States concerned, including, therefore, the maritime areas situated near to the coast, those

areas would be subject to two sets of rules: those set forth in *articles 51 to 53* and those contained in *article 55*. This would inevitably create difficulties, particularly as no provision delimits the maritime area in which the coastal State is competent to take measures in pursuance of *article 55*. The Swedish Government considers that the provisions set forth in *articles 51 to 53* are fully adequate in themselves, especially in view of the fact that every coastal State may take advantage thereof, on the condition that its nationals engage in fishing; and furthermore, if that State has a special interest in the conservation of the living resources of an area adjacent to its territorial sea, the provisions set forth in *article 56* seem to provide the necessary safeguards and to render *article 54* superfluous.

The Swedish Government is consequently not disposed to accept the content of *article 55*. Considering, however, that some States which favour the adoption of that article refuse to accept the arbitral procedure described in *article 57*, the Swedish Government wishes to add a few comments on that last point.

The fishing regulations which a coastal State would be able to enact under *article 55* would affect maritime areas which would nevertheless continue to be governed by the principle of the freedom of the seas. The right of the coastal State to enact regulations of this kind has naturally been made subject to certain conditions, such as the production of scientific evidence showing an urgent need for such measures and the obligation to ensure that they do not discriminate against foreign fishermen. If those conditions remain unfulfilled, the coastal State is not entitled to take the measures in question. The onus of proving that the required conditions are fulfilled should therefore lie on the coastal State which has taken the measures, and other States are obviously not bound to accept the statements of the coastal State unless they are fully substantiated. Hence, it seems reasonable that these other States, in so far as they do not desire to acquiesce in the measures taken by the coastal State in pursuance of *article 55*, should not be obliged to comply with them until an impartial tribunal has ruled that the conditions specified in the article are fulfilled. That is why the Swedish Government believes that the enactment of any regulations in conformity with the ideas contained in *article 55* is only conceivable if there exists a system of arbitration such as that provided for in *article 57*. A system of that kind should, however, be rounded off (with a consequential amendment in *article 58, paragraph 2*) by a provision stipulating that a State which has referred a dispute to an arbitral commission should not be bound to observe the measures adopted until that commission has given its decision. This comment is equally applicable to the measures specified in *article 53* of the draft.

Finally, the Swedish Government considers that there may be some contradiction, in *article 57*, between, on the one hand, the period of three months specified in *paragraph 2*—which states that, failing agreement on the choice of the members of the arbitral commission, they shall be nominated by the Secretary-General of the United Nations after consultation with certain other functionaries—and, on the other hand, *paragraph 5*, which stipulates that the arbitral commission shall in all cases be constituted within three months. This would

seem to leave the Secretary-General no time for his consultation.

Article 66

This article deals with the right of a coastal State to take certain measures of control in a twelve-mile zone of the high seas contiguous to its territorial sea. The Swedish Government, in its earlier communications, expressed its objections to a provision of this kind, pointing out that it had no support in international law. The Swedish Government still adheres to that opinion and wishes to repeat that, in the past, States wishing to exercise control over foreign vessels beyond their territorial limits concluded treaties with the foreign States concerned in order to obtain the necessary power (e.g., the so-called United States Liquor Treaties or the Helsingfors Treaty of 1925 between the Baltic States).

Articles 67-73

As regards the provisions concerning the continental shelf, the Swedish Government also wishes to refer to the opinion which it expressed before and which, according to article 69, the Commission apparently shares, namely, that the principle of the high seas must prevail even in the epicontinental waters and that the question of the continental shelf cannot be linked with that of the breadth of the territorial sea. The Swedish Government has admittedly expressed its readiness to accept certain rules designed to facilitate exploitation of the natural wealth of the continental shelf. It is nevertheless opposed to the suggestion that the rights which are conceded to the coastal State for this purpose should be described — as they are in article 68 — as “sovereign rights”. The exercise of sovereign rights over the shelf by the coastal State might, among other things, impede free scientific research, such as that carried on in the interests of fishing at the bottom of the sea and in the sedimentary deposits. In addition, the Swedish Government would like the right of the coastal State to exploit the continental shelf to be restricted to the exploitation of inorganic natural resources. The Swedish Government would thus welcome a provision excluding from the application of articles 67 to 73 all forms of fishing and all exploitation of the organic wealth of the continental shelf. If the principle of the freedom of the seas is to be respected, such exploitation must remain open to the nationals of all States.

In the above comments, the Swedish Government has concentrated on certain specific provisions of the International Law Commission's draft which seem to deserve particular attention. It wishes to state, however, that it may propose certain amendments or additional provisions at the forthcoming conference.

Finally, the Swedish Government would like to state its position on the General Assembly's wish as expressed in the relevant resolution, that, besides dealing with the questions appearing in the International Law Commission's report, the conference should also consider the question of the free access to the sea of land-locked countries. As the International Law Commission has made no proposal on this subject, and there is thus, as yet, no basis of discussion to assist the conference in dealing with it, certain difficulties are apt to arise. Even at this stage, however, the Swedish Government wishes

to point out that the question seems to belong in a field which is governed by several conventions concluded under the auspices of the League of Nations: the Convention and Statute on Freedom of Transit and on the Régime of Navigable Waterways of International Concern, signed at Barcelona on 20 April 1921; the Declaration recognizing the Right to a Flag of States having no Sea-coast; and the Convention on the International Régime of Maritime Ports, adopted at Geneva on 9 December 1923. If these conventions should be considered insufficient, they could, in the Swedish Government's opinion, serve as a point of departure for any supplementary agreement which the conference may decide to prepare.

17. United Kingdom of Great Britain and Northern Ireland

TRANSMITTED BY A NOTE VERBALE FROM THE PERMANENT MISSION OF THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND, DATED 20 SEPTEMBER 1957

[Original: English]

I. Introduction

Her Majesty's Government consider that the International Law Commission's report constitutes a valuable piece of work which will contribute materially towards the conclusion of possible conventions or other instruments on the law of the sea. They believe that, in the necessary spirit of general co-operation, agreements on such a result can be reached, and that it would in its turn materially contribute to diminishing international friction.

In the opinion of Her Majesty's Government, the true interests of all nations are best served by the greatest possible freedom to use the seas for all legitimate activities. From this point of view increasing encroachments on areas which should properly be regarded as high seas cannot but be matters of serious concern.

Many problems connected with the law of the sea are in the first instance problems of definition. This is particularly so in respect of the outer limits of the territorial sea, international boundaries for the territorial sea, and the international boundaries of contiguous zones and the continental shelf. Ideally, these definitions should be subject to precisely defined and agreed rules of hydrographic procedure, so that the competent authorities all over the world will be able to produce the same results in drawing particular limits or boundaries on charts.

II. Comments on the draft articles

These comments should not be taken to mean that Her Majesty's Government are necessarily fully satisfied with articles not commented on.

Article 3

Her Majesty's Government wish to draw attention to the comments they have already made on this article

and, in particular, to emphasize that the determination of the breadth of the territorial sea is a matter which is governed by international law, so that the limits of its territorial waters cannot be fixed by each State at its sole discretion. They believe that a uniform solution of this problem is necessary. A solution on a regional or local basis, which would result in varying limits of territorial waters in different parts of the world would not only lead to great practical difficulties, but would only serve to perpetuate existing uncertainties, and would undoubtedly lead to the whole question being thrown open again in a few years time.

As regards the question of breadth, wide extension of the limits of territorial waters cannot but prejudice the principle of the freedom of the seas, since any such extension must impinge on the free availability of the seas for the common use of mankind. The only uniform limit which has received a wide measure of recognition (from the practice of States, the decisions of international tribunals and the opinion of other authorities) is that of a three-mile breadth of territorial waters. Any extension of territorial waters beyond that limit must give rise to difficult problems. There is, for example, the problem of straits; any extension of territorial waters beyond the three-mile limit would be likely to make a number of straits wholly part of the territorial waters of the riparian State or States, and in some cases might result in existing high seas becoming entirely territorial waters. A more serious result would ensue where the high seas at either end of the strait disappeared into territorial waters so that the strait lost its character of an international strait joining two parts of the high seas.

A second aspect of any extension of territorial waters is that it would extend the area in which the coastal State would be able to exercise jurisdiction over the merchant vessels of other States, with a possibility of resultant delays and hindrances to the freedom of navigation. Thirdly, any such extension cannot but affect freedom of air navigation, since it will affect the area claimed by States as the air space above their territories. Fourthly, there are practical problems which would arise from any extension of territorial waters, and would particularly affect the smaller vessels of all countries. For instance, a limit of more than three miles would make it more difficult for small fishing vessels accurately to fix their position from the shore; and radar and lighthouses will, because of increased distance, be less effective as aids to navigation.

The arguments that are advanced in favour of more extended limits of territorial waters, and sometimes in favour of varying limits for different States, are based on the existence of problems which, it is believed, can be more satisfactorily resolved by other means. The development by a coastal State of the resources of the sea bed and subsoil of the continental shelf can take place without any extension of territorial waters, and the problems arising from the necessity of conserving fisheries adjacent to territorial waters can best be solved by international agreement, taking account of the varying circumstances of the fisheries and directed to particular needs, and not by an extension of the limits of territorial waters. For customs and fiscal purposes the establishment of a contiguous zone beyond a three-mile limit of territorial waters, and extending for not more

than twelve miles from the coast, would meet all reasonable needs of the coastal State.

Article 5

Straight baselines

Certain phrases used in this article appear to be insufficiently precise, and so to give rise to difficulties. For example, the phrase "where there are islands in its [the coast's] immediate vicinity" could be used as justifying the use of straight baselines to join the coast to single isolated islands, whereas the decision of the International Court of Justice on the Anglo-Norwegian Fisheries Case was based on the existence of a continuous island fringe along the stretch of coast concerned. Furthermore, as this article reads at present, it would seem to mean that if there are any islands off a coast, a straight baseline system "joining appropriate points" may be used along the whole coast. A more precise wording seems therefore to be required to ensure that the straight baselines are drawn only in order to join the natural entrance points of the "deep indentations" and between the natural entrance points of the straits formed in a string of islands lying close off shore.

It is also considered that the requirement, which was one of the conditions laid down by the International Court in the Fisheries Case, that straight baselines should only enclose waters strictly *inter fauces terrarum*, should be introduced into this article in order to ensure that the baselines are not automatically jointed from headland to headland, and that, when dealing with strings of islands, the lines are not invariably used to join the outermost point of one island to that of another.

The article also states that the baseline must not depart to any appreciable extent from the general direction of the coast. There is, however, no guidance on how this expression is to be interpreted; this would appear to be essential before baselines can be drawn on charts. The most practical way of ensuring that baselines do not depart from the general direction on the coast would appear to be to place a limit on their maximum length, a limit which might correspond to that which may be agreed upon for the closing of bays, and to ensure that no base point isolated from the true coastline is used in the straight line system.

Internal waters

The article also states that the sea areas enclosed must be sufficiently closely linked to the land domain to be subject to the régime of internal waters. The International Law Commission was not able to examine closely the problems involved in defining internal waters, and a satisfactory assessment of the justification of straight baselines along a particular coast will therefore depend on a fuller definition of internal waters than that provided in the commentary to article 26.

There would seem to be advantage in including in article 5 itself the point made in paragraph 7 of the commentary, *i.e.*, that straight baselines may be only drawn between points situated on the territory of a single State.

Article 7

In paragraph 1 of this article, it is not clear as regards

the criteria for deciding whether an indentation is a bay or a curvature of the coast, whether, in determining the area to be assessed, the boundary at the landward end is to be by the high-water or the low-water mark. There would seem to be advantage in using the low-water mark. In paragraph 3, no mention is made as to whether the closing line is to be measured between high-water marks or low-water marks; again, it would seem preferable to select a low water mark.

In the same paragraph, the maximum length of the closing line is stated to be fifteen miles. This is considered to be too great. There are many practical arguments in favour of a ten-mile closing line. Even if the view is accepted that the ten-mile rule had not acquired the authority of a general rule of international law, it can nevertheless be justified both by historical practice and by the fact that it can more easily be related to the range of vision at sea.

In paragraph 4 of the article, the words following "historic bays" require modification. As at present drafted, they might be held to imply (although this is clearly neither the intention nor the practice) that all straight baselines can have a minimum length of fifteen miles. The conditions laid down by the International Court would clearly require, in many cases, and have already resulted in, much shorter baselines.

There would seem to be advantage in including in the article, as a separate paragraph, the statement in the second paragraph of the commentary that "islands at the mouth of a bay cannot be considered as 'closing' the bay if the ordinary sea route passes between them and the coast".

Article 21

Her Majesty's Government have recently passed the Administration of Justice Act, 1956, for the purpose of implementing the Brussels Convention of 1952 for the Unification of Certain Rules relating to the Arrest of Seagoing Ships, and is on the point of ratifying the Convention. Her Majesty's Government could not therefore accept a further international instrument covering the same ground. To accept the article as it stands at present drafted would, in any case, be impossible because it does not agree with the terms of the Convention. Paragraph 2 of the article, which sets out the circumstances in which a ship may be arrested for the purpose of exercising civil jurisdiction, other than when it is lying in the territorial sea or passing through it after leaving internal waters, is drafted in such a way as not to coincide with the terms of the Convention. Paragraph 3 appears to remove every limitation of arrest in cases where a ship is lying in the territorial sea or is outward bound through it (the very circumstances in which such arrests usually take place). The arrest need not be limited, as in paragraph 2 of the article, to proceedings in respect of obligations incurred by the ship itself, or for the purpose of its voyage. The provision that a State may effect such an arrest in accordance with its laws gives support to indiscriminate arrest under local laws, and could therefore cause disproportionate dislocation and inconvenience to ships; the whole of paragraph 3 is inconsistent with, and would defeat the purpose of, the Brussels Convention.

Article 26

In paragraph 2 of the commentary to this article, reference is made to large stretches of water entirely surrounded by land, and the succeeding sentence states that "such" stretches of water, when they communicate with the high seas by strait or arm of the sea are considered as internal seas. A small drafting change would seem to be required here, since seas cannot communicate with the high seas at all if they are entirely surrounded by land. In any case, a clearer definition of the distinction between a gulf and an internal sea may be desirable.

Article 34

The subject of this article is already covered in international agreements to which Her Majesty's Government, together with nearly all other maritime States, are already party. These international agreements are:

International Regulations for Preventing Collisions at Sea, 1948;

The International Convention respecting Load Lines, 1930;

The International Convention for the Safety of Life at Sea, 1948.

They cover their subjects fully and to the greatest practical degree and make provisions for amendments to keep them up to date and abreast of new developments and techniques. Even so, they do not go so far as the draft articles in some respects. They do not, for example, regulate the actual construction of cargo ships, but control it indirectly by means of regulations relating to load-lines and seaworthiness. The need to control the construction of cargo ships has not yet been proved and is certainly not pressing. It is not possible even for the United Kingdom, who have a long experience and high standards on the subject, to embody every aspect of seaworthiness in regulations.

As regards paragraph (b) of the article, the United Kingdom could not sign or accept a Convention containing this provision. Although the Government ensure by regulation that British ships shall observe certain minimum standards of food and accommodation for their crews, the conditions under which masters, officers and men are employed are a matter for the shipowners' and seafarers' organizations and are not the subject of government regulations. Even as a statement of general principle, the commitment to internationally accepted standards or to reasonable labour conditions is too vague to be practicable when it has to be undertaken as part of a binding international instrument. The United Kingdom has never found it practicable or desirable to legislate as to the adequacy of a ship's crew, but maintains a sufficient control by means of the power to detain a ship which is unseaworthy as a result of undermanning.

Article 35

As regards paragraph 2 of the commentary on the article, it should be noted that damage to an installation on the continental shelf necessary for the exploration and exploitation of natural resources (article 71) can equally be considered "an incident of navigation".

Articles 35, 36 and 48

The subject matter of these articles is either wholly or partly dealt with in existing conventions. Where this is the case it is questionable whether it should be done again.

Article 47

This article, in allowing hot pursuit from the contiguous zone, ignores the status of the zone as high seas. It is considered that the right of hot pursuit should be permitted only from within the territorial sea.

Articles 49-60

Her Majesty's Government welcome in principle this set of articles and consider that they should provide a basis for future agreements and allay the often legitimate fears of States for the conservation of marine resources alike in coastal waters and in the deep seas. They would agree without reserve with these basic propositions which the articles embrace :

(i) That fishing activities upon any marine resource should be regulated where this is needed for conservation purposes ;

(ii) That all States fishing any marine resource on the high seas should be required to seek agreement upon any conservation measures that may be required ;

(iii) That a State newly entering a high seas fishery should be initially bound by any measures of conservation already in force ;

(iv) That a State which is a coastal State in relation to any high seas fishery, whether or not it is currently engaged in that fishery, should be enabled to participate on an equal basis with other States in any plan of research or system of regulation of the fishery for conservation purposes.

Her Majesty's Government accept in principle the requirements that where States have failed to reach agreement on any issue arising from the above propositions they should resort to arbitration of an appropriate character which shall be binding upon them. Speedy arbitral decisions would, however, be essential, as unsettled controversy over the conservation of marine resources may, if at all prolonged, easily bring about loss to the fishermen as well as damage to the resource. Her Majesty's Government are therefore glad to note the proposals for short time-limits in respect of action upon a respect for arbitration, the constitution of a commission to consider the disagreement, and the rendering of the arbitral decision. These would be the more essential in the event of its being considered possible to give the coastal State a right to take unilateral measures of conservation which could only be upset by subsequent arbitration, and the commission deciding not to suspend the measures of the coastal State pending its arbitral award as article 58 would empower it to do.

Articles 54, 55 and 58 are designed to meet what are understood to be the particular needs and fears of the coastal State in regard to the safeguarding of the living resources of the sea. Her Majesty's Government recognize that both the needs and the fears may be material whether or not the coastal State has yet begun

to share in the harvesting of those resources ; this recognition is the keener because Her Majesty's Government are themselves responsible for the interests of many such territories which are now engaged in expanding their fishing industries in order to augment their food supplies. At the same time, Her Majesty's Government consider that these articles require much further study from various technical fishery aspects before it can be judged whether, and if so in what circumstances, an acceptable formulation can be devised for the fundamentally new principle which is proposed, namely, that individual States may apply measures, and on the high seas, that are operative against other interested States without their agreement and in advance of arbitration on the merits of the measures in question.

Among the technical fishery aspects requiring study are these :

(a) There is an implicit assumption that stocks of marine resources are capable of localized definition. But fish, and other marine resources, have migratory movements extending over great distances. A stock may be local to a particular State at one period of the year, and local to another State, or entirely oceanic, at other periods. To confine the action of a coastal State to "any area of the high seas adjacent to its territorial sea" may make that action quite ineffective ; to permit its extension further may be demonstrably unwarrantable. There will be a wide range of circumstances, depending on the species or stock of the marine resource in question, and it is by no means clear under article 55 where the line could be drawn beyond which unilateral conservation was not permissible.

(b) There is an implication that the coastal State is always confronted by a wide expanse of ocean. That may not be the most usual situation. Many countries are grouped around the margin of seas — the Baltic, the Mediterranean and the North Seas are examples in Europe and there are others elsewhere — which may be small in area. This reality has to be taken into account along with the migratory characteristics of fish and other marine resources. The conclusion would seem inescapable that in many parts of the world there will be several countries in a given area which might properly regard themselves as coastal States within the compass of article 55, and which might take conflicting unilateral action. This could well bring about a state of chaos in the fisheries.

(c) There are many international conservation bodies in existence for specific areas, or for certain kinds of marine resources, which have conservation programmes in operation and of which coastal States concerned have or can become members. The position of these bodies in relation to the proposed articles seems to require definition.

(d) Under article 55, the unilateral measures of a coastal State would apply to other States, in advance of reference to arbitration, if the stated requirements were fulfilled, and would remain obligatory upon all pending the arbitral decision. If this is to be an effective provision, the implication exists that not only should other States concerned undertake to see that their nationals observe the measures in question, but also that the enforcement of those measures should be supervised, particularly on the high seas. The questions arise, by

whom should the measures be supervised, and whether the other States affected would be expected or required to enforce against their own nationals the unilateral measures of the initiating State from which they might dissent, and over which they might be intending to go to arbitration. Alternatively, it may be asked whether it is intended that the State introducing the unilateral measures should be entitled to enforce them against vessels of other flags on the high seas. Her Majesty's Government would observe that agreement on the collective or the international enforcement of fishery conservation measures has so far been slow in forthcoming, and that the possibilities for the unilateral enforcement of controversial measures would not appear promising.

Article 67

The last phrase of this article is somewhat ambiguous, in that this may refer to detached parts of the shelf with depths of less than 200 metres situated beyond the shelf immediately adjacent to the coast with depths greater than 200 metres intervening. This is particularly so in view of the alternative meanings of the words "adjacent" and "contiguous" which, beside meaning "lying alongside" and "touching", may also have the sense "neighbouring" or "in close proximity to". It is appreciated that the question of "detached parts" is covered by paragraph 8 of the commentary on this article, but the final article itself should make it clear that "detached parts" are exceptions to the general rule, since this is a matter of substance rather than of comment.

Article 69

It is considered that the intention of this article could be more clearly expressed by substituting the phrase "in no way affect" for "do not affect".

Article 71

Paragraph 2 of the article refers to the establishment of "reasonable safety zones", without qualifying the breadth of the safety zone itself. It is felt that it would be preferable to include in the article a stated breadth, at present only included in the commentary. The article should also include the provision contained in paragraph 5 of the commentary, that abandoned or disused installations must be entirely removed.

Article 72

The description of the median line contained in paragraph 1 and 2 of this article could, it is believed, be better expressed as "every point of which is equidistant from the nearest point on the baselines from which the width of the territorial sea is measured".

This rendering conforms to that in articles 12 and 14.

It is suggested that a further clause be added to the effect that the median lines be permanently marked either on the ground or on charts or be fully described in relation to fixed marks on the ground. Coast lines, and thus the baselines for measuring the width of territorial waters, are liable to alter in the course of time. Boundaries through continental shelves should not be susceptible to any movement depending on nature.

Proposals for additional provisions

Her Majesty's Government believe also that there are the following problems of a technical nature which the International Law Commission did not deal with, and which might usefully be studied at the International Conference.

(a) The question of access to ports which can only be reached by traversing the territorial waters of another country;

(b) The division of territorial waters in bays where the coasts belong to two or more States, mentioned by the Commission in paragraph 7 of their commentary on article 7;

(c) The limits of territorial waters of ice-bound coasts;

(d) The use of "methods of equidistance" in the drawing of median lines, etc.;

(e) The selection of charts for the drawing of boundaries between adjacent and opposite States. Article IV specifies "large-scale charts officially recognized by the coastal State"; but in boundary problems at least two States are involved and their "officially recognized" charts may not agree;

(f) International boundaries through the contiguous zone. The Commission referred to this in paragraph 8 of their commentary in article 66; cases are not as exceptional as they suggested;

(g) The account to be taken of islands in dividing the continental shelf between adjacent or opposite States. For example, a small island may lie near the centre line of a gulf, the whole of which forms part of the continental shelf. If this island should be used as a base point of measurement for one State or another, the median line would be switched from the centre of the gulf to a position nearly three-quarters of the way across it.

(h) The division of wide continental shelves or oceans by the method of the median line a simple drawing method should be devised since all "legs" of the median line as well as distances from them to be baselines for measurement form parts of "great circles".

Land-locked States

This is an important problem to which Her Majesty's Government are devoting careful and sympathetic attention, but they are not yet in a position to comment on it.

18. Netherlands²²

LETTER FROM THE PERMANENT MISSION OF THE NETHERLANDS TO THE UNITED NATIONS, DATED 17 OCTOBER 1957

[Original text: English]

General

The Netherlands Government has carefully studied the final draft of the International Law Commission on

²² Circulated as document A/CONF.13/5/Add.1, dated 7 November 1957.

the law of the sea as embodied in chapter II of the report of the Commission on the work of its eighth session (A/3159). The Netherlands Government is grateful to the Commission for its efforts to bring more precision and clearness into the various rules and guiding principles in the domain of the law of the sea. In doing so the Commission has made good use, in particular, of the results of the 1930 Codification Conference held at The Hague and of various international technical conferences (e.g. the Conference on the Conservation of the Living Resources of the Sea held at Rome in 1955). At the same time, it has consistently based itself on the views of the Governments and experts consulted, while taking into account the observations of the specialized agencies and of other inter-governmental as well as non-governmental bodies concerned, thus bringing many problems connected with the codification and development of the law of the sea considerably nearer to a formulation acceptable to all nations concerned. That is why the Netherlands Government — as has already been stated by the Netherlands representative in the Sixth Committee at the eleventh session of the General Assembly — considers the final report of the International Law Commission on the law of the sea to be an excellent basis for discussion at the conference to be convened in accordance with General Assembly resolution 1105 (XI).

In view of the disturbing tendency on the part of certain States to issue regulations unilaterally in disregard of the interests common to all nations, as expressed in the universal rule of the freedom of the high seas, the Netherlands Government considers it to be essential that rules of international law should soon be established or reaffirmed on these matters, together with adequate guarantees for their effective implementation. The Netherlands Government is confident that the conference will succeed in making a substantial contribution towards this end.

The Netherlands Government has noted with satisfaction that a number of observations made in its earlier comments have been taken into account in the present draft. For the sake of convenience, the earlier written comments made by the Netherlands Government have, in so far as they are still applicable, been included in an abridged form among the comments on the latest version of the draft articles. The following comments therefore give a provisional summary of the Netherlands Government's views on the entire draft of the International Law Commission.

Comments on the draft articles

Article 2

This article should be incorporated in paragraph 1 of article 1 in order to make it clear that the qualification laid down in paragraph 2 of article 1 also applies to what is now article 2 of the draft.

Article 3

This article deals with two important matters, namely: (1) the uniformity of the delimitation of the territorial sea along all coasts and (2) the breadth of the territorial sea.

1. The Netherlands Government agrees with the

International Law Commission that it is the task of the conference to fix a uniform breadth of the territorial sea. Only in very exceptional cases where this is justified by history and customary law should it be permitted to the conference to depart from this general rule and to fix a breadth greater than three miles for clearly specified coastlines.

2. The Netherlands laws and regulations on the matter are based on the rule of a three-mile limit to the territorial sea. In the Netherlands Government's view this breadth is the only acceptable one and the only one recognized by international law. The freedom of the seas is a universal and fundamental rule; departures from this rule, such as the sovereignty of the coastal State over territorial waters, can only result from another generally accepted rule of equal authority. As has been rightly pointed out, no such rule exists beyond the principle that three miles is the breadth of the territorial sea. No extension of the territorial sea beyond the three-mile limit has received unquestioned acceptance as being allowed by the rules of international law.

The Netherlands Government has noted that the Commission seems in its latest report to be at first sight a little less definite about the three-mile limit than in its earlier reports. In 1955, the Commission stated in paragraph 3 of article 3 that "international law does not require States to recognize a breadth beyond three miles".²³ In the latest draft (para. 3) it is only stated that "many States do not recognize such a breadth (*i.e.*, extending beyond three miles) when that of their own territorial sea is less". But this statement should be read in conjunction with the Commission's commentary, in particular where it is said (para. 4, last sentence): "the Commission... declined to question the right of other States not to recognize an extension of the territorial sea beyond the three-mile limit". In other words, as long as no agreement has been reached on any such extension of the territorial sea limit, there is, according to the Commission, which has in fact reaffirmed its opinion of 1955, no obligation to recognize the legal consequences of an extension of its sovereignty by a State over parts of the sea which other States are entitled to regard as belonging to the high seas. The Netherlands Government firmly adheres to this view.

Obviously, the basic principle of the free availability of the seas for the common use of all mankind does not exclude taking into account the legitimate interests of coastal States with regard to the exploitation of the seabed and its subsoil, the conservation of the living resources of the sea, customs, fiscal and sanitary regulations, etc. In order to satisfy these special needs the International Law Commission has formulated several proposals in respect of the continental shelf, fisheries, the "contiguous zone", etc. which, in the opinion of the Netherlands Government, may pave the way to a codification of the régime of the high seas, thus providing satisfactory solutions to the problems indicated and affording an acceptable balance of all interests involved. The Netherlands Government considers this approach to be more in line with the concepts of inter-

²³ Official Records of the General Assembly, Tenth Session, Supplement No. 9 (A/2934), p. 16.

national law than the extending of the limits of the territorial sea belt.

The problem of striking a balance between the special interest of the coastal State and the general interests of all seafaring peoples is one that concerns all nations. A general and universally acceptable agreement should be arrived at which would provide the only means of putting an end to present unilateral practices. No effort should be spared to arrive at such a solution, and the Netherlands Government therefore welcomes any further efforts by the conference to create order in the present rather chaotic situation by formulating proposals to this end.

Article 5

The Netherlands Government regards it as an improvement that the article is now so worded that the method of the straight baselines is not justified if applied solely for the protection of economic interests.

The Netherlands Government further welcomes the addition of the third paragraph to the article which provides the necessary guarantee that existing rights of passage are not to be encroached upon by application of the straight baselines system.

Because disputes may easily arise when the provisions of this article are applied in actual practice, it would seem desirable to provide for a system for the settlement of disputes regarding this matter. (See also the comments on article 73 on the desirability of a system for the settlement of disputes with respect to any of the provisions of the draft.)

Article 7

A study on the width, location, etc., of existing bays would be of great assistance in deciding upon the most appropriate width for determining the extent of the internal waters in bays. In this respect the Netherlands Government would like to reserve its position.

Furthermore the Conference will have to draw up rules applicable to the status of what are called international bays, i.e. bays the coasts of which belong to more than one State. According to paragraph 7 of the commentary, the International Law Commission refrained from drawing up rules with regard to this question. The Netherlands Government would, without committing itself as to the place where they should eventually be incorporated in the draft, suggest the following rules:

"1. Without prejudice to the status of those parts of gulfs and bays which are to be deemed parts of the high seas, there must be no suspension of the right of innocent passage of foreign ships through gulfs and bays the coasts of which belong to more than one State, in so far as these ships are proceeding to or from foreign ports situated on those gulfs and bays.

"2. The gulfs and bays referred to in the preceding paragraph shall include the straits connecting them with the high seas, however narrow the entrance may be."

Article 11

The Netherlands Government understands the words "as measured from the mainland or an island" to mean that the extension of the territorial sea permitted in this article may be resorted to only once so that any drying

rocks or drying shoals lying within this extension shall not again be taken as points of departure for fresh extensions.

Article 12

The Netherlands Government accepts the system of "the median line" as a basis for delimiting the territorial sea between States the coasts of which are opposite each other at a distance less than the sum of the breadths of their respective territorial sea belts. Further, it is, for the same reason as stated in the comments on article 5, considered to be desirable that provision be made for the settlement of disputes which may arise in connexion with the application of article 12. (See also comments on article 73.)

Article 14

The Netherlands Government wonders whether the rules contained in this article also purport to provide a solution for such complicated questions as may arise in cases where at the frontier between two States a river flows into the sea.

Article 15

As in this article, except in the first and the last paragraph, "innocent passage" is defined rather than "the right of innocent passage" (the latter being substantially defined in article 16 f.f.), a more logical title of this article would be "Meaning of innocent passage". The first and the last paragraph would then have to be grouped together in a separate article preceding article 15. Furthermore, a clearer wording of the article would result if the order of paragraphs 3 and 4 were reversed.

Article 17

The Netherlands Government would suggest that to paragraph 4 be added: "or between one part of the high seas and the territorial sea of a foreign State".

Article 21

The same subject-matter has been included in the Brussels Convention of 10 May 1952, relating to the arrest of sea-going ships. It is to be recommended that, in any convention to be concluded, the relationship between that convention and the Brussels Convention be clearly stated.

Article 24

The Netherlands Government would wish to see the wording of article 26 (paras. 1 and 2) of the report of the International Law Commission of 1954 restored. The Netherlands Government does not see any grounds for altering the earlier draft because, in its view, this draft fully met the requirements of actual practice. As far as the Netherlands is concerned this practice has never produced any difficulties. The argument advanced by the Commission for altering the existing text (point 2 of its commentary), namely "the passage of warships through the territorial sea of another State can be considered by that State as a threat to its security..." does not seem to have much validity since in cases of innocent passage, which in particular must comply with

the criteria laid down in paragraph 3 of article 15, such fears are obviously unjustified. Moreover, paragraphs 1 and 3 of article 17 and article 25 also afford sufficient guarantees to coastal States in this respect. Furthermore, to make the right of passage of warships through the territorial sea subject to previous authorization might endanger the safety of navigation and in particular in case of bad visibility, would make Coastal Navigation by means of bearings impossible.

Article 29

The new text of this article shows that the detailed observations made by the Netherlands Government on this matter in its previous comments have, in general, been taken into account. For instance, article 29 no longer lists some of the special conditions which ships have to fulfil in order to acquire the nationality of a certain State. It now only contains the principle that there must exist a genuine link between the State and the ship.

In the article it is stated that the above-mentioned condition must be fulfilled "for purposes of recognition of the national character of the ship by other States". The question now arises what legal consequences non-recognition of the nationality of a ship may have. In the text it might, *inter alia*, on the analogy of the decision of the International Court of Justice in the so-called "Nottebohm Case",²⁴ be explicitly stated that a State need not recognize claims by States whose flags are unlawfully flown in so far as these claims are based on the use of the flag (*e.g.*, the right to exercise jurisdiction). In so far as rules of international law are unrelated to the nationality of the ship they shall of course continue to apply. Thus, for instance, the penal jurisdiction of a State over all persons on board who possess its nationality shall not be impaired.

The Netherlands Government would, moreover, like to make the following observations on the wording of the article.

In the second sentence it is stated that "ships have the nationality of the State whose flag they are entitled to fly". It is not quite clear whether the drafters have wished to give an exhaustive definition of the concept of "nationality of ships". If such were the intention, only ships entitled to fly the flag of a certain State have the nationality of that State, thus excluding ships to which the right to fly its flag has not been explicitly granted by the regulations of the flag State. If the second sentence should indeed be interpreted as providing an exhaustive definition of the concept of "nationality", it is not clear why in the first sentence "nationality of ships" should be referred to as something separate from "the right to fly its flag". The question then arises what has been meant by "nationality" in the first sentence: solely a pleonasm, or a concept other than nationality in the sense of international law (for instance, for purposes of national legislation)?

Another possible interpretation of the second sentence is that it is at any rate beyond doubt that ships that have (explicitly) been granted the right to fly the flag of a

certain State possess the nationality of that State, but that it is not excluded that other ships also possess that nationality. For instance, there are no legal regulations in the Netherlands granting fishing craft the right to fly the Netherlands flag: they possess Netherlands nationality, but they have not been granted an exclusive right to fly the Netherlands flag, at least not by law. The rule, thus interpreted, may entail some practical difficulties, since it is precisely the flag—and a flag that foreign ships are by law not entitled to fly—which is the indication *par excellence* of a ship's nationality.

The Netherlands Government wishes to draw attention to the fact that in the first sentence it does not say "may fix the conditions" as in the previous draft, but "shall fix the conditions". This would mean that such States as have not yet exhaustively regulated the right to fly their flag will have to lay down additional legal provisions. If this is the case, the difficulties referred to in the preceding paragraph will make themselves felt to a less extent because the right to fly their flag is then laid down by law with respect to all their ships, which will make it impossible for other ships than those entitled to fly their flag to claim the nationality in question.

Consequently, the Netherlands Government is of the opinion that article 29 gives rise to a number of questions and that it will be desirable to arrive at a clearer wording of the text of this article in the course of a further exchange of views. The Netherlands Government would at any rate suggest that the phrase "the national character of the ship" in the last sentence of paragraph 1 be replaced by the term "nationality", which is used in the preceding sentence and to which the third sentence of paragraph 1 probably refers.

Furthermore, article 29 touches upon a highly controversial matter, namely, the practice of some States to grant great fiscal and other facilities to ships that register in these States without their having any links with them. This matter is viewed with concern in shipping circles in other countries. It is feared that if ships avail themselves of these facilities to an ever-increasing extent the competitive position of other countries will be undermined and that the lack of supervision by the flag State will be detrimental to the safety of navigation. The Netherlands Government is of the opinion that the conference will also have to investigate this matter. In this connexion, attention may be drawn to the fact that this matter is now being studied by, *inter alia*, the Maritime Transport Committee of the Organization for European Economic Co-Operation (OEEC). Pending the results of this study, the Netherlands Government does not deem it appropriate to enter into the matter any further at this stage.

Article 30

The Netherlands Government would suggest that the second sentence of this article be deleted. In the Netherlands Government's view, article 29 allows to withhold recognition to a *mala fide* change of flags. This provision also applies to a *mala fide* change should it take place during a voyage.

Article 33

The Netherlands Government maintains the view

²⁴ *Nottebohm Case (Second Phase), Judgment of April 6, 1955, I.C.J. Reports 1955, p. 4.*

expressed in its comments on the 1955 draft (article 8) that, as regards immunity, a distinction should be made between ships on commercial government service and ships on non-commercial government service. In the Netherlands Government's view, there is no reason why government vessels which are operated for purely commercial purposes should be assimilated, with regard to immunity of jurisdiction, to warships. In accordance with a general tendency in international law the immunity of foreign States is not recognized in so far as they act in a private capacity. In that connexion mention may be made of the convention and statute respecting the international régime of maritime ports, which was signed at Geneva on 9 December 1923, of the international convention for the unification of certain rules relating to the immunity of State-owned vessels, signed at Brussels on 10 April 1926, of the convention drafted by the Hague Codification Conference of 1930 and of article 22 of the present draft. The same tendency is revealed by the practice of States. Some Governments which for quite a long time have advocated the principle of an unlimited immunity of foreign States have recently changed their attitude (cf. *Bulletin of the Department of State*, Volume 26, 23 June 1952, p. 984). Other States, e.g., the Soviet Union, have concluded bilateral treaties in which the principle of a limited immunity was recognized.

Besides, in view of the fact that in some countries commerce and shipping are wholly in the hands of State-owned enterprises, the principle of unrestricted immunity would mainly benefit such States.

For these reasons the Netherlands Government would prefer, in accordance with the Brussels Treaty, the words "on government service, whether commercial or non-commercial" to be replaced by the words "on non-commercial government service".

Article 34

The Netherlands Government doubts if the phrase "ships under its jurisdiction" is the correct term here. In the Netherlands Government's view, there are only reasons for imposing the obligation referred to in this article on States with regard to ships flying their flag. The phrase "ships under its jurisdiction" would, however, also include ships of foreign nationality as soon as they are in the territorial sea of a particular State. It would be going much too far to impose on the coastal State the obligation to make regulations as referred to under (b) and (c) with regard to such foreign ships. The title of part II, "High seas", suggests that ships under the territorial jurisdiction of the foreign State cannot have been meant here. That is why the Netherlands Government would suggest that the phrase "ships under its jurisdiction" be replaced by "ships sailing under its flag".

Article 39

By limiting acts of piracy to acts committed for private ends, acts performed in an official capacity are already excluded from the definition. On the other hand, as appears from article 40, such exclusion is not intended for acts committed for private ends by the crew of a government ship or a government aircraft. It seems, therefore, wise to delete the word "private" before

"ship" and "aircraft" in the first sentence of paragraph 1.

In connexion with what is stated by the International Law Commission in paragraph 6 of its commentary on article 39, it may be observed that many writers of note hold a different opinion on the subject of mutiny (cf. for instance: Higgins-Colombos, Ortolan, Oppenheim-Lauterpacht 1955, Gidel; cf. also a decision of the Privy Council in the case of the Attorney-General Hong Kong v. Kwok-a-Sing). The Netherlands Government is, however, of the opinion that the Commission's view is correct. The community of States need not interfere with a change of authority on board the ship so long as the acts of the mutineers concern the ship only.

Article 43

In the Harvard Draft (*Research in International Law*, 1932; see *American Journal of International Law* 26 (1932), *Special Supplement*, p. 743, f.f.) more detailed regulations concerning piracy are given than in the present draft. As instances may be adduced article 13 concerning the rights of third parties acting in good faith and article 14 concerning a fair trial. The concise nature of the present draft precludes the laying down of detailed regulations on these points. It might be desirable, however, to draw attention to the obligation of States to observe the principles just mentioned.

Article 44

The question arises why the wording of this article should be different from that used in paragraph 3 of article 46, as probably the same is meant in both articles.

Articles 54 and 55

It is assumed that, subsequent to the adoption of conservation measures, article 54 grants rights to the coastal State analogous to those granted in article 53 to States whose nationals are engaged in fishing. From this it follows that existing regulations cannot be put aside unilaterally by the coastal State invoking article 55. The application of such measures can only be suspended by a decision (interim or final) of an arbitral commission.

Furthermore, the Netherlands Government deems it desirable to impose upon coastal States contemplating the adoption of the measures referred to in article 55, the obligation to satisfy, prior to the adoption of these measures, a competent international body (e.g., the Fisheries Division of the Food and Agriculture Organization of the United Nations) that the conditions referred to under (a) and (b) of this article have indeed been complied with.

Article 60

The Netherlands Government is of the opinion that in this article an obligation to submit disputes to the arbitral provisions of articles 57-59 can hardly be dispensed with. If States can oppose unilateral measures of a coastal State with regard to the conservation of fisheries in a certain area adjacent to its coast, this should also be possible if regulations concerning fisheries conducted by means of equipment embedded in the floor of the seas are laid down for the same area by that coastal State. (See also comments on article 73.)

Articles 61 and 70

It is not clear to the Netherlands Government why, in addition to article 61, in which this matter is exhaustively regulated, there should still be a need for the specific provision of article 70, which, moreover, is worded differently.

The Netherlands Government would, however, prefer the definition of cables used in article 70 ("submarine cables") to the detailed enumeration of the different kinds of cables in article 61.

Article 66

In the Netherlands Government's view, the phrase "admission of foreigners" will have to be added to paragraph (a), because it does not come under "customs, fiscal or sanitary regulations" and because in many States the admission of foreigners cannot be properly supervised as soon as they have gone ashore.

Article 67

The addition that the limit of the continental shelf may be fixed beyond the limit of 200 metres if the sea bed beyond this limit admits of the exploitation of its natural resources may create a dangerous situation in the future, because if in the future an exploitation of minerals at ocean depths might be possible by means of a dredging installation installed on a ship, the coastal State must be prevented from claiming a monopoly by basing itself on the present text. This kind of exploitation must remain free in principle, just as at present fishing is free for any State.

Article 71

The phrase "unjustifiable interference with navigation, etc." in paragraph 1 is rather vague. The Netherlands Government wishes to emphasize from the outset that in the balancing of the various interests involved the interests of navigation should take precedence. Moreover, the article should include detailed provisions on notifications and warnings, and should, in particular, specify to whom the notifications are to be addressed. A penalty should be established for failure to observe such provisions. In any event there should be a guarantee that the notification shall always be given before the installations are constructed. In addition, in order to protect navigation, special rules should be made governing the construction and equipment of the installations.

The term "reasonable distance" for the safety zones in paragraph 2 is too vague. The Conference will have to lay down a clearly defined distance for these zones.

Article 72

As in the case of the boundaries of the territorial sea (see comments on article 12) the Netherlands Government supports the principles embodied in article 72 with regard to the delimitation of the continental shelf. The Netherlands Government would like to emphasize the necessity of an internationally accepted rule for these delimitations, together with adequate safeguards for impartial adjudication in the case of disputes, as it will not be sufficient simply to express the hope that the States concerned will reach agreement on this matter.

Article 73

This article provides for the settlement of disputes concerning articles 67-72. Other articles of the draft also provide for an incidental settlement of disputes. The Netherlands Government would greatly appreciate it if it would be possible to include provisions regarding the settlement of disputes with respect to all articles in any convention(s) to be concluded on the present subject matter.

19. China²⁵

LETTER FROM THE PERMANENT MISSION OF CHINA
TO THE UNITED NATIONS, DATED 27 JANUARY 1958

[Original text : English]

Article 3

The Government of China would welcome a generally acceptable rule for the breadth of territorial sea, which would reasonably satisfy the demands of the coastal States on the one hand and would not impair unduly the freedom of the high seas on the other. However, in view of the divergent views concerning this subject expressed in the course of the debate in the Sixth Committee during the eleventh session of the General Assembly, it cannot help entertaining doubt on the possibility of a uniform rule to be adopted at the forthcoming conference. Under these circumstances, the conference may probably establish a maximum permissible breadth based on the findings of the International Law Commission and, at the same time, leave to each State the right of not recognizing the breadth fixed by any other State, which, though not exceeding the maximum permissible limit, is greater than that of its own.

Article 5

The Government of China is in agreement with the principles of straight baselines established in this article based on the judgement of the International Court of Justice on the Anglo-Norwegian Fisheries Case. It is felt, however, that the conditions laid down in paragraph 1 of the article are rather vague. They could not be applied without the difficulty of judging whether or not the configuration of a coast justifies the use of the straight baseline method. In order to be applied satisfactorily as a working rule of international law, and to avoid confusion and dispute, the provisions of this article require greater precision. Since there seems to be no precise way to describe the configuration of a coast which shall justify the straight baseline method, the only way possible for these purposes seems to be to set in figures a maximum permissible length of the straight baseline. The International Law Commission had in fact adopted at its sixth session a paragraph containing the maximum length of the straight baseline and its maximum distance from the coast, the text of which is reproduced on page 14 of the Commission's report (A/3159). This paragraph was later deleted at its seventh session for reasons which, in the opinion of the

²⁵ Circulated as document A/CONF.13/5/Add.2, dated 29 January 1958.

Government of China, are not very convincing. It is considered as desirable to reinstate the said paragraph.

It is further felt that the special rules for bays as provided in article 7 would serve no purpose in the absence of a limit for the length of straight baselines. According to article 7, paragraph 4, the rules for bays shall not apply in cases where the straight baseline method is applied. A bay which satisfies the qualifications set forth in article 7, paragraph 1, would normally justify the application of the straight baseline method, and the water area within the bay becomes internal waters by the application of that method regardless of the rules concerning the closing line of a bay. Under these circumstances, the rules for bays would be apparently insignificant if there is no limit for the length of straight baselines.

Article 7

The maximum length of the closing line of a bay should be no less than twice the maximum permissible breadth of territorial sea, if the latter is adopted at the conference.

As has been stated in the comments on article 5 above, the rules for bays can only be useful if there is a limit for the length of straight baselines. In the absence of such a limit, article 7 may very well be deleted.

Article 26

Paragraph 2 of article 26 defines the term "internal waters". This definition should appear earlier in the draft articles as references to the term "internal waters" have been made in a number of instances in the preceding articles. In view of the connexion between internal waters and baseline from which the breadth of territorial sea is measured, it may be appropriate to lay down this definition in article 4. Article 26, which has for its title "definition of the high seas", does not seem to be the proper place for a definition of internal waters.

Article 29

The Government of China supports the principle that there must be genuine link between ships and their flag States. It is felt, however, that the relevant provisions of article 29 are not precise enough and would give rise to controversies which might prove to be harmful to the interests of international navigation. If the conference is to approve this principle, elaboration on the term "genuine link" may be desirable and necessary.

Article 39

The International Law Commission has correctly concluded that acts committed on board a ship by the crew or passengers and directed against persons or property on board the ship cannot be regarded as acts of piracy. However, if the acts so committed involve those of navigating or taking command of the ship, they should be deemed as acts of piracy. It is therefore suggested that a new sub-paragraph be added to paragraph 1 of article 39 as follows:

"On the high seas, against persons or property on board the ship if, for these ends, the person or persons committing such act navigate or take command of the ship."

Article 40

The following new text of article 40 is suggested:

"The acts referred to in article 39 committed by the crew or passengers of a government ship or aircraft, who have revolted and taken control of the ship or aircraft, are assimilated to acts committed by the crew or passengers of a private ship."

It is to be pointed out that the original text of this article is not satisfactory in that it envisages only the mutiny of the crew of a government ship or aircraft. Actually, the passengers of a government ship or aircraft could also revolt and engage in piratical acts, which should likewise be assimilated as acts committed by the passengers of a private ship or aircraft.

Article 47

It is generally recognized that hot pursuit must commence in the territorial sea of the pursuing State. But there has been the practice that in connexion with certain matters a State was authorized by treaty to seize a foreign ship in an area beyond the territorial sea of that State. Under this circumstance, the right of hot pursuit may be exercised even if the pursuit is commenced when the ship pursued is found in such an area. For these considerations, it is suggested that the following phrase be inserted before the second sentence of article 47, paragraph 1:

"Unless otherwise authorized by treaties or agreements entered into by the pursuing State and the flag State of the ship pursued,"...

Article 66

The Government of China supports the idea advanced in the course of the debate in the Sixth Committee at the eleventh session of the General Assembly that coastal States should have exclusive fishing right in their contiguous zones, and would like to see a paragraph containing provisions to this effect to be included in article 66.

20. Ethiopia ²⁸

NOTE FROM THE MINISTRY OF FOREIGN AFFAIRS,
DATED 24 FEBRUARY 1958

[Original text : English]

The Ethiopian Government will not be represented at the international conference of plenipotentiaries to be convened at Geneva on 24 February 1958 for the purpose of considering the draft rules of the sea prepared by the International Law Commission. However, the Ethiopian Government has carefully considered the proposed convention, and in this memorandum sets forth its views with respect to certain of the provisions contained therein.

In reviewing the draft Convention and preparing its comments on it, the Ethiopian Government has been guided by two basic principles which might well be adopted by the Conference in guiding the conferees in their work. First, it is, of course, essential that the

²⁸ Circulated as document A/CONF.13/5/Add.3, dated 3 March 1958.

convention guarantees, and to the greatest extent possible should be based upon, the fundamental principle of freedom of the seas. The Ethiopian Government considers that, as regards this principle, the present draft provides an excellent working document upon which discussions can proceed. But, second, it is of equal importance that the conference should produce a convention which will be a practical and workable instrument. The measure of the conference's success in achieving this objective will be determined by the number of States which adhere to the convention. A convention which resolves every problem and settles the most hotly disputed issues, but to which only a handful of States adhere, is a failure and, accordingly, the conference should be assiduous in working out solutions to the problems involved in the convention which will be acceptable to the greatest number of States.

There are several questions of major significance which arise out of the present draft to which the Ethiopian Government would like to address itself and which will undoubtedly receive careful attention at the forthcoming conference.

As regards the breadth of the territorial sea, the Ethiopian Government recognizes the legitimate interests which have persuaded some States to adopt a twelve-mile limit and others to define their territorial sea in terms of three miles. Ethiopia has herself laid down in general a twelve-mile limit. The Ethiopian Government sees major difficulties in reaching agreement on a single definition as to the breadth of the territorial sea. In keeping with its statements above, the Ethiopian Government expresses the hope that some compromise solution will be found which will in some degree satisfy adherents of both views and permit States representing both views to accept the convention. As a matter of principle, the Ethiopian Government would prefer to see this question left aside, if that were possible, rather than have the convention embody a statement which would be unacceptable to any large group of States.

By and large, the draft convention has avoided the use of vague and indefinite language. One notable exception exists, however, namely article 29, which speaks of the requirement that a "genuine link" should exist between the State and the ship before other States need accept the national character of the ship.

Clearly, the necessary jurisdiction and control over a vessel requires the existence of a connexion between the State and the ship closer than that which is created by virtue merely of registration or the grant of a certificate of registry. However, the use of the phrase "genuine link" does not much improve the matter. Leaving complete leeway for States to determine how this requirement is satisfied will undoubtedly result in a plethora of conflicting definitions, with different tests being adopted for different purposes, depending upon the context in which the question arises. If it is the fact that no greater precision is possible, there would appear to be no reason for recourse to a standard so vague and imprecise as to be virtually meaningless.

The Ethiopian Government is in full agreement with the spirit of article 34 as promoting increasingly high standards regarding the safety of navigation. The Ethiopian Government, which is in the process of codifying various laws touching on these, among other

matters, will make every effort to ensure that standards which are obtaining increasing international acceptance will be applied as regards merchant shipping flying the Ethiopian flag. However, it is felt that a too sudden application of such standards to countries which have a limited merchant fleet and which have been accustomed to operate in areas where standards are perhaps somewhat less than the desired optimum would have an unnecessarily disruptive and inhibiting effect.

It is, accordingly, suggested that article 34 be couched in terms of goals to be attained over a period of time rather than as standards to be placed in immediate operation. If desired, an additional clause could be added to the article whereby States adhering to the convention would pledge themselves to move with all deliberate speed to the attainment of the specified standards.

21. Thailand ²⁷

TRANSMITTED BY THE DELEGATION OF THAILAND TO THE UNITED NATIONS CONFERENCE ON THE LAW OF THE SEA

[Original text: English]

Article 35

The purpose of draft article 35 is to attempt to protect the interests of all those who are involved in a collision or any other incident of navigation concerning a ship on the high seas. Normally it is the flag State which is the most competent to deal with a ship in matters contemplated in article 35 since international law recognizes that generally a ship is part of a floating territory of the State to which it belongs.

Article 45

The Thai delegation is of the opinion that the following should be added to article 45:

"or other ships or aircraft on government service authorized to that effect."

This addition, though it departs from the commentary of article 45 in that it permits not only warship and military aircraft to make the arrest, will not cause friction between States, since each State will have carefully considered whether it would be proper to authorize a certain ship to make the arrest or seizure on account of piracy. It is necessary to point out in this connexion that conditions in the Far East and in other parts of the world are very different. The fact that pirate junks operate on the high sea of the Far East makes it essential, in the Thai delegation's view, for the scope of article 45 to be widened to include the use of police and customs patrol boats.

Article 57

The Thai delegation does not agree with the principle of compulsory arbitration. Arbitration generally implies

²⁷ Circulated as document A/CONF.13/5/Add.4, dated 18 March 1958.

consent of the parties to the disputes. The Permanent Court of International Justice in 1923 said: "It is well established in international law that no State can, without its consent, be compelled to submit its disputes with other States either to mediation or to arbitration, or to any other kind of pacific settlement". Article 57 of the draft thus contradicts the basic idea upon which traditional arbitration is founded.

The Thai delegation considers that, since there exists the International Court of Justice under Article 33 of the Charter of the United Nations, disputes arising under articles 52, 53, 54, 55 and 56 should be submitted to the International Court of Justice at the request of any of the parties, unless the parties agree on some other method of peaceful settlement. This is in effect to adopt the language of article 73.

A BRIEF GEOGRAPHICAL AND HYDROGRAPHICAL STUDY OF STRAITS WHICH
CONSTITUTE ROUTES FOR INTERNATIONAL TRAFFIC

BY COMMANDER R. H. KENNEDY

(Preparatory document No. 6) *

[Original text : English]
[23 October 1957]

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Introduction

In the following study of certain straits constituting routes for international traffic, a small plan of each strait is included showing the essential features to assist in identification. Should, in any particular case, a more detailed study be required, references are given to the relevant *Charts* and *Pilots*. These references are to the

* This paper was prepared at the request of the Secretariat of the United Nations but should not be considered as a statement of the views of the Secretariat.

Charts and Sailing Directions issued by the Hydrographic Department of the British Admiralty. It should be borne in mind that when consulting the *Pilots* (Sailing Directions), the latest supplement to those volumes should be read in conjunction with them.

Miles referred to in the descriptions are sea miles, each constituting one-sixtieth of a degree of latitude in the area.

No account has been taken of the varying breadths of the territorial sea as at present claimed by the different States. The references to "high seas" in the descriptions are based on an assumed maximum claim of twelve miles to a breadth of territorial sea. With any lesser breadth, the high seas will encroach into the straits and may alter the sense of the descriptive text. The remark that a strait connects the high seas lying at each end of it does not necessarily imply that there is no passage on the high seas through the strait.

In the directive for this study, straits of a width of twenty-six miles or less were to be considered. Certain straits are wider than this measurement at their ends; accordingly, only that part lying within this breadth has been considered. In certain other cases, however, the straits embraced by these measurements widen abruptly at their ends into the high seas, the area considered has therefore been that lying between the outermost inter-sections of twelve-miles arcs centred on the coastlines of the opposite States, at each end of these straits.

The following additional general remarks may also be of assistance when considering this study :

(i) When considering these straits, drying features have been described if they lie within twelve miles of the coastline of the mainland or of a feature permanently above water, with a view to taking them into account for the extension of the belt of territorial sea. This is on the assumption of a maximum breadth for the territorial sea of twelve miles. With lesser breadths many of these features described will not lie within a distance from permanently dry land equivalent to the breadth of the territorial sea; accordingly, such features will not qualify to form base points for the extension of the limits of the territorial sea.

(ii) Certain references have been made in the text to navigation through the straits in relation to median lines. When assessing the positions of the median lines, drying features lying within twelve miles of each shore have

been taken into account except in those cases where such features lie in an overlap of the two limits, where they would qualify to extend the limit from both shores.

(iii) In straits wider than the sum of the breadths of the territorial sea claimed by opposite States, the separation of the territorial sea limits is not necessarily equal to the distance between opposite coasts less the sum of the breadth of belts of the territorial seas, as it is the prominent points or headlands and, in certain cases, drying features which control the limits of the belts.

(iv) Whatever the status of the waters of a strait it is obligatory, in order to reach a port therein, to pass through the territorial sea of the State in whose territory the port lies.

1. Straits of Bab el Mandeb (Annex, map No 1)

References : Charts Nos. 6, 1925 and 2592.

Red Sea and Gulf of Aden Pilot, Tenth Edition, 1955.

1. These straits join the high seas of the Gulf of Aden to those of the Red Sea and form part of the international route from the Mediterranean to the Far East. The name is strictly applied to the waters lying between Ras Bab el Mandeb and Ras Si Ane about 14½ miles south-westward and comprising the Large Strait between Perim Island and the African coast and the Small Strait between that island and Arabia. Large Strait is about 9¼ miles wide and Small Strait about 1½ miles in breadth. For the purposes of this study, however, the water area in the vicinity less than 26 miles will be considered. This extends from Mokha in the north to a position about 20 miles eastward of Ras Bab el Mandeb, a distance of approximately 50 miles.

2. The following States border these Straits :

On the south-west, Ethiopia and French Somaliland.

On the north-east, Yemen and Aden Protectorate.

In the Straits, Perim Island (part of the British Colony of Aden).

3. (a) The length of the Straits may be considered as 50 miles.

(b) The general width of the Straits is 19½ miles but this width is restricted over a distance of about 7 miles both by the peninsula of which Ras Bab el Mandeb forms the southern end on the northern side, and by Perim Island, which divides the main strait into two — Large Strait and Small Strait.

(c) Small Strait between Perim Island and Ras Bab el Mandeb is about 3 miles long and varies in width from about 3 miles to 1½ miles.

(d) Large Strait between Perim Island and the African coast is about 10 miles long, with a general width of about 10½ miles. The narrowest part is 9¼ miles wide between the southern end of Perim Island and Jezirat Seba, a group of six islands extending about 6 miles from the African coast and south-south-westward of Perim Island.

4. The whole strait, with the exception of Small Strait, throughout its length of about 50 miles, is deep

water varying from about 100 fathoms or more in the middle to approximately 3 to 6 fathoms close off the coastal reefs. There are no navigational dangers throughout its length. Small Strait has depths varying from 12 to 5½ fathoms and is free from dangers in the fairway. Tidal streams are, however, strong and irregular and, as many casualties have occurred there, the use of Large Strait is recommended.

5. In addition to Perim Island and Jezirat Seba described above, the only island in the area is Dumeira, the outer edge of which lies about a mile from the African coast and about 14 miles west-north-westward of Perim Island.

There are no ports within the area.

6. Navigation is possible on both sides of median lines drawn through the main strait and through Large and Small Straits.

2. Strait of Gibraltar (Annex, map No 2)

References : Chart No. 142.

West Coasts of Spain and Portugal Pilot, Third Edition, 1946.

1. The Strait of Gibraltar runs in a general east-west direction and is the only connexion of the high seas of the Atlantic Ocean to those of the Mediterranean Sea ; it embraces a much used route for international shipping.

The Strait is bounded on the north by the coasts of Spain and by Gibraltar, and on the south by Morocco and by the Spanish territory of Ceuta.

To the west, Cabo Trafalgar and Cabo Espartel (Spartel) form the natural entrance points and those on the east are Europa Point (Gibraltar) and Ceuta.

2. (a) The length of the Strait is about 33 miles.

(b) The breadth at the western end, the widest part from Cabo Trafalgar to Cabo Espartel is about 24 miles.

(c) The breadth at the eastern end from Europa Point, the southern tip of Gibraltar, to Ceuta is 13 miles.

(d) The narrowest part of the Strait is about 10 miles west of Ceuta, where the distance between its low-water lines of the north and south sides is 7½ miles.

(e) In general, the Strait may be said to narrow uniformly from its western end for a distance of about 18 miles to a width of about 8¼ miles on a line running south-east from Isla Tarifa, thence eastwards it retains this general width for about 6 miles (embodying the narrowest part of 7½ miles) and then widens again to its eastern end.

3. The Strait is deep. Navigation presents no difficulties; the least navigable width between the 10-fathom lines is about 7 miles and depths in places reach over 600 fathoms.

There are no islands or drying banks in the Strait other than a few detached drying rocks very close inshore.

Vessels often navigate towards the sides of the Strait rather than in its middle in order to benefit from the currents and tidal streams to the maximum possible.

4. The following ports lie within the Strait :

(i) On the northern shore : Barbate, a small fishing port ; Tarifa, an open anchorage ; Algeciras ; and Gibraltar.

(ii) On the southern shore : Tangier ; Ceuta.

5. Navigation would be possible on either side of median lines drawn through the Strait between the low-water lines of the various coastal States.

3. Zanzibar Channel (Annex, map No 3)

References : Charts Nos. 664, 640 A, 640 B.

Africa Pilot, Volume 111, Eleventh Edition, 1954.

1. The Zanzibar Channel separates the island of Zanzibar from the mainland of Africa. It connects the high seas of the Indian Ocean southward of Zanzibar with Pemba Channel, from 30 to 20 miles wide, between the island of Pemba and the coast of Africa. There is also a connexion to the high seas from the northern end of the Zanzibar Channel through the strait, with a maximum width of $21\frac{1}{2}$ miles, between Zanzibar Island and Pemba.

The island of Zanzibar fronts a bight in the African coast and, in general, the western coast of the island conforms to the shape of the African shoreline, from which it is separated by distances of from about 16 to 24 miles. Thus, but for various reefs and islets studding either side which at one place reduce the navigable width to about 4 miles, the strait is of a comparatively uniform breadth.

This channel is out of the direct route along the African coast and would not generally be used other by vessels coasting, calling at ports within these two channels, or by vessels seeking shelter.

2. The channel is bordered on the west by Tanganyika and on the east by Zanzibar.

3. (a) The length of the Zanzibar Channel is approximately 80 miles and the continuation northward through Pemba Channel is a further 60 miles.

(b) The widths at both the southern and northern entrances of the Zanzibar Channel between the low-water lines of Zanzibar Island and the African coast are 24 miles. About 20 miles within the southern entrance point this width is restricted to about 16 miles, and its widest part some 24 miles further northward is 24 miles.

4. The depths in the Channel, except near the coastal banks and reefs, in general vary from about 10 to 40 fathoms ; there is a least depth of 14 fathoms in the fairway. Both the African shore and that of Zanzibar are fringed with detached coral reefs ; those off the former lie in places up to $5\frac{1}{2}$ miles and those off Zanzibar as far as $8\frac{1}{2}$ miles offshore.

About 24 miles within the southern entrance the fairway narrows and is restricted by detached drying patches over a distance of about 8 miles to a width of about 5 miles. The narrowest part is about 4 miles wide between a one-fathom shoal and a drying reef west-north-westward of it.

5. Navigation is somewhat difficult owing to variations in the tidal streams and in the current, which

is affected by the monsoons. In addition, at times, the reefs on the mainland side of the channel are difficult to distinguish through the muddy water brought down by the rivers. There is also a great difference in the spring and neap ranges of the tides which makes a change in appearance of the reefs. It is recommended in the Sailing Directions that passages new to the navigator should be taken at low water.

6. Ports within the Zanzibar Channel are :

(a) On the mainland : Dar-es-Salaam at the southern end of the channel ; Pangani abreast the northern end of Zanzibar Island (and Tanga in the Pemba Channel).

(b) On Zanzibar Island : Zanzibar, about the middle of the west coast of the island. Zanzibar is approached through the narrow passes between the reefs.

7. The drawing of a median line to divide the channel is complicated here by the existence of drying reefs. The varying effects which these have on a median line is dependent on the breadth which is allocated to the territorial sea. With wider breadths reefs will fall within the overlap of territorial waters as measured from the low-water line of land permanently above water.

This problem is more fully discussed in the preface to this paper and, as recommended there, all drying features lying within the overlap of territorial waters should be neglected as base points for measurement.

Navigation would be possible on both sides of the median line drawn on a basis of a 12-mile territorial limit, although it would probably be necessary to erect navigational marks on many more of the reefs to facilitate the passage of vessels on one side or the other of it, should innocent passage be restricted.

4. The Serpent's Mouth (Annex, map No 4)

References : Charts Nos. 481, 483 A and 1480.

West Indies Pilot, Volume 11, Tenth Edition, 1955.

1. The Serpent's Mouth is the name given to the narrow southern entrance to the Gulf of Paria between the south-west point of the island of Trinidad and the coast of Venezuela. For the purposes of this description, however, the "funnel-shaped" approach between the southern coast of Trinidad and Venezuela will also be included. This strait connects the high seas of the North Atlantic Ocean with those of the Gulf of Paria.

Abreast Cape Casa Cruz, about $11\frac{1}{2}$ miles west of the south-eastern point of Trinidad, the strait has a width of 26 miles and narrows in a comparatively uniform manner to a breadth of 9 miles about 25 miles further westward off Punta Bombeador. The southern shore then recedes southward to form the estuary of the Rio Macareo, where the strait broadens to a width of about $15\frac{1}{2}$ miles. Thence it narrows again over a distance of 17 miles to the Serpent's Mouth, which has a breadth south-westward of Icacos Point, the south-western tip of Trinidad, of 8 miles. Thence the strait widens abruptly into the Gulf of Paria. Extending westward of Icacos Point are a number of groups of detached rocks and shoals which restrict the entrance to the strait into five separate narrow channels.

2. Depths within the strait are comparatively deep. Near its middle they vary from over 20 to about $5\frac{1}{2}$ fathoms in patches; nevertheless, it would be possible to carry a depth of 14 fathoms from the Atlantic to the Gulf of Paria.

From the middle of the strait towards its northern and southern shores the depths decrease comparatively evenly, although they are much steeper off the coast of Trinidad than off the southern shore, where coastal flats with depths of less than 6 fathoms extend up to nearly 5 miles in places. The estuary of the Rio Macareo is very shallow, and there is a long dredged channel through it.

Near the middle of the western approach to the Serpent's Mouth lie a group of above-water and drying rocks surrounded by shoals. The most conspicuous of these is Soldato rock, 117 feet high, which lies about 5 miles west of Icacos Point. Between this group and the mainland of Venezuela and Trinidad are a number of submerged shoals with navigable channels between which will now be briefly described:

(i) Eastern Channel, close under Icacos Point between the mainland and Wolf Rock, has a minimum width of about 400 yards and a least depth of 21 feet.

(ii) Second Channel lies between Wolf Rock and Three Fathom Bank, has a minimum width of about half a mile and a least depth of 23 feet.

(iii) Middle or Third Channel, lying between Three Fathom Bank and the dangers off Soldato Rock, is about $2\frac{1}{2}$ miles wide, with a least depth of 19 feet. It is possible, however, to carry a depth of 26 feet through this channel.

(iv) Western Channel is situated between the dangers south-westward of Soldato Rock. Some detached patches with least depths of $2\frac{1}{2}$ fathoms lie about $2\frac{1}{2}$ miles further south-westward. Depths of 9 to 18 fathoms lie in the fairway.

(v) There is an unnamed channel lying between the detached patches south-westward of the dangers off Soldato Rock and the coastal flats off the Venezuelan shore. This is about 400 yards wide between the 6-fathom lines and is comparatively deep.

All these channels are buoyed, with the exception of that last-mentioned, and there is a light structure on Three Fathom Bank. Middle Channel is that generally recommended for vessels of suitable draught. Eastern Channel is narrow and is often obstructed by vessels at anchor. Western Channel, although wide and deep, is not recommended, as the north-westerly current runs at times at rates up to 4 knots over the dangerous patches on its south-western side. The south-westernmost channel is narrow and the current runs strongly so passage through it would not be feasible unless it was well buoyed on both its sides.

3. There are no ports within this strait; anchorage may be obtained, however, by vessels with local knowledge in a few bays off the south coast of Trinidad. The dredged channel at the mouth of Rio Macareo gives access to Puerto Ordaz, about 150 miles up that river, which vessels up to a draught of 24 feet can reach.

The Serpent's Mouth is not considered so safe as the northern entrance to the gulf; but by its use vessels proceeding from Port of Spain to Demerara will

materially shorten the time of passage by avoiding much of the adverse current experienced on the usual route round the northern side of Trinidad, although the distance is about the same.

4. A treaty was signed in 1942 between the Governments of the United Kingdom and of Venezuela laying down the international limit of the submarine areas of the Gulf of Paria. This limit passes through the Serpent's Mouth to a position in the middle of the Strait about 26 miles east-south-eastward of Icacos Point. This boundary has since been laid down by a boundary commission but, to date (1957), has not been ratified. Navigation is possible both sides of this line, although it would entail the use of the south-westernmost of the channels (see paragraph 2 (v) above).

5. The Dragon's Mouth (Annex, map No 5)

References: Charts Nos. 484 and 483 A.

West Indies Pilot, Volume 11, Tenth Edition, 1955.

1. The Dragon's Mouth separates the north-eastern tip of Trinidad from the coast of Venezuela about $10\frac{1}{2}$ miles westward. Three islands lie within this area dividing the waters into four channels which connect the high seas of the Caribbean to those of the Gulf of Paria. These three islands—Chacachacare, Huevos and Monos—are under the administration of Trinidad. Isla Patos, in the south-western approach to the western channel, is Venezuelan.

2. The greatest length of the Dragon's Mouth may be considered as from abreast La Isletta, off the northern point of Promontorio de Paria, to abreast Isla Patos, a distance of $7\frac{1}{2}$ miles.

3. The four mouths or "bocas" will now be described:

(i) Boca de Monos lies between the north-western point of Trinidad and the eastern coast of Monos Island. It is about 2 miles long; the fairway is of comparatively uniform width, is straight and has a least breadth of about 400 yards in which depths vary from over 50 to 22 fathoms. Eddies off the points in this channel are strong and irregular. The passage has a lighthouse at its southern end. Gaspar Grande island lies in the south-eastern approach off the entrance to Chaguaramas bay.

(ii) Boca de Huevos is situated between the western coast of Monos island and the eastern coast of Huevos island. This strait has a length of about 2 miles. Its northern end is shaped like that of a wide funnel by the contracting north-western and north-eastern coasts of the two islands. Over a distance of about $1\frac{1}{4}$ miles the channel has a comparatively uniform breadth of about three quarters of a mile. The channel is deep, reaching depths of over 90 fathoms. There are no dangers within. There is a navigational light on the southern end of Huevos island which serves both for this and Boca de Navios.

(iii) Boca de Navios lies between the south-western coast of Huevos island and the north-eastern coast of Chacachacare island. It is about $1\frac{3}{4}$ miles long, has a maximum width of a little over a mile and a minimum

width at its southern end of just over half a mile. There are no navigational dangers and the channel is deep, with depths of 135 fathoms in its middle. The nearest anchorage is in Chacachacare bay, at the southern end of the island of that name. There is a leper establishment on this island.

(iv) Boca Grande is the strait between the western coast, nearly two miles long, of Chacachacare island and the east coast of the Venezuelan promontory of Paria. From La Islette to abreast Isla Patos its length is about $7\frac{1}{2}$ miles. At the northern end, the width is $5\frac{3}{4}$ miles; at the southern end between the south-western end of Chacachacare island and Isla Patos it is the same—the greatest breadth is about $7\frac{1}{2}$ miles. Isla Patos lies about $2\frac{1}{4}$ miles off the Venezuelan coast. The channel is deep, and depths generally exceed 100 fathoms. In the middle, however, is a bank with less than 50 fathoms having an isolated depth of about 8 fathoms.

A high-power lighthouse at the northern end of Chacachacare island assists identification and navigation in this strait.

There are no dangers in the main part of the strait. Diamond rock, on which is a light structure, is submerged, it lies about a quarter of a mile off the south-western end of Chacachacare island with Bolo rocks, 80 feet high, between. Garza rocks, small but rising to a height of 217 feet, are situated about 800 yards off the Venezuelan coast about 3 miles north of Isla Patos. Strong tide rips occur about half a mile south-eastward of Isla Patos and about 2 miles north-eastward of that island in the middle of the strait.

4. Tidal streams and currents in all these straits are comparatively strong, and when combined in direction may reach a rate of up to 4 knots.

5. There are no ports or roadsteads of any importance within the limits of the straits.

6. Navigation is possible both sides of a median line drawn through Boca Grande, the only one of the straits having an international character.

7. The 1942 treaty between the United Kingdom and Venezuela relating to the division of the submarine areas of the Gulf of Paria does not extend into the area of the Dragon's Mouth.

6. St. Lucia Channel (Annex, map No 6)

References : Charts Nos. 956, 371 and 1273.

West Indies Pilot, Volume 11, Tenth Edition, 1955.

1. St. Lucia Channel separates the French island of Martinique from the British possession of St. Lucia. This strait joins the high seas of the North Atlantic Ocean to those of the Caribbean Sea. For the purposes of this description, the strait will be considered to extend on the east from a line joining Cape Ferre in Martinique to Cape Marquis in St. Lucia, a distance of 25 miles, to a line on the west joining Morne du Diamant on Martinique to the northern entrance point of Port Castries in St. Lucia, a distance of 26 miles. Between

these lines the strait has a length of between 8 and 13 miles.

From Cape Marquis, the north-east coast of St. Lucia runs in a north-westerly direction for about 4 miles to Hardie Point, and from Port Castries the north-western coast runs in a north-north-easterly direction for about $6\frac{1}{4}$ miles to Pointe du Cap. Thus the southern shore of the true strait lies between Hardie Point and Pointe du Cap, a distance of $1\frac{1}{2}$ miles.

The southern shore of Martinique forms a bight between the coast south of Morne du Diamant and Islet Cabrit, an islet close off the southern point of Martinique, about 12 miles eastward; this part of the coast forms the northern shore of the true strait.

The narrowest part of the channel is $17\frac{1}{2}$ miles wide, and lies between Islet Cabrit and Hardie Point at the north-eastern end of St. Lucia. The widest part of the true strait is northward of Pointe du Cap and is about $22\frac{1}{2}$ miles wide.

2. The strait is deep, but depths of less than 100 fathoms are found within about 5 miles of the northern end of St. Lucia. A coastal bank with depths under 10 fathoms extends off the south coast of Martinique. The only navigational danger in the strait is Banc du Diamant, a patch with $4\frac{1}{2}$ fathoms over it, situated $1\frac{3}{4}$ miles from the coast south of Morne du Diamant and about three quarters of a mile from Rocher du Diamant.

3. The only islands and drying rocks within the area which may affect the territorial water limits or a division of the strait are as follows :

(i) Off St. Lucia : Pigeon Island with Burgot rocks, 37 feet high, close northward, about $1\frac{1}{2}$ miles south-westward of Pointe du Cap ; and Fous islets with Roches aux Fous close northward about $1\frac{1}{2}$ miles southward of Hardie Point.

(ii) Off Martinique : Rocher du Diamant, 574 feet high nearly a mile south-eastward of the coast south of Morne du Diamant and Islet Cabrit, on which is a lighthouse, about 700 yards southward of the southernmost point of Martinique.

4. There are no ports within the area, anchorage may be obtained, however, off several of the villages in the small bays and indentations on the south coast of Martinique and off the north-west coast of St. Lucia in St. Croix Roads, south of Pigeon Island and in Anse du Choc, a wide bay north of Port Castries.

5. Navigation through the strait presents no difficulties.

6. A median line drawn through the straits permits navigation on both its sides.

7. Strait between St. Lucia and St. Vincent (Annex, map No 7)

References : Charts Nos. 956, 791 and 1273.

West Indies Pilot, Volume 11, Tenth Edition, 1955.

1. This strait between St. Lucia and St. Vincent, both British possessions, is bounded on the north by the

southern coast of St. Lucia between Cape Moule à Chique and Beaumont Point about 10 miles north-westward. This stretch of coast is comparatively straight, with the exception of Vieux Fort Bay and Laborie Bay, two indentations each about $1\frac{1}{2}$ miles across, of which the former qualifies as a "bay" under article 7 of the 1956 report of the International Law Commission.¹

The southern shore of the strait is formed by the northern coast of St. Vincent between Espagnol Point on the east and De Volet Point nearly $4\frac{1}{2}$ miles westward. Between these two points, the coast projects into the strait approximately along the arc of a circle.

The length of the strait can be said to vary between about $4\frac{1}{2}$ and 10 miles.

2. At the eastern end of the strait is $23\frac{1}{2}$ miles wide, at its western end it is $27\frac{1}{2}$ miles wide. Its narrowest part is toward its eastern end, where it is 22 miles between the southern point of Moule à Chique and the Cow and Calves, some detached above-water rocks close to the north-eastern point of St. Vincent.

3. The strait is deep and in general varies from about 100 to 1,000 fathoms; depths of less than 100 fathoms extend for $4\frac{1}{2}$ miles off the south-eastern end of St. Lucia, and 57 fathoms have been reported near the middle of the eastern end. The current runs north-westerly through the strait up to a rate of $1\frac{1}{2}$ knots. There is a high-powered lighthouse at the southern end of St. Lucia and navigation presents no difficulties.

4. There is a small port at Vieux Fort Bay where vessels with a draught of 18 feet and a length of 500 feet can berth. Also close inshore on the south-western coast of St. Lucia are one or two open anchorages. There are none on the north coast of St. Vincent.

5. Navigation is possible on both sides of a median line through the strait.

8. Dominica Channel (Annex, map No 8)

References: Charts Nos. 956, 371 and 697.

West Indies Pilot, Volume 11, Tenth Edition, 1955.

1. This strait lies between British and French territory. It is bounded on the north by the south-eastern coast of Dominica between Petit Savanne, the south-eastern point of Dominica, and the south-western point, Cacharou or Scott Head, about $7\frac{1}{4}$ miles distant. On the south it is bounded by the northern coast of Martinique between Basse Pointe on the east and Pointe du Pecheur on the north-western coast of the island.

2. (i) The length of the strait between these limits is 8 miles.

(ii) The width of the strait at its eastern end is 24 miles and at its western end $25\frac{3}{4}$ miles.

(iii) The strait is narrowed by the curving northern coast of Martinique, and has a minimum width near its middle of 22 miles.

3. This is a safe passage in spite of there being no

navigational aids. There are no dangers within the strait, which is deep, with depths reaching well over 1,000 fathoms. The current runs in a westerly direction, and tidal streams close to the coasts are not strong. There is, however, a tide rip close to the shore off the southernmost point of Dominica.

4. There are no detached drying rocks or banks to extend territorial waters but there is one islet, La Perle, 86 feet high, situated about 400 yards off the north-western side of Martinique, and two small above-water rocks very close offshore on the south-eastern coast of Dominica.

5. There are no ports within the strait. Anchorage may be obtained in Grand Bay on the south-eastern side of Dominica. This bay does not fall within the definition of a bay by article 7 of the 1956 report of the International Law Commission.

6. Navigation is possible both sides of the median line.

9. Straits between Dominica and Guadeloupe

(Annex, map No 9)

References: Charts Nos. 956, 697 and 885.

West Indies Pilot, Volume II, Tenth Edition, 1955.

1. The water area between Dominica and Guadeloupe is formed into six passages by the islands of Petite Terre, Marie Galante and the group of small islands and islets named Iles des Saintes, while eastward of the eastern extremity of Guadeloupe lies the island of Désirade with yet another strait between. These will primarily be described as two main straits for a transit from west to east. These waters join the high seas of the Caribbean Sea to those of the Atlantic Ocean.

2. Dominica is British, and Guadeloupe, together with the other above-named islands, are French.

3. The sea area lying between the north coast of Dominica and the south coast of Guadeloupe is divided into two by Isles des Saintes and by Marie Galante, about 14 miles eastward.

(i) The southern of these two straits is about 25 miles long between a line joining Rollo head on the north-west coast of Dominica to the western point of Iles des Saintes and that joining Crumpton point on the north-east coast of Dominica to the western extremity of Marie Galante.

The width at the western end is $20\frac{1}{2}$ miles, and at the eastern end about $21\frac{1}{2}$ miles. The narrowest part between the northern point of Dominica and the southern point of Iles des Saintes is 13 miles, while that between the north-east coast of Dominica and Marie Galante is 16 miles.

The strait is deep and entirely free from navigational dangers. With the exception of a few detached rocks within about 200 yards of the coast of Dominica and some similar ones off the coast of Marie Galante, there are no features to extend the limits of the territorial sea beyond those based on the low-water lines of the islands.

There are no ports of any size within the area, but

¹ Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159).

vessels may anchor off Grand Bourg on the south-western side of Marie Galante.

(ii) The northern of the two main straits may be considered as the area between the coast of Guadeloupe on the north and Iles des Saintes and Marie Galante on the south, as well as that between the latter island and Petite Terre.

The length of the strait is about 36 miles.

The breadth at the western end is 7 miles; the minimum width between Iles des Saintes and the south coast of Guadeloupe is $5\frac{1}{2}$ miles; the minimum width between Marie Galante and Guadeloupe is 14 miles; the maximum breadth between Marie Galante and Guadeloupe is 16 miles to the entrance to Petit Cul-de-Sac Marin; the minimum breadth between Marie Galante and Petite Terre is $12\frac{1}{2}$ miles and the breadth at the eastern end between the easternmost points of Marie Galante and Petite Terre is $15\frac{1}{2}$ miles.

The middle of the strait is deep; a coastal bank with depths of less than 20 fathoms extends from the south-east coast of Guadeloupe and embraces Petite Terre. On this bank, and about 9 miles westward of Petite Terre is a dangerous shoal with a depth of $3\frac{3}{4}$ fathoms. There are a few detached drying rocks and reefs off the south-eastern coast of Guadeloupe and off the islands from which the width of the territorial sea would be extended; all these lie within about half a mile of the low-water lines of the coasts. Petit Cul-de-Sac Marin, however, is cluttered with such obstructions to navigation and with shoals; this indentation conforms to the definition of a "bay" in article 7 of the 1956 report of the International Law Commission, so these features are inside internal waters.

The only port of any consequence within the area is Pointe à Pitre near the head of Petit Cul-de-Sac Marin; it is the principal port of Guadeloupe. The channel thereto is narrow and intricate, but is marked and vessels drawing 26 feet may lie at the wharves. There are a number of anchorages off the small towns and villages on the south-east coast of Guadeloupe available for small craft with local knowledge. There is also anchorage amongst Iles des Saintes and off St. Louis on the west coast of Marie Galante suitable for small craft. Navigation through the strait is not difficult; to assist this at night there are high-powered lights on the south-western end of Guadeloupe, on Petite Terre, in the approach to Pointe à Pitre and on Désirade.

The general run of the current is in a westerly direction.

(iii) Brief descriptions of the straits between the islands, etc., are as follows:

(a) Between Iles des Saintes and Marie Galante: Runs in a northerly direction; length, about $6\frac{1}{2}$ miles; breadth, $13\frac{1}{2}$ miles; deep water with a bank of 29 fathoms in the middle of the northern end.

(b) Between Petite Terre and the south-eastern point of Guadeloupe: Runs in an easterly direction; length, about 3 miles; breadth, nearly 5 miles; depths 10 to 18 fathoms; no navigational dangers except for the $3\frac{3}{4}$ fathom patch in the western approach about 9 miles west of Petite Terre and referred to above.

(c) Between Petite Terre and Désirade, an island lying east of the south-eastern end of Guadeloupe: Runs

in a north-easterly direction; length, about $6\frac{1}{2}$ miles; minimum breadth, $6\frac{1}{2}$ miles; depths, from about 14 to $5\frac{1}{2}$ fathoms; high-powered lights on Petite Terre and on Désirade would assist in its passage at night.

(d) Between Guadeloupe and Désirade: Runs in a northerly direction; length, about 2 miles; breadth, 5 miles; depths, from about 10 fathoms in the southern approach to over 200 fathoms in the middle; a westerly current may at times set across this strait.

10. Magellan Strait (Estrecho de Magallanes) (Annex, maps Nos. 10 and 11)

References: Charts Nos. 554, 1336, 1337, 21, 887, 631.

South America Pilot, Part II, Thirteenth Edition, 1942.

1. The Magellan strait towards the southern end of South America joins the high seas of the South Atlantic Ocean to those of the Pacific Ocean; it is used as a route for international shipping. It separates Tierra del Fuego from the rest of South America. Article 5 of the Boundary Treaty of Buenos Ayres, 1881, between Chile and the Argentine Republic stipulates that the Strait of Magellan shall be open to the vessels of all nations. The distance between the eastern and western entrances of the strait through the various channels is about 310 miles and it takes a number of days to pass through the strait. Although the strait is provided with lighthouses, it is recommended, for those not accustomed to traverse it, that in general daylight passages should be made and anchorage found for the nights. This is on account of the strong tidal streams, the prevalence and unpredictability of bad weather, gales, rain, snow and fog, and the generally foul and rocky nature of the anchorages. The difference in the duration of daylight in these latitudes between summer and winter is also an important consideration in the navigation of the strait. The range of the tide varies from nearly 40 feet towards the eastern end of the strait to only a few feet at the western end. In the western entrance a heavy swell is nearly always encountered even on a calm day.

2. The eastern entrance to the strait lies between Cabo Virgenes (Cape Virgins) and Cabo Espiritu Santo about 22 miles south-southwestward. The western entrance may be considered as between Cape Deseado, the westernmost point of Desolation Island, and Los Evanjelistas, a group of above-water rocks, 24 miles north-westward and about 10 miles from the general line of the coast.

3. The northern side of the strait towards the east is formed by the southern coast of Patagonia and by the eastern and south-western sides of its termination, the Brunswick Peninsula. The northern side at the western end consists of the south-western side of Peninsula Muñoz Gamero, Providence Island, Tamar Island, and the islands of Archipelago of Queen Adelaide. Between the two peninsulas the northern side of the strait is formed by the south-western coast of Cordova Peninsula at the southern end of Isla Riesco. This side of the channel is considerably indented.

4. The southern side of the strait is formed at the eastern end by the north-eastern, northern and north-

western sides of Tierra del Fuego, further west it is formed by the west coast of Isla Dawson, and the north-eastern coasts of the large islands of Capitan Aracena, Clarence, Santa Ines, Jacques and Desolation, with many islands lying between them. This southern side forms a deeply indented coastline with innumerable bays, sounds and straits.

5. The whole of the strait lies within the territory of Chile, with the exception of the eastern end. Here, on the south side, the international boundary across Tierra del Fuego between Chile and the Argentine Republic meets the coast at Cabo Esperitu Santo, while on the north side of the strait the boundary between these two States meets the coast in a position close eastward of Dungeness, which lies about 5 miles south-south-westward of Cabo Virgenes.

6. The total length of the strait is about 310 miles.

The breadth at the eastern entrance is 22 miles; this narrows about 15 miles within to a breadth of about 12 miles. Some 35 miles west of Dungeness, the strait is constricted by First Narrows of Primera Angostura. These Narrows, mostly between low cliffs, have a breadth of about 2 miles for a distance of 16 miles. Beyond the First Narrows, the strait widens again to a general width of 15 miles for a distance of about 19 miles, then to be restricted by the Second Narrows, or Segunda Angostura, to an average width of 5 miles for a distance of 12 miles. Southward of Second Narrows the strait is about 18 miles wide, but is divided into three channels by a group of islands; the two western channels are narrow, the easternmost forms the recommended track and has a width of about 7 miles. Southward of these islands is Broad Reach, having a length of about 35 miles and a general breadth of 16 miles. The continuation of this reach is Famine Reach between the Brunswick Peninsula, with Cape Froward at its southern extremity, and Isla Dawson; this reach is about 27 miles long with a narrowest breadth of 5 miles.

Abreast Cape Froward the strait turns from a southerly to a general north-westerly direction to the Pacific Ocean. The next reach is Froward Reach, which has a length of about 30 miles and a comparatively uniform breadth of about $5\frac{1}{2}$ miles. At the end of this reach Charles islands, Isla Carlos III, and several others divide the strait. English Reach forms the recommended track north-eastwards of these islands; it is 19 miles long and has widths from about 3 to $1\frac{1}{4}$ miles. South of Charles islands the channel has a breadth of about 2 miles, but it is restricted south-westward of Isla Carlos III to under half a mile in width. North-westward of Isla Carlos III, the strait continues through Crooked Reach and Long Reach for a distance of about 40 miles, with a general breadth of about $2\frac{1}{4}$ miles and with the narrowest part only $1\frac{1}{2}$ miles wide.

North-westward of Long Reach is Sea Reach, which extends to the Pacific Ocean. For its first 25 miles, as far as Tamar island, it has a general width from about $4\frac{1}{2}$ to $6\frac{1}{2}$ miles, thence it opens out to a general width of 12 to 13 miles. However, northward of Cape Pillar, the northern point of Desolation Island, the channel is restricted to a width of about $7\frac{1}{2}$ miles by a submerged bank of rocks and foul ground extending southward from the Archipelago of Queen Adelaide.

At the south-eastern end of Sea Reach is the southern entrance to Smyth Channel which leads towards Golfo de Penas.

7. *Depths*: In the approach to the eastern end of the strait, extending from the coast off Cape Virgenes in a south-easterly direction for about 18 miles, is a bank with general depths of $5\frac{1}{2}$ to 9 fathoms; southward of this there are depths of up to 40 fathoms. Thence, in the fairway to the First Narrows, depths are about 20 fathoms, deepening within the Narrows to about 40 fathoms. In the fairway between the First and Second Narrows, depths are from 14 to 27 fathoms, but in both the northern and southern parts of this area, clear of the fairway, are a number of dangerous banks and shoals.

The Second Narrows has depths up to 29 fathoms. The three channels formed by islands southward of the Second Narrows have the following depths in their fairways: the western (Pelican passage) $4\frac{1}{4}$ fathoms; the middle (Queen channel) 12 fathoms; the eastern (New channel) 22 fathoms.

Broad, Famine and Froward Reaches are deep, the few depths charted near the fairway range from 45 fathoms to nearly 300 fathoms. English, Crooked, Long and Sea Reaches are also deep, depths near the middles of these channels vary from 52 fathoms in English Reach to over 400 fathoms in Long Reach. In Sea Reach, abreast Tamar island and about three-quarters of a mile southward of the recommended track, are some isolated shoal patches, one with a least charted depth of 11 fathoms on which the sea often breaks.

8. The only port within the Strait is Punta Arenas, situated on the western side of the strait about 27 miles southward of the southern end of the Second Narrows. Anchorage in the roadstead off the port is good and is well sheltered from the prevailing winds. In 1956 it was reported that only one mole was available for shipping; this can accommodate vessels of 5,000 tons and of a draught of 24 feet.

There are numerous anchorages, mostly close to the coasts, available for shipping seeking shelter and for temporary anchorage over night. At some of these are small settlements having either a pier or jetty. In general, these anchorages are small and the bottoms there are irregular; their use requires extreme vigilance, not only on account of the inadequate surveys but also because of the frequent squalls or "williwaws" which are likely to blow from any direction without warning. Tidal streams in places may also be strong. Many of the submerged rocks which are dangers to navigation have kelp growing on them, the floating parts of this form very useful marks as to the position of the rocks.

9. The only parts of the Strait wider than 8 miles are the eastern and western ends, the area between the First and Second Narrows, Broad Reach, the northern end of Famine Reach and the approach to Magdalen Sound which lies between Isla Dawson and Isla Capitan Aracena. In consequence, as it is only in these areas that drying rocks or shoals can under any circumstances affect the limit of territorial waters in excess of 3 miles, only such features in these areas will be described:

(i) *The eastern entrance*: Nassau rock, which dries at low water of extraordinary low spring tides, lies 3 miles south-eastward of the low-water line of Virgenes.

(ii) *Between the entrance and First Narrows*: Plumper bank, which dries, lies parallel to the coast and about $2\frac{3}{4}$ miles from it close northward of the northern approach to the First Narrows.

(iii) *Between the First and Second Narrows*: There are no drying features charted beyond the low-water lines of the coasts.

(iv) *Broad Reach and the northern end of Famine Reach*: at the northern end of Broad Reach is a small drying bank about a quarter of a mile north of Isla Santa Marta, the north-easternmost islet of the group of islands south of the entrance to the Second Narrows. Islands in this group are Elizabeth island, from $1\frac{1}{2}$ to $4\frac{3}{4}$ miles from the western coast of the Strait; Isla Santa Marta, about $1\frac{1}{4}$ miles eastward of the north-eastern end of Elizabeth island and about $6\frac{1}{4}$ miles from the south-eastern extremity of Second Narrows; Isla Santa Magdalena, about $4\frac{1}{2}$ miles east of Elizabeth island and $7\frac{1}{2}$ miles from the eastern shore of Broad Reach.

(v) *That part of the Strait east of Cape Froward which forms the approach to Magdalen Sound*: Off the western extremity of Isla Dawson are a few rocky islets, the most western lies about $1\frac{1}{4}$ miles from the eastern shore of the Strait. On the opposite side of the Strait, and about $8\frac{1}{4}$ miles north-eastward of Cape Froward, is a small islet in the middle of the small bay, Bahia San Nicolas; this is about a quarter of a mile offshore. The distance between these two islets is $7\frac{1}{4}$ miles.

(vi) *The western end of the Strait, Sea Reach north-westward of Isla Tamar*:

Northern side; within a distance of half a mile west of Isla Tamar are several above-water and drying rocks; about $1\frac{3}{4}$ miles in the same direction another rock is charted. Above-water and drying rocks lie within three-quarters of a mile of the southern end of Isla Manuel Rodriguez. There are also a number of similar rocks in the approach to Parker bay and others within half a mile of Parker island. North-westward of Parker island, and within a distance of 21 miles of it, lie numerous small above-water and drying rocks; these in effect form the north-eastern side of the Strait.

Southern side: from abreast Isla Tamar to Cape Pillar the coast is fronted by a number of above-water and drying rocks; these do not extend more than half a mile from the coast. The north-westernmost of these are close north of Cape Pillar.

10. In the wider parts of the Strait of Magellan navigation is possible on both sides of a median line.

11. Strait of Juan de Fuca (Annex, map No 12)

References: Charts Nos. 2941, 2689.

British Columbia Pilot, Volume II, Seventh Edition, 1951.

1. The Strait of Juan de Fuca on the west coast of America separates Canada on the north from the United States of America on the south. Its northern shore is formed by the coast of the southern end of Vancouver Island and the southern shore is the coast of the State of

Washington. At its western end are the high seas of the Pacific Ocean; its eastern end divides into channels leading southward to Admiralty Inlet, Puget Sound and Hood Canal and to others leading northward into the Strait of Georgia which, in turn, leads to narrow channels running up the eastern side of Vancouver Island to connect again with the high seas of the ocean.

Traffic through the Strait of Juan de Fuca is considerable for, in addition to the local coasting traffic, a number of steamship companies operating across the Pacific and through the Panama Canal have their termini in the Strait of Georgia or in Puget Sound.

2. The ends of the Strait may be considered as, on the west, a line joining Cape Flattery, the north-west point of the State of Washington, to Pachena point on Vancouver Island and about 25 miles north-westward and, on the east, a line joining New Dungeness in Washington to Gonzales point, the south-eastern extremity of Vancouver Island, about 16 miles north-westward.

The Strait is thus about 70 miles in length.

3. Northward of Cape Flattery, the Strait is $10\frac{1}{2}$ miles wide; thence it gradually widens to a breadth of 12 miles off Pillar point, 27 miles south-eastward of that Cape; thence it retains this general width for 15 miles, where it becomes constricted, southward of Beechey head, to its narrowest width of 9 miles; this general width continues for about 9 miles. The Strait thence widens again to its maximum breadth of 17 miles southward of a closing line across the entrance to Esquimalt and Victoria harbours, where the coastline conforms to the definition of a "bay" as laid down in article 7 of the 1956 report of the International Law Commission.

4. Beyond a distance of half a mile from the low-water lines of the coasts the whole Strait is deep and in places reaches depths of more than 100 fathoms. In general, the 10-fathom contour lies about half a mile offshore, but this distance is increased to about $1\frac{1}{2}$ miles off the middle of the northern shore and off the southern coast towards the south-eastern end of the Strait. Race rocks, remarked on below, lie on a bank with less than 10 fathoms which is about a mile long at right angles to the northern shore. In the north-western entrance the 50-fathom contour extends for about 12 miles off the northern shore; close within its outer edge is Swiftsure bank, with a least depth of 19 fathoms. A light-vessel is stationed near this bank.

5. The Strait is well lighted, and in clear weather its navigation is simple. However, every precaution must be taken in thick weather for the currents and tidal streams are irregular. The Strait is also subject to sudden changes in weather which is exceptionally severe off the entrance in winter. The rise and fall of the tide is about 8 feet.

6. Esquimalt and Victoria, both close together at the south-east end of Vancouver Island, are the principal ports in the Strait. The former is a naval port, where there is plenty of accommodation alongside with depths up to 31 feet and a graving dock; the latter port has accommodation for large ocean vessels, depths at the piers are up to 38 feet.

Minor ports within the Strait are: Port San Juan, an inlet 13 miles north-eastward of Cape Flattery with Port Renfrew on its eastern side. There is good anchorage and a pier with 18 feet of water at its head. Sooke Harbour near the southern end of Vancouver Island has a bar with 13 feet of water over it, the channel within is narrow, but there is anchorage for small vessels and a jetty. Port Angeles on the southern shore and about 12 miles west of New Dungeness is well sheltered except from eastward, there are wharves and piers with up to 34 feet of water alongside. Neah Bay, also on the southern shore, and about 4 miles within the entrance of the Strait, is much used as a harbour of refuge during westerly and southerly gales. It has a breakwater, several mooring buoys and a pier with 18 feet alongside.

7. There are few islands or drying rocks within the Strait which qualify to extend the territorial water limits from those based on the low-water lines of the coasts. On the southern side there are but three, namely: Duncan rock, small, low and over which the sea nearly always breaks, lies about $1\frac{1}{2}$ miles north-north-westward of Cape Flattery with an islet and several rocks between; Seal rock, which is small in area but 100 feet high, lies a quarter of a mile from the coast, 2 miles south-eastward of Neah Bay; and, lastly, a drying rock whose seaward edge lies about a fifth of a mile from the coastal low-water line about $1\frac{1}{2}$ miles south-eastward of Pillar Point.

On the northern side: About 8 miles north-westward of Port San Juan is a rock which dries, the outer edge of which lies about a quarter of a mile offshore; a similar one is situated about 25 miles south-eastward of that point. Donaldson island, small and 100 feet high, is situated about 400 yards off the coast close south-eastward of Sooke Harbour; Church Island, small and 39 feet high, lies 300 yards offshore about 5 miles south-eastward; Race Rocks are a group of low bare rocks, the outermost being about $1\frac{1}{2}$ miles off the southern tip of Vancouver Island; Trial Islands lie about a mile southward of Gonzales point, the extremity of the southern and larger of the two is almost a mile offshore, there is a drying rock within a quarter of a mile of Gonzales point.

8. The international boundary through this Strait was determined by an arbitration award made in 1872 by the Emperor of Germany. A treaty between the United Kingdom and the United States of America in 1908 made a slight amendment to the line, but outside the area of this Strait. The Treaty referred to the boundary as running "along the *middle* of the channel which separates Vancouver's Island from the mainland". The award defined the boundary as a series of straight lines. An examination of the chart shows that the boundary is not the centre line of the navigation channel nor of the area between the opposite coast lines, nor the median line, but it would seem to be made up of a series of arbitrary straight lines which, borrowing from one side and the other in various parts, gives the appearance of a fair division.

The boundary line awarded in 1872 continued northward through Haro Strait and Boundary Pass to a position in the Strait of Georgia on what was, in that

year, the 49th parallel of latitude, and *midway along this parallel* between the mainland and Vancouver Island, thence along that parallel to the mainland. (More recent geodetical observations have moved the 49th parallel slightly, but the boundary remains the same on land).

9. Navigation is possible on both sides of the international boundary through the Strait.

12. Chosen Strait (Annex, map No 13)

References: Charts Nos. 358, 3366, 127, 2385.

South and East Coasts of Korea, East Coast of Siberia, and Sea of Okhotsk Pilot, Fourth Edition, 1952.

1. Chosen Strait, also known as Korea Strait, Choson Haehyop and Tsushima Kaikyo, joins the high seas of the East China Sea to those of the Sea of Japan: it lies between the south coast of Korea and the north-western side of Kyushu and the islands offlying it. The Strait is divided into two channels by Tsu Shima, a group of Japanese islands.

International traffic through the Strait is considerable. Only those parts of the channels which have a breadth of 26 miles or less will be described.

2. The western channel:

(i) The portion of this channel which has widths of 26 miles or less is bordered on the south-east by the north-west side of Tsu Shima between Ina Zaki, a cape in latitude $34^{\circ} 34' N.$, and Mitsu Shima, an islet lying off the northern end of Tsu Shima: the north-western side is formed by the following small islands; Vashon Rock, within a mile of Makino Shima, which fronts Pusan (Fusan); Blakeney Island, about 6 miles south-westward; Aunt Islands, 3 miles south-south-westward of the latter; Craigie Island, a further 3 miles in the same direction; and South Atalante Island, 16 miles further south-south-westward.

The length of the channel varies between 15 miles on its south-eastern side to 26 miles on its north-western side.

(ii) The widths of the channel are formed by the distances between the above-named islands and the coast of Kamino Shima, the largest of the Tsu Shima group and are as follows:

South Atalante Island to Ina Zaki	26 miles
Craigie Island to Kamino Shima	22.8 miles
Aunt Islands to Kamino Shima	24 miles
Blakeney Islands to Kamino Shima	$25\frac{1}{4}$ miles
Vashon Rock to Mitsu Shima	25 miles

At the southern end of the channel the least distance between 12-mile arcs of circles drawn on South Atalante Island and Ina Zaki is 2 miles; however, northward of this least distance the separation of the arcs from South Atalante Island and those from Tsu Shima increases to reach a maximum of $3\frac{1}{4}$ miles where the arc from

(Note: Although all of the above features on the north-west are named "island", each in fact consists of a group of isolated rocks.)

Craigie Island intersects that from South Atalante Island.

(iii) The channel is bordered on the north-west by Korean territory and on the south-east by Japanese territory.

(iv) The Strait is deep and varies in depth from 34 fathoms to over 100 fathoms. There are no navigational dangers therein. There are two high-powered lights at the northern end and one at the south-western end of the Strait to assist navigation at night. The combined tidal streams and current may at times set north-eastward at a rate up to $3\frac{1}{2}$ knots.

(v) On the mainland of Korea, westward of the Strait are the ports of Pusan, Chinkai and Masan.

(vi) Above-water drying rocks which qualify to extend the limits of territorial waters are few and are all situated within about 200 yards of the coastline, with the exception of the rocks in the vicinity of Mitsu Shima where they are all within $1\frac{1}{4}$ miles of the main coast of Kamino Shima, the largest island of the Tsu Shima group.

3. The eastern channel :

The eastern channel lies between Tsu Shima on the north-west and Kyushu on the south-east. Dividing this channel into two are the islands of Okino (or Kotsu) Shima and Iki Shima ; Iki Channel separates the latter island from Kyushu.

Okino Shima lies about 34 miles east of the middle of Tsu Shima and about 25 miles from O Shima, an island about 3 miles off the north-west coast of Kyushu.

The channels where less than 26 miles wide will be described in the following order : (a) between Tsu Shima and Iki Shima ; (b) between Iki Shima and Kyushu ; and (c) between Okino Shima and O Shima.

(a) The channel is bordered on the north-west by about 3 miles of the extreme south-east coast of Tsu Shima and on the south-east by the north-west coast of Iki Shima limited by the extreme northern islet of the coast and Tenaga Shima, another islet about $2\frac{1}{4}$ miles southward. There is a length of Strait of 8 miles where the separation of the 12-mile arcs from the opposite coasts is 2 miles or less.

The maximum width over this portion of the main strait is 26 miles and the minimum width 25 miles.

Depths in the whole strait are deep, varying from 20 to 65 fathoms. There are no navigational dangers. A high-powered light on each side of the strait aids night-time navigation. There are no ports or roadsteads of any consequence within the area.

(b) The channel between Iki Shima on the north and the coast of Kyushu on the south is bordered on its southern side by a number of islands and islets ; the principal of these from west to east are Azuchi Shima Madara Shima and Kakata Shima which lie from 8 to 4 miles offshore. Within a distance of 6 miles eastward of the south-eastern end of Iki Shima are a number of above-water and drying rocks. Towards the middle of the channel, at the western end, is Futagami Jima with two above-water rocks within 2 miles westward of it ; towards the eastern end of the channel is Yeboshi Jima.

Both these small high rocks have powerful navigation lights on them. 13 miles eastwards of the north-eastern end of Iki Shima is the small island of Oro Shima, and $18\frac{1}{4}$ miles further eastward is O Shima, close off the coast of Kyushu.

The length of the channel from abreast Futagami Jima to the line joining Oro Shima to O Shima is about 40 miles.

The breadths of the channels are best described by giving the distances between the bordering islands as follows :

Futagami Jima to Iki Shima	6 $\frac{1}{4}$ miles
Futagami Jima to Azuchi Shima	5 $\frac{1}{2}$ miles
Madara Shima to Iki Shima	7 $\frac{1}{2}$ miles
Kakata Shima to rocks eastward of Iki Shima	6 $\frac{3}{4}$ miles
Yeboshi Jima to rocks eastward of Iki Shima	4 $\frac{1}{4}$ miles
Yeboshi Jima to islet off Kyushu	6 $\frac{1}{2}$ miles
Yeboshi Jima to Oro Shima	10 $\frac{3}{4}$ miles
Oro Shima to rock off Kyushu	11 miles
Oro Shima to O Shima	18 $\frac{1}{4}$ miles

From the point of view of the extension of territorial waters, the positions of the islands and above-water rocks can best be seen on the chart (the most important have been named above). There are few drying rocks other than those close off the coasts or off the islands. Two, however, are isolated and may have some importance. The first lies $8\frac{1}{4}$ miles east of Yeboshi Jima and $3\frac{1}{2}$ miles from the coast of Kyushu, the nearest above-water rock to it is small, 3 feet high and 3.1 miles away. The second consists of two close together, $11\frac{3}{4}$ miles east-south-eastward of Oro Shima and $5\frac{1}{2}$ miles from the nearest land permanently above water.

Depths in the fairways vary between 40 and 12 fathoms ; there are a few isolated shoals, but the most restricted part of the fairway is west-north-westward of Yeboshi Jima, where its navigable breadth is reduced to $3\frac{3}{4}$ miles.

The only ports within the area worthy of note are Karatsu Ko and Fukuoka, both on the coast of Kyushu.

(c) The strait between Okino Shima on the north-west and O Shima on the south-east has a minimum breadth of 25 miles. Its length between limits where 12-mile arcs of circles from its opposite shores are separated by 2 miles or less is 9 miles. The 12-mile arc from Oro Shima passes through the south-western of these limits.

Depths in the strait vary from about 20 to 50 fathoms. There are no navigational dangers and there are good lights on both the islands for night navigation.

There are no features to extend the limits of the territorial sea from those based on the low-water line of the land permanently above water other than a small rock within half a mile of O Shima, and perhaps, four small rocks, the highest being 9 feet high, nearly three-quarters of a mile south of Okino Shima, should also be mentioned, as they are not clearly shown on the chart.

There are no ports in the area.

East-south-eastward of the strait is Shimonoseki Kaikyo, the strait leading between Kyushu and Honshu into the Inland Sea of Japan.

13. Hainan Strait (Annex, map No 14)

References : Charts Nos. 3892, 3010.
China Sea Pilot, Volume I, Second Edition, 1951.

1. Hainan Strait separates the Chinese Island of Hainan from the mainland of China and joins the high seas north-east of the island to those of the Tongking Gulf on the west. It is frequently used by international shipping.

The Strait runs in an east-north-easterly direction and is comparatively straight. Its northern side is formed by the southern coast of Lui-Chow Peninsula and its southern side by the north coast of Hainan Island.

2. The length of the Strait between the intersection at its east and west ends of 12-mile arcs drawn from the opposite coasts is about 61 miles, but between its natural entrance points the true strait is about 40 miles long.

3. The breadth of the true strait at its western end is $13\frac{1}{2}$ miles ; 5 miles within it widens to 19 miles ; thence it reduces in width to 10.2 miles at about 13 miles within the western entrance. It retains this width for about 3 miles then widens again to 15 miles, thence to be constricted once more to its narrowest part of 9.8 miles at a distance of 24 miles east of its western entrance. Thence, in general terms, the strait widens again to a breadth of 19 miles at its eastern entrance.

4. Depths in the fairway of the true strait are comparatively deep and range from about 17 fathoms to 40 ; there are dangerous shoals, however, on both the north and south sides, particularly within the headlands of the bays there. Dangerous shoals and sandbanks also exist in the middle of both approaches to the Strait ; these are more dangerous in the eastern approach, where many of them break if there is any swell. Three navigational channels are charted through the shoals at the east end leading to the strait, the middle of these is marked by buoys. There are a number of navigational lights in the strait. The tidal streams are strong and at times may attain a rate of 4 knots ; overfalls and tide-rips also occur. Visibility during the north-east monsoon may be reduced to 2 miles or less by drizzle or mist. Fishing stakes may be encountered in places, up to 4 miles offshore.

5. Hoi-How, which has a roadstead and no alongside berths, is the only port within the area ; it is the sea-port for Kiungchow, the capital of Hainan, about 2 miles southward. Sheltered anchorage may also be found in the bays on both the north and south sides of the strait according to the direction of the wind.

6. There are few features which may qualify to extend the limits of the territorial sea from those based on the low-water line of permanently dry land. Such features are charted as follows : (a) about $2\frac{1}{2}$ miles east of Hainan Head, the south-eastern natural entrance point of the strait, there are several small drying sandbanks lying on Hainan Head Bank ; (b) Lo Tao Sha, an extensive drying sandbank, lies in the eastern entrance to the strait, with its outer limit about $5\frac{3}{4}$ miles eastward of the south-eastern coast of Lui-chow Peninsula — its inner limit is about $4\frac{1}{4}$ miles offshore ; (c) on the northern side of the Strait there are two rocks which dry

at low water, situated almost a mile southward of Hongham point, which is $18\frac{1}{2}$ miles north-westward of Hainan Head ; (d) on the northern shore of the Strait, and about 11 miles within the western entrance, an islet, 20 feet high, lies within a distance of a quarter of a mile offshore. The low-water line of the south-western end of this islet is about three-quarters of a mile from that of the mainland. About half a mile further westward are two other detached rocks or islets.

14. Palk Strait (Annex, map No 15)

References : Chart 68 A.
Bay of Bengal Pilot, Eighth Edition, 1953.

1. Palk Strait forms the northern entrance to Palk Bay and lies between the northern coast of Ceylon and the eastern coast of India. As this Strait is 29 miles wide at its narrowest part and there are no islands, islets or drying features in that area which qualify any extension of the limits of the territorial sea beyond those based on the low-water lines of the mainland, this Strait will not be described.

1. The southern end of Palk Bay is separated from the Gulf of Mannar by Pamban island, Adam's Bridge and Mannar island. Pamban island is connected to the mainland of India by a causeway having a railway and a road. A cutting through the causeway, over which there is a rolling lift bridge, is 200 feet wide and allows passage for small coasting vessels of from 200 to 800 tons, about 200 feet in length.

1. The channels through Adam's Bridge, which is a narrow ridge of sand and rocks connecting Pamban to Mannar Island, are but 3 or 4 feet deep and passage through them is dangerous owing to the shifting nature of the sand and the strong currents and confused sea in the vicinity. Between Mannar island and Ceylon is a boat channel only, spanned by a railway bridge and a road bridge. There is a regular steamer ferry service between Pamban and Mannar islands.

15. Strait of Malacca (Annex, map No 16)

References : Charts Nos. 1358, 794, 795.
Malacca Strait Pilot, Third Edition, 1946.

1. The Strait of Malacca separates Sumatra from Malaya, and forms a much used route for international shipping passing from the high seas of the Indian Ocean to those of the South China Sea. Only those parts of the Strait where 12-mile limits from opposite shores overlap or are separated by less than 2 miles will now be described. In addition to Singapore Strait, which is remarked on as a separate item, these areas are three in number : (a) abreast the Aruah Islands ; (b) between Cape Rachado and Tanjong Medang ; and (c) between Cape Tohor and Tanjong Parit.

2. (a) The Aruah Islands (latitude $2^{\circ} 53' N.$) are a group of islets situated on the western side of the axis of the Strait and are Indonesian territory. The channel between them and the coast of Sumatra south-westward

is 21 miles wide and has a length of about 20 miles. Westward of the islands the fairway is deep with depths up to 24 fathoms, but within 6 miles southward of them depths vary between 3 and 7 fathoms. There are no drying features from which the territorial sea limits can be extended.

North-eastward of the islands is the main fairway of the Strait which lies between them and North Sands, extensive submerged sandbanks running parallel with the Strait. Between these sands and the Malayan coast is Pulau Angsa, an islet on an extensive drying sandbank, $4\frac{1}{2}$ miles offshore. On North Sands, and $11\frac{1}{2}$ miles westward of Pulau Angsa low-water line, is a patch which dries 3 feet, named Batu Kinching. This patch is separated from the eastern islet of Aruah Islands by $24\frac{1}{2}$ miles. The length of this part of the Strait where the 12-mile arcs from Aruah Islands and Batu Kinching are separated by 2 miles or less is about 10 miles. The deep-water fairway of the Strait, with depths of 16 to 20 fathoms, lies within about 13 miles of Aruah islands.

At the southern end of North Sands, on the north-eastern side of the fairway and south-eastward of the area now being described, is One Fathom Bank, with a light-structure on it; there is another dangerous $3\frac{3}{4}$ -fathom patch about $2\frac{1}{2}$ miles further southward. The deep-water fairway is restricted in the vicinity of these patches by South Sands, submerged sandbanks lying off and parallel to the coast of Sumatra; the width of the navigable channel here is about 4 miles.

Port Swettenham is situated on the Malayan coast due east of this area.

Note: Any width of territorial sea less than $11\frac{1}{2}$ miles "incapacitates" Batu Kinching as a base point for measurement and at the same time increases the breadth of the navigable part of the Strait outside the territorial sea limit as measured from Aruah Islands.

(b) Abreast Cape Rachado (latitude $2^{\circ} 24' N.$) on the Malayan coast, the Malacca Strait is reduced in width to a distance of 20 miles between that point and Medang, an island separated by a creek from Rupert, a large island lying close off the coast of Sumatra.

The length of this part of the Strait where its shores are separated by a distance of 26 miles or less is 28 miles. The 12-mile arcs from the opposite coasts overlap.

Southward of the adjacent islands of Medang and Rupert, the Strait has a general width of 30 miles, and northward of them the breadth is about 40 miles from shore to shore. The narrow part of the area between Medang and the Malayan shore varies between 20 and 25 miles in width over a distance of about 14 miles.

The Strait here is deep, varying from $9\frac{1}{2}$ to over 30 fathoms. There is, however, a dangerous shoal with $2\frac{1}{2}$ fathoms of water over it near the middle. This can be passed on either side, but the main fairway lies north-eastward of it and within 12 miles of the Malayan coast. Navigation of this part of the Strait presents no difficulties; it is well marked and lighted, and the tidal streams and current, although reaching a maximum rate of 3 knots at springs, run true to the fairway.

There are a number of small islets and drying reefs which qualify to extend the limits of the territorial sea, close to the Malayan coast; the most seaward of these are Batu Tengah and Pulau Batu Besar which both lie about $1\frac{1}{2}$ miles offshore. On the south-western side of the Strait, on the coastal bank extending north-westward from Medang, are several drying mud banks; the most seaward of these is 6 miles north-west of Medang and $4\frac{1}{2}$ miles from the low-water line of the nearest permanently above-water feature. Further north-westward are other drying banks on the southern end of South Sands, but these do not affect the territorial sea limits of this narrow part of the Strait.

Port Dickson, on the Malayan coast, lies at the northern end of the area and the roadstead of the Port of Malacca eastward of the area. To the east of Medang and Rupert is the approach to Bengkalis Strait, wherein is the settlement of Bengkalis with its small roadstead. Navigation is possible on both sides of the median line of this part of the Strait.

(c) Between Tanjong Tohor (latitude $1^{\circ} 51' N.$) on the Malayan coast and Tanjong Parit, the north-eastern extreme of Bengkalis, an island off the Sumatra coast, the Strait again narrows to a width of less than 26 miles over a distance of about 11 miles. The minimum breadth of the Strait between the low-water lines of these points is 24 miles, so 12-mile arcs from each side just touch. There are no islets or drying features in the vicinity from which the limits of the territorial sea can be extended. The Strait between these points varies in depth from 13 to 26 fathoms, but south-eastward of it, near the middle of the channel and parallel to its axis, is Long Bank, with depths of about 3 fathoms over it; there are similar banks some with less depths, between it and the islands close off Sumatra. The fairway thus lies nearer to the Malayan shore than the centre line of the Strait.

Eastward of the area is the roadstead and small port of Batu Pahat.

16. Ombae Strait (Annex, map No 17)

References: Charts Nos. 1697 and 3244.

Eastern Archipelago Pilot, Volume II, Sixth Edition, 1949.

1. Ombae Strait separates the south coasts of the Alor islands from the north-west coast of Timor and the east coast of Alor from Atauro or Kambing. The Alor islands are Indonesian territory, and the north eastern end of Timor is Portuguese. Only that part of the Strait having a width of 26 miles or less will be described, together with the extreme western end of Wetar Strait, which also is less than 26 miles wide.

The western approach to the Strait is funnel-shaped, and about 30 miles west of Tanjong Laisoemboe, the south-eastern extremity of Alor, it has a width of about 32 miles, while about 23 miles west of that point the width between the south coast of Alor and Tanjong Parimbala, a prominent point where the coast of Timor turns from a general westerly to a southerly direction, is 26 miles.

At the western end of Wetar Strait and in the south-

eastern approach to Ombae Strait lies the Portuguese island of Atauro; it is separated from Timor by a distance of $12\frac{3}{4}$ miles and from Liran, an island south-west of Wetar, by 7 miles.

The Strait joins the high seas of the Savu Sea, south-westward, to those of the Banda Sea, northward. It is a route frequented by sailing vessels. The maximum observed rate of tidal streams is 3 knots.

2. The length of the Strait to the northern exit between Alor and Atauro, where its breadth is less than 26 miles, is 40 miles. Its length into the Wetar Strait is about 55 miles.

The minimum breadth between the south-east point of Alor and the north-west coast of Timor is $16\frac{3}{4}$ miles; that between Alor and Atauro is $21\frac{1}{2}$ miles, and between the latter island and Timor is $12\frac{3}{4}$ miles. There is no point in the strait proper further than 12 miles from the land.

3. The Strait is very deep, having charted depths of over 1,700 fathoms. There are no navigational dangers, and the coasts are all steep-to. There are but two navigational lights in the whole area.

4. Only two offshore features which would qualify to extend the limits of the territorial sea are charted. These are both very close to the coasts; the first is off Alor and about 14 miles west of the south-eastern point of that island, and the second is off Timor and about $4\frac{1}{4}$ miles north-eastward of Parimbala and is the southern point of the shortest distance between Timor and Alor.

5. The only roadstead worthy of note within the area is off Dilly, a settlement on the north coast of Timor and about 27 miles eastward of Tanjong Parimbala; anchorage may be found when necessary close to the coast off most of the villages along the coasts.

6. Navigation is possible on both sides of the median line both through the strait proper and the approach to Wetar Strait.

17. Soenda Strait (Annex, map No 18)

References : Charts Nos. 1653 A, 2056.

Eastern Archipelago Pilot, Volume II, Sixth Edition, 1949.

1. The Soenda Strait separates Sumatra from Java. It is a route much used by international shipping, and forms the principal connexion between the high seas of the Indian Ocean and those of the Java Sea. The northern entrance point is about 50 miles west of Djakarta.

The western entrance to the Strait lies between Tanjong Gedeh, the western extremity of Java, on the south side and Balimbing Pamantjasa, on the south side of Sumatra, about 64 miles north-westward.

The Strait is wide at its western end, but is constricted to a breadth of about 14 miles at the east. The northern shore, formed by the southern coast of Sumatra, consists primarily of two large bays, with entrances about 26 and

30 miles wide. About mid-way between the western and eastern entrances, and borrowing towards the northern shore, is a group of islands of which Rakata, once known as Krakatau, the famous volcano, is the most southern. The narrow part of the Strait at the eastern end is also encumbered by islands and rocks. The maximum separation of islands in the group towards the middle of the Strait and between these islands and the south coast of Sumatra is $7\frac{1}{2}$ miles. The channels through this group will therefore not be described in detail.

About 4 miles northward of the north-western extremity of Java lies the island of Panaitan, between is Behouden Passage, deep and 13 miles long, forming an entrance to the Strait from southward. Only that part of the Strait where the main channel has a breadth of 26 miles or less will be remarked on; this extends from northward of Panaitan at the western end to a position 13 miles northward of Tanjong Podjok, the cape at the junction of the north and west coasts of Java.

2. (i) The Strait between the above limits runs in a general north-easterly direction and is about 63 miles in length.

(ii) At the western end, between Rakata on the north and Panaitan, the breadth is about 23 miles. On the coast of Java and due south of Rakata is Welkomst Baai; from Rakata to the entrance of this bay is 31 miles, this forms the widest part of the Strait (see also paragraph 5 below). South-eastward of Rakata the distance to Tanjong Lesung on the Java coast is 22 miles, and it is about the same distance to the Java coast eastward of that island. From Tanjong Tua, the most southerly tip of the eastern end of Sumatra, the distance to Karang Tjikoneng, a point opposite on the Java coast, is 14 miles. The Strait thence runs in a north-north-easterly direction, retaining this general width, for about 14 miles to abreast Tanjong Podjok, where the Java coast turns abruptly eastwards.

In this narrow neck are a number of islands and rocks which divide the Strait; the largest of these is Sangian lying near its middle. Close off the Sumatra coast is a chain of islets and rocks, the most distant being $2\frac{1}{4}$ miles offshore and $4\frac{1}{4}$ miles north-west of Sangian; there is a small rock, just above water, about mid-way between Sangian and this chain of islands.

The distance between the southern point of Sangian and the Java coast south-eastward is about $5\frac{1}{4}$ miles. Some $4\frac{3}{4}$ miles east-south-eastward of this point, and about $1\frac{1}{4}$ miles from the Java coast, is a small high rock, while 5 miles north-eastward of Sangian, and about 4 miles from the Java coast, is a similar but higher rock with a navigational light on top.

Thus, the narrowest part of the Strait proper lies between the outermost of the chain of islands off Sumatra and the coast of Java, a distance of 12 miles, while the narrowest navigational channel is $1\frac{3}{4}$ miles wide between Sangian and the small above-water rock north-westward.

3. The main Strait throughout its length is deep, varying from over 60 fathoms to about 16. However, amongst the islands north of Rakata there are many dangerous shoals charted and vessels are cautioned to

avoid that area as depths are liable to alteration due to volcanic eruption.

Near the middle of the Strait, and 4 miles north-eastward of Sangian, is a 3-fathom patch.

There are two navigational lights in the narrower part of the Strait and one in Behouden Passage.

Tidal streams are generally strong; near the small above-water rock north-westward of Sangian a rate of 6 knots has been reported with strong eddies and discoloured water.

The rise and fall of the tide is small.

There are no difficulties in the navigation of the Strait; the main channel south of Rakata is that generally used, as is that southward and eastward of Sangian.

4. There are no drying features charted which could qualify to extend the limits of the territorial sea. The positions of the islands can be best be seen on the chart.

5. Inside the western end of the Strait and southward of Rakata, 12-mile arcs of circles drawn from that island, from Papaitan and from the coast of Java do not overlap or meet, but a small triangular area is left between them. This area has arcs as sides, the maximum length of sides from apex to apex is $5\frac{1}{2}$ miles and the distance from the apex to the base of the triangle is $4\frac{1}{2}$ miles. 13-mile arcs from the base points do just *not* meet or overlap.

6. The only port of note within the area is Pandjang on the eastern side of the two large bays in the south coast of Sumatra; here there is sheltered anchorage, some mooring buoys and a quay 540 feet long with 26 feet of water alongside. On the Java coast, about 5 miles south of Tanjong Podjok, is a sheltered anchorage inside the island of Merak Besar, close to the settlement of Pulomerak, the terminus of the railway. A steamer ferry service is maintained between this settlement and Pandjang.

18. San Bernardino Strait (Annex, map No 19)

References : Charts Nos. 3808, 3370, 3818.

Eastern Archipelago Pilot, Volume I, Sixth Edition, 1950.

1. San Bernardino Strait separates the south-eastern end of Luzon from the north-western part of Samar and is the eastern of the several straits through the Philippine Islands on one of the principal routes joining the high seas of the Pacific Ocean with those of the China Sea.

The Strait is shaped somewhat like a curved funnel and is wider at the east than at the west.

Its western side is formed by the comparatively straight stretches of the east and south coasts of the south-eastern end of Luzon, between Bingay Point on the north and Sujak Point on the south. The eastern side consists of the western coasts of the Balicuatro Islands, 24 miles south-south-eastward of Bingay Point and the north-western part of Samar; the south-eastern

side is formed by the north coasts of the islands of Dalupiri, Kapul and San Andres, the northern of the Naranjo Islands.

The San Bernardino Islands, two in number, small and about 160 feet high, with two small above-water rocks within a quarter of a mile eastward of them, lie close inside the north-eastern entrance to the Strait and near mid-channel.

The western end of the Strait leads into Tikao Pass, north-westwards, and also into the Samar Sea through Dalupiri, Kapul and Naranjo Passes situated between the islands of those names.

Off the south-east corner of Luzon the breadth of the Strait is restricted by a chain of islands, with Tiklin Strait, with a least width of about 350 yards, between Luzon and the islands.

2. (i) The length of the Strait is about 35 miles.

(ii) The breadth of the Strait between the north-eastern natural entrance points of Bingay Point and the Balicuatro Islands is 24 miles; this is divided into two by the San Bernardino Islands which lie $5\frac{1}{2}$ miles north-west of Balicuatro Islands and within 8 miles of the nearest point of the east coast of Luzon, westward.

Between the north-western tip of Samar and the chain of islands off the south-east coast of Luzon the breadth of the Strait is $7\frac{1}{2}$ miles. Between the chain of islands and the northern point of Kapul is the narrowest part of the Strait; it is $3\frac{1}{2}$ miles wide.

Between San Andres Island and the most southern rock of the chain of the islands off south-east Luzon is $6\frac{3}{4}$ miles; between San Andres and the coast of Luzon northward is about $7\frac{1}{2}$ miles and between that island and Sujak Point is $8\frac{1}{4}$ miles.

The least breadth of Dalupiri Pass is under 2 miles, of Kapul Pass is $3\frac{1}{4}$ miles and of Naranjo Pass is $4\frac{3}{4}$ miles. Tikao Pass has a least breadth of 9 miles and the waters between Naranjo Islands and Masbate Island westwards are 11 miles wide.

3. The San Bernardino Strait is deep, depths in general being between 30 and over 100 fathoms. There is, however, a dangerous shoal on a bank with less than 6 fathoms of water over it which extends about three-quarters of a mile south-eastward from the southern rock of the chain of islands of the Luzon coast, which reduces the navigable width of the Strait to $3\frac{1}{4}$ miles. Depths of less than 6 fathoms also extend north-westwards of the northern point of the Balicuatro Islands and the same distance eastwards of the San Bernardino Islands.

Tiklin Strait is deep but there are shoal patches at both its ends; navigation therein is not recommended on account of its narrowness and the strong tidal streams.

4. For navigation at night there are high-powered lights on San Bernardino Island, at the north end of Kapul and on the southernmost rock of the chain of islands off Luzon.

Caution is required in the navigation of the Strait, not so much on account of the dangers, but because of the strong tidal streams which may run in the narrow part up to a rate of 8 knots. There are many strong

eddies and tide rips and towards the south-western end there are cross sets either in or out of the various passes between the islands. Heavy seas are encountered during the north-east monsoon.

There are no major ports or anchorages within the area. Anchorage may be obtained off Allen on the north-western part of Samar and off Port Gubat, on Luzon, about 10 miles south of Bingay Point.

5. No drying features, other than the low-water lines of permanently above-water land, appear to be charted. There are a few above-water rocks around the coasts but nearly all are within a quarter of a mile of the low-water lines of the islands. Exceptions to these are in the chain of islands off the south-east coast of Luzon :

(i) Calantus, the southernmost rock ; this is 5 feet high, has a navigation light on it, and is situated $1\frac{1}{2}$ miles south of Luzon and a mile from the next island north-eastward.

(ii) Magtimua Rock, about half a mile south-eastward of the northern island in the chain and about 2 miles from the main coast of Luzon.

19. Surigao Strait (Annex, map No 20)

References : Charts Nos. 3810, 3826.

Eastern Archipelago Pilot, Volume I, Sixth Edition, 1950.

1. Surigao Strait somewhat resembles in shape that of a hook. It connects the high seas of the Pacific Ocean to those of Leyte Gulf and those of the Mindanao Sea, the latter in turn being connected westward to the Sulu Sea and north-westward through the various straits of the Philippines to the China Sea. It forms a regular route for international shipping.

The entrance to the Strait on the Pacific side is between Suluan Island on the north and the island of Dinagat on the south. The northern side is formed by Suluan and Homonhon Islands ; the western side is formed by the south-eastern sides of Leyte and Panaon Island ; the eastern side consists of the west coasts of Dinagat and of the islands southward between it and the north end of Mindanao. The southern entrance lies between the south end of Panaon Island and Bilaa Point, the northern extremity of Mindanao.

Westward of the northern end of Dinagat, the islands of Hibuson and Little Hibuson divide the Strait into two passages ; the eastern of these is obstructed towards its eastern side by two rocky islets with various shoals in the vicinity.

Towards the southern end of the Strait is Hinatuan Passage leading, between the north coast of Mindanao and the islands northward, to Dinagat Sound and to the Pacific Ocean south-eastward of the island of Siargao.

Between Panaon Island and Leyte is Panaon Strait, a narrow passage leading to Sogod Bay at the south-eastern end of Leyte.

2. (i) The length of the Strait between its entrance points is about 70 miles.

(ii) The breadth of the Strait at the Pacific end

between Suluan Island and the north coast of Dinagat is 26 miles. North of Dinagat the width is $14\frac{1}{2}$ miles to Homonhon. The passage between Dinagat and Hibuson Island is $3\frac{3}{4}$ miles wide and that between Little Hibuson Island and Leyte is $12\frac{1}{2}$ miles wide. Between an islet off the west coast of Dinagat and the closing line of Kabalian Bay in the south-east coast of Leyte is about $13\frac{1}{2}$ miles.

The narrowest part of the main Strait is $8\frac{1}{2}$ miles wide and lies between the south-eastern corner of Leyte and Sumilon Island, a small island at the north-western end of Hinatuan Passage. The width of the Strait between its southern natural entrance points is $10\frac{1}{4}$ miles, while that between Limasawa Island, west of Panaon Island and off the entrance to Sogod Bay, and the nearest point on the north-west coast of Mindanao is 21 miles.

(iii) The Strait is deep ; in the northern half depths vary between 18 and 60 fathoms, while the southern half is deeper with depths up to 770 fathoms in the southern entrance. Towards the middle of the northern entrance, however, is a 10-fathom patch which it would be prudent to avoid in dirty weather. Lesser depths also occur over the coastal bank, which extends about $2\frac{1}{2}$ miles westward of the northern end of Dinagat.

3. There are no dangers in the fairway of the Strait and in daylight navigation should prove simple. There are no lights, however to assist navigation at night.

The tidal streams are charted as running true to the fairway ; in the vicinity of Hibuson Island they are strong and may attain a rate of 5 or 6 knots at spring tides. Tide rips are found near the prominent points of the coasts in the Strait and amongst the islands on its eastern side.

There are no ports within the Strait. Surigao, the capital of the province of that name and a place of considerable importance, is situated on the north coast of Mindanao and about 5 miles within the entrance of Hinatuan Passage leading eastward off the Strait at its southern end. There is a wharf with 21 feet of water at its head and good anchorage may be obtained nearby. Sheltered anchorage close to the coast may be found by vessels with local knowledge in several of the bays in the west coast of Dinagat and in Kabalian and Hinunangan Bays on the south-east coast of Leyte.

4. No drying features are charted from which the limits of the territorial sea could be extended. The positions of the above-water islets from which such measurements are made can best be seen on the chart ; with the exception of those named above and those south-south-westward of Dinagat, none are more than $2\frac{1}{4}$ miles offshore.

20. Strait of Hormuz (Annex, map No 21)

References : Chart No. 753.

Persian Gulf Pilot, Tenth Edition, 1955.

1. The Strait of Hormuz joins the high seas of the Gulf of Oman to those of the Persian Gulf ; a considerable amount of international traffic passes through

it. The Strait lies between Iran on the north and north-west and Oman on the south. Its northern shores are formed by the eastern part of Qishm Island together with its off-lying islands of Jezirat Larak and Jezirat Henjam. Its southern shores are formed by the western and northern sides of Musandam Peninsula, the most northerly part of the mainland of Oman, and its off-lying islets.

From the Gulf of Oman the approach to the Strait is in a northerly direction and is about 30 miles wide. The Strait itself runs in a general south-westerly direction; it is constricted to a breadth of $20\frac{3}{4}$ miles at the north-eastern end between Jezirat Larak and Great Quoin, an islet $8\frac{1}{2}$ miles northward of Musandam Peninsula; thence between this peninsula and the eastern coast of Qishm Island the general width is about 28 miles.

Qishm is an island about 60 miles long lying parallel to the Iran coast and separated from it by the narrow and intricate Clarence Strait. Jezirat Henjam, an island about 5 miles across, lies close off the middle of its south-eastern coast. Jezirat Larak, about $5\frac{1}{2}$ miles long, is situated about $4\frac{1}{4}$ miles south eastward of the eastern extremity of Qishm.

Salamah Wa Binatahan, also known as the Quoins, is a group of three high islets, lying between $7\frac{1}{2}$ and 9 miles northward of the north-east point of Musandam Peninsula. Within $2\frac{3}{4}$ miles of the northern side of this peninsula are a number of islets varying in height from a few feet to over 800 feet.

The only part of the Strait now to be considered is that having a breadth of 26 miles or less; this is situated north-north-westward of Salamah Wa Binatahan.

2. (i) The length of that part of the Strait having a breadth of 26 miles or less is $16\frac{1}{2}$ miles. The 12-mile arcs from the nearest points on opposite shores overlap over a distance of 13 miles.

(ii) The breadth of the Strait between Great Quoin to the south, and the eastern end of Jezirat Larak is $22\frac{1}{2}$ miles, that between Great Quoin and the south-western end of Jezirat Larak is $21\frac{1}{2}$ miles, that between Perforated Rock, an islet close off the north-western tip of Musandam Peninsula and the south-western end of Jezirat Larak is 26 miles. The shortest distance across the Strait, between Great Quoin and the nearest point on Jezirat Larak, is $20\frac{3}{4}$ miles.

(iii) Depths in that part of the Strait now being considered vary between 32 and 50 fathoms. Further westward in the Strait and north of its axis is Patrick Stewart Bank with a depth of 14 fathoms. About $1\frac{3}{4}$ miles south-westward of Little Quoin a 9-fathom sounding is charted.

3. Navigation through the Strait presents little difficulty but the tidal streams, which are strong and at times set across the Strait, must be guarded against.

Strong breezes may set in and sudden shifts of wind may occur with little or no warning. During a Shamal in summer and also while the Nashi is blowing in winter, the very hazy atmosphere may so completely obscure the land that surf on the beach may be the first indication of its proximity.

There is a high-powered light on Little Quoin, the

southern of the islets of Salamah Wa Binatahan, to assist navigation at night. The channel southward of Little Quoin, between it and the islets off-lying Musandam Peninsula, which is about 10 miles long with a least breadth of $4\frac{3}{4}$ miles, is often used in preference to the main Strait northward.

There are no ports or roadsteads within the area. There are roadsteads, however, off Qishm, a small town on the north-eastern coast of the island of that name, and at Bandar Abbas, on the mainland of Iran, northward of the eastern end of Qishm Island. Anchorage may also be found north of Jezirat Larak.

4. There are no drying features in the area from which the limits of the territorial sea may be extended. There is a small above-water rock, not shown on the chart, situated less than 100 yards from the north side of Great Quoin.

5. Navigation is possible on both sides of a median line through the Strait and its approaches.

21. St. George's Channel (Bismarck Archipelago) (Annex, map No 22)

References: Charts Nos. 3553, 1574, 2015, 2135, 524.
Pacific Islands Pilot, Volume I, 1946.

1. St. George's Channel in the Bismarck Archipelago separates New Ireland from New Britain and joins the high seas of the Solomon Sea southward to those of the Bismarck Sea north-westward. International shipping passing to and from Rabaul, a port on the New Britain side of the channel, use both its southern and northern entrances.

The Channel, about 40 miles wide at its southern end between the south point of New Ireland and the coast of New Britain westward, gradually narrows towards its northern end, where it is split into two unequal parts by the Duke of York Group, a group of 13 islands of which Duke of York Island is the largest.

The channel eastward of this group continues in a northerly direction along the coast of New Ireland; that westward takes a north-westerly direction past the entrance to Blanche Bay wherein is the port of Rabaul. Credner Islands, two in number, both small and low, lie in about the middle of the western channel and south-westward of the Duke of York Group.

Both New Britain and New Ireland are under Australian trusteeship. Only that part of the Channel which has a breadth of 26 miles or less will be remarked on here.

2. (i) At the southern end the breadth of the Channel narrows to 26 miles abreast Watarea Rock, a small rock about a quarter of a mile offshore $8\frac{3}{4}$ miles northward of the south point of New Ireland. At the northern end the Channel is 26 miles wide north-eastward of Cape Tawui, the most northerly point of New Britain. The length of the Channel between these limits past the eastern side of the Duke of York Group is about 55 miles and that past the western side of the Group is about 48 miles.

(ii) The breadth of the Channel towards its southern end, as stated above, is 26 miles; about 10 miles further within its narrows to 18 miles; abreast Cape Gazelle, 17 miles further north, the width is about 16 miles; thence the Channel divides around the Duke of York Group. To the east of the Group, the narrowest part of the Channel is 8 miles north-eastward of the middle of the eastern coast of Duke of York Island; thence this branch widens to about 12 miles north-east of Mait Unanga, the northern of the two islets north-westward of the most northerly point of Duke of York Island.

The branch of the Channel passing west of the Duke of York Group has a width of $4\frac{1}{2}$ miles between Cape Gazelle and the southern islet of the Group. Between the south-western island of the Group and the eastern of the Credner Islands is a distance of nearly 3 miles, and between the latter and the coast of New Britain southward is $3\frac{1}{2}$ miles. From the western Credner Island to Praed Point, the northern entrance point to Blanche Bay is $5\frac{1}{2}$ miles. From Cape Tawui to Makada Island, the north-western of the Duke of York group is $14\frac{1}{2}$ miles.

(iii) The Channel is deep; it has not been well surveyed but is apparently free from dangers. The few depths that are charted are between 116 and 1,600 fathoms and are mostly over 1,000 fathoms; one shoal sounding of 31 fathoms was reported in 1917 to lie $2\frac{1}{4}$ miles off the west coast of New Ireland. The coastal bank with shallower depths does not extend more than about half a mile off the eastern and western sides of the Channel.

3. Navigation within the Channel is simple, no dangers are charted; except, however, for lights inside Blanche Bay, there is but one navigational light for use in night time passages, this is on Cape Gazelle. Currents may run at a rate of from 2 to 3 knots, their direction being dependant on the monsoons. Off Cape Gazelle tide rips are charted.

The entrance to Blanche Bay is $2\frac{3}{4}$ miles wide.

The only port of any consequence within the area is Rabaul within Blanche Bay. Here there is a berth for a maximum draught of 30 feet, and anchorage may be obtained in any suitable depth. Rabaul is the seat of Government and the port of entry for New Britain. There are several open anchorages for vessels with local knowledge close inshore in the small bays of both the coasts of New Britain and New Ireland, and also between the islands of the Duke of York Group.

4. No offshore drying features are charted from which the limits of the territorial sea can be extended.

22. Cook Strait (Annex, map No 23)

References : Charts Nos. 695, 1493.

New Zealand Pilot, Eleventh Edition, 1946.

1. Cook Strait separates North and South Islands of New Zealand and connects the high seas of the Tasman Sea northward with those of the South Pacific Ocean southward. It forms a much frequented route for international shipping to and from the principal ports of

New Zealand. In general terms, the Strait is wide at its northern end, narrows towards its middle where it retains a comparatively uniform width over a distance of about 14 miles and then widens again to its southern entrance.

The eastern side is formed by the coast of North Island from the mouth of the Waikanae River to Cape Terawhiti, 30 miles south-westward and thence to Cape Palliser about 35 miles south-eastward of that cape. The western side extends from Stephens Island, situated about 46 miles west-north-westwards of the mouth of the Waikanae River to The Brothers, 33 miles south-eastward, thence to Cape Campbell, 37 miles southward. The southern entrance is 46 miles wide, and the whole Strait has a length of about 60 miles.

The part here to be considered is that where the separation of the opposite shores is 26 miles or less. This area is bounded on the north by a line joining Walker Rock, a small rock, 3 feet high, lying one mile off Cape Jackson and about 9 miles north-westward of The Brothers, to the southern end of Kapiti Island situated 3 miles off the coast of North Island and westward of the mouth of the Waikanae River. The southern limit is formed by a line from Karori Rocks, about a quarter of a mile off the coast of North Island and $3\frac{1}{2}$ miles southward of Cape Terawhiti, to White Bluffs on the coast of South Island and about 30 miles south-south-westward of The Brothers.

2. (i) The length of the middle of the Strait between these limits is about 37 miles.

(ii) The breadth at the northern end is 26 miles. Abreast The Brothers, two islands about 235 feet high with some outlying rocks, lying $2\frac{1}{2}$ miles off Arapawa Island on the western side of the Strait, the width to Mana Island, eastwards is 15 miles. Mana Island lies about $1\frac{1}{2}$ miles offshore and 12 miles south of Kapiti Island. Between The Brothers and Ohau Point 10 miles south-westward of Mana Island, the breadth of the Strait is just under 12 miles. The narrowest part of the Strait is between Wellington Head, the south-eastern extreme of Arapawa Island, and the coast of North Island between Ohau Point and Cape Terawhiti $3\frac{1}{2}$ miles southward; it there has a breadth of $11\frac{3}{4}$ miles. From Cape Terawhiti to Rununder Point on the coast of South Island westward, the width is 17 miles; while from the same point to the coast in the middle of Clowdy Bay, situated northwards of White Bluffs, is $27\frac{3}{4}$ miles. Between Karori Rock and White Bluffs is 26 miles.

(iii) The Strait is in general deep and for the most part the 20-fathom depth contour lies within a mile of the coast; depths near the axis of the Strait are great and in places reach more than 200 fathoms. Clowdy Bay has, however, less water and the 20-fathom contour there lies up to $7\frac{1}{2}$ miles from its shore. There are a few isolated rocky patches in the area, notably a 9-fathom bank about $5\frac{1}{2}$ miles south-south-westward of Kapiti Island and $4\frac{1}{4}$ miles offshore; a $5\frac{1}{4}$ -fathom patch in the middle of the Strait, just north of a line joining The Brothers to Mana Island; a rock awash at low-water, $3\frac{3}{4}$ miles north of The Brothers; and two rocks which dry 6 feet about $2\frac{1}{4}$ miles south of The Brothers and the same distance off the western shore.

The rise and fall of the tide is about 6 feet.

3. There are few off-lying dangers in the Strait, which has plenty of sea-room and navigation should not normally present any difficulty. However, the area is subject to heavy gales, both from the north-west and south-east, which are often accompanied by low visibility. The tidal streams and currents are reported to be variable and may be strong; when these are in the opposite direction to the wind a heavy turbulent sea is raised which may be dangerous. Heavy tide-rips often occur off many of the prominent points and also in the middle of the Strait between Cape Terawhiti and Wellington Head.

To assist night time navigation there are ample high-powered lights on both sides of the Strait.

Port Nicholson, a large land-locked harbour, with Wellington, the capital of New Zealand, on its western side, is situated near the south-western extreme of North Island and about 8 miles eastward of Karori Rock, the south-eastern limit of that part of the Strait here being remarked on. There is alongside accommodation in the port for large vessels with a draught up to 36 feet.

The western side of the Strait has several secure anchorages where shelter may be found. There is also anchorage on the eastern side, in the lee of Kapiti and Mana Islands.

4. The positions of the islands in the Strait are best seen on the chart. The following small isolated above-water and drying rocks within the Strait which may extend the limits of the territorial sea are especially mentioned; those on the east side will first be described:

(i) There is a drying rock about a quarter of a mile westward of the south-western end of Kapiti Island.

(ii) Detached rocks are charted as extending for about 300 yards from the coast about $2\frac{1}{4}$ miles north-eastward of Ohau Point.

(iii) Rocks extending the same distance offshore lie off the coast $1\frac{3}{4}$ miles south-westward of the same point.

(iv) Toms or Thoms Rock, awash at low water, lies about a mile south-eastward of Karori Rock and nearly three-quarters of a mile offshore. Karori Rock, small, 10 feet high with a navigational light on it, lies about half a mile offshore and $3\frac{1}{2}$ miles south-eastward of Cape Terawhiti.

(Note: Toms Rock will not extend the limit of the territorial sea unless rocks which are awash at low-tide are accepted into the same category as those that dry between the tides.)

Those rocks situated on the west side are as follows:

(i) Walker Rock, small and 3 feet high, and Jackson Head Rock, 6 feet high, lie within a mile north-eastward of Cape Jackson. The latter rock has a navigational light on it.

(ii) White Rocks consisting of 6 small above-water rocks, the highest being 53 feet high, lie just within the entrance to Queen Charlotte Sound and about a mile north-westward of its southern entrance point.

(iii) Cook Rock, $3\frac{3}{4}$ miles northward of The

Brothers, is charted as awash at low-water (see Note against 4, (iv) above). This rock is occasionally visible when the sea breaks over it in strong winds.

(iv) The Brothers have been described in paragraph 2, above. There are some drying rocks lying within a quarter of a mile eastward and others south-eastward of the southern of these.

(v) Two rocks named "Awash", in fact, dry 6 feet at low-water; these are situated about $2\frac{1}{4}$ miles south of The Brothers and about the same distance from the western side of the Strait.

(vi) Off several of the points on the western side of the Strait small above-water rocks are found on the drying reefs extending from the points.

(vii) Off White Bluffs, drying rocks are charted nearly half a mile from the coast.

5. Clowdy Bay between White Bluffs and Rununder Point is just a "bay" within the definition in article 7 of the 1956 report of the International Law Commission, with a closing line of 15 miles.

The distance across the Strait to the northern entrance point of this bay is $18\frac{3}{4}$ miles.

23. Foveaux Strait (Annex, map No 24)

References: Charts Nos. 3634, 1915, 3484.

New Zealand Pilot, Eleventh Edition, 1946.

1. Foveaux Strait, at the southern end of New Zealand, lies between the southern side of South Island and Stewart Island; it connects the high seas of the Tasman Sea with those of the South Pacific south-eastward. The Strait is not frequently used except for passage to and from Bluff Harbour, the port for Invercargill, situated near the middle of its northern shore.

The western entrance to the Strait is but imperfectly surveyed and the scale of the chart is small.

The western limit may be considered as lying between Ruggedy Point at the north-west end of Stewart Island and Pahia Point, about 23 miles northward, at about the middle of the south coast of South Island. The eastern limit lies between Cape Edwardson (East Head), at the north-east end of Stewart Island, and Waipapa Point, about 33 miles north-eastward on South Island. Ruapuke Island lies near the middle and just inside the eastern entrance to the Strait, thus dividing it into two portions each less than 26 miles wide. Ruapuke Island is surrounded by islets and reefs.

The Strait for about three-quarters of its length measured from its western end has a comparatively uniform breadth of about 17 miles from shore to shore, and then widens to its eastern entrance; the navigable width, however, is considerably reduced by rocks and shoals.

Towards the western end of the Strait and four miles from its northern shore lies Centre Island, with Escape Reefs about the same distance eastward. Towards the eastern end, the Stewart Island coast is fronted by numerous islets and rocks up to a distance of about 5 miles.

2. (i) The length of the Strait between its entrances described above is about 45 miles.

(ii) The breadth at the western end is 23 miles. About 5 miles within lies Centre Island, about 4 miles from the northern shore with a number of rocks and dangers between; these reduce the navigable width to about $11\frac{1}{2}$ miles. The distance from Escape Reefs, some above-water rocks surrounded by reefs and shoals lying about 4 miles east of Centre Island, to the north coast of Stewart Island is about 12 miles. Near the middle of the Strait the northern shore is formed by an extensive peninsula forming the south-west side of Bluff Harbour; the least distance from this peninsula to the coast of Stewart Island is $14\frac{1}{2}$ miles. From the south-eastern end of this peninsula to Ruapuke Island is $9\frac{1}{2}$ miles; Dog Island, with a shallow bank eastward of it, situated about 3 miles south-east of the end of the peninsula, reduces the navigable width here to under 5 miles.

From Ruapuke Island to Waipapa Point is $13\frac{1}{2}$ miles; rocks and shoals north-east of the island reduce the width of the fairway to $6\frac{3}{4}$ miles. Between Ruapuke Island and Stewart Island south-eastward is a distance of $14\frac{1}{2}$ miles; islets, above-water rocks and shoals extend for nearly 6 miles from the island and the same distance from the coast of Stewart Island, to reduce the fairway to a width of less than 3 miles.

(iii) Depths throughout the Strait are somewhat irregular; in the western half, south and east of Centre Island, they are from about 20 to 25 fathoms, while further eastward they range from 12 to 20 fathoms. Between Ruapuke Island and the coast of South Island northward depths are in general 10 fathoms and less. The fairway south of that island has depths up to 20 fathoms but it is bordered by shoals with less than 5 fathoms over them.

3. There is plenty of sea-room in the Strait and there are ample landmarks and navigational lights to assist in its navigation. However, this part of New Zealand is constantly subject to violent gales from the south-west to north-west which may continue for days on end with lulls of only a few hours between. These gales bring rain and thick dirty weather and so navigation is hampered. The tidal streams run up to a rate of about 3 knots and, if in the opposite direction to the winds, a steep sea may result. Abnormal magnetic variation has been reported in the Strait.

Bluff Harbour is the only port of consequence within the area. It lies on the northern shore towards the eastern end of the Strait and is the port for Invercargill, the capital of the county of Southland. There are over 3,700 feet of wharfage with depths alongside of from 20 to 33 feet.

Sheltered anchorage may often be found in the lee of Stewart Island and in the indentations of its coast.

4. Few drying features that could extend the limits of the territorial sea are charted other than those within a half-mile distance from the coasts of the mainland, islands and islets permanently above water, the positions of which may best be seen on the larger scale charts. There are some, however, and some islets and rocks, which, although small may be of importance and are not clearly shown on the chartlet. The outermost of these are as follows:

Hapuka Rock, which dries 3 feet, is situated about a mile south-westward of Centre Island.

Bishop and Clerks, an above-water rock with a number of drying rocks around it, lie about $3\frac{1}{2}$ miles westward of Black Rock Point, the most northerly point of Stewart Island, and about $1\frac{1}{2}$ miles offshore.

Pig Island, with a one-foot high rock half a mile southward, is situated about $4\frac{1}{2}$ miles north of Escape Reefs and $2\frac{1}{2}$ miles offshore.

Half Way Rocks, above-water and drying, lie about $8\frac{1}{2}$ miles eastward of Escape Reefs and $3\frac{1}{4}$ miles offshore.

Half Passage Rock, above-water with drying rocks about a quarter of a mile south-eastward of it, is situated about 4 miles south-west of Ruapuke Island.

At the western end of the Strait and on the southern side are Ruggedy Isles, a group of high craggy rocks, lying about $1\frac{1}{2}$ miles off Ruggedy Point.

24. Kaiwi Channel (Annex, map No 25)

References: Charts Nos. 1510, 1378.

Pacific Islands Pilot, Volume III, Seventh Edition, 1946.

1. Kaiwi Channel, situated in the Hawaiian Islands, separates Oahu from Molokai and joins the high seas north of those islands to the high seas south of them. It is a route much used by international shipping.

The shores of the channel are formed by the south-east coast of Oahu between Makapuu Point and Koko Head, $4\frac{1}{2}$ miles south-westward, on the west, and the west coast of Molokai between Ilio Point and Laau Point, 8 miles south-south-westward, on the east.

Both these coasts are comparatively straight.

2. (i) The length of the channel may be considered as about 15 miles.

(ii) The breadth of the channel at its northern end between Makapuu Point and Ilio Point is $22\frac{1}{4}$ miles; at its southern end between Koko Head and Laau Point, which forms its widest part, its width is $23\frac{1}{2}$ miles. The narrowest part of the channel lies between Makapuu Point and Kaunалу, on Molokai, and about 2 miles northward of Laau Point; here the breadth is 22 miles.

(iii) The channel is deep; near its axis soundings are charted up to 350 fathoms. On the western side depths of less than 10 fathoms are found up to about half a mile offshore, and abreast Makapuu Point depths of less than 100 fathoms, and in general between 30 and 70 fathoms, extend up to 5 miles from the coast. On the eastern side a bank, with general depths of between 20 and 30 fathoms, extends south-westward for about 29 miles from Laau Point across the entrance to the channel from southward. Off the coast between Laau and Ilio Points the 100-fathom contour runs from about 5 to 3 miles offshore.

3. There are no dangers within the channel; its navigation presents no difficulties. There are high-powered navigational lights to assist passage at night on Makapuu Point and Laau Point.

The channel lies within the area of the North-East Trade Wind.

The current is not strong but it may be irregular.

The rise and fall of the tide is small.

There are no ports within the channel; Honolulu and Pearl Harbour, with accommodation for large ships, are situated on the south coast of Oahu, within a distance of about 20 miles westward of the southern entrance to the channel.

Papohaku Roadstead on the west coast of Molokai, and about $2\frac{1}{2}$ miles southward of Ilio Point, affords good anchorage in fair weather; the 10-fathom contour lies about half a mile offshore in this vicinity.

4. No drying features, from which the limits of the territorial sea can be extended, are charted other than a few rocks off the coast of Oahu, all of which lie within a distance of 200 yards of the main coastline.

Within $1\frac{1}{2}$ miles north-north-westward of Makapuu point, and just outside the limits of the channel, are two small islets.

25. Dover Strait (Annex, map No 26)

References : Charts Nos. 2675, 1895, 1406.

Channel Pilot, Part I, Thirteenth Edition, 1947.
Channel Pilot, Volume II, Eleventh Edition, 1952.

1. The Dover Strait, situated between the south-east coast of England and the northern coasts of France, connects the high seas of the English Channel to those of the North Sea. It is a much frequented route for international shipping.

The Strait, and its approaches as a whole, somewhat resemble in shape that of two funnels, end to end. The part now to be considered, however, is the narrower portion where it does not exceed 26 miles in breadth. At the south end this distance separates Dungeness on the English coast from Cap d'Alprech, on the French coast about $1\frac{1}{2}$ miles south of Boulogne. At the northern end this distance extends from near the English town of Deal to a position on the low-water line of the French coast about 6 miles east of Calais. The French coast trends northward from Cap d'Alprech for about 11 miles to Cap Gris Nez, then turns north-eastward for about the same distance to Calais, whence it trends east-north-eastwards.

Between Dungeness and Folkestone, about 13 miles north-north-eastward, the English coast forms a bight with a penetration inland of about $3\frac{1}{2}$ miles. Thence it trends north-eastward to South Foreland where it turns to a northerly direction to Deal and the North Foreland.

2. (i) The length of the Strait where the separation of its coasts is 26 miles or less is about 25 miles.

(ii) The breadths at the southern and northern ends, as stated, are 26 miles. The breadth from Cap Gris Nez to the middle of the bight north of Dungeness is about 24 miles; between Cap Gris Nez and Folkestone is $19\frac{1}{2}$ miles, and between the low-water line close northward of Cap Gris Nez and the breakwater at Dover is

17 miles; this is the shortest distance across the Strait.

Between South Foreland and the low-water line of the French coast about midway between Cap Gris Nez and Calais is $17\frac{1}{2}$ miles, and from South Foreland to Calais breakwater is 20 miles. From Deal to Calais breakwater is 22 miles.

(iii) On the whole, that part of the Strait now under discussion is comparatively deep, with general depths varying from 11 to 20 fathoms outside the coastal banks. There are, however, some long sand ridges or banks lying in the middle and roughly parallel with the axis of the Strait and its approaches which restrict navigation. There are two of these within the area, namely The Ridge or Le Colbert, and The Varne; the former has a least depth of one fathom and the latter of $2\frac{1}{2}$ fathoms.

In the northern approach are the Goodwin Sands about $6\frac{1}{2}$ miles off Deal; their southern end lies within the area; these sands dry in places, including one small patch within the area. South Falls, with $3\frac{1}{2}$ fathoms over them, lie about $5\frac{1}{2}$ miles east-north-east of the Goodwin Sands; Sandettie Bank has $3\frac{1}{4}$ fathoms over it and is about 10 miles east of the Goodwin Sands, with Outer Ruytingen and West Dyck, with $1\frac{1}{2}$ and 3 fathoms over them respectively, lying roughly parallel to and $7\frac{1}{2}$ and 4 miles from the French coast.

In addition, towards the English and French coasts there are a number of submerged wrecks with varying depths over them.

3. Navigation through the Strait presents little difficulty, as there are many landmarks on both sides and the dangers are all well marked by buoys and light-vessels. Tidal streams may run up to a rate of 3 knots in places, but are in general true to the fairway. There are overfalls in places and a steep sea may arise when the wind is in opposition to the stream. If compelled to anchor in the Strait, care must be taken to avoid the numerous submarine cables which cross the area in all directions.

Navigation at night is facilitated by several high-powered lights, by light-vessels and by numerous light-buoys.

There is a rise and fall of tide of about 18 feet.

The ports of Folkestone and Dover are situated within the area on the English coast and Boulogne and Calais on the French coast; all are sheltered by breakwaters and are termini for cross-channel ferry services. Boulogne is a large fishing centre and Calais is connected with the main canal system of France. Good sheltered anchorage may be obtained in The Downs, between the coast in the vicinity of Deal and the Goodwin Sands. Vessels can also anchor off Boulogne and Calais, but shelter here is not so good.

4. Drying features from which the limits of the territorial sea might be extended are few. South Caliper on the English side at the southern end of the Goodwin Sands is a sandbank about a mile long which dries 2 feet; this is situated about 5 miles off the coast midway between South Foreland and Deal. On the French side, about mid-way between Cap d'Alprech and the southern breakwater of Boulogne, a small group of

drying rocks lies about 200 yards from the low-water line of the coast which is there about half a mile from the high-water mark. About 3 miles north of Boulogne is a small sandbank which dries 2 feet; its outer edge lies about 200 yards seaward of the low-water line of the coast and nearly half a mile from the high-water line.

About a mile eastward of Cap Gris Nez the low-water line is situated about three-quarters of a mile offshore, and about 2 miles eastward of that cape a detached drying bank is charted about 300 yards from the low-water line and about three-quarters of a mile offshore. Les Gardes, rocks which dry 8 feet, are situated with their outer edge $4\frac{1}{2}$ miles north-east of Cap Gris Nez and half a mile from the high-water mark.

East of Calais the low-water line, which is there about a quarter of a mile from the coast, extends further offshore, and about $3\frac{1}{2}$ miles from that port it is nearly a mile from the high-water line of the coast.

5. Navigation is possible on both sides of a median line through the Strait.

26. Canal de Menorca (Annex, map No 27)

References : Chart No. 1317.

Mediterranean Pilot, Volume I, 1951.

1. Canal de Menorca separates the Spanish island of Mallorca from that of Menorca and connects the high seas of the Mediterranean north-westward and south-eastward of them. The approach from south-eastward lies between the eastern coast of Mallorca and the south-western coast of Menorca; the Strait itself is between the north-east coast of the former island and the west coast of the latter. The north-east coast of Mallorca is indented by Alcudia and Pollensa Bays, separated by a narrow neck of land; the distance between the entrance points of the former is 9 miles, of the latter about 4 miles, and of the combined area 12 miles. As both the individual bays and also the area of them combined conform to the International Law Commission's definition of a "bay" in article 7 of its 1956 report, the closing line of the combined bays, joining the natural entrance points, will be considered as "coastline" in this description.

2. (i) The length of the Strait where it has a width of 26 miles or less varies from about 8 miles on its eastern side to about 16 miles on its western side.

(ii) The breadth of the Strait at the southern end is 26 miles between Cabo del Pinar on the east coast of Mallorca and Cabo Dartuch on Menorca. Between Cabo Pera, the north-east corner of Mallorca, and Cabo Dartuch the width is $20\frac{1}{2}$ miles. From Cabo del Freu, about 2 miles north of Cabo Pera, to Cabo Dartuch is the narrowest part of the Strait, a distance of $19\frac{3}{4}$ miles.

Between Cabo Farruch, the southern entrance point to Alcudia Bay to Cabo Dartuch is $23\frac{1}{2}$ miles. The distance between a point about 9 miles north-westward, on the closing line of Alcudia and Pollensa Bays, to Bajoli de Menorca (Cape Minorca) is 26 miles. (The closing line of these bays joins Cabo Farruch to Cabo Formentor, the north-east point of Mallorca.)

(iii) The strait is deep; depths vary between 24 and 80 fathoms. All the points on both coasts are steep-to.

3. Navigation through the Strait is simple as there are no dangers, there is plenty of sea-room and many landmarks on each side. There are high-powered navigational lights on both sides of each end of the Strait to assist passage at night.

Northerly winds, however, raise a very heavy sea in the channel. There are no ports of any note within the area. Anchorage may be found anywhere in Alcudia and Pollensa Bays in suitable depths according to draught. Both these bays are, however, open eastward and are exposed to the frequent gales originating in the Gulf of Lions; the northern part of Alcudia Bay is somewhat more protected than is Pollensa Bay.

With offshore winds anchorage may also be obtained off Ciudadela and off Cabo Bajoli de Menorca, both on the west coast of Menorca.

4. There are no drying features from which the limits of the territorial sea may be extended, as the rise and fall of the tide is negligible. The only off-lying detached above-water rock in the area is Farayo de Aubarea, off the north-east coast of Mallorca; this is small in extent, 75 feet high, and is situated nearly half a mile offshore about 5 miles north-westward of Cabo del Freu.

27. Strait of Messina (Annex, map No 28)

References : Charts Nos. 3935, 177, 1976.

Mediterranean Pilot, Volume I, Eighth Edition, 1951.

1. The Strait of Messina separates the Italian island of Sicily on the west from the Italian mainland on the east, and joins the high seas of the Tyrrhenian Sea, northward, with those of the Ionian Sea, southward.

It is a Strait much used by international shipping.

Its shores are formed by the comparatively straight and converging coasts of the north-eastern end of Sicily and of the western end of the "toe" of Italy. The northern limit of the Strait proper lies between Capo Peloro, the north-eastern tip of Sicily, at which the northern coast trends westwards, and Scilla on the mainland, about 3 miles eastward; its southern limit lies between Capo d'Ali, a point on the Sicily coast about 18 miles south-westward of Capo Peloro, and Punta Pellaro on the mainland about 9 miles eastwards. The northern approach may be considered as between Capo Rasocolmo, about 5 miles west of Capo Peloro, and Capo Barbi, about $8\frac{1}{2}$ miles north-north-east of Scilla. The southern approach is between Capo San Andrea, on the coast of Sicily, about 12 miles south-south-west of Capo d'Ali and a point about 2 miles east-south-eastward of Capo del'Armi, about 20 miles eastward where the mainland coast turns to a general easterly direction. These limits of the approaches have been taken as the points from which 12-mile arcs struck from the opposite coasts intersect furthest from the land.

2. (i) The length of the Strait and its approaches is about 30 miles.

(ii) The breadth of the approach to the Strait at its

southern end is about 20 miles. The breadth of the Strait proper at its southern end between Punta Pellaro and Capo d'Ali is 9 miles, while the shortest distance from Punta Pellaro to the Sicily coast is $7\frac{1}{2}$ miles; about 5 miles within, the Strait is $5\frac{1}{4}$ miles wide.

Abreast Messina, a port on the Sicily coast, the breadth is reduced to just less than 3 miles. The narrowest part, about $2\frac{1}{4}$ miles southward of Capo Peloro and $3\frac{1}{2}$ miles north-eastward of Messina, is $1\frac{3}{4}$ miles wide, which general width is maintained for $2\frac{1}{4}$ miles to abreast Capo Peloro. Thence the Strait widens to 3 miles between that cape and the coast at Scilla, and the approach continues widening to reach a width of about 15 miles at its northern end.

(iii) The whole of the Strait is deep; except in the immediate vicinities of its shores, depths in the southern part and that approach exceed 300 fathoms, while at the northern end and in the northern approach they are in general over 150 fathoms. Towards the northern end at the narrower part of the Strait, a submarine ridge crosses it on which depths are less than 100 fathoms, with a least depth of 38 fathoms; this ridge is instrumental in setting up "Tagli" or "bores" in that part of the Strait (similar to those set up in certain rivers).

3. The approach and southern part of the Strait present no difficulties in their navigation, there are no dangers and plenty of landmarks. There are high-powered lights at both ends and at Messina for navigation at night. In the narrower part, however, the tidal streams and currents are very strong, they result in eddies and whirlpools, famous from antiquity; caution in navigation is therefore necessary. In addition near the high land on either side of the Strait ships may be exposed to violent squalls which descend through the valleys of the mountains, and may be of such strength at times as to inconvenience steamers. Should the wind be against the "Tagli" or "bores", a short high sea, dangerous for small craft, may result.

From Capo Peloro an overhead cable, with a clearance of 230 feet, crosses the northern end of the Strait.

Messina, on the Sicily coast, is the most important port within the area. It is most secure and commodious; there is water for deep draught ships throughout the harbour and vessels can load and unload close to the quays, where depths alongside are 25 to 30 feet. A vessel of 45,000 tons has used this harbour. There are mooring buoys.

Reggio on the mainland coast is small, but is protected by a mole; it has 1,600 feet of quayage with depths of from 19 to 26 feet. A train ferry runs across the Strait from this port to Messina. Villa San Giovanni is also small and protected by a mole, which is quayed on its inner side, where there are depths of from 16 to 25 feet. A ferry service is maintained to Messina.

Open anchorage may be obtained by vessels with local knowledge in several places on either side of the Strait, the most sheltered place is north of the harbour entrance at Messina.

4. There are no drying or off-lying above-water features in the Strait or its approaches from which the limits of territorial sea may be extended.

28. Strait of Bonifacio (Annex, map No 29)

References : Charts Nos. 1189, 1131, 1780, 161 B, 429.
Mediterranean Pilot, Volume I, Eighth Edition, 1951.
Mediterranean Pilot, Volume II, Eighth Edition, 1952.

1. The Strait of Bonifacio separates the French island of Corsica from the Italian island of Sardinia, and joins the high seas of the Mediterranean Sea eastwards and westwards of the islands. The Strait lies between the southern coast of Corsica and the northern coast of Sardinia, and is obstructed by numerous islands and rocks which are divided into two groups by the main passage known as Bocca Grande. The international boundary passes through this passage and is marked by the alignments of two pairs of beacons, the first pair, bearing about 104° , being on Maddalena and Budelli Islands, and the second pair, bearing about 221° , being on Punta Marmorata on the north coast of Sardinia.

This Strait is much frequented by international shipping.

For the purposes of this description the Strait and its approaches will be considered as extending, at both the east and west ends, from the positions of the centres of arcs of 12-miles radius drawn from the French and Italian territory where such arcs intersect furthest from the land. On the eastern side, the centres lie on Toro Rocks to the north-east and on the south-east from Corcelli Island. Toro Rocks are an isolated group of rocks, the highest 131 feet high, situated about $4\frac{1}{4}$ miles off the south-east coast of Corsica. Corcelli Island is the outermost small islet at the north-east end of the Arcipelago della Maddalena, the southern group of islands and rocks extending about $6\frac{1}{4}$ miles from the north coast of Sardinia.

On the western side, the centres lie on the southernmost above-water rock of Les Moines to the north-west and on Caneddi Islet close off Sardinia. Les Moines are a group of detached above-water and submerged rocks situated $2\frac{3}{4}$ miles south-westward of the south-west coast of Corsica. Caneddi Islet is a small detached above-water rock within about 200 yards of the coast about 9 miles south-west of Capo Testa at the north-west corner of Sardinia.

Both the western and eastern approaches to the Strait are funnel-shaped. The western end of the Strait proper lies between a line joining Cap de Fenò, to the west of the southern coast of Corsica, and Capo Testa at the north-west corner of Sardinia; the eastern end is between Isolotto La Pressa, the most northerly islet in Arcipelago della Maddalena, and Pointe Capicciòle on the Corsican coast about $8\frac{1}{2}$ miles north-westward. The Corsican coast south-westward of Pointe Capicciòle is fronted by a group of islands and rocks extending up to $3\frac{1}{2}$ miles offshore; these form the northern and north-western sides of Bocca Grande.

The various narrow channels between the islands of Arcipelago della Maddalena and those in the group of islands southward of Pointe Capicciòle will not be described. The positions of these islands can best be seen on the chart.

2. (i) The length of the Strait and its approaches

within the above limits is about 22 miles; that of the Strait proper is about $10\frac{1}{2}$ miles.

(ii) The breadth at the western end of the approach is 20 miles; that at the western end of the Strait proper (Cabo Testa to Cap de Feno) is 9 miles. The width between the northern point of Sardinia and Ecueil de Lavezzi, the southernmost above-water rock of the islands and rocks on the northern side of the channel is $3\frac{1}{2}$ miles. Between this rock and Isola Razzoli, the north-western of the islands in Arcipelago della Maddalena, is just over $3\frac{1}{2}$ miles, and it is the same distance from Isola Razzoli to the outlying rocks off Ile Lavezzi. The narrowest part of the channel is 3.4 miles wide between an above-water rock, close northward of Isola Razzoli, and Ecueil de Perduto, a small rock which dries one foot, $3\frac{3}{4}$ miles from the Corsican coast and $2\frac{3}{4}$ miles north-east of Ile Lavezzi.

The breadth in the eastern approach (Toro Rocks to Corcelli Island) is 12 miles.

(iii) The Strait is deep; depths in the western approach are between 80 and 27 fathoms; in the Strait proper they vary in the fairway between 27 and 40 fathoms and in the eastern approach they are between 40 and 50 fathoms.

About half a mile southward of Ecueil de Lavezzi is a $4\frac{3}{4}$ -fathom patch with shoaler water between. A depth of $4\frac{1}{4}$ fathoms is charted nearly half a mile north-westward of Isola Razzoli. There is a bank with less than 20 fathoms over it about $1\frac{3}{4}$ miles south of Ecueil de Perduto.

3. Navigation through the main channel of the Strait presents no difficulties; there are plenty of landmarks for fixing and no dangers outside a distance of half a mile from its shores. The Strait is well lighted for navigation at night. However, in gales, particularly from the north-westward, the sea breaks everywhere in the passage. After prolonged blows a current may be experienced in the Strait. There are no ports as such within the area. Close southward of the area there is a naval base at Maddalena on the southern side of the island of that name. Anchorage could be obtained in case of necessity in several small bays in the northern coast of Sardinia and amongst the islands of Arcipelago della Maddalena.

4. The rise and fall of the tide in this part of the Mediterranean is very small; charted drying features which would affect the outer limit of the territorial sea are accordingly few. In the area of this Strait there is but one, Ecueil de Perduto, a rock which dries one foot, situated about half a mile south-eastward of Ile Perduto which itself lies $3\frac{1}{4}$ miles off the south-east coast of Corsica with other islands in between.

The coasts of Sardinia, Corcisa and the two groups of islands mentioned above the positions of which can best be seen on the chart, are fronted by many small above-water rocks; most of these lie within 400 yards of the coasts and are too numerous to mention in detail although many will affect the outer limits of the territorial sea. Those at a greater distance offshore are as follows:

(i) *Off the coast of Sardinia:*

Isolotto Municca, a small islet close offshore about

$1\frac{3}{4}$ miles east of Capo Testa, is fronted by rocks the most seaward of which is about 650 yards off the coast of Sardinia.

East of Punta Marmorata are rocks about the same distance offshore, and others lie within 800 yards of the coast about 2 miles south-eastward of that point.

Scoglio Callot, although only 300 yards offshore, is particularly mentioned as it lies near the narrowest part of the Strait; it is northward of the northern end of Isola Razzoli, with a similar rock the same distance eastward of it.

Three hundred yards north-westward of Isola La Pressa is another small rock mentioned for the same reason.

(ii) *Off the coast of Corsica:*

Les Moines (Monachi Rocks) are a group of rocks lying between $1\frac{1}{2}$ and $2\frac{3}{4}$ miles south-westward of the south-western coast of Corsica in the western approach to the Strait.

Le Prêtre, north-eastward of Les Moines and about half a mile offshore is a rocky patch on which is a masonry beacon-tower; it is not known whether this rock itself dries, or if it is above or below water.

Iles Bruzzi, about $2\frac{1}{2}$ miles south-eastward of Le Prêtre, is a group of above-water rocks extending about a quarter of a mile offshore.

Testa de Gatto is a small rock, 2 feet high, about 700 yards off the coast about $4\frac{3}{4}$ miles south-east of Le Prêtre.

5. Navigation would be possible on both sides of a median line through the Strait; the international boundary has, however, been fixed and is marked by the alignment of two pairs of beacons as stated in paragraph 1 above.

29. The Dardanelles, Sea of Marmara and the Bosphorus

References: Charts Nos. 224, 1086, 2429, 1198.

Black Sea Pilot, Tenth Edition, 1955.

Note. The names used in this description will be primarily those on Admiralty Chart No. 224 which are not necessarily the local names or those used in the *Black Sea Pilot*.

1. The Dardanelles join the Mediterranean Sea to the Sea of Marmara, and the Bosphorus joins the latter to the Black Sea.

The whole forms a route much frequented by international shipping and is subject to the Regulations of the Montreux Convention of 1936.

The approach to the Dardanelles from westward is between the islands of the Aegean and, although the separation of the nearest of these to the entrance is from 25 to 12 miles, they will not be remarked on here.

The total length of the passage from the Mediterranean to the Black Sea is about 160 miles. The territory on both sides of it is Turkish. This passage will be described in three parts: (A) the Dardanelles; (B) the Sea of Marmara; and (C) the Bosphorus.

A. The Dardanelles (Annex, map No 31)

2. The south-western entrance lies between Cape Helles, the south-western tip of the Gallipoli Peninsula and Kum Kale about $2\frac{1}{2}$ miles south-eastward. The north-western shore is formed by the coast of the Gallipoli Peninsula and the south-eastern shore by the mainland of Asia Minor. The north-eastern end also forms the north-eastern end of the Gallipoli Strait, which lies between the coast in the vicinity of the town of Gallipoli (Gelibolu) and the opposite shore. The line of division between the Gallipoli Strait and the Sea of Marmara may be considered as that joining Cankaya Burnu on the north-west to Fanous on the south-east.

(i) The length of the Dardanelles between the above limits is about 36 miles.

(ii) The width at the entrance is $2\frac{1}{2}$ miles; about 5 miles within it reaches a width of 4 miles, to become restricted again to $1\frac{1}{2}$ miles about $8\frac{1}{2}$ miles within the entrance. Thence the passage trends northwards for about $6\frac{1}{2}$ miles to form The Narrows, having general widths of from one to 2 miles and a least width abreast Canakkale of about three-quarters of a mile. At the northern end of The Narrows, the breadth is one mile; thence the passage continues north-eastwards to the Gallipoli Strait, a distance of about 16 miles with general widths of about 2 miles, a least width of $1\frac{1}{2}$ miles and a maximum of 3 miles. The Gallipoli Strait, about $4\frac{1}{2}$ miles long, has a least width of $1\frac{3}{4}$ miles abreast the town of Gallipoli; its width on joining the Sea of Marmara is $2\frac{1}{2}$ miles.

(iii) The Dardanelles are deep; depths in the fairway vary between 25 and 50 fathoms. The coastal bank extends further from the south-east shore than from the north-west shore in the wider parts of the Strait, but the 6-fathom contour in general is inside half a mile from the shores.

(iv) There is no difficulty in navigating the Dardanelles. Vessels should in general keep in the middle to avoid the current which runs from about one to 2 knots except near The Narrows where the rate may be up to 4 knots. As is usual in confined channels, cross sets must be expected near the sharper bends.

There are many lights to assist in navigation at night.

There is a speed restriction enforced for vessels passing through the Dardanelles.

The only ports worthy of mention are Canakkale in The Narrows and Gallipoli or Gelibolu. The former has anchorage off the town in depths of from 16 feet to 17 fathoms, and one jetty capable of berthing a vessel of 7,000 tons gross. The latter has well sheltered anchorage in depths of from 15 to 23 fathoms about a quarter of a mile offshore; lighters are used for loading and unloading.

As a rule vessels can find temporary anchorage in any part, but the Asiatic side is the better as it is not so deep or steep-to; the holding ground is good. In strong north-easterly winds there is little shelter to be found from wind or sea north-eastward of The Narrows.

(v) There are no outlying or above-water rocks.

B. The Sea of Marmara (Annex, map No 30)

3. The Sea of Marmara is entered from the Mediterranean by way of the Dardanelles and from the Black Sea by the Bosphorus and is situated between Turkey in Europe and Turkey in Asia.

On the European side the coastline of the Dardanelles continues in a general north-easterly direction for about 65 miles to Erekli, thence trends eastward for about 47 miles to the entrance to the Bosphorus. Erekli is situated at the eastern extreme of a wide-based promontory separating two extensive indentations or curvatures of the coast. That on its western side has a breadth of about 20 miles and a penetration inland of $6\frac{1}{2}$ miles; that on the eastern side has a breadth of 27 miles and a penetration inland of $6\frac{1}{4}$ miles. Neither of these indentations conform to the definition of a "bay" given in article 7 of the 1956 report of the International Law Commission. The coastline on the Asiatic side is more complicated. From the entrance to the Dardanelles, the coast trends eastwards for about 25 miles to Kara Burnu forming, with the European coast, a funnel-shaped approach to the Dardanelles with an eastern entrance about 10 miles wide. From Kara Burnu the coast continues in a south-easterly and then an easterly direction for about 27 miles to the base of the large Kapu Dagh Peninsula whence it turns north-westward for 12 miles to the western extremity of that peninsula, thus forming the Gulf of Artaki.

The entrance points of this gulf are separated by $18\frac{1}{4}$ miles, but between them are four islands all separated by less than 10 miles either from each other or the outer ones from the headlands forming the entrance points of the gulf. The sum of their separations is about 14 miles. The gulf would therefore appear to conform to the definition of a "bay" in article 7 of the 1956 report, and so may be closed by closing lines.

Northward of these islands lies Marmara Island.

From the eastern side of the base of Kapu Dagh Peninsula the coast trends eastward for 56 miles to the head of Indjir Liman or Gulf of Mudania. About midway along this stretch of coast Kalolimno Island (Imrali) lies about 7 miles offshore. This island is separated from the eastern extremity of the Kapu Dagh Peninsula by 22 miles and from the north-western entrance point of Indjir Liman by $10\frac{1}{4}$ miles. Closing lines drawn from this island across the entrance to Indjir Liman enclose waters conforming to the definition of a "bay" in the Law Commission's report. The waters west of the island, however, do not do so.

From Boz Burnu, the north-western entrance point of Indjir Liman, the coast trends north-eastwards for about 12 miles and thence eastwards for about 42 miles to the head of the narrow Gulf of Ismid. This gulf proper has an entrance $3\frac{1}{2}$ miles wide and a length of 26 miles. The approach, however, is funnel-shaped and a group of islands, named Princes Islands, lies on its northern side. Closing lines can be drawn from these islands to the coasts southward and north-eastward of the middle of these having a sum total length of 15 miles. The area enclosed by these lines and the islands conforms to the Law Commission's definition of a "bay".

Princes Islands, nine in number, lie not only on the

northern side of the approach to the Gulf of Ismid, but also on the south-eastern side of the approach to the Bosphorus. Oxia, a small rock, 300 feet high, is the most seaward of these islands and lies due south of the Bosphorus; it is about 6 miles from the Asiatic shore and 7 miles from the European shore.

The approach to the Bosphorus is also funnel-shaped and its southern end may be considered as lying between Stephano Point on the European coast and Mal Tepe Burnu, a cape abreast the largest of the Princes Islands and about $14\frac{1}{2}$ miles south-eastward of Stephano Point. The length of this approach is about 5 miles.

(i) The extreme length of the Sea of Marmara is nearly 150 miles and its breadth in its widest part is about 40 miles.

(ii) The Sea of Marmara is deep. Depths in the approach to both the Dardanelles and the Bosphorus are in general between 15 and 40 fathoms; depths near the middle of the sea are in places more than 700 fathoms. The coastal banks are comparatively flat, with depths varying between 25 and 50 fathoms; that off the northern shore is the narrower and varies in width between one and 6 miles, while that off the southern shore is between 9 and 17 miles wide except in the approach to the Gulf of Ismid, where the banks extend for only about a mile offshore.

(iii) There are no drying features charted from which the limits of the territorial sea may be extended. Small outlying above-water rocks etc. which affect this limit are as follows:

A small islet, about 2 miles west of Marmara Island.

A small rock, about three quarters of a mile eastward of that island.

The north-eastern islet of the group lying about $3\frac{1}{4}$ miles east of the north-eastern end of the Kapu Dagh Peninsula.

Oxia, the outer and north-eastern of the Princes Islands.

A small islet, about a mile south-eastward of Oxia.

Proti, the northern islet in the Princes Islands.

Venedek Tash, a rock one foot high, about a quarter of a mile southward of the promontory in the middle of the northern shore on which is Erekli.

(iv) Navigation through the Sea of Marmara presents no difficulty. There are no off-lying dangers, with the exception of some detached shoals lying up to a mile offshore at the south-western end of the approach to the Dardanelles, and a bank with less than 5 fathoms over it projecting about a mile from the Asiatic side of the approach to the Bosphorus. There are ample navigational lights to assist night-time passage. The route most commonly used is that north of Marmara Island, but the alternative passage between that island and those lying in the entrance to the Gulf of Artaki is often used in clear weather by west-bound vessels.

The general set of the current throughout the sea is from east to west at rates of from half to one knot.

(v) There are no major ports within the Sea of Marmara, the smaller ports of note are:

On the southern side:

Bandirma, on the east side of the root of Kapu Dagh Peninsula; Mudania, on the south side of Indjir Liman and Gemlik at the head of that gulf; Golcuk, a naval port and dockyard, Ismid and Derince Burnu, all near the head of the Gulf of Ismid.

On the northern side:

Tekirdag, at the head of the bight westward of the promontory on which is Erekli; and Erekli, at the south-east corner of the promontory.

Temporary anchorage may be obtained by vessels with local knowledge off most of the towns and villages along both shores of the sea.

(vi) Twelve-mile arcs of circles centred on the northern and the southern coasts and on the islands do not overlap in two places near the middle of the Sea, but leave irregular-shaped areas between. The first and larger of these is east-north-eastward of Marmara Island; it has a maximum length of $27\frac{1}{2}$ miles in an east-west direction and a maximum breadth of $14\frac{1}{2}$ miles in an approximate north-south direction. The second area is north-east of Kalolimno Island. Here the 12-mile arcs *from the coast and Kalolimno* are separated by an irregular-shaped area with a maximum length of about 6 miles and breadth of about $1\frac{1}{4}$ miles. If a closing line be allowed, as indicated above, for Indjir Liman, the area not enclosed by 12-mile arcs almost entirely disappears.

C. The Bosphorus (Annex, map No 31)

4. The Bosphorus, as stated above, joins the Sea of Marmara to the Black Sea and trends in a general north-north-easterly direction. Its southern entrance may be considered as a line joining Seraglio Point on the European side to Moda Burnu on the Asiatic shore about $2\frac{1}{4}$ miles south-eastward. Its northern entrance lies between Cape Rumili and Yum Burnu about $2\frac{1}{2}$ miles eastward.

The Bosphorus somewhat resembles a river in being narrow with abrupt and angular windings and a strong current.

The western shore is formed by the coast of Turkey in Europe and the eastern shore by Turkey in Asia.

Close inside the southern entrance on the European side is the Golden Horn, a creek, forming the harbour of Istanbul which is situated on its southern side. The harbour is about 3 miles long, with an average width of a quarter of a mile.

(i) The length of the Bosphorus is about 17 miles.

(ii) The width at the southern entrance is $2\frac{1}{4}$ miles; about $1\frac{1}{4}$ miles within and abreast the southern entrance point of the Golden Horn the breadth of the Strait is rather less than a mile. The entrance to the Golden Horn is about a quarter of a mile wide. From the Golden Horn the strait narrows over a distance of $3\frac{1}{2}$ miles north-eastward to a breadth of about half a mile; it then trends in a general northerly direction for about $4\frac{1}{2}$ miles with some sharp bends, and is less wide; its minimum width of 750 yards is close north-

ward of Anadolu Hissari, a town on the Asiatic side about $5\frac{1}{4}$ miles beyond Istanbul. The strait then turns north-westward for about $2\frac{1}{2}$ miles, with an average width of about three quarters of a mile, after which it continues in a north-easterly direction for about 6 miles to its northern entrance. This part is narrowest abreast Madschiar, where it is 900 yards wide; beyond this the strait in general widens to reach a width of about $2\frac{1}{4}$ miles at its northern entrance.

In some of the wider parts the navigable widths are reduced by a few shoals, but in no part is the navigable width less than the narrowest part of the strait, viz. 750 yards.

(iii) Depths in the fairway of the strait are considerable and in places reach over 40 fathoms. The shores are for the most part steep-to. Depths suitable for anchorage may be found, however, in a number of the bays in the lee of the prominent points.

In the southern entrance the coastal banks extend about 400 yards from each side. On the coastal bank off Scutari, on the Asian side abreast the entrance to the Golden Horn, and about 200 yards offshore is Leander's Tower, a small rock about 23 feet high on which is a light-structure.

There are a few detached dangerous shoals in the strait, of these two are on the western side of the channel lying close offshore about 4 miles within the southern entrance, others lie across the entrance to Umur Bay on the eastern side about $5\frac{1}{2}$ miles within the northern entrance, and another about 400 yards offshore on the western side about $3\frac{1}{2}$ miles within that entrance.

(iv) There are but few dangers in the strait and passage through it presents little difficulty in daylight but, in spite of a number of navigational lights and buoys, passage at night is not recommended for a stranger.

The main current sets southward and through the narrowest parts it may attain a rate of 5 knots; at the turns in the channel the current is deflected by the points and in many places counter currents with resultant eddies are set up.

The prevailing wind is north-easterly.

About 4 miles within the northern entrance submerged obstructions have been established from both shores; their ends are marked by light buoys leaving a narrow passage between, through which vessels must pass. There are also several areas where anchoring and fishing are prohibited. A number of submarine cables cross the strait. There is a speed restriction enforced.

The principal ports within the area are Istanbul, on the shores of the Golden Horn, and Haidar Pasha on the Asiatic shore in the southern entrance to the strait. Istanbul is an open port, is accessible to and has accommodation for the largest vessels. There are many mooring buoys and much of both sides of the Golden Horn is quayed.

Haidar Pasha is formed by a detached breakwater; there are quays with depths alongside of about 21 feet and some mooring buoys. This port is the terminus of the Anatolian railway.

Anchorage may be obtained in suitable depths north

of the entrance to the Golden Horn, in Beikos Bay on the Asiatic side about 8 miles within the southern entrance, and in Buyukdere Bay on the European side about 6 miles within the northern entrance. The last is the quarantine anchorage for vessels entering from the north. When taking up anchorage near other vessels, due allowance must be made for the strong current eddies which are seldom constant and frequently change. In consequence vessels may swing in opposite directions and collide if insufficient room be allowed. This is particularly so near the entrance to the Golden Horn.

30. Kithera Strait (Annex, map No 32)

References: Chart No. 1685.

Mediterranean Pilot, Volume IV, Eighth Edition, 1955.

1. Kithera Strait situated between the southern side of Kithera Island and the northern end of Antikithera Island, joins the high seas of the Mediterranean on the west to those of the Aegean Sea on the east. It is the middle one of three straits separating the islands lying between the north-western end of Crete and the mainland of Greece.

Both Kithera and Antikithera are Greek territory.

Kithera Strait is much used by international shipping.

The distance between Kithera and Antikithera Islands is about $17\frac{1}{4}$ miles, but southward of Kithera Island are three islets, and northward of Antikithera are others with some rocks which will be described later. The navigable channel is thus reduced in width to a distance of about 10 miles.

2. (i) The length of the Strait proper may be considered as, at the northern end, about 10 miles: at the southern end, the distance between the most outlying of the rocks off the northern end of Antikithera Island, viz. 3 miles.

If, on the other hand, the length of the Strait be considered as that within the territorial sea and the maximum breadth of 12 miles be allowed for this, it would be between $24\frac{1}{2}$ and 30 miles between the arcs of that radius.

(ii) The width of the strait at its western end between Ovo Islet, the most western of the islets off the south coast of Kithera, and Nautilus Rock, the most western of those north of Antikithera, is $13\frac{1}{4}$ miles.

At the eastern end between Anti-Dragonera, an islet off the eastern coast of Kithera Island, and Pori Islet, north of Antikithera, the width is $16\frac{3}{4}$ miles.

The narrowest part lies between the southern of the Kupho Islets lying south-east of Kithera Island and Pori Islet, a distance of about $10\frac{1}{2}$ miles.

(iii) Depths in the strait are deep. A narrow oceanic ridge with depths of less than 100 fathoms rising from depths of about 300 fathoms connects Kithera Island to Antikithera Island. The least charted depths on it, except in the immediate vicinity of the coasts, islets and rocks, are 39 fathoms charted nearly 2 miles south-eastward of Kupho Islets, and a rock with 4 fathoms

over it, about three quarters of a mile northward of Pori Islet.

3. Navigation through the Strait has no difficulties in daylight, when the recommended track is between Kithera Island and Ovo Islet and thence southward of Kupho Islets. There are no high-powered navigational lights in the strait to assist passage at night. Such a passage should be made by passing south of Ovo Islet and of the Kupho Islets; the arc of visibility of the light on Anti Dragonera, off the eastern end of Kithera Island, will indicate when the latter have been passed.

For the positions of the small above-water rocks which form dangers see paragraph 4 below.

There are no ports within the area. Anchorage sheltered from all but southerly and south-easterly winds can be obtained in Kapsali Bay, a rectangular-shaped bay about three-quarters of a mile across, in the south coast of Kithera Island. Anchorage sheltered from the north and west can also be obtained in St. Nikolo Bay on the south-east coast of Kithera Island. Lights of small power assist vessels to approach these anchorages at night.

4. There are no drying features from which the limits of the territorial sea may be extended; the rise and fall of the tide is not appreciable. The following are small above-water features which do affect the limits:

On the northern side of the strait:

Ovo Islet, small, rocky and 647 feet high, is situated about 2 miles south of the southern end of Kithera Island.

Kupho Islets, two in number, are small flat rocks, the northern and larger being 33 feet high; they lie about 5 miles east of Ovo Islet and about $2\frac{1}{2}$ and 3 miles offshore.

On the southern side of the strait:

Nautilus Rock, small, 10 feet high, is the westernmost danger, it lies $2\frac{3}{4}$ miles north-westward of Psira Rock, a small rock lying about half a mile off the northern end of Antikithera Island.

Poretti Islet, small, 130 feet high and cliffy, with a rock above water close off its western end, lies about $\frac{1}{4}$ miles northward of Nautilus Rock.

Pori Islet, small but somewhat larger than the others in area, is 410 feet high; it lies about $2\frac{1}{2}$ miles north-eastward of Nautilus Rock and about 4 miles northward of Antikithera Island.

31. Carpathos Strait (Annex, map No 33)

References: Charts Nos. 2606, 236, 872, 1667, 2824.
Mediterranean Pilot, Volume IV, Eighth Edition, 1955.

1. The Carpathos Strait, also known as Scarpanto Strait and Stenón Karpáthou, is the eastern of the two straits which join the high seas of the Aegean Sea to those of the Eastern Mediterranean Sea. The Strait runs in an approximate north-south direction. Its western side is formed by the east coasts of the islands of Carpathos

and Saria, and its eastern side by the west coast of Rhodes Island and the south and west coasts of Khalkia Island together with the offlying islets and above-water rocks. The southern end of the Strait proper is a line joining Cape Praso Nisi, the southern point of Rhodes Island to the south-eastern end of Carpathos, a distance of 35 miles. The northern end is a line joining Myrtos Point, the south-west corner of Khalkia Island, to Cape Paraspori, the northern point of Saria, a distance of $23\frac{1}{2}$ miles. The only part of the Strait to be considered here is where the Strait has a width of 26 miles or less; at the southern end, this distance occurs between Cape Praso Nisi and a cliffy point charted with the name Gria, about $1\frac{3}{4}$ miles south of the north-eastern end of Carpathos.

It is Greek territory on both sides of the strait.

2. (i) The length of the Strait between the above limit and the line joining Khalkia Island to Cape Paraspori varies from about $7\frac{1}{2}$ miles on the western side to about $21\frac{1}{2}$ miles on the eastern side.

(ii) The breadth of the Strait at the southern limit now under consideration is 26 miles. The narrowest part occurs between Karavolos, a small rocky islet about 4 miles northward of Cape Praso Nisi and three-quarters of a mile offshore, and the north-eastern point of Saria; the distance is 23 miles. Between Octonya Nisi, another small rocky islet about $3\frac{1}{2}$ miles north of Karavolos and 2 miles offshore, and the north-eastern end of Saria, the strait is $23\frac{1}{2}$ miles wide. Thence it widens to 26 miles between Cape Monolithos, the most westerly point of Rhodes Island, and Saria, to narrow again to $23\frac{1}{2}$ miles at the northern entrance between Myrtos Point on Khalkia Island and the north end of Saria.

(iii) Depths in the strait are generally deep and in places exceed 700 fathoms. The coastal bank, with less than 100 fathoms over it, extends up to three-quarters of a mile off Carpathos and Saria, from 2 to 4 miles off Rhodes Island and about a mile off Khalkia Island. The 10-fathom contour in general is close to the shores on both sides of the strait. In the middle of the strait there is a bank with a depth of 25 fathoms which has not yet been closely examined, while midway between this and Saria a depth of 13 fathoms is charted.

3. There are no drying features from which the limits of the territorial sea may be extended. In addition to the islets previously described in paragraph 2 (ii), above, there are a few small above-water rocks lying off the coasts. The principal of these are as follows:

Off Carpathos:

A small rock lying about a quarter of a mile south of the entrance to the very narrow shallow channel separating Saria from Carpathos, and about 200 yards offshore.

Off Saria:

Two small rocks lying close offshore and about half a mile south of the north-east point of Saria.

Off Rhodes Island:

A small islet, nearly half a mile off the coast, about $2\frac{1}{2}$ miles south-south-eastward of Cape Monolithos.

Gria Nisi, another small islet, close offshore about half a mile south-eastward of that point.

Nipuri, an islet about $2\frac{3}{4}$ miles northward of Cape Monolithos and the same distance east-south-eastward of the south-east end of Khalkia Island.

5. The 12-mile arcs centred on (i) the north-east point of Saria; (ii) on Myrtos Point, the south-east point of Khalkia Island; and (iii) on Ocotya Nisi, the islet off the west coast of Rhodes Island, do not overlap, but enclose an area with a maximum length of $2\frac{1}{4}$ miles and a maximum breadth of one mile.

32. The Sound (Annex, map No 34)

References: Charts Nos. 2115, 2114, 2150.

Baltic Pilot, Volume I, 1944.

1. The Sound, named by the Swedes Øresund and by the Danes Sundet, is the eastern of the passages connecting the high seas of the Kattegat with those of the Baltic. It runs in an approximate north-south direction, with Sweden forming its eastern shore and the Danish island of Sjaeland its western shore.

It is much used by international shipping as it forms the shortest route from the North Sea to the eastern part of the Baltic. It is, however, only available for vessels of moderate draught, as the depths in the southern part do not exceed 26 feet. Deep draught vessels from the northward can reach København on the Danish shore and Malmö on the Swedish side.

The northern entrance is funnel-shaped and the remainder somewhat resembles the shape of a horn.

Two islands, Ven and Saltholm, lie near the axis of the strait; the former is Swedish and the latter Danish territory. There are fairways on both the east and west sides of these islands.

The strait is entered from northward between Gilbjerg Hoved, the north point of Sjaeland, and Kullen, a prominent point on the Swedish coast about $11\frac{3}{4}$ miles north-eastward. From southward it is entered between Stevns Klint, a point towards the southern end of the east coast of Sjaeland, and Falsterbo Udde, the south-western extreme of Sweden, about $13\frac{1}{4}$ miles east-north-eastward.

An agreed international boundary divides the strait.

(i) The length of the strait between the above limits is about 58 miles. If, on the other hand, the length be considered as the distance between the most seaward intersections of 12-mile arcs centred on Denmark and Sweden at both ends of the strait, it is 80 miles long, for at the southern end the strait would be additionally lengthened by the inclusion therein of the eastern and northern coasts of Møen, an island lying south-eastward of Sjaeland.

(ii) The breadth of the strait at its northern entrance is $11\frac{3}{4}$ miles; 10 miles within the breadth is 3 miles; a further 4 miles within between Helsingør and Helsingborg the strait is constricted to its narrowest part and is 2 miles wide. Thence the strait widens. About 8 miles south of Helsingør the strait is nearly 8 miles wide, but is divided into two channels by the island of Ven; the

channel on the west is $4\frac{1}{2}$ miles wide and that on the east is $3\frac{1}{2}$ miles wide. The strait continues generally to widen to a breadth of $15\frac{3}{4}$ miles abreast København, about 12 miles south of Ven. Thence it is restricted by Amager, an island separated from Sjaeland by a narrow channel, and also by Saltholm. The shortest distance between Amager and the coast of Sweden is $7\frac{1}{2}$ miles and the channels east and west of Saltholm have breadths of $3\frac{3}{4}$ and $2\frac{1}{2}$ miles respectively.

Southward of Amager is Køge Bugt, a bay conforming to the definition in article 7 of the International Law Commission's report of 1956. The width of the strait combined with the "depth" of the bay is about 26 miles. Southward of this bay the strait is again constricted to its southern entrance between Stevns Klint and the rocks off-lying Falsterbo Udde to a breadth of $13\frac{1}{2}$ miles.

The southern approach to the strait has a breadth at its southern end between Møen and the rocks off Falsterbo Udde of about 23 miles and a maximum width of 27 miles.

(iii) Depths in the fairway of the northern part of the Sound as far south as København and Malmö vary between about 7 and 14 fathoms. In the wider parts the coastal banks, with less than 6 fathoms over them, extend up to about $3\frac{1}{2}$ miles offshore in places. In the narrower parts these distances are considerably less.

About $1\frac{1}{2}$ miles north of Helsingør, on the western side of the fairway, is a detached bank with $2\frac{3}{4}$ fathoms over it and on the axis of the strait about a mile south of Helsingør is a bank, about 3 miles long, with less than 6 fathoms over it and a least depth of $4\frac{1}{2}$ fathoms. The coastal bank around Ven is narrow.

In general, depths between Amager, Saltholm and the Swedish coast south-eastward are less than 6 fathoms, with numerous shoal patches some of which have less than one fathom over them. The Drogden Channel between Saltholm and Amager has been dredged to allow a narrow passage with depths of 26 feet. South-west of Saltholm, by keeping on a leading line, depths of 23 feet can be carried from the deeper water north-east of the island to the Baltic.

West of a line joining the edge of the coastal bank about 4 miles south of Amager to the edge of the coastal bank about 6 miles south-west of Falsterbo Udde the general depths are between $6\frac{1}{4}$ and 12 fathoms.

Channels have been dredged through the coastal banks where necessary to give access to the ports within the Sound.

3. Navigation through the Sound presents no particular difficulties in clear weather. There are ample navigational lights and light-vessels, and the channels in their narrower parts are well buoyed. There are several radio aids.

Although there is no appreciable tide the water level is liable to considerable seasonal variations and may rise or fall as much as 7 feet above or below the mean level. Continued strong winds in the Baltic or northern approaches to the Sound have considerable effect on the level.

Signals are displayed in various places to indicate the variation in level.

The currents in the Sound are uncertain and varied ; in general they are north-going and south-going, the former predominating. Their direction and rate are considerably affected by air pressure and winds and over the shoaler areas by the changes in the water level, but mostly they conform to the main directions of the fairways. In the narrow part off Helsingør their rates may attain at times 4 or 5 knots.

There are a number of ports in the Sound. In the winter these are kept clear of ice. København, the capital of Denmark, is situated on the western side close north of Amager. Here there are depths of up to 39 feet in the roadstead, plenty of alongside accommodation and all modern port facilities ; alongside berths have depths up to 32³/₄ feet.

On the Swedish side are Malmö, Landskrona, Helsingborg, Limhamn and Hoganas.

Malmö, east of Saltholm, has depths in the roadstead of about 8 fathoms and ample alongside accommodation in depths up to 30 feet with all necessary facilities.

Landskrona, about 15 miles north of Malmö, has depths in the roads up to 36 feet ; in the port there is plenty of quayage with depths alongside of from 20 to 30 feet.

Limhamn, about 3 miles south-west of Malmö, has depths at its quays of approximately 25 feet ; at the tanken quay two or three vessels of 16-18,000 tons can berth simultaneously.

Helsingborg, on the eastern side towards the narrow northern end of the Sound, has quayage with depths alongside up to 32 feet and all facilities.

Hoganas, 13 miles north of Helsingborg, is a small harbour with depths of between 14 and 21 feet.

A canal with depths of 23 feet has been cut through the isthmus of the peninsula of which Falsterbo Udde forms the south-west end. Considerable driftnet fishing takes place in the Sound during certain months of the year.

4. There are no drying features charted from which the limits of the territorial sea can be extended, as there is no tide. The following are small above-water rocks which qualify to do so :

On the western side :

Middlegrund Fort, nearly 2¹/₂ miles east of the northern end of København.

Flak Fort, about 4 miles east of København and 2 miles north of Saltholm.

A number of small rocks close off the north end of Saltholm, and a number of similar ones east and south-east of the south-eastern end of that island. The most distant is 1¹/₂ miles offshore.

On the eastern side :

A small rock nearly a mile south of Landskrona.

A number of small rocks lying up to a mile offshore off the north-eastern shore of a bay or indentation of the coast, north-eastward of Falsterbo Udde.

A group of small rocks, lying between three quarters of a mile and 1³/₄ miles southward of Falsterbo Udde.

33. Singapore Strait (Annex, maps Nos. 35 and 36)

References : Charts Nos. 2403, 1353.

Malacca Strait Pilot, Third Edition, 1946.

1. For the purpose of this study the Singapore Strait, which separates the Indonesian islands lying off the Sumatra coast from the southern coasts of Johore and Singapore Island, will be considered as the continuation of the southern end of the Strait of Malacca lying between the intersection of 12-mile arcs centred on the opposite shores at the north-western and eastern ends of the Strait. The Strait is a focal point for international shipping, and joins the high seas of the Malacca Straits to those of the South China Sea. The Durian Strait, Sugi Strait, Chombol Strait and Riouw Strait all lead south-eastward to the South China Sea between the Indonesian islands on the southern side of the Singapore Strait.

2. The western end of the Strait may be considered as the intersection of 12-mile arcs centred on Tokong Belanda, an above-water rock about 3 miles north-west of Groot Karimun, and Pulau Pisang, about 19 miles northward, and the eastern end as the intersection of similar arcs centred on the low-water line of Tanjung Berakit and on the easternmost drying rock of the group of above-water and drying rocks on which stands the Horsburgh Lighthouse, which is maintained by the Government of Singapore. This group lies 7 miles north of Pulau Bintan and about 5³/₄ miles east-south-east of Stork Reef, a drying reef 2 miles off the Johore coast.

3. The length of the Strait between the above limits is about 75 miles.

(a) The Strait at the western end first narrows to a width of 7³/₄ miles between Pulau Iju and Pulau Kukub. Distances within the Strait will be given from the line joining these islands.

(b) 6 miles within, the breadth is 8³/₄ miles and thence it widens rapidly, with the entrances to Durian, Sugi and Chambol Straits on the south side and the western approach to the Johore Strait on the north side.

(c) 17 miles within, the Main Strait is restricted to a breadth of 4 miles between the reef on which is Pulau Nipa and Pulau Pawai, 6¹/₂ miles south of Singapore Island.

(d) 22 miles within, the breadth is just under 3 miles between Pulau Takong and the islet on which is Raffles Lighthouse.

(e) For the next 10 miles, a general breadth of between 2¹/₂ to 3 miles is maintained between the islets and the drying reefs lying off Pulau Batam on the south side and Singapore Island on the north.

(f) About 41 miles within, the Strait is 8 miles wide between Pulau Batam and Singapore Island, it thence widens into the eastern approach to Johore Strait and Kuala Johore, and narrows again to about the same width a further 7 miles within.

(g) Thence the Strait widens with the approach to Riouw Strait on the southern side after which it retains a general width between Pulau Bintan and the south-east coast of Johore of about 12 miles over a distance of about 9 miles.

(h) Towards the eastern end, the group of rocks on

which stands Horsburgh Light divides the Strait into two. South Channel, the southern part, is $5\frac{1}{2}$ miles wide between the north coast of Pulau Bintan and a drying rock $1\frac{1}{2}$ miles south-west of the Horsburgh group, and $9\frac{3}{4}$ miles wide between the group and Tanjong Berakit. Middle Channel, the northern part, is $5\frac{3}{4}$ miles wide between the Horsburgh group of rocks and a drying reef 2 miles off the south-eastern point of Johore.

4. The main fairway of the Strait runs between the territory of Indonesia and that of Malaya and Singapore; it is comparatively deep and depths in general vary from 10 to 30 fathoms, although there are a few shoal patches. It is well marked for both day and night navigation. There are a number of drying reefs on both sides of the Strait, but these lie within short distances of land permanently above water. The rise of the tide is about 9 feet; tidal streams may be strong with many

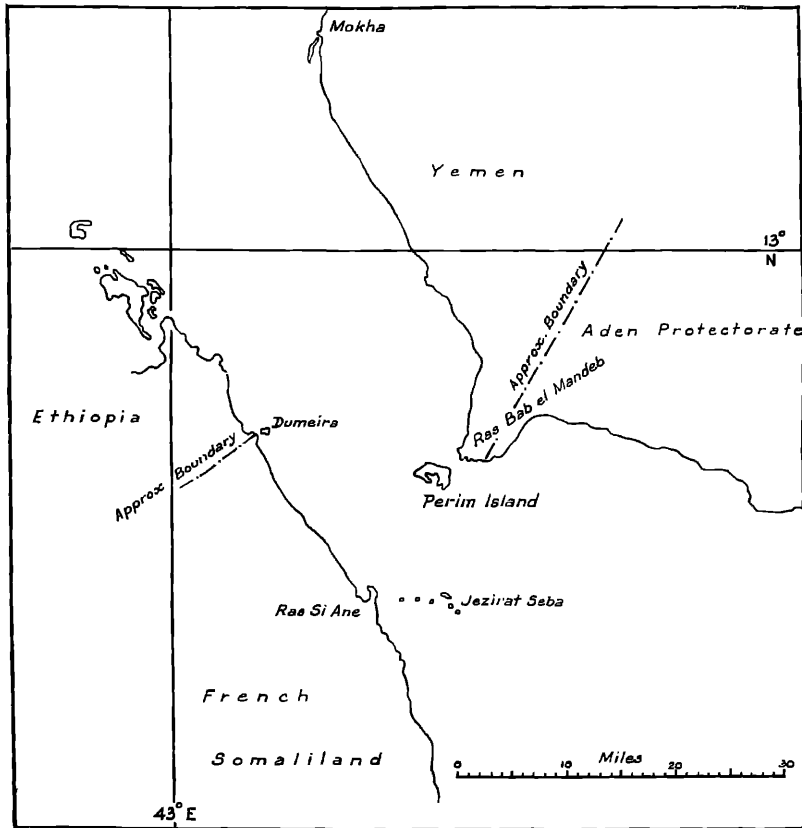
overfalls and eddies. Heavy rain squalls frequently reduce the visibility.

5. Ports within the area on the northern side are Singapore, with a roadstead and alongside accommodation with all modern facilities for vessels up to 33-foot draught; Pulau Bukom and Pulau Sebarok, 5 miles south-west of Singapore, with oil loading and discharging facilities and depths alongside up to $45\frac{1}{2}$ feet and 38 feet respectively. On the southern side are Pulau Sambo, about $9\frac{1}{2}$ miles east of Raffles Lighthouse, with oil loading and discharging facilities and depths alongside up to 30 feet; Tandjong Uban, close within the Riouw Strait, with alongside depths up to 41 feet.

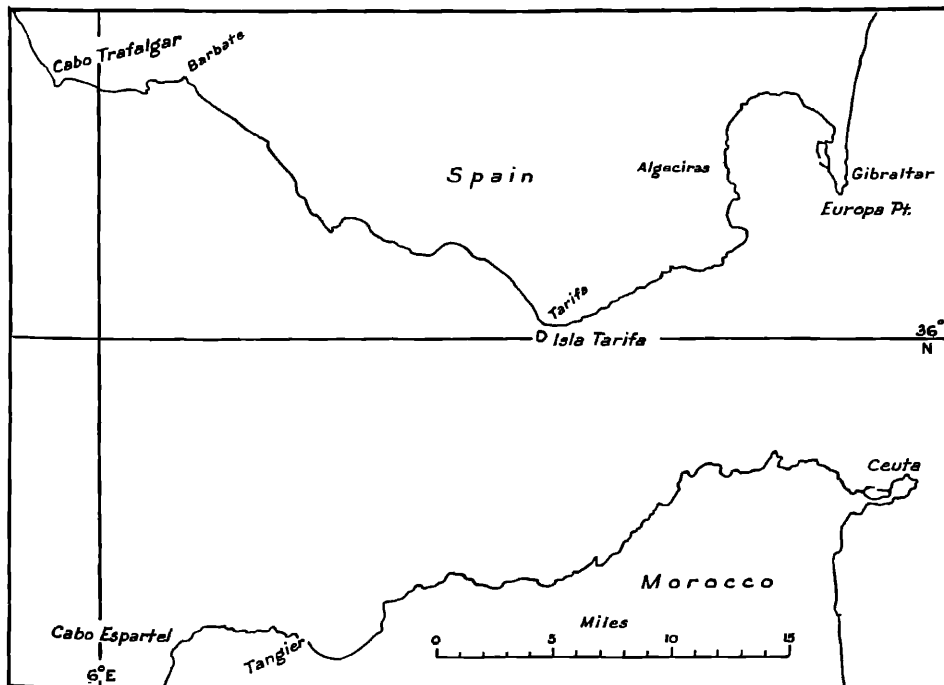
6. Navigation would be possible on each side of a median line through the Strait.

ANNEX

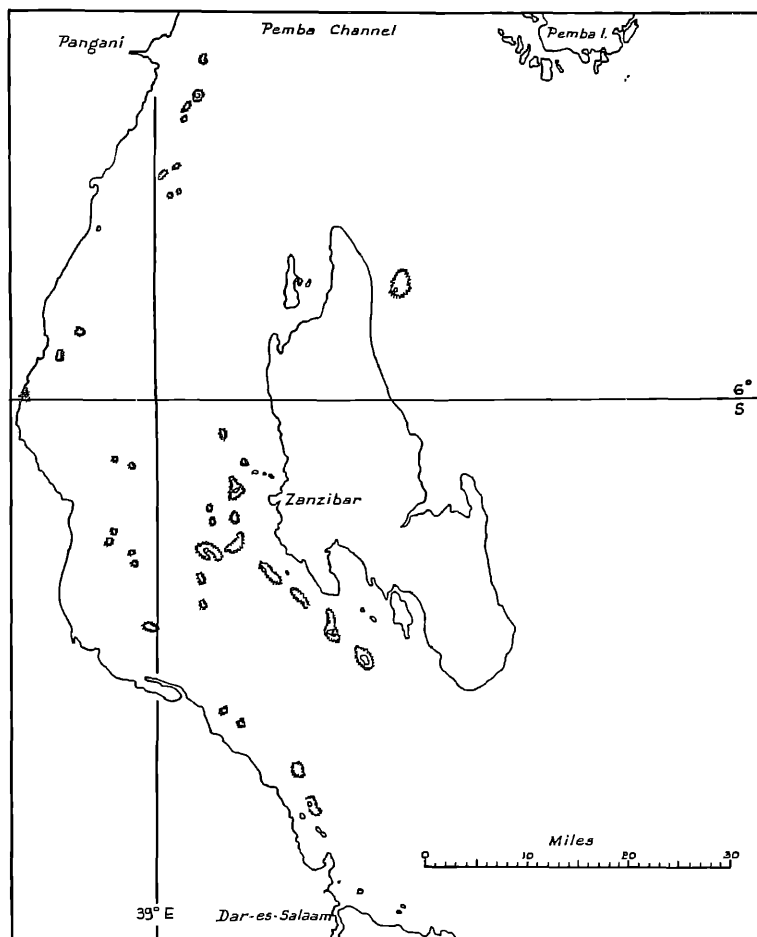
MAP NO. 1
Straits of Bab el Mandeb



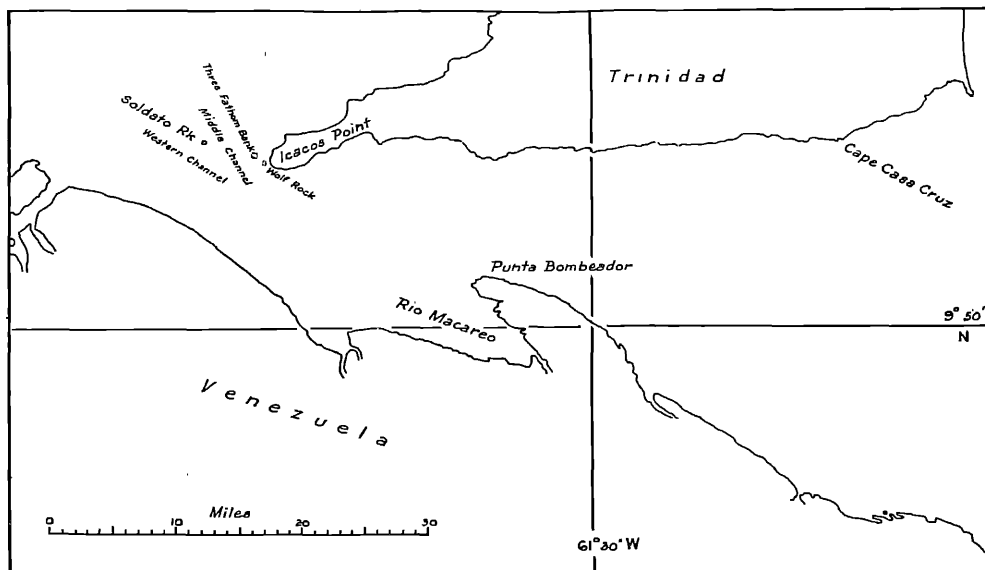
MAP NO. 2
Strait of Gibraltar



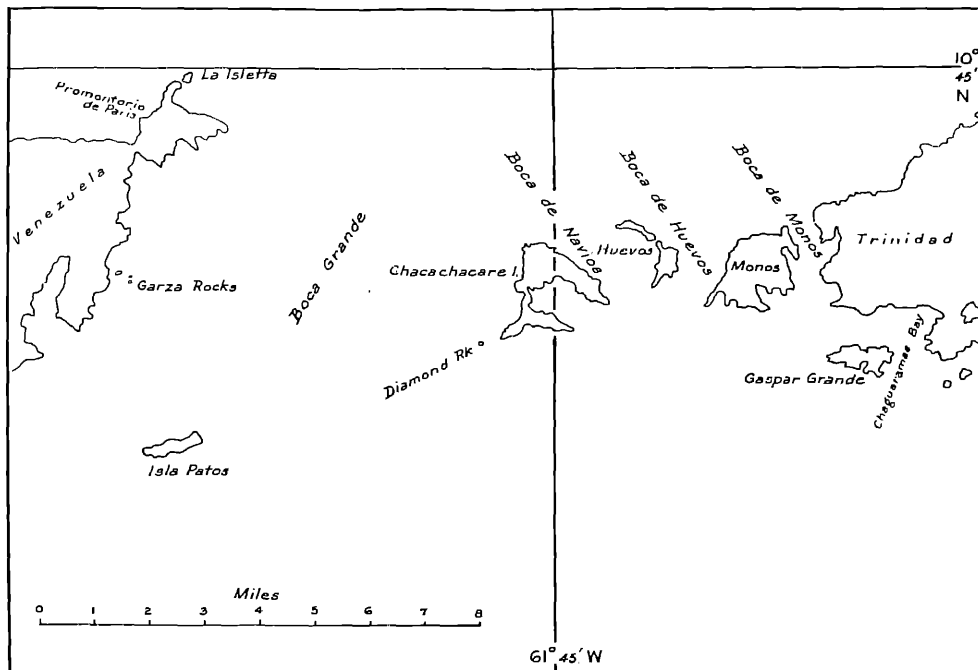
MAP NO. 3
Zanzibar Channel



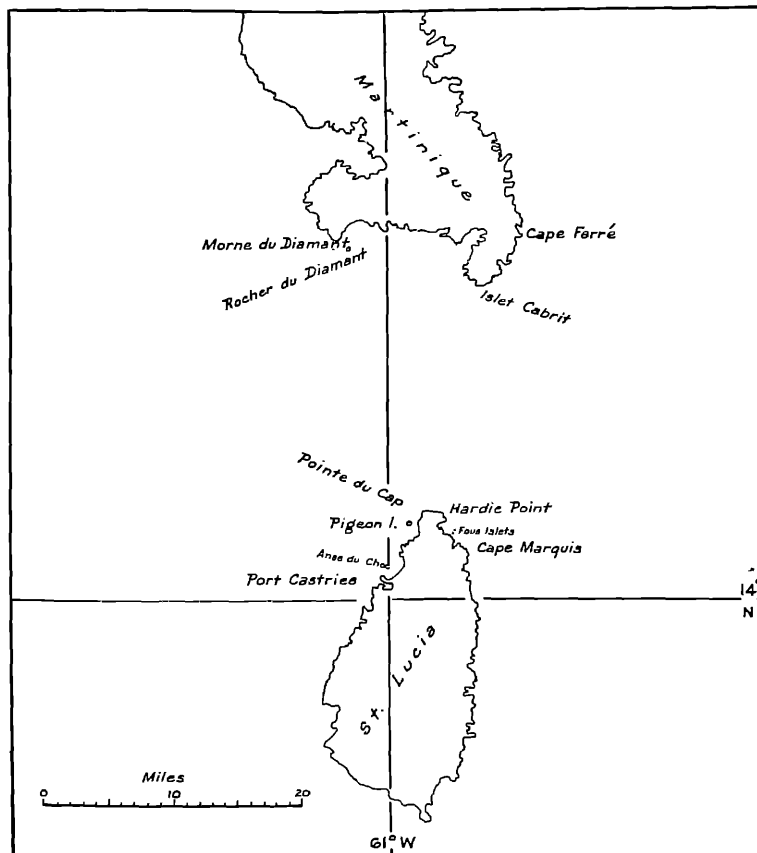
MAP NO. 4
Serpents Mouth



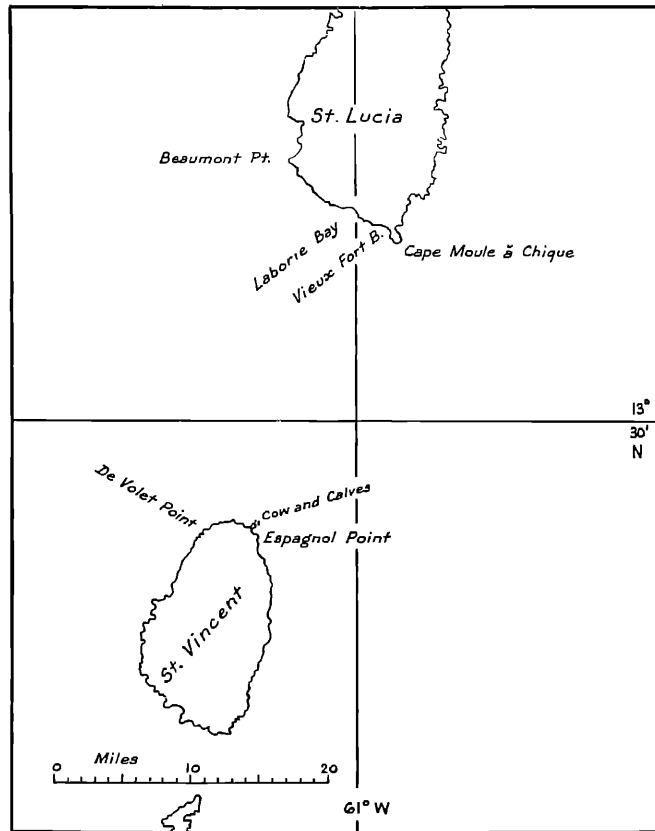
MAP NO. 5
Dragons Mouth



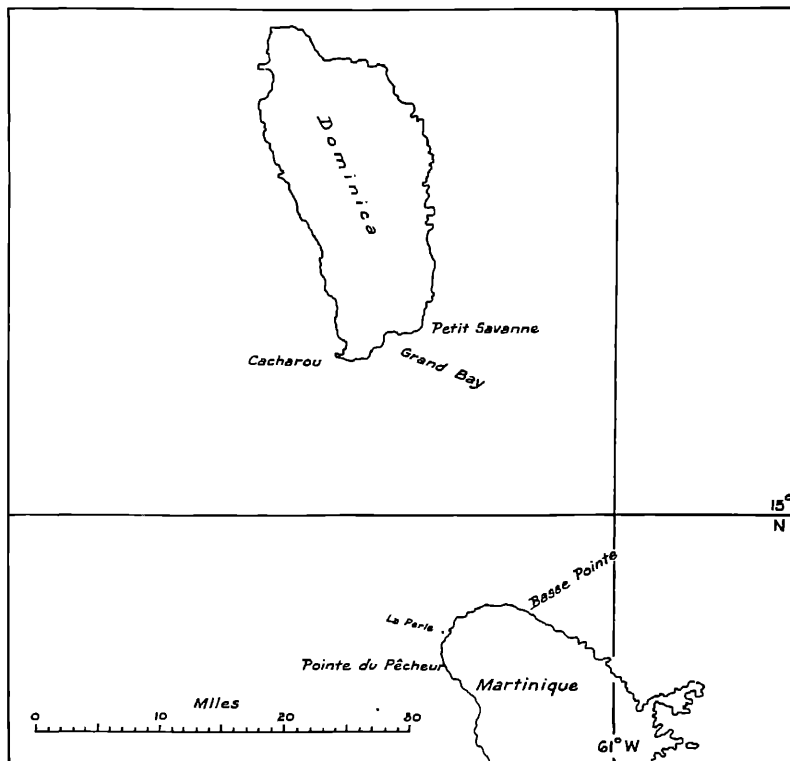
MAP NO. 6
St. Lucia Channel



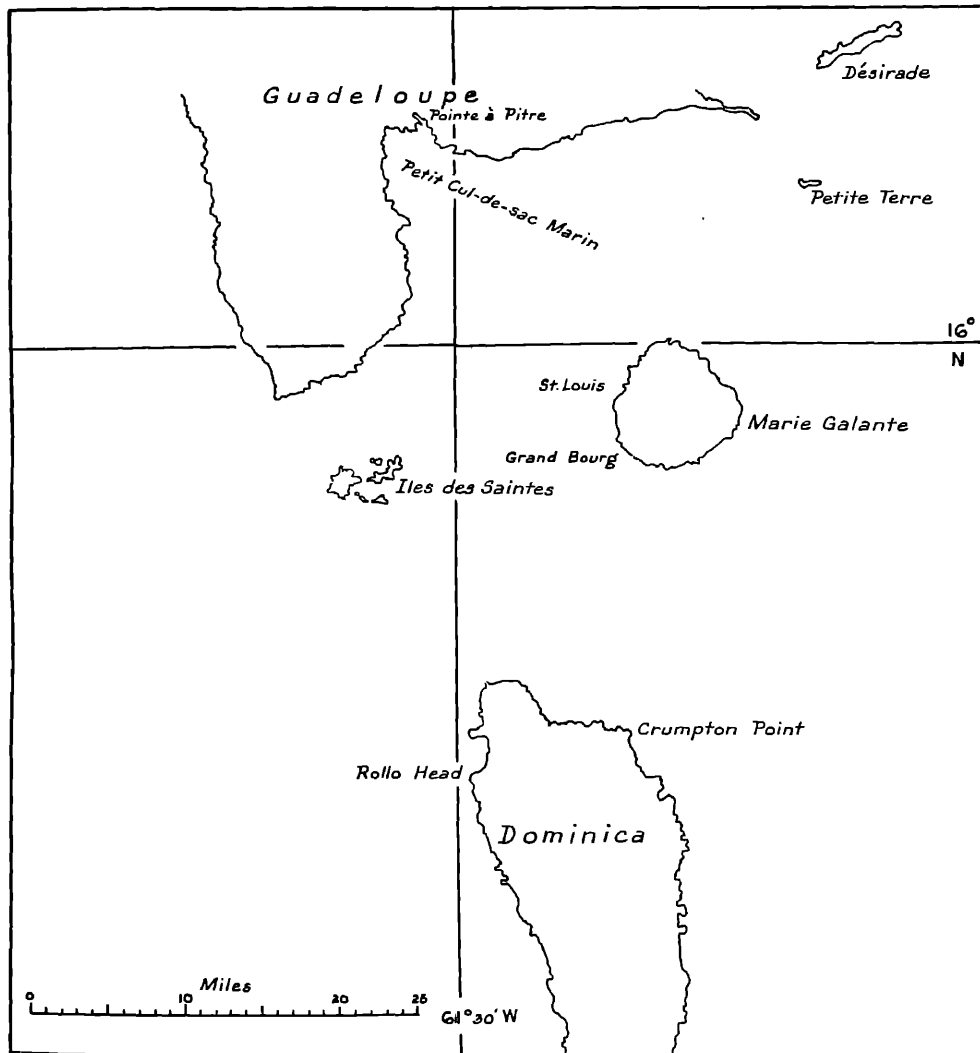
MAP NO. 7
Strait between St. Lucia and St. Vincent



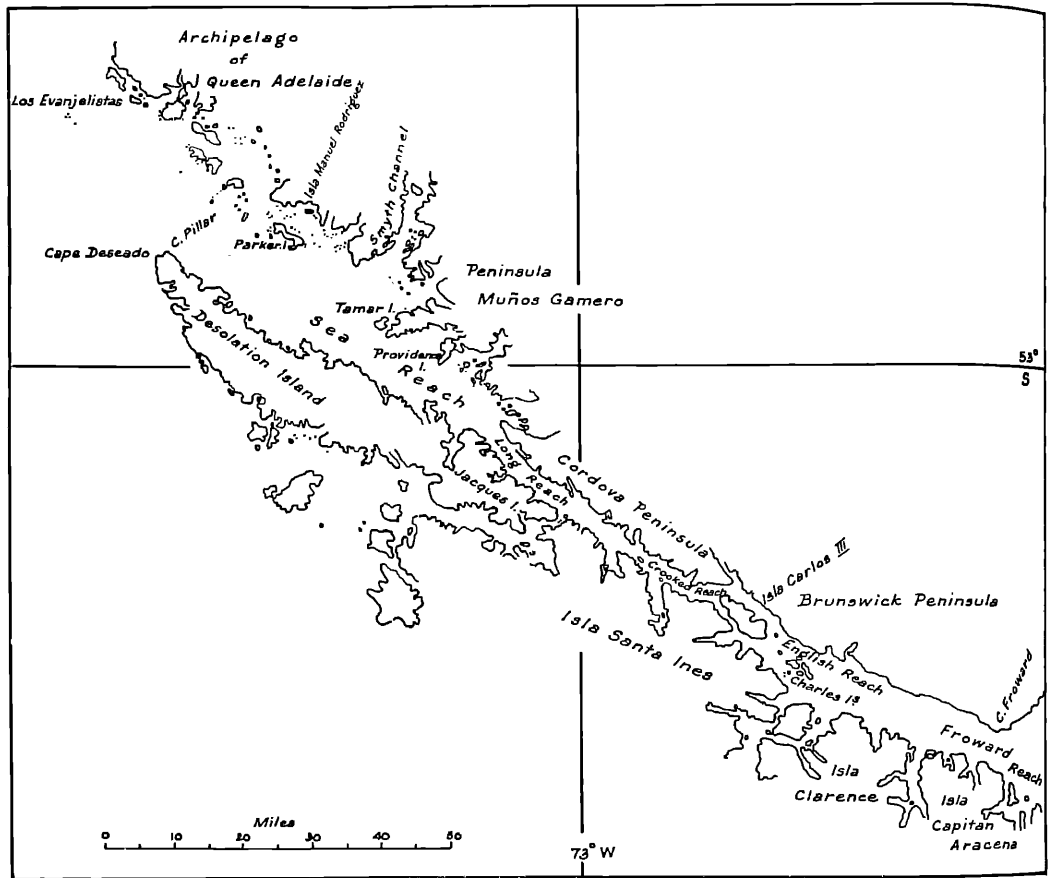
MAP NO. 8
Dominica Channel



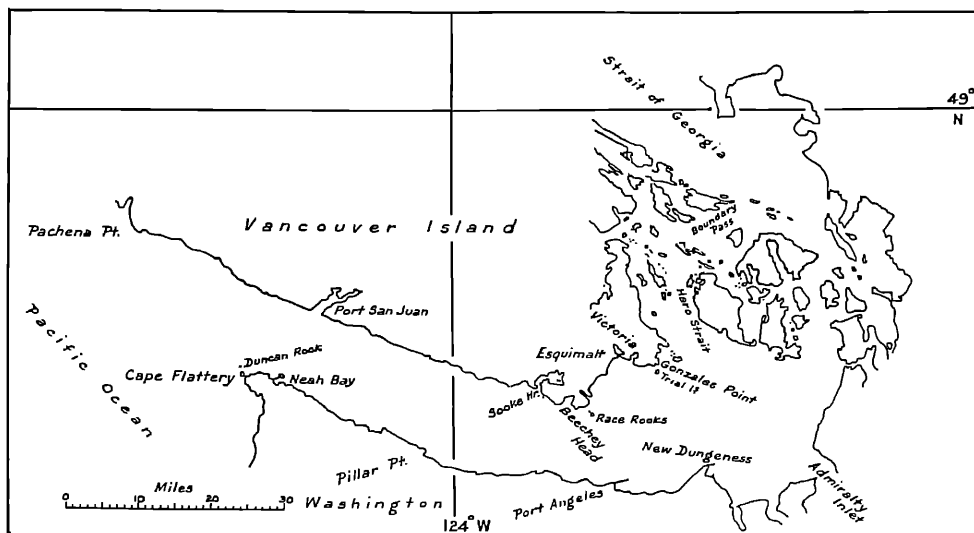
MAP NO. 9
Straits between Dominica and Guadeloupe



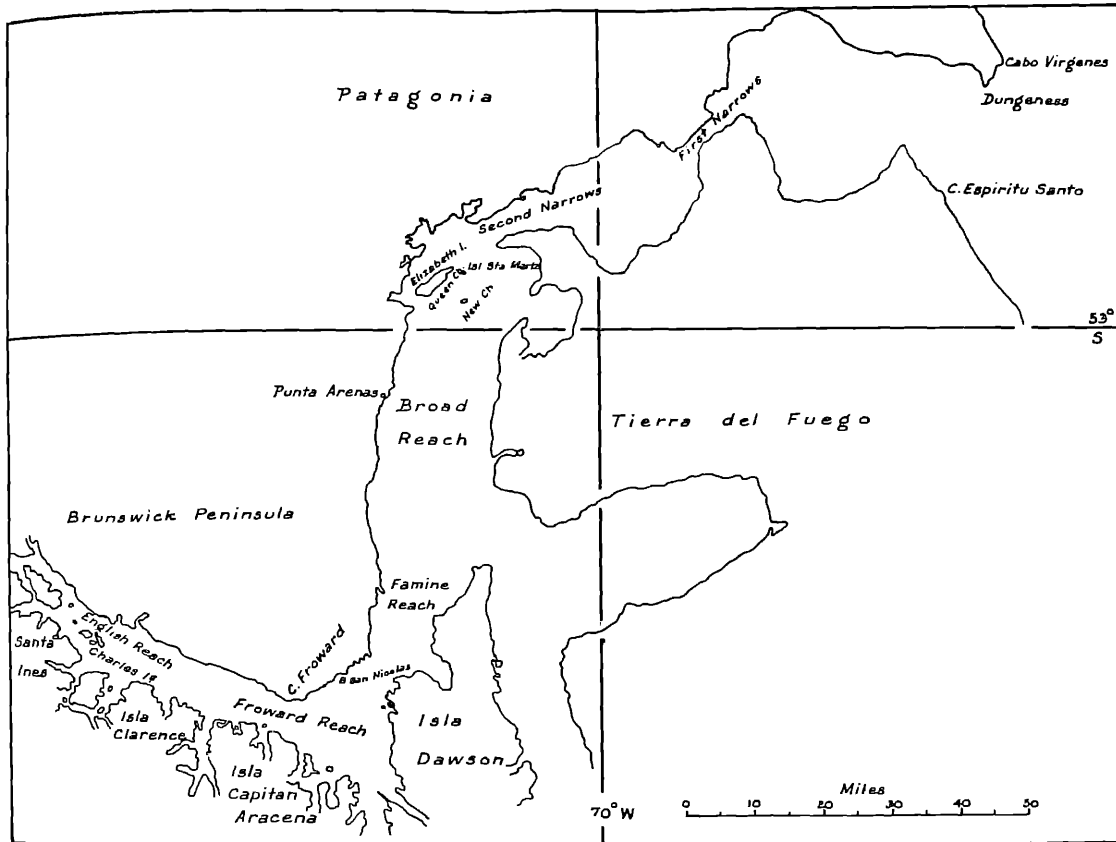
MAP NO. 10
Magellan Strait (Western Part)



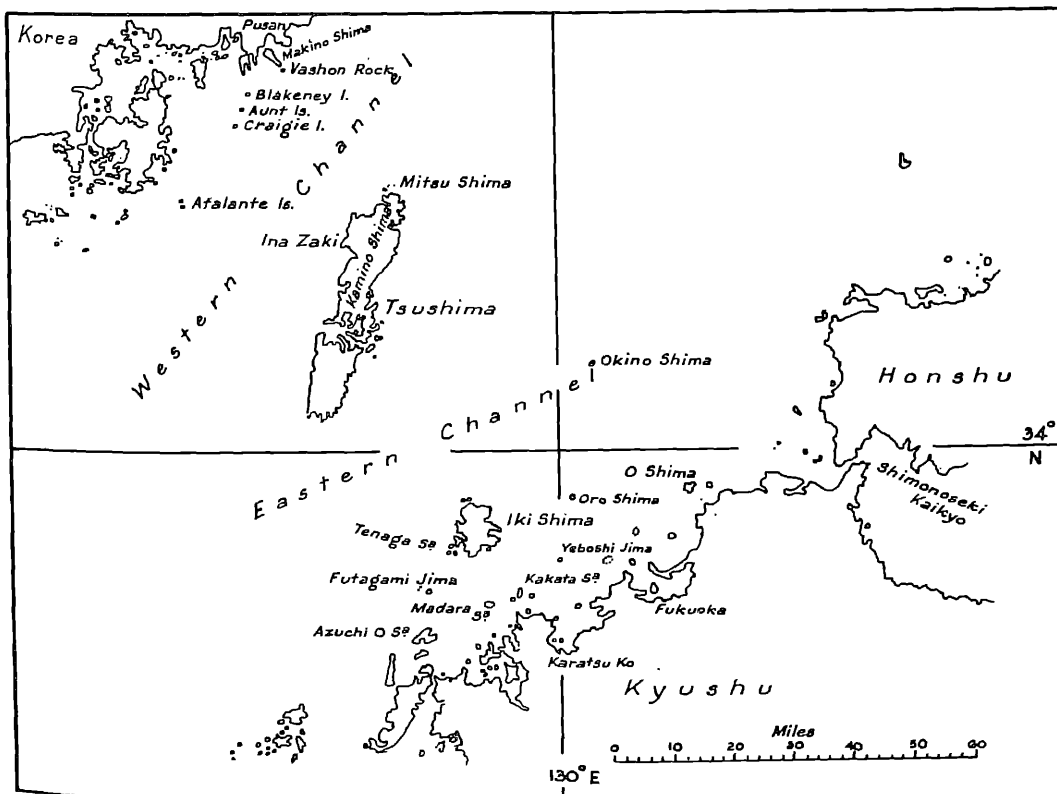
MAP NO. 12
Strait of Juan de Fuca



MAP NO. 11
Magellan Strait (Eastern Part)

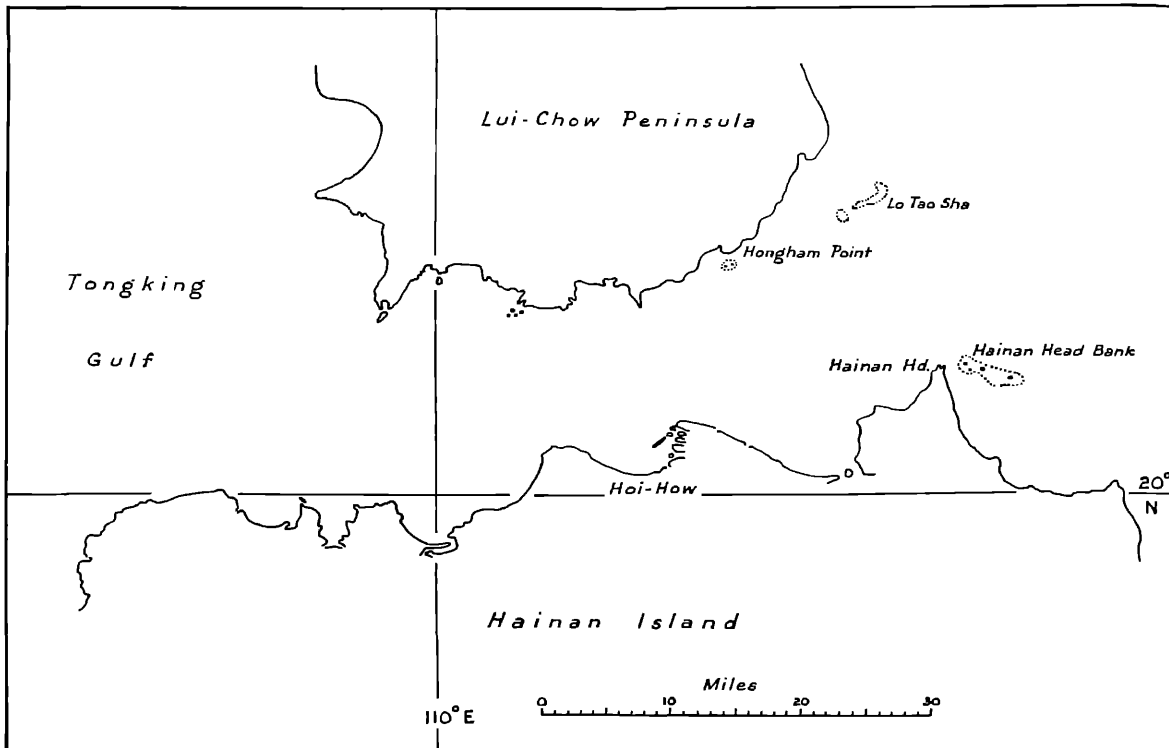


MAP NO. 13
Chosen Strait



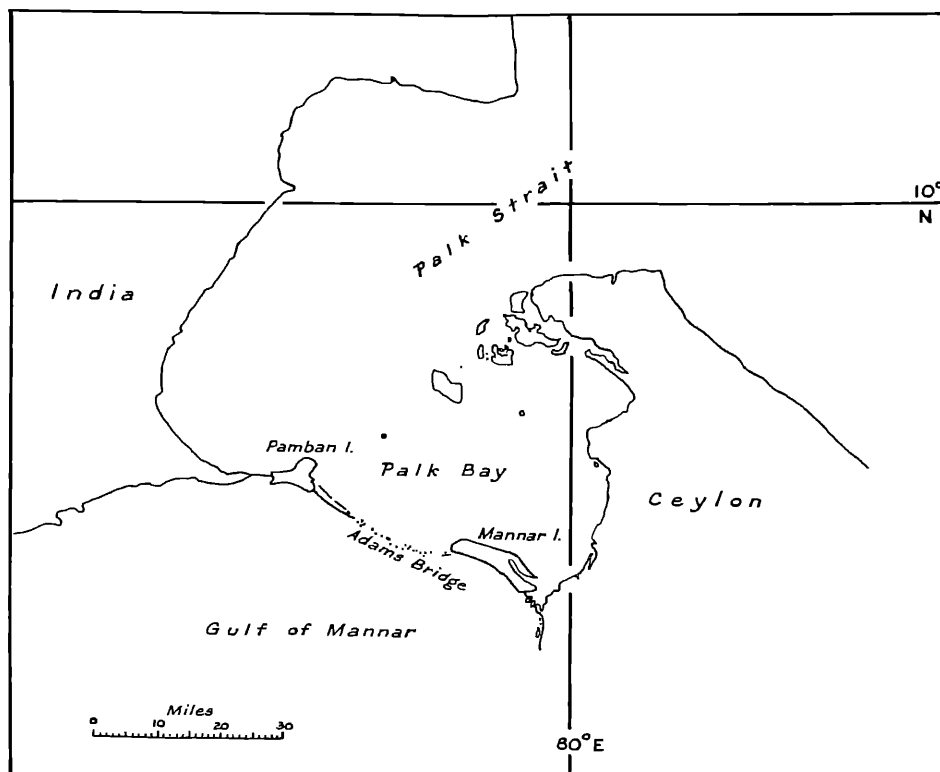
MAP NO. 14

Hainan Strait

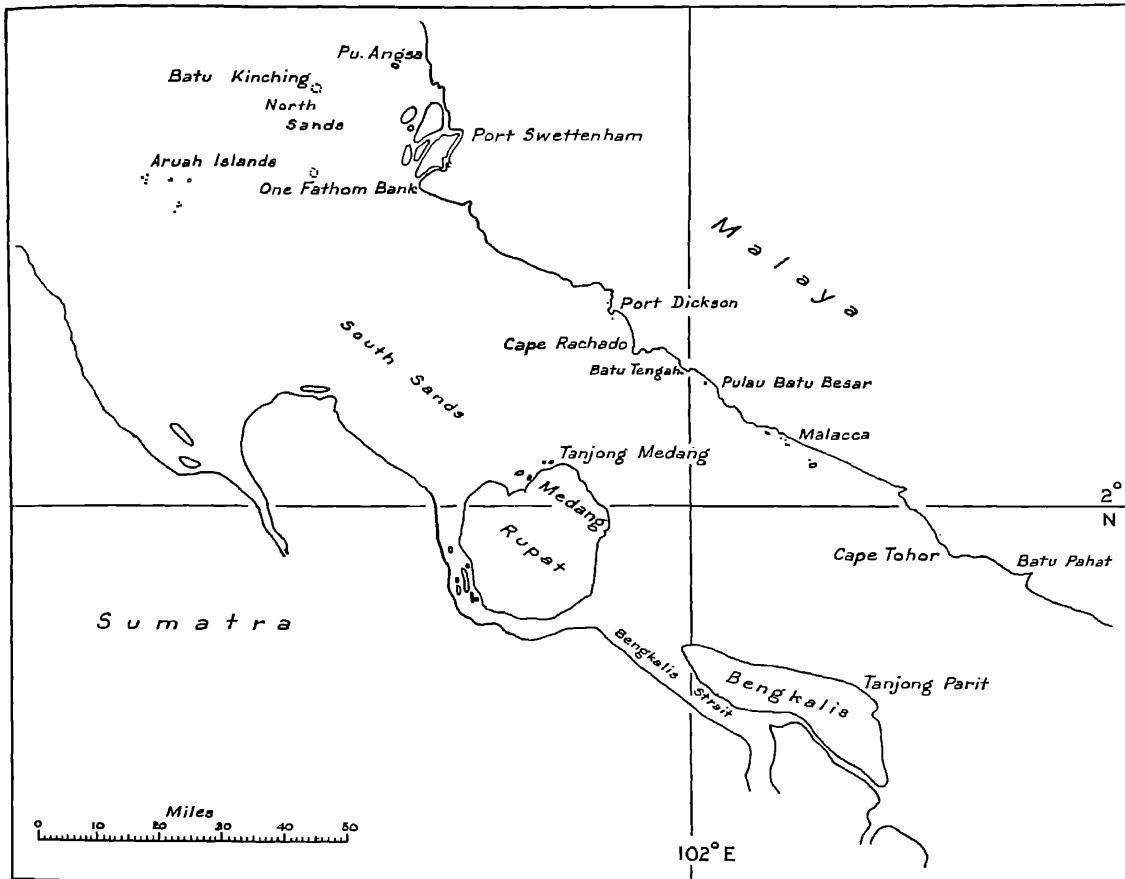


MAP NO. 15

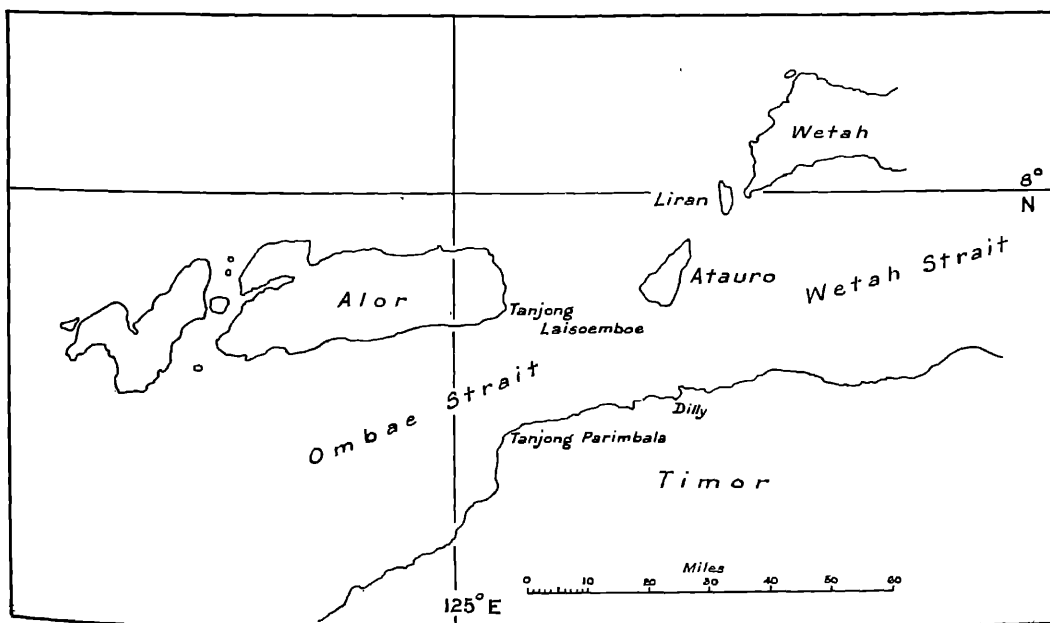
Palk Strait



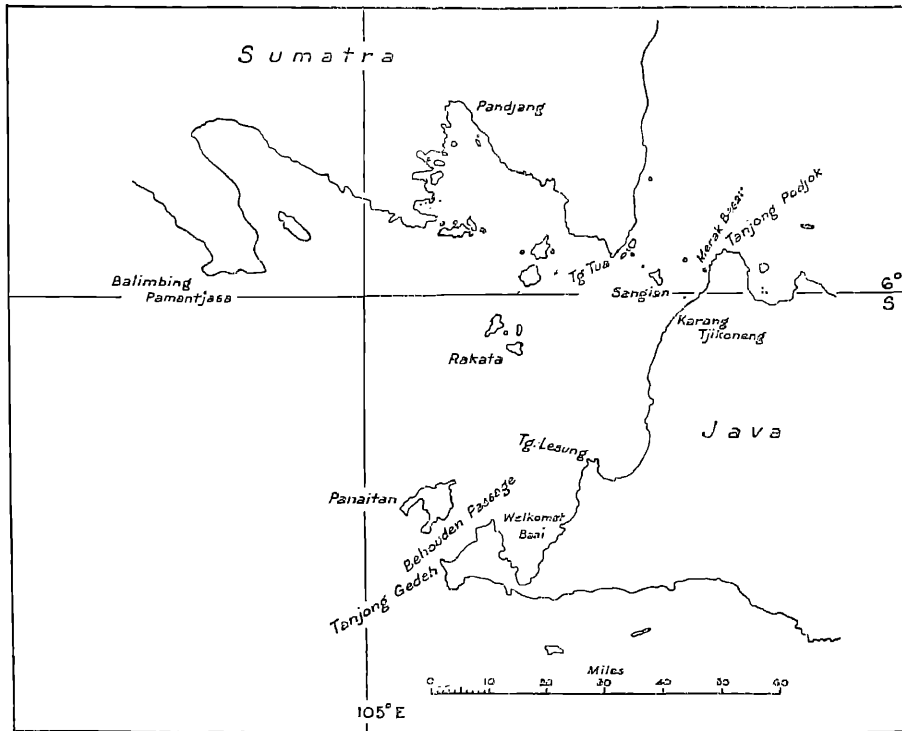
MAP NO. 16
Strait of Malacca



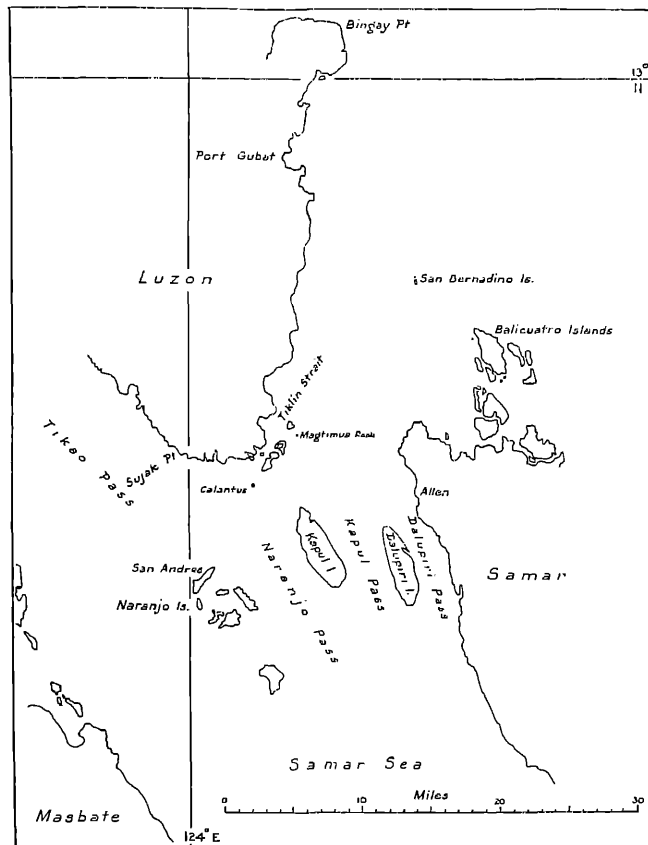
MAP NO. 17
Ombae Strait



MAP NO. 18
Soenda Strait

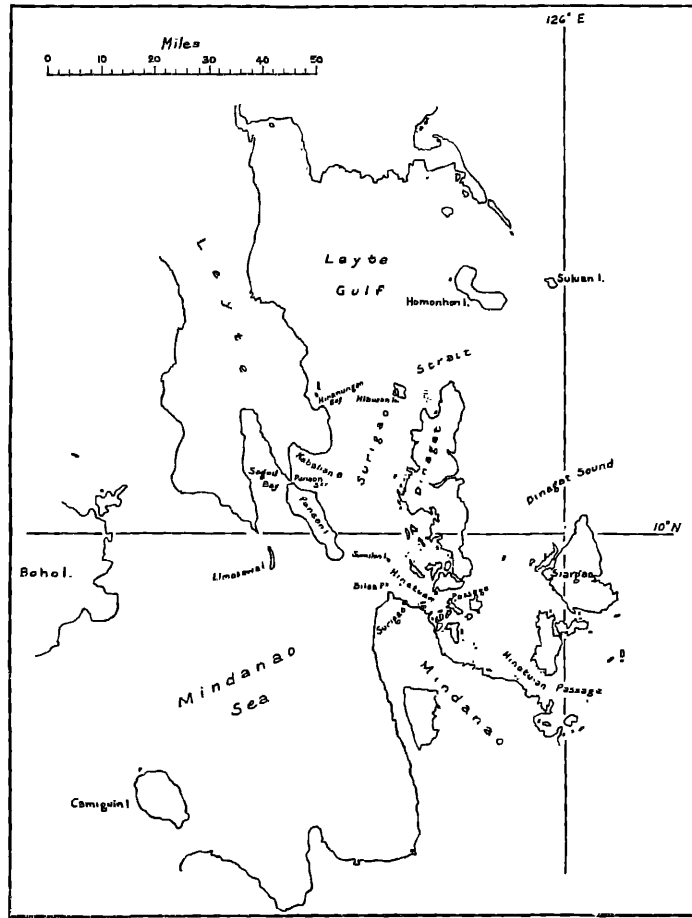


MAP NO. 19
San Bernardino Strait



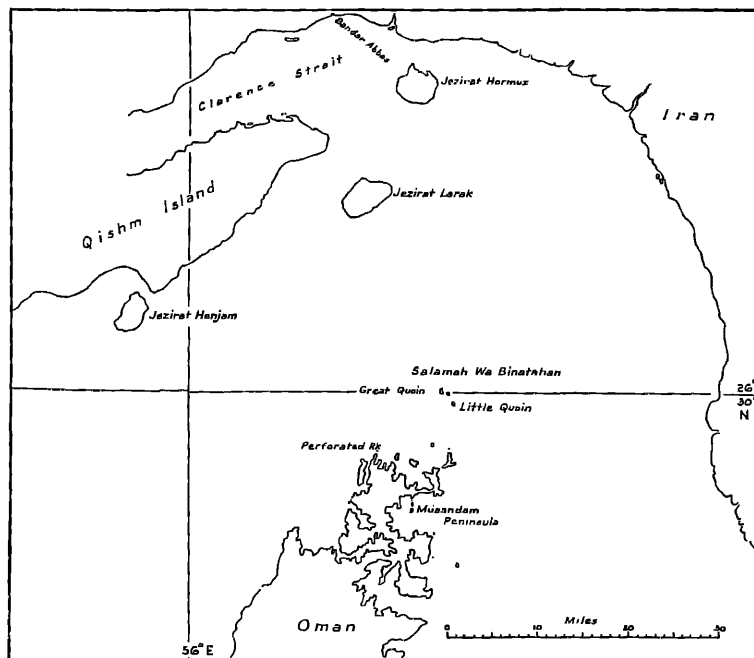
MAP NO. 20

Surigao Strait

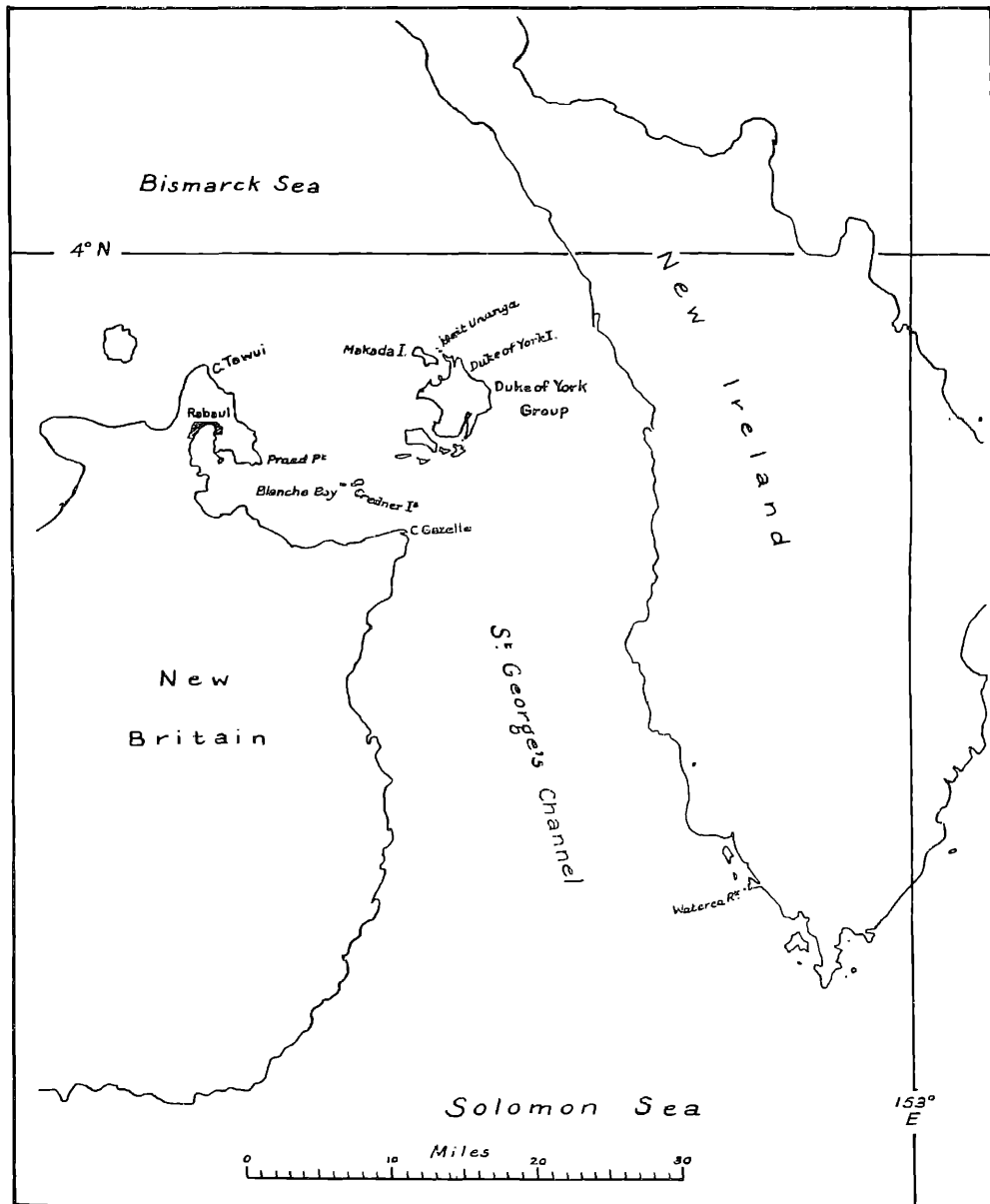


MAP NO. 21

Strait of Hormuz

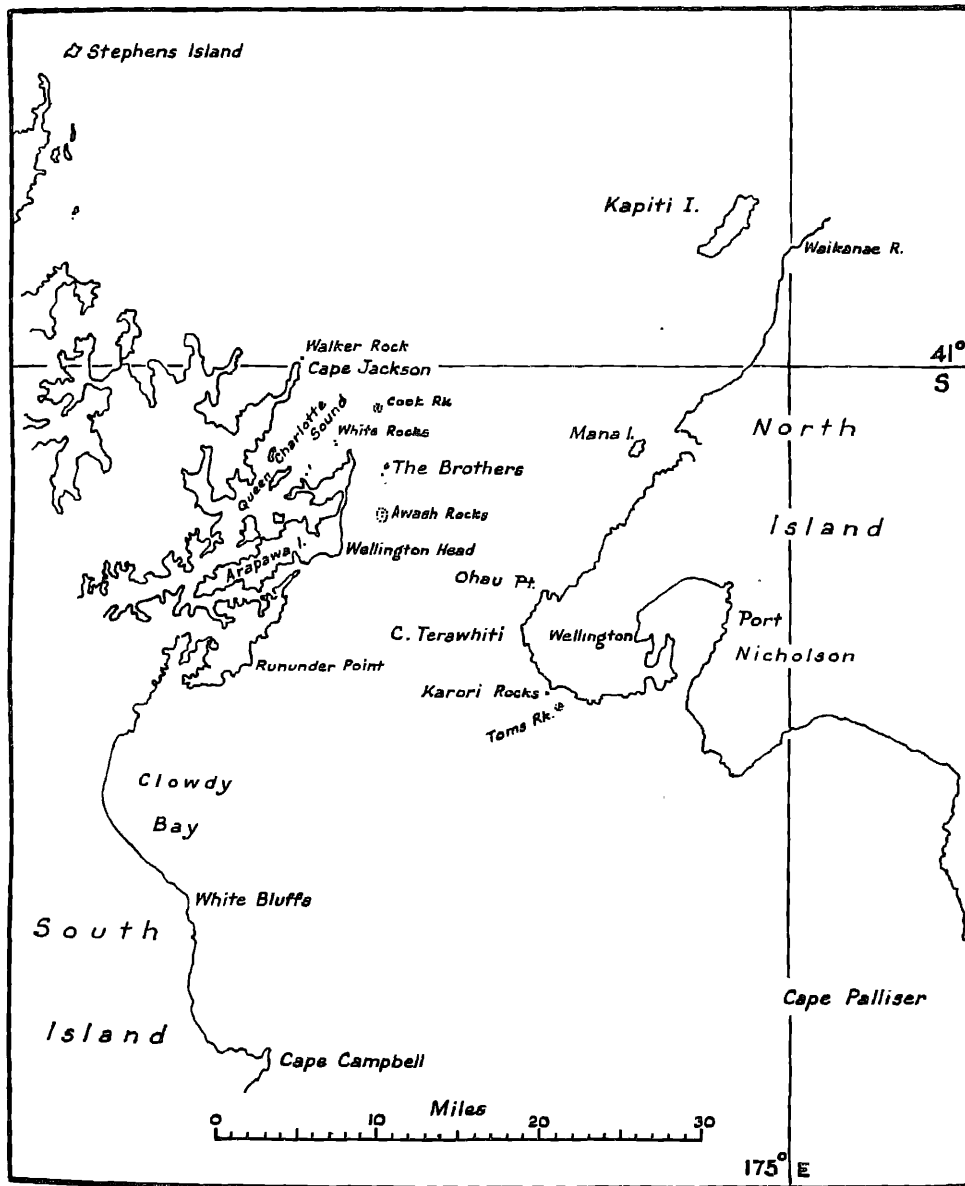


MAP NO. 22
St. George's Channel (Bismarck Archipelago)

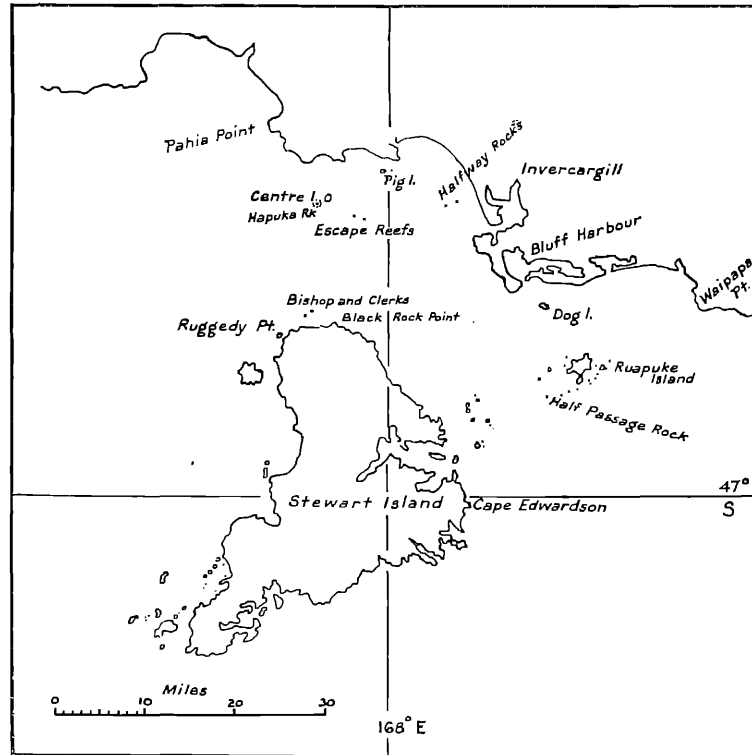


MAP No. 23

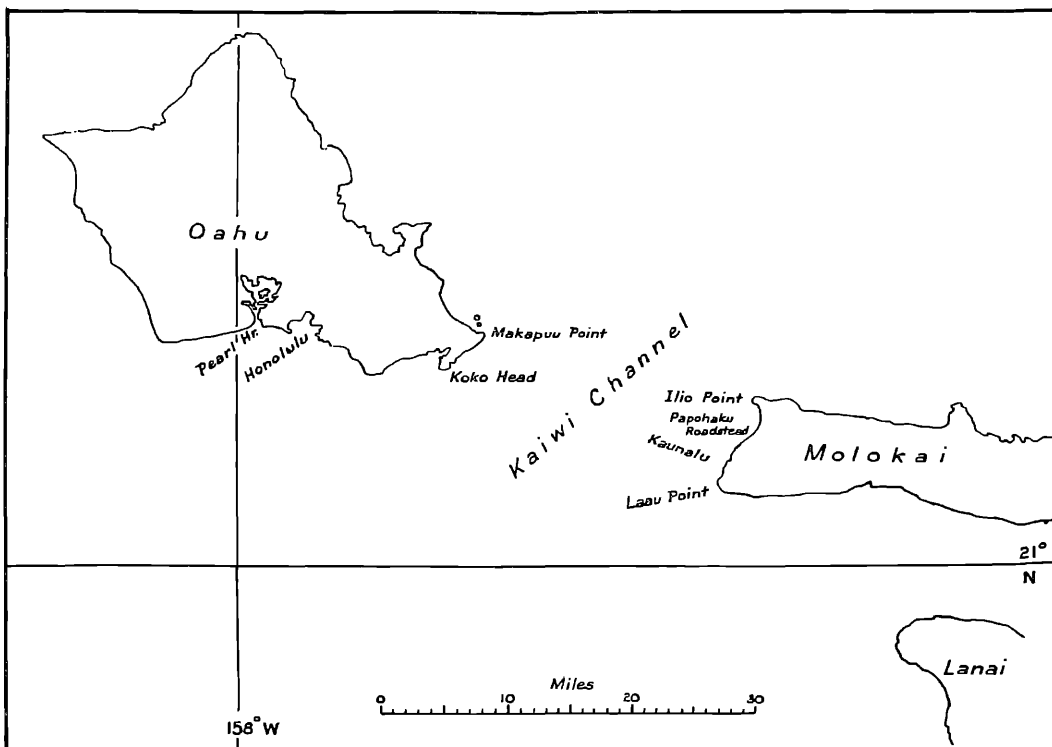
Cook Strait



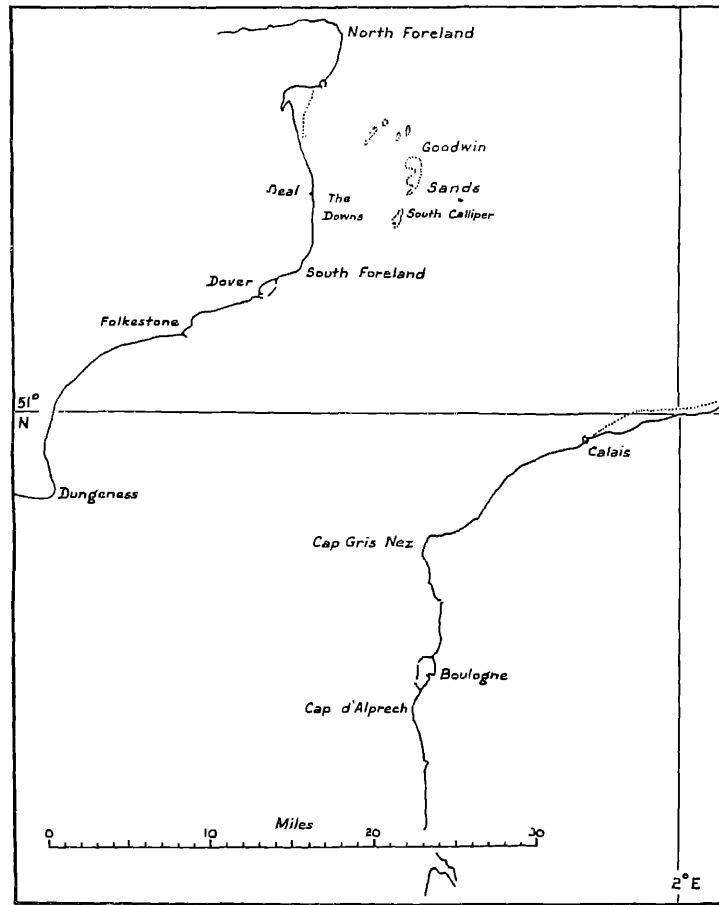
MAP NO. 24
Foveaux Strait



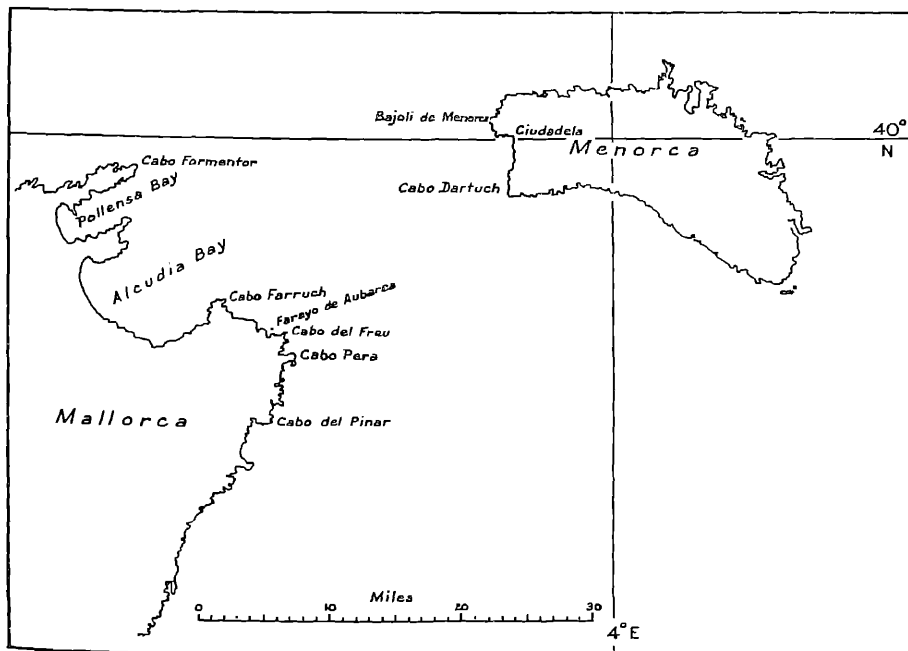
MAP NO. 25
Kaiwi Channel



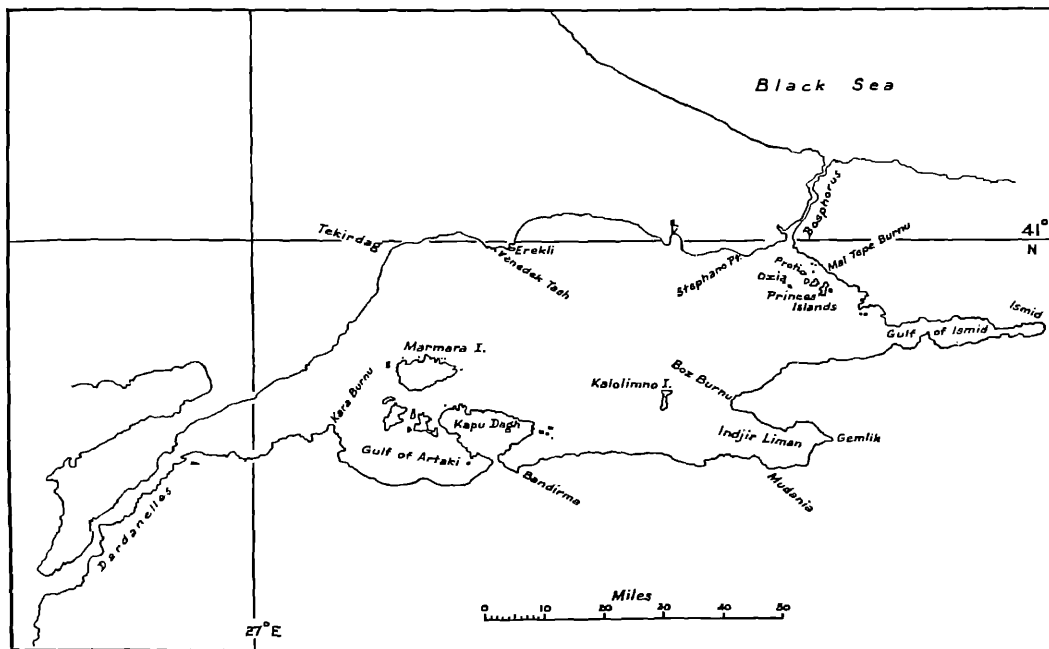
MAP NO. 26
Dover Strait



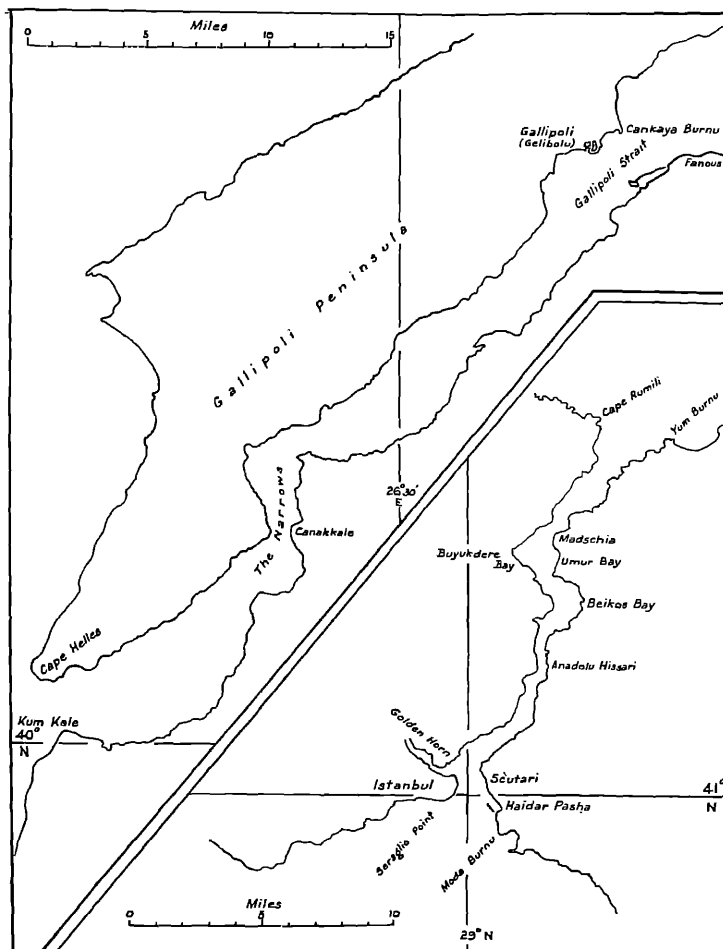
MAP NO. 27
Canal of Menorca



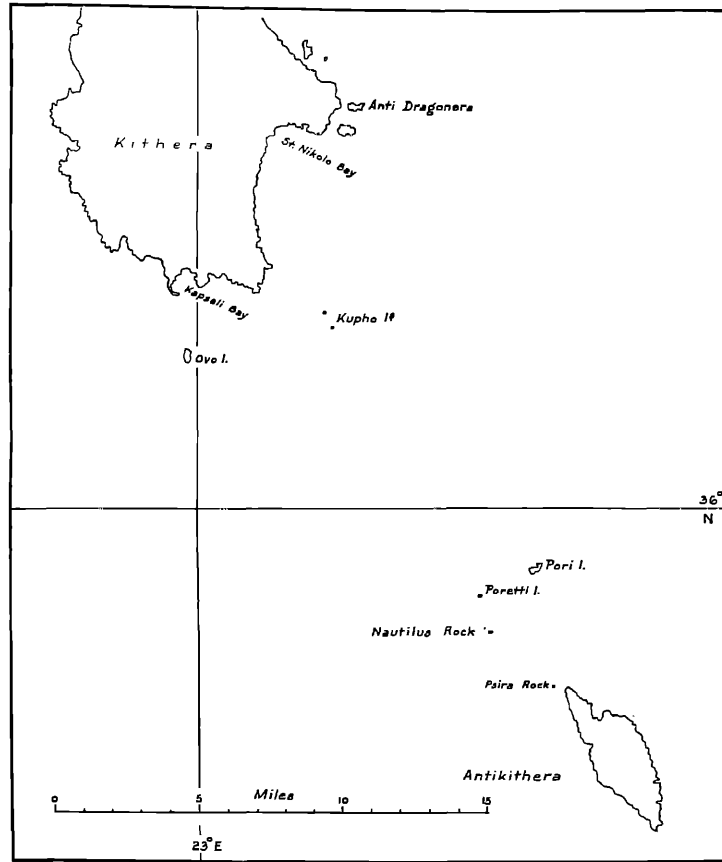
MAP NO. 30
Sea of Marmara



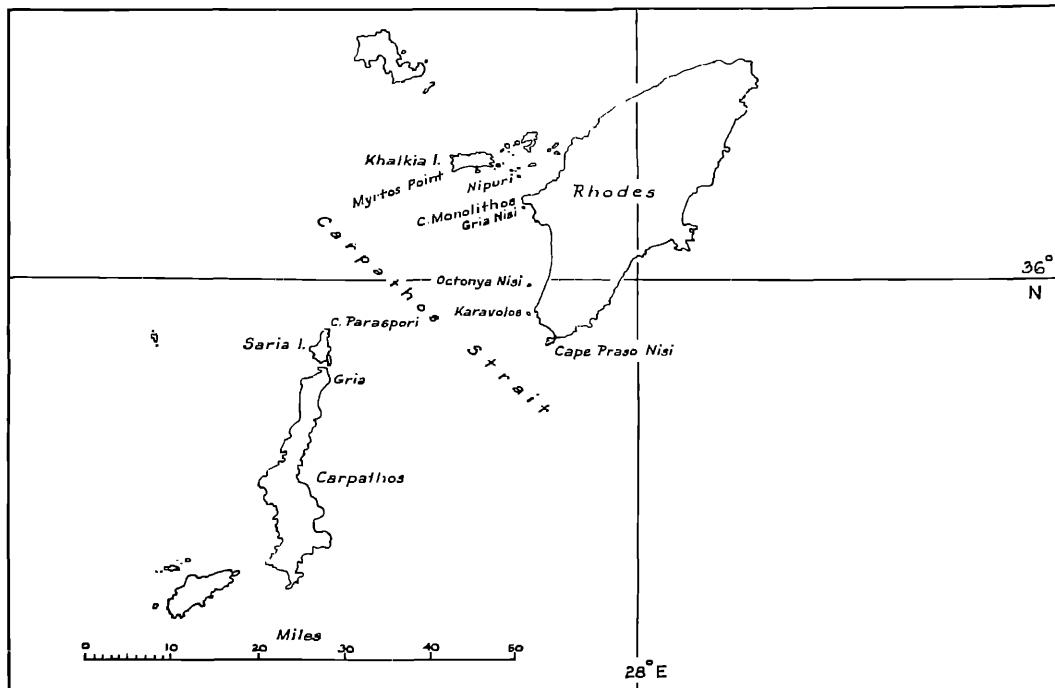
MAP NO. 31
The Dardanelles and Bosphorus



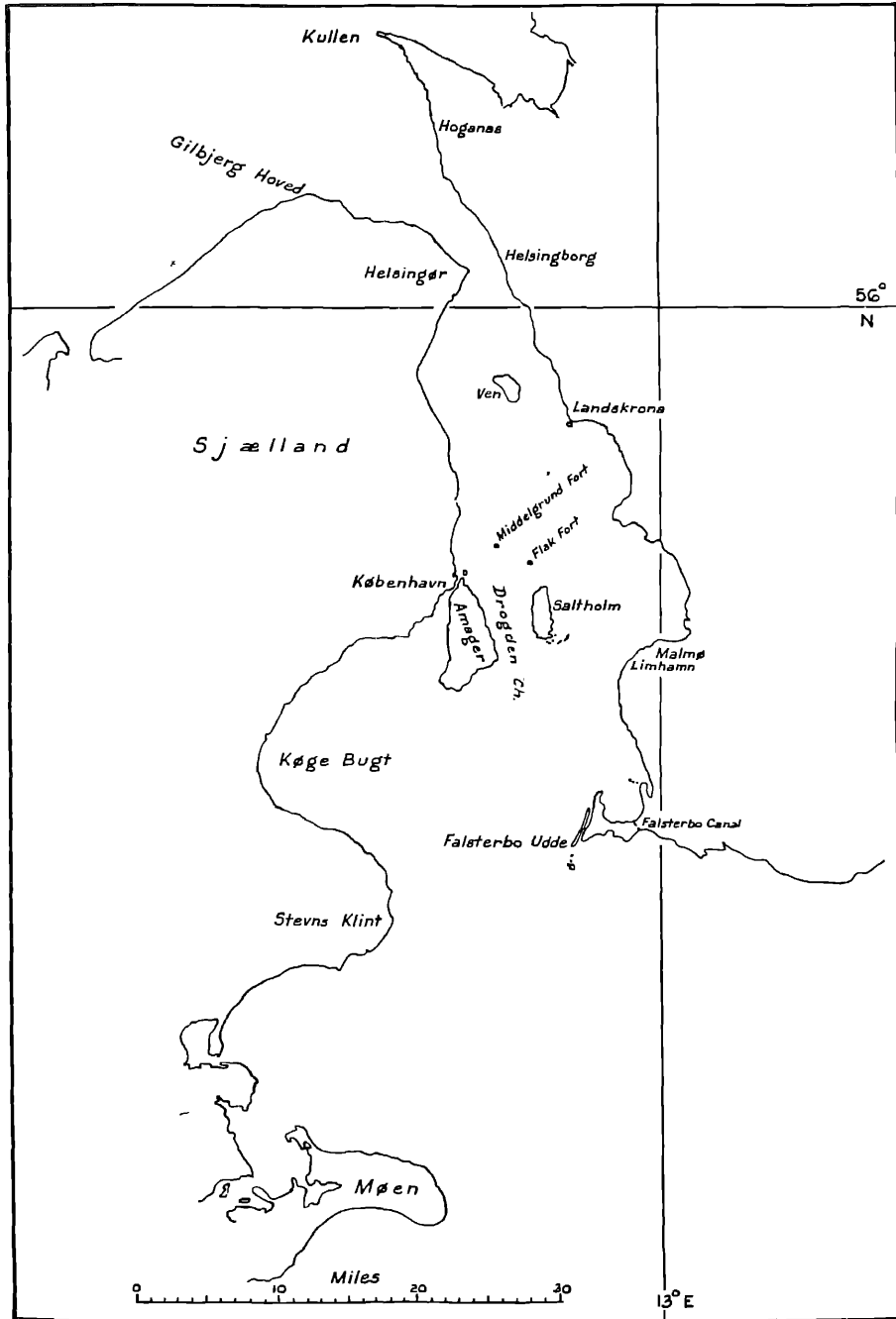
MAP NO. 32
Kithera Strait



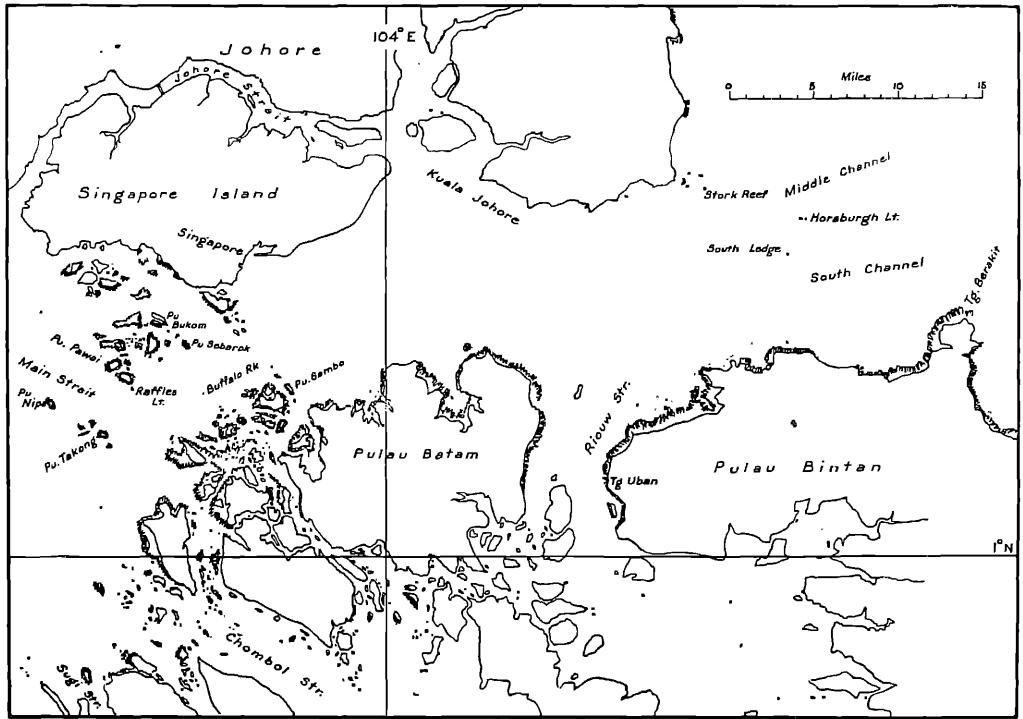
MAP NO. 33
Carpathos Strait



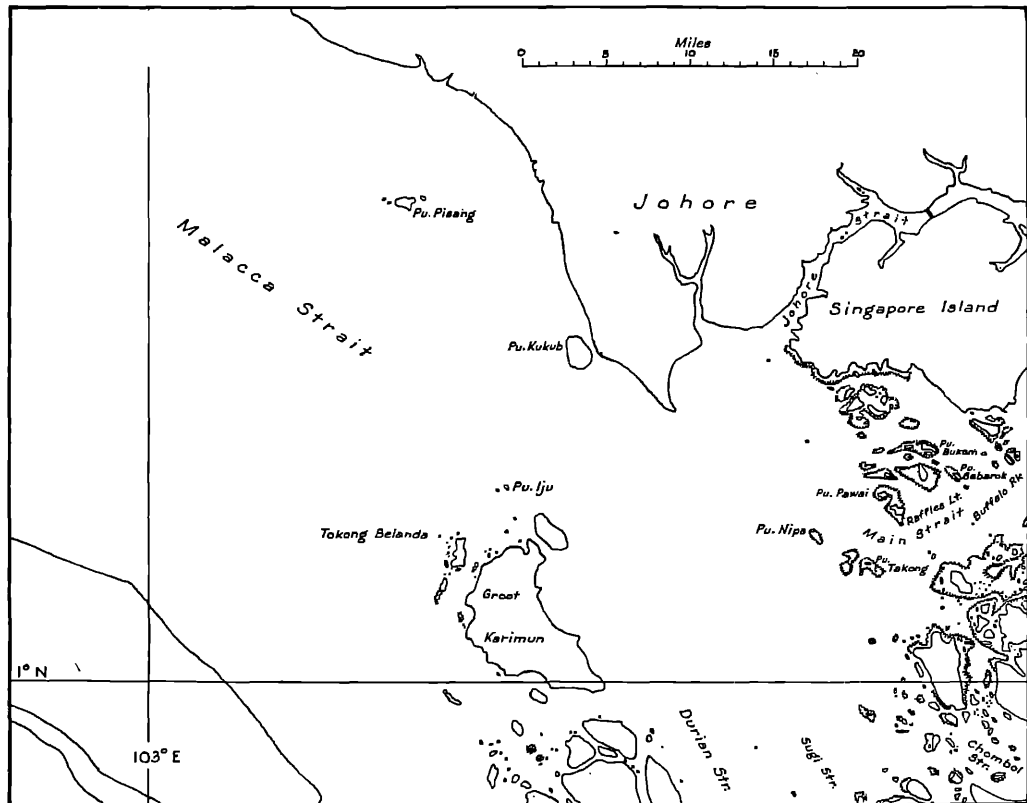
MAP NO. 34
The Sound



MAP NO. 35
Singapore Strait (Eastern Part)



MAP NO. 36
Singapore Strait (Western Part)



THE RELATION BETWEEN THE ARTICLES CONCERNING THE LAW OF THE SEA
ADOPTED BY THE INTERNATIONAL LAW COMMISSION AND INTERNATIONAL
AGREEMENTS DEALING WITH THE SUPPRESSION OF THE SLAVE TRADE

MEMORANDUM BY THE SECRETARIAT OF THE UNITED NATIONS

(Preparatory document No. 7)

[Original text: English]
[29 October 1957]

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II. SUPPLEMENTARY CONVENTION OF 7 SEPTEMBER 1956 ON THE ABOLITION OF SLAVERY, THE SLAVE TRADE AND INSTITUTIONS AND PRACTICES SIMILAR TO SLAVERY	17—25

INTRODUCTION

1. The draft articles concerning the law of the sea, prepared by the International Law Commission at its eighth session, contain, in articles 37 and 46, provisions dealing with the slave trade.

2. During the consideration of the report of the International Law Commission on its eighth session¹ at the eleventh session of the General Assembly, the question of the relation between any future code of the law of the sea and existing treaties and conventions on certain aspects of maritime law was raised. It was recognized that this question would arise, *inter alia*, in regard to the slave trade and the right of visit.²

3. In the discussion, the representative of Egypt drew attention to the need for revising article 46, paragraph 1 (b), which gave warships the right, in certain specified maritime zones, to board vessels, suspected of engaging in the slave trade. Conditions had radically changed since the adoption of the Brussels Act of 1890 on which the provision in question was based. He recalled that the Convention of St. Germain-en-Laye of 1919 and the Slavery Convention of 1926 contained no such provision and that a similar provision proposed for inclusion in the Supplementary Convention on the

Abolition of Slavery, the Slave Trade and Institutions and Practices Similar to Slavery, signed on 7 September 1956, was omitted in the final text. In its final form, the relevant provision stated merely that States parties should take effective measures to prevent ships and aircraft authorized to fly their flags from conveying slaves and to ensure that their ports, airports and coasts are not used for the conveyance of slaves and that they should exchange information with a view to stamping out the slave trade. Some similar provision should be included in the codification of the law of the sea.³

4. The Special Rapporteur of the International Law Commission, in reply, pointed out that article 46 was not concerned with the slave trade (which was dealt with in article 37), but only with the visit of ships suspected of engaging in the slave trade. The Commission had restricted the right of visit to special zones in order to avoid abuses.⁴

5. The object of this paper is to present a survey of the important treaties and conventions concerning slavery and the slave trade. The main provisions of some of these instruments, particularly those which relate to the repression of the slave trade by sea, will be summarized or reproduced.

I. INTERNATIONAL TREATIES AND CONVENTIONS DEALING WITH THE SUPPRESSION OF THE SLAVE TRADE CONCLUDED PRIOR TO THE SECOND WORLD WAR

6. A large number of international treaties and conventions have been concluded since the nineteenth century on the abolition of slavery and the suppression of the slave trade.

7. The early nineteenth century treaties and declarations—such as the Peace Treaties of Paris of 1814 and 1815, the Declaration of Vienna of 1815, and the Declaration of Verona of 1822—embodied the general principle that the slave trade is repugnant to the principles of justice and humanity, exhorted the community of nations to prohibit the slave trade and called

¹ Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159).
² *Ibid.*, Annexes, agenda item 53, document A/3520, para. 43.

³ *Ibid.*, Sixth Committee, 498th meeting, para. 16.
⁴ *Ibid.*, 500th meeting, para. 44.

upon the signatory States to take separate action against that trade.

8. In the middle of the nineteenth century, between 1830 and 1870, a number of international treaties concerning the suppression of the slave trade were concluded, such as the Treaties of 1831 and 1833 between France and Great Britain, the Treaty of London of 20 December 1841 for the suppression of the African Slave Trade, which was signed by Austria, Great Britain, Prussia and Russia as well as by France (France did not, however, ratify this treaty), and the Treaty of Washington of 1862 between Great Britain and the United States of America. These treaties dealt mainly with joint action at sea to suppress the slave trade and provided for mutual rights to visit, search and capture ships suspected of engaging in the slave trade.

General Act of Berlin of 1885

9. The Conference of Powers on the problems of Central Africa which met in Berlin in 1885 (Berlin Congo Conference) included in its General Act the following provision concerning slavery and the slave trade:

" Article 6

" All Powers exercising rights of sovereignty or an influence in the said territories engage themselves to watch over the conservation of the indigenous populations and the amelioration of their moral and material conditions of existence and to strive for the suppression of slavery and especially of the Negro-slave trade . . .

" Article 9

" Seeing that trading in slaves is forbidden in conformity with the principles of international law as recognized by the signatory Powers, and seeing also that the operations which, by sea or land, furnish slaves to the trade ought likewise to be regarded as forbidden, the Powers which do or shall exercise sovereign rights or influence in the territories forming the conventional basin of the Congo declare that these territories may not serve as a market or way of transit for the trade in slaves of any race whatever. Each of these Powers binds itself to employ all means at its disposal for putting an end to this trade and for punishing those who engage in it."

General Act of Brussels of 1890

10. On 2 July 1890, the General Act for the Repression of African Slave Trade was adopted by the Anti-Slavery Conference held in Brussels from 18 November 1899 to 2 July 1890. This was the most detailed and comprehensive international agreement concerning slavery and the slave trade which was in force at the outbreak of the First World War. The General Act was signed and ratified by seventeen States and provided for a number of military, legislative and economic measures for the suppression of the slave trade.

11. Chapter III of the General Act (articles 20-61) contained detailed provisions concerning the repression of the slave trade by sea within a defined maritime zone in which the slave trade was still in active existence on the coasts of the Indian Ocean and the Red Sea. The text of articles XX-XXIX read as follows:

" Article XX

" The signatory Powers recognize the desirability of taking steps in common for the more effective repression of the slave-trade in the maritime zone in which it still exists."

" Article XXI

" This zone extends, on the one hand, between the coasts of the Indian Ocean (those of the Persian Gulf and of the Red Sea included), from Beloochistan to Cape Tangalane (Quilimane); and, on the other hand, a conventional line which first follows the meridian from Tangalane till it intersects the 26th degree of South latitude; it is then merged in this parallel, then passes round the Island of Madagascar by the east, keeping twenty miles off the east and north shore, till it intersects the meridian at Cape Ambre. From this point the limit of the zone is determined by an oblique line, which extends to the coast of Beloochistan, passing twenty miles off Cape Ras-el-Had.

" Article XXII

" The signatory Powers of the present General Act, among whom exist special conventions for the suppression of the slave-trade, have agreed to restrict the clauses of those conventions concerning the reciprocal right of visit, of search and of seizure of vessels at sea, to the above-mentioned zone.

" Article XXIII

" The same Powers also agree to limit the above-mentioned right to vessels whose tonnage is less than 500 tons. This stipulation shall be revised as soon as experience shall have shown the necessity thereof.

" Article XXIV

" All other provisions of the conventions concluded for the suppression of the slave-trade between the aforesaid Powers shall remain in force provided they are not modified by the present General Act.

" Article XXV

" The signatory Powers engage to adopt efficient measures to prevent the unlawful use of their flag, and to prevent the transportation of slaves on vessels authorized to fly their colours.

" Article XXVI

" The signatory Powers engage to adopt all measures necessary to facilitate the speedy exchange of information calculated to lead to the discovery of persons taking part in operations connected with the slave-trade.

" Article XXVII

" At least one international bureau shall be created; it shall be established at Zanzibar. The high contracting parties engage to forward to it all the documents specified in article XLI, as well as all information of any kind likely to assist in the suppression of the slave trade.

" Article XXVIII

" Any slave who has taken refuge on board a ship of war bearing the flag of one of the signatory Powers, shall be immediately and definitively set free. Such freedom, however, shall not withdraw him from the competent jurisdiction if he has been guilty of any crime or offence at common law.

" Article XXIX

" Any slave detained against his will on board of a native

vessel shall have the right to demand his liberty. His release may be ordered by any agent of any of the signatory Powers on whom the present General Act confers the right of ascertaining the status of persons on board of such vessels, although such release shall not withdraw him from the competent jurisdiction if he has committed any crime or offence at common law."

12. The remaining articles of chapter III (articles 30-61) set out rules concerning the use of the flag by native vessels, the stopping of suspected vessels, and the examination and trial of vessels seized.

Convention of St. Germain-en-Laye of 1919

13. By a Convention signed at St. Germain-en-Laye on 10 September 1919 by the United States of America, Belgium, the British Empire, France, Italy, Japan and Portugal, and ultimately ratified by all the signatories, the General Act of Berlin of 1885 and the General Act of Brussels of 1890 were abrogated as between the Powers who were parties to the new Convention.

14. The Convention of St. Germain contained the following provisions (article II, paragraph 1) on slavery and the slave trade: "The Signatory Powers exercising sovereign rights or authority in African territories will continue to watch over the preservation of the native populations and to supervise the improvement of the conditions of their moral and material well-being. They will, in particular, endeavour to secure the complete suppression of slavery in all its forms and of the slave trade by land and sea."

Slavery Convention of 1926

15. On 25 September 1926 the Slavery Convention was adopted by the Assembly of the League of Nations and signed on the same date by the representatives of thirty-six States. Article 3 of the Convention, which deals with the slave trade, reads as follows:

"Article 3

"The High Contracting Parties undertake to adopt all appropriate measures with a view to preventing and suppressing the embarkation, disembarkation and transport of slaves in their territorial waters and upon all vessels flying their respective flags.

"The High Contracting Parties undertake to negotiate as soon as possible a general convention with regard to the slave trade which will give them rights and impose upon them duties of the same nature as those provided in the Convention of 17 June 1925, relative to the International Trade in Arms (articles 12, 20, 21, 22, 23, 24 and paragraphs 3, 4, 5 of section II of annex II) with the necessary adaptations, it being understood that this general convention will not place the ships (even of small tonnage) of any High Contracting Parties in a position different from that of the other High Contracting Parties.

"It is also understood that, before or after the coming into force of this general convention, the High Contracting Parties are entirely free to conclude between themselves, without, however, derogating from the principles laid down in the preceding paragraph, such special agreements as, by reason of their peculiar situation, might appear to be suitable in order to bring about as soon as possible the complete disappearance of the slave trade."

16. The Slavery Convention of 1926 was amended by a Protocol adopted on 23 October 1953 by the General Assembly of the United Nations, which transferred the functions undertaken by the League of Nations under the Convention to the United Nations. By 30 September 1957, thirty-seven states had become Parties to the 1926 Convention,⁵ as amended by the Protocol of 1953.

II. SUPPLEMENTARY CONVENTION OF 7 SEPTEMBER 1956 ON THE ABOLITION OF SLAVERY, THE SLAVE TRADE AND INSTITUTIONS AND PRACTICES SIMILAR TO SLAVERY

17. The most recent international instrument dealing with the question of the slave trade is the Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery (E/CONF.24/23), which was adopted and opened for signature on 7 September 1956 by a Conference of Plenipotentiaries convened in Geneva under the auspices of the United Nations.

18. The Convention was signed by thirty-nine States and, as of 30 September 1957, had been ratified or acceded to by the following seven States: Byelorussian Soviet Socialist Republic, Cambodia, Laos, Jordan, Sudan, Union of Soviet Socialist Republics and the United Kingdom of Great Britain and Northern Ireland. It entered into force on 30 April 1957.

19. Articles 3 and 4 of the Convention, which deal with the slave trade⁶, read as follows:

"Article 3

"1. The act of conveying or attempting to convey slaves from one country to another by whatever means of transport, or of being accessory thereto, shall be a criminal offence under the laws of the States Parties to this Convention and persons convicted thereof shall be liable to very severe penalties.

"2. (a) The States Parties shall take all effective measures to prevent ships and aircraft authorized to fly their flags from conveying slaves and to punish persons guilty of such acts or of using national flags for that purpose.

"(b) The States Parties shall take all effective measures to ensure that their ports, airfields and coasts are not used for the conveyance of slaves.

"3. The States Parties to this Convention shall exchange information in order to ensure the practical co-ordination of the measures taken by them in combatting the slave trade and shall inform each other of every case of the slave trade, and of every attempt to commit this criminal offence, which comes to their notice.

"Article 4

"Any slave who takes refuge on board any vessel of a State Party to this Convention shall *ipso facto* be free."

⁵ The number of Parties to the original convention is forty-six.

⁶ Article 7 (c) defines "slave trade" as including "all acts involved in the capture, acquisition or disposal of a person with intent to reduce him to slavery; all acts involved in the acquisition of a slave with a view to selling or exchanging him; all acts of disposal by sale or exchange of a person acquired with a view to being sold or exchanged; and, in general, every act of trade or transport in slaves by whatever means of conveyance".

20. There was considerable discussion⁷, at the Conference concerning the question of including in the Convention provisions relating to the right of visit, search and seizure with respect to vessels suspected of engaging in the slave trade. The debate centred on the text of article 3 of the draft supplementary convention prepared by an *ad hoc* committee appointed by the Economic and Social Council and used by the Conference as the basis of its discussions.⁸ The text of that draft article was as follows :

“(a) The act of conveying or of attempting to convey slaves on the high seas, or being accessory thereto, shall be a criminal offence under the laws of the States Parties to this Convention and persons convicted thereof shall be liable to penalties as severe as those generally applied to acts of piracy.

“(b) While on the high seas in the area of the Indian Ocean, including the Red Sea and the Persian Gulf, bounded on the south by the twenty-sixth degree south latitude and on the east by the sixty-second degree east longitude, warships or military aircraft under the control of Parties to this Convention shall have the same right of visit, search and seizure in relation to vessels of Parties to this Convention suspected on reasonable grounds of being engaged in the act of conveying slaves as they have in relation to vessels so suspected of being engaged in acts of piracy.

“(c) (i) Any vessel seized in accordance with this article shall be brought in for adjudication by a court of the State which has made the seizure. This State, may, however, request any other State Party to this Convention, or to the Slavery Convention of 1926, to refer the case to one of its courts if, in its view, practical or other reasons make this advisable.

“(ii) Any slave who is found on board a vessel shall be immediately set at liberty.

“(iii) Any person found on board any vessel searched in accordance with this article who is reasonably suspected of having committed any of the offences specified in paragraph (a) of this article shall be handed over for trial to the authorities of the State of which he is a national or, if practical or other reasons make this advisable, he may be brought to trial by the authorities of the capturing State, or, subject to the consent of the State of which he is a national, by the authorities of any other State Party to this Convention or to the Slavery Convention of 1926.

“(d) In this article ‘slave’ means any person over whom any or all powers attaching to the right of ‘ownership’ are exercised and includes any person intended to be dealt with as a slave.”

21. The provision relating to the right of visit, search and seizure encountered strong opposition at the Conference. It was maintained that such provision would infringe the national sovereignty of States and violate the principle of freedom of navigation. The article would be a potential source of controversy; the rights it conferred could be so abused as to endanger international peace and security. It was unnecessary to employ warships and aircraft to combat the slave trade. Traffic in slavery would cease as soon as the economic and social conditions causing it were improved. It was further pointed out that the 1926 Slavery Convention did not provide for the right of visit, search and seizure.

22. The draft article was also criticized as discriminatory in that it singled out a particular maritime zone

for special regulation. Reference to a particular area would imply that the countries on the borders of that area allowed the slave trade in some form or other. The assumption was without foundation, since no up-to-date reliable information concerning the slave trade was available. The proposed provision was based on the General Act of Brussels of 1890 which could no longer be regarded as an international standard. Not only had the Brussels Act been abrogated by the Convention of St. Germain-en-Laye, but great changes had taken place in Asia and North East Africa since the conclusion of that Act in 1890. It was also pointed out that the area described in the proposed article was larger than that defined in the Brussels Act. Moreover, while the Brussels Act restricted the right of visit and seizure to vessels of less than 500 tons, there was no similar restriction in the draft article.

23. On the other hand, a number of representatives maintained that the form of international control envisaged in the proposed article was essential in order to combat illicit traffic in slaves effectively. Even if States Parties to the Convention most vigilantly watched their ports and coasts, small boats could evade such vigilance. These boats might come to the notice, on the high seas, of naval vessels under the control of other States. If nothing was done to verify on the spot the suspicion that they were engaging in the slave trade, no effective action was likely to be taken against them. If the right of visit, search and seizure were granted by treaty, there was no question of infringing national sovereignty, since matters regulated by international agreements could no longer be regarded as coming within the exclusive domestic jurisdiction of the States Parties concerned. The misgivings expressed concerning the possible abuses to which the granting of the right might lead appeared to be groundless. It was pointed out that in the case of piracy the right of visit, search and seizure had long been recognized, but it had not given rise to abuses. In reply to the objection that the proposed article singled out a particular area, it was explained that on practical grounds it was desirable to confine the area in which vessels could be searched to those parts where there was reason to believe that the slave trade still existed. It was important that the freedom of the seas should be limited to the minimum extent possible.

24. In an attempt to meet some of the objections to the draft article, a revised text was prepared by the representatives of Belgium, France, Turkey and the United Kingdom (E/CONF.24/L.25) which omitted reference to any particular maritime zone, eliminated the right of seizure and restricted the right of visit and search to vessels of less than 500 tons, and left responsibility for further action against the offending vessel to the State Party under whose flag it was sailing. However, for lack of support, this revised text was withdrawn by the sponsors.

25. The Conference adopted the text proposed by Egypt, India and the Soviet Union, as amended by Peru and Portugal, which left it to each State Party to take effective measures to prevent ships or aircraft flying its flag from conveying slaves and to ensure that its ports, airports or seacoast were not used for the conveyance of slaves. The text of the article, as adopted, is reproduced in paragraph 19 above.

⁷ See E/CONF.24/SR.5-SR.8, SR.17 and SR.22.

⁸ *Official Records of the Economic and Social Council, Twenty-first Session, Annexes, agenda item 12, document E/2824.*

POLLUTION OF THE SEA BY OIL

MEMORANDUM BY THE SECRETARIAT OF THE UNITED NATIONS

(Preparatory document No. 8)

[Original text: French]
[29 October 1957]

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I. WORK DONE ON THE INTERNATIONAL LEVEL BEFORE THE SECOND WORLD WAR

1. The problem of pollution of the sea by oil has been under study for many years and has been considered by national and international bodies and by Governments.

2. At the invitation of the Government of the United States of America, an international conference of experts, the Preliminary Conference on Oil Pollution of Navigable Waters, met at Washington in June 1926. The object of this Conference was "to facilitate an exchange of views on technical matters and to consider the formulating of proposals for dealing with the problem of oil pollution of navigable waters through international agreement". Although the text of a draft convention was adopted at the Conference, no agreement was signed.

3. The United Kingdom Government, having considered that the pollution of the sea owing to the discharge of oil or oily water was increasing, decided to submit this matter to the League of Nations. A letter, dated 19 July 1934, was sent by that Government to the League, drawing attention to the pollution of the sea coast of the United Kingdom, damage to inshore fisheries and destruction of sea birds caused by discharge of oil from vessels at sea.

4. At the fifteenth ordinary session of the Assembly of the League (1934), it was agreed that the Communications and Transit Organization of the League would undertake an initial inquiry, on the understanding that it would convene a committee of experts from various countries to study the problem more closely.

5. This Committee, composed of experts from Denmark, France, Italy, Japan, the United Kingdom and the United States, met at Geneva in November 1934.

On the basis of information describing the conditions in the ports and waters of various countries, the experts agreed that considerable damage was done by pollution of sea water by oil.

6. The Communications and Transit Organization, in pursuance of the work and findings of the Committee, submitted a resolution to the Council of the League concerning the conclusion of an international convention on this subject. The object of such a convention was to find, by international agreement, some methods whereby oil-burning and oil-carrying ships might be prevented from discharging oil or oily mixtures in coastal areas, since these substances might drift and travel sometimes for considerable distances, depending on the wind and tide conditions then prevailing, and cause the pollution of the surrounding sea waters. It was admitted, however, that no remedy could prevent pollution caused by discharge of oil resulting from collisions and shipwreck or from vessels in order to calm the seas during storms and to facilitate rescues.

7. After having studied the Communications and Transit Organization's recommendation, the Council of the League adopted, in January 1935, the following resolution:

"The Council

"Authorizes the Communications and Transit Organization to make all the necessary preparatory studies with a view to facilitating the future conclusion of an international convention in regard to the pollution of the sea by oil."

8. In order to give effect to the resolution adopted by the Council, the Secretary-General, on 23 January 1935, addressed a circular letter, together with a questionnaire, to all States Members of the League and to non-member States, a total of sixty-nine Governments.

9. The replies received showed that, on the whole, the problem was of a serious nature and would justify an international convention. The Assembly, therefore, at its sixteenth session, adopted a resolution (24 September 1935) by which, *inter alia*, the Council was requested "to instruct the Communications and Transit Organization to take as rapidly as possible, and with the assistance of expert advice, if required, the necessary steps to complete the preparation of a draft convention and to submit that draft to Governments for consideration". The Council was also invited "in the light of

the observations received from Governments to convene an international conference on oil pollution at an appropriate time". The Council subsequently adopted a resolution on 27 September 1935, by which it instructed "the Communications and Transit Organization to complete the preparation of a draft convention on this subject for the consideration of Governments and to report to the Council when the observations from the Governments have been received".

10. In order to give effect to the above-mentioned resolutions, the Committee of Experts was reconvened and held its second session in October 1935, at Geneva. The Committee prepared a new draft convention and a draft final act on the basis both of the draft Washington Convention of 1926 and of the answers received from Governments to the questionnaire mentioned above.

11. The Advisory and Technical Committee for Communications and Transit, at its nineteenth session (November 1935), adopted a resolution by which it decided to transmit these drafts to the Governments with the request that they should send to the Secretary-General of the League of Nations any observations they might see fit to make, at the same time informing him whether they were prepared to attend, on the basis of these drafts, an international conference convened for the purpose of concluding such a convention. Nearly all the replies received from the States with sea coasts were in favour of concluding such a convention, and all the important maritime countries which replied were prepared to participate in the proposed conference.

12. The Council, at its ninety-fourth session, decided to convene an international conference to adopt the draft convention.

13. This conference never took place, because three important maritime countries—Japan, Germany and Italy—whose participation was considered necessary from a technical point of view, were not in a position to be invited to attend a conference convened under the auspices of the League of Nations. Finally, on account of the war, the matter was not further pursued.

II. WORK DONE BY THE UNITED NATIONS, 1950-1954

14. The question of pollution of the sea was brought before the United Nations Transport and Communications Commission at its fourth session (March-April 1950). Since the time when the League of Nations had dealt with the matter, considerable changes had taken place both in the fuels used by the merchant marine and in the quantity of oil transported by sea. Those changes only made the question more acute.

15. The Commission decided that the Inter-governmental Maritime Consultative Organization (IMCO), when it had started functioning, would be the competent agency to handle this subject. It considered, however, that in the meantime it would be appropriate to ask Governments if they were interested in the problem and, if so, which aspects of it seemed to them to deserve special attention. The Commission also discussed the question whether this study should include the pollution of sea water by atomic waste from fuel used by ships.

16. At its eleventh session (July-August 1950), the Economic and Social Council adopted a resolution in conformity with the Commission's recommendations, and invited the Governments possessing the technical facilities to do so to undertake research studies on the problem.

17. At its fifth session (March 1951), the Transport and Communications Commission took note of the replies received from Governments in response to this invitation. At its sixth session (February 1953), it proposed that a committee of experts should be established, and this proposal was endorsed by the Economic and Social Council in resolution 468 B (XV).

18. In the course of his consultations on the establishment of this committee of experts, the Secretary-General had been informed by the Government of the United Kingdom that, in view of the increasing seriousness of the pollution of its coasts, and following consideration of the recommendations of a committee it had appointed to consider the matter, the United Kingdom Government intended to issue invitations to the major maritime Powers to attend an *ad hoc* diplomatic conference in London in April-May 1954. It had further stated that any agreement which might emerge from the conference would be brought within the scope of IMCO when it was set up.

III. THE INTERNATIONAL CONFERENCE ON POLLUTION OF THE SEA BY OIL, LONDON, 16 APRIL - 12 MAY 1954

19. The London Conference, which was attended by representatives of forty-two countries and at which the Secretary-General of the United Nations was represented, adopted an International Convention for the Prevention of Pollution of the Sea by Oil. The Convention was signed by twenty countries.¹ It will come into force twelve months after the date on which not less than ten Governments have become parties to the Convention, including five Governments of countries each with not less than 500,000 gross tons of tanker tonnage. Under article XXI of the Convention, the duties of the proposed Bureau will be carried out by the Government of the United Kingdom unless and until IMCO comes into being. Thereafter the duties of the Bureau will be carried out by that Organization.

20. In addition, the Conference adopted a Final Act embodying eight resolutions, one of which (resolution 8) invites the United Nations to "undertake the collection, analysis and dissemination of information about oil pollution in various countries, and in particular technical information about port facilities for the reception of oily residues and the results of research into the problem of oil pollution generally". The resolution also invites the United Nations to keep the problem under review.

21. The number of ratifications required for the entry into force of the Convention has recently been

¹ These countries are: Belgium, Canada, Ceylon, Denmark, Finland, France, Federal Republic of Germany, Greece, Ireland, Italy, Japan, Liberia, Mexico, Netherlands, New Zealand, Norway, Sweden, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, Yugoslavia.

attained for, on 20 September 1957, the following countries had ratified it:

	<i>Date of deposit of instrument of ratification</i>
United Kingdom	6 May 1955
Mexico	10 May 1956
Sweden	24 May 1956
Federal Republic of Germany	11 June 1956
Denmark	26 November 1956
Canada	19 December 1956
Norway	26 January 1957
Ireland	13 February 1957
Belgium	16 April 1957
France	26 July 1957

Consequently, the Convention will enter into force on 26 July 1958.

IV. WORK DONE BY THE UNITED NATIONS SINCE THE LONDON CONFERENCE, 1954

22. The results of the London Conference were brought to the attention of the Economic and Social Council which, on 30 June 1954, adopted resolution

537 A (XVIII) to the effect that it was unnecessary to establish the committee of experts foreseen in resolution 468 B (XV) and that it would be appropriate to give effect to the recommendation made by the London Conference in its resolution No. 8.

23. Pursuant to this resolution, the United Nations Secretariat addressed an inquiry to the forty-two Governments which had taken part in the London Conference, the purpose being to collect the information mentioned in resolution 8 of that Conference. It then analysed the information thus obtained and published it in 1956 in a document entitled: "Pollution of the Sea by Oil" (ST/ECA/41). This document was circulated to Governments. Part V of the document gives information on the laws and regulations adopted on the subject or in preparation in a number of countries.

24. It should be pointed out that the Economic Commission for Europe, a United Nations body, is now giving attention to the problem of the pollution of the sea. Subsequent upon a consultation with experts which took place in February 1957, this Commission adopted a resolution requesting the Secretariat to continue to study this problem in co-operation with the secretariats of the World Health Organization and the Food and Agriculture Organization, and with the assistance of a number of experts.

Document A/CONF.13/11

METHOD OF WORK AND PROCEDURES OF THE CONFERENCE:
REPORT OF THE SECRETARY-GENERAL

[Original text : English]
[5 November 1957]

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1. In accordance with paragraph 7(b) of resolution 1105(XI), adopted by the General Assembly on 21 February 1957, the Secretary-General, with the advice and assistance of a group of experts¹, prepared the present memorandum concerning the method of work and procedures of the Conference. The provisional agenda and the provisional rules of procedure, to which this memorandum refers, are being circulated as separate documents (A/CONF.13/9 and 10).

I. PROVISIONAL AGENDA OF THE CONFERENCE

2. The provisional agenda must be considered in relation to the purposes of the Conference. These have already been defined in resolution 1105(XI). They are twofold, namely :

(i) "To examine the law of the sea, taking account not only of the legal but also of the technical, biological, economic and political aspects of the problem, and to embody the results of its work in one or more international conventions or such other instruments as it may deem appropriate" (resolution 1105(XI), para. 2); and

(ii) "To study the question of free access to the sea of land-locked countries, as established by international practice or treaties" (resolution 1105(XI), para. 3).

3. It is believed that the distinction between the two tasks is not a fundamental one, but arises merely from the circumstances under which they were allotted to the Conference. The work of the Conference connected with an examination of the law of the sea is a sequel to that of the International Law Commission. That Commission itself, at its first session (1949), drew up a provisional list of topics whose codification it considered necessary and feasible. Among the items in this list were the régime of the high seas and the régime of the territorial sea. The Commission itself included the régime of the high seas among the topics to be given priority and began work on it. Subsequently, at its third session (1951), in pursuance of a recommendation

contained in General Assembly resolution 374(IV), the Commission decided to begin work also on the régime of the territorial sea. At its eighth session (1956), the Commission completed its work on both these topics and submitted to the General Assembly seventy-three articles concerning the law of the sea as a whole, of which twenty-five (part I) related to the territorial sea, and forty-eight (part II) to the high seas.²

4. At the same time the Commission recommended "that the General Assembly should summon an international conference of plenipotentiaries to examine the law of the sea, taking account not only of the legal but also of the technical, biological, economic and political aspects of the problem, and to embody the results of its work in one or more international conventions or such other instruments as it may deem appropriate."³

5. At no time, however, did the Commission study the question of free access to the sea of land-locked countries, as established by international practice or treaties. The decision to recommend the Conference to study this specific question, as well as to examine the law of the sea generally, was taken by the General Assembly at its eleventh session on the advice of the Sixth Committee. There being already before the Sixth Committee a twenty-two Power draft resolution, recommending that an international conference of plenipotentiaries should be convened to examine the law of the sea along the lines recommended by the International Law Commission (A/C.6/L.385 and Add.1-3), amendment was introduced (A/C.6/L.393) recommending that the Conference should also study the problem of free access to the sea of land-locked countries.⁴ This amendment, proposed by Afghanistan, Austria, Bolivia, Czechoslovakia, Nepal and Paraguay, was accepted by the sponsors of the original draft resolution and was included in the resolution as adopted by the Sixth Committee, and thereafter by the General Assembly.

6. It is to be noted that the resolution contains no specific recommendation to the Conference, as it does in the case of the law of the sea, to embody in an international convention or other instruments the results of its study of the question of free access to the sea of land-locked countries. At the same time, there would appear to be no reason why the Conference should not embody the results of its work on this question in a

² *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159), chapter II.*

³ *Ibid.*, para. 28.

⁴ *Ibid.*, *Annexes*, agenda item 53, document A/3520, paras. 13 and 14.

¹ See below, report of the Secretary-General on the preparation of the Conference (A/CONF.13/20), p. 303.

suitable form of instrument if it considers it appropriate to do so.

7. It is believed, therefore, that no difference of purpose exists with regard to the two tasks of the Conference. Nevertheless, in view of the different origin and background of the two tasks, it seems desirable to distinguish between them when it comes to adopting the agenda of the Conference. Thus, in the provisional agenda, item 10 is listed as "Examination of the law of the sea in accordance with resolution 1105 (XI) adopted by the General Assembly on 21 February 1957", and item 11 is listed as "Study of the question of face access to the sea of land-locked countries in accordance with resolution 1105 (XI) adopted by the General Assembly on 21 February 1957."

8. The provisional agenda of the Conference requires little explanation beyond that which has already been given. Most of the items, as well as the order in which they are listed, become clear upon a consideration of the provisional rules of procedure. For example, the convening of the Main Committees and of the Special Committee on the Question of Free Access to the Sea of Land-Locked Countries for the purpose of electing Chairmen, which appears as item 6 on the agenda, precedes the election of Vice-Presidents. This order has been thought desirable to secure adequate representation on the General Committee.

II. PROVISIONAL RULES OF PROCEDURE OF THE CONFERENCE

9. These rules for the most part follow the standard pattern of rules of procedure for international conferences. It may, however, be of interest to draw attention to certain features of the United Nations Conference on the Law of the Sea, and to consider those features in relation to the provisional rules of procedure of the Conference.

10. First, there is the unusually wide scope of the Conference. Leaving aside for the moment the question of free access to the sea of land-locked countries, the Conference is required "to examine the law of the sea, taking account not only of the legal but also of the technical, biological, economic and political aspects of the problem..." This feature of the Conference renders necessary, not merely the organization of the work in such a way that these questions can be examined in all their various aspects, but also — and above all — the provision of exceptionally good machinery for co-ordination.

11. Secondly, there is the consideration that, notwithstanding the wide scope of its examination of the problem, the Conference is charged also with a specifically legal task and, moreover, one requiring peculiar precision and exactitude. This is the task of embodying "the results of its work in one or more international conventions or such other instruments as it may deem appropriate". This feature of the Conference renders necessary the provision of exceptionally good arrangements for drafting.

12. Thirdly, the number and diversity of the problems with which the Conference will have to deal seem to require that it should be free to adopt a number of

different kinds of instruments according to its discretion, and should not necessarily try to compress all the results of its work in a single instrument. At the same time the possibility of a single instrument should not be excluded, if the Conference deems such a solution to be preferable.

13. Those features of the United Nations Conference on the Law of the Sea will now be considered in relation to the provisional rules of procedure which the Secretary-General will submit to the Conference.

14. First, the very wide scope of the Conference renders it essential that the greater part of the work should be done in committee, and it is assumed that there will not be a general debate in the plenary meetings of the Conference.

15. The provisional rules of procedure envisage the setting up of four Main Committees, to each of which is allocated a specific part of the articles concerning the law of the sea prepared by the International Law Commission. This should ensure that the task of the Conference is tackled in a uniform and systematic manner, and it takes into account the fact that the General Assembly has referred to the Conference as its basis of discussion the report of the International Law Commission.

16. According to this plan, the Main Committees would be established, and their work divided, as follows:

(a) First Committee (Territorial Sea and Contiguous Zone): articles 1-25 and 66;

(b) Second Committee (High Seas: General Régime): articles 26-48 and 61-65;

(c) Third Committee (High Seas: Fishing, Conservation of Living Resources): articles 49-60;

(d) Fourth Committee (Continental Shelf): articles 67-73.

17. It is recommended that the four Main Committees should organize their discussion of the articles of the International Law Commission in two stages.

18. The first stage would consist of a short general debate on those articles referred to the Committee, or a discussion of them article by article, or even a combination of both of these methods. At this stage, representatives would express their views on the articles and, so far as possible, put forward any proposals or amendments which they may wish to make regarding them. A decision on the articles, or on the proposals or amendments put forward, would not necessarily be made at this stage. However, provisional votes could be taken when desirable and in so far as it should be necessary to take decisions of principle in order to facilitate subsequent stages of the work of the Committee. The process of formulation of texts or the consideration of particular problems might well be referred to sub-committees set up for those purposes. It may be hoped that this first stage would be completed by the end of the third week of the Conference.

19. The second stage would involve taking the articles *seriatim* and, at this stage, final decisions should be reached on the texts to be recommended by the Committee to the plenary meeting of the Conference. It would be desirable if, at this stage, each Committee could indicate the extent to which reservations to the texts recommended by it would be permissible if such texts were incorporated in a convention or other appropriate instrument.

20. The separate background to the question of free access to the sea of land-locked countries seems to indicate that the task of the Conference can best be accomplished by establishing a Special Committee to consider this question, distinct from the Main Committees which will examine the law of the sea. It is not suggested, however, that the difference in title should be more than nominal, or that the status of the Special Committee on the Question of Free Access to the Sea of Land-Locked Countries should be in any way inferior to that of the four Main Committees dealing with the law of the sea.

21. It is thus provided in rule 48 that each State participating in the Conference may be represented by one person on the Special Committee no less than on the four Main Committees. It is realized that some States may find it difficult to be represented in all the committees. It is, however, important that the question of free access to the sea of land-locked countries should not be considered as a question of interest only to the land-locked countries themselves and their immediate neighbours with seaboard. It is a question of considerable significance to international law as a whole, with a direct bearing on the law of the sea. For these reasons, the Special Committee will not be able to do its work satisfactorily unless its membership is broadly representative of (a) the land-locked countries themselves; (b) their neighbours; and (c) other countries.

22. The fact that this Special Committee will not have before it a section of the articles of the International Law Commission upon which to base its deliberations necessarily poses certain problems peculiar to that Committee. A partial solution may well be found if Governments could submit proposals in advance of the Conference; accordingly, Governments are earnestly invited to follow such a course.

23. The magnitude of the task allotted to each committee renders it essential that they should be given the power to establish such sub-committees or working groups as may be necessary, and this has been provided for in rule 46 of the provisional rules of procedure.

24. The necessary division of work between so many committees, not to mention the sub-committees which these committees may themselves see fit to appoint, makes it indispensable that the Conference should have adequate machinery for co-ordinating its work. The need for co-ordination is emphasized by the interdependence of the parts of the articles allocated to the four Main Committees. It has been sought to meet this need in rules 15 and 50 of the provisional rules of procedure, particularly by providing for the holding of joint meetings of committees or sub-committees and the establishment of joint working groups.

25. Secondly, since the Conference is to embody the results of its work in one or more international conventions or such other instruments as it may deem appropriate, it is desirable that it should have in mind, from the very beginning, the problem of drafting. Profiting from the experience of earlier conferences, which have been similarly confronted with the responsibility of framing rules of international law on a large scale, there would seem to be no doubt that the Conference should appoint at an early stage a drafting com-

mittee.⁵ This committee, which is provided for in rule 49, should have no responsibility for the substance of the provisions to be approved by the Conference. Its duties, as suggested in the rules, should be rather those of ensuring consistency within one and the same instrument, and co-ordination between different instruments to be adopted by the Conference. It would also be responsible for preparing the Final Act of the Conference, and it might render valuable assistance in drafting the preambular and final clauses of the various conventions and other instruments that might be adopted.

26. In order that the drafting committee may discharge these responsibilities properly, it is considered essential that its membership should not be unduly large. For this reason a membership of nine has been proposed. Moreover, although it is desirable that the various languages and legal systems should be adequately represented on this committee, the main qualification for appointment should be experience in legal draftsmanship. It would also be desirable that a member or members with scientific qualifications be included in the composition of this committee.

27. Thirdly, since, as already indicated in paragraph 12, the Conference should have complete liberty in deciding upon the form of the instruments in which it will embody the results of its work, it is not considered necessary to provide in the rules of procedure for the form of the instruments which the Conference may eventually adopt.⁶ It might, however, be wise for these instruments to contain an article stating clearly that it is the intention of the signatories that the rules contained

⁵ The conferences whose experience would seem to be especially valuable in this connexion are (i) The Hague Peace Conference of 1907; (ii) the London Naval Conference of 1908-1909; and (iii) the Conference for the Codification of International Law held at The Hague in 1930.

⁶ It may be recalled that the rules of procedure of The Hague Codification Conference in 1930 contained rather elaborate provisions in this connexion. Thus, article XX of these rules of procedure provided separately for conventions, protocols, special protocols, recommendations and *vœux*. It reads as follows:

"Each Committee may draw up one or more draft conventions or protocols and may formulate recommendations or *vœux*."

"A Committee may embody in the draft conventions or protocols any provisions which have been finally voted by a majority containing at least two-thirds of the delegations present at the meeting at which the vote takes place."

"In the case of provisions which have secured only a simple majority, a Committee, at the request of at least five delegations, may decide by a simple majority whether such provisions are to be made the object of a special protocol open for signature or accession."

"The provisions referred to in the two preceding paragraphs, if they are not embodied in a draft convention or protocol, shall be inserted in the Final Act of the Conference."

"Each convention or protocol shall contain a provision expressly showing whether reservations are permitted, and, if so, what are the articles in regard to which reservations may be made."

"Recommendations and *vœux* may be adopted by a simple majority."

Moreover, the rules of procedure, as originally drawn up by the preparatory committee, provided also for declarations in which would be set forth "the principles regarded at least by a majority of the delegations represented on the Committee as the expression of existing international law." This provision, however, was not adopted by the Conference.

in the instrument shall be applicable in the future without prejudice to the question whether they are or are not existing rules of customary international law.

28. The question of voting in the plenary meetings is dealt with in rule 35 of the provisional rules of procedure. A distinction is made between matters of substance and matters of procedure, the former requiring a two-thirds majority of the representatives present and voting and the latter a majority of the representatives present and voting. In cases of doubt the President of the Conference shall rule on the question and his ruling stands unless overruled by a majority of the representatives present and voting.⁷

⁷ There are a great variety of precedents in the matter of voting rules, for instance, the systems enumerated below :

(a) The system of the United Nations Conference on International Organization, San Francisco, 1945, according to which decisions on questions of procedure were taken by a simple majority and decisions on all other questions were taken by a two-thirds majority ;

(b) The system of the General Assembly of the United Nations (Article 18 of the Charter) according to which decisions on important questions are taken by a two-thirds majority, and decisions on other questions by a simple majority ;

(c) The system of many international conferences (e.g., the United Nations Maritime Conference, 1948 ; the Conference on Freedom of Information, 1948 ; the United Nations Conference on Road and Motor Transport, 1949 ; the Conference on Declaration of Death of Missing Persons, 1950 ; the Conference on the Status of Refugees and Stateless Persons, 1951 ; the Conference on Maintenance Obligations, 1956 ; and the Conference on a Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery, 1956), according to which decisions on all questions are made by a simple majority ; and

(d) The system of the Conference on the Statute of the International Atomic Energy Agency, 1956, according to which decisions to amend the provisions of an existing draft

29. As in the case of the General Assembly, it is suggested in rule 53 of the provisional rules of procedure that committees and sub-committees should arrive at their decisions by a simple majority. At The Hague Codification Conference in 1930 the rule was adopted that committees should adopt recommendations and *voeux* by a simple majority, and draft conventions and protocols by a two-thirds majority ; whilst the conference itself could adopt by a simple majority draft conventions and protocols, recommendations and *voeux* presented by the committees. In view of the system of voting recommended in rule 35, it is suggested that there is no reason why committees of the Conference should not in every case arrive at their decisions by a simple majority.

III. WORKING SCHEDULE OF THE CONFERENCE

30. The facilities available to the Conference and the desire to enable all States participating to be represented on the committees demand that the times of meetings should be so arranged as to ensure that not more than three meetings take place at the same time. As to working hours there will normally be meetings twice a day, Monday through Friday, from 10.30 a.m. to 1 p.m. and from 3 p.m. to 6 p.m. However, the rule should be regarded as having sufficient flexibility to allow for variation when the work of a committee demands it.

were taken by a two-thirds majority and — unless otherwise provided for — all other decisions were taken by a simple majority. In the present instance the application of such a system would mean that decisions to amend definite proposals contained in the International Law Commission's draft would be taken by a two-thirds majority and all other decisions (including decisions to adopt the Commission's proposals) would be taken by a simple majority.

TECHNICAL PARTICULARS CONCERNING THE METHODS OF FISHING CONDUCTED
BY MEANS OF EQUIPMENT EMBEDDED IN THE FLOOR OF THE SEA

MEMORANDUM BY THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

(Preparatory document No. 9)

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INTRODUCTION

The paper gives a description of the principal types of gear attached to the bottom of the sea. Details as to construction and operation are given of representative examples of each type but, although in some instances other similar gear is mentioned as being used in various countries or regions, no attempt has been made to give a full account of the many minor variations in construction, nor to list all the local names of such diverse gear in various countries.

These principal gear types have been arranged below according to their degree of permanence, i.e. how long they generally remain fixed in one position and according to the means by which they are attached to the floor of the sea :

1. Gear with supporting members embedded in the sea floor, constructed on a site and left there to operate

for prolonged periods (some parts left embedded in—or resting on—the sea bottom for several seasons, or even permanently).

A common feature of this gear is that stakes are rammed into the floor of the sea to remain there for extended periods of time, and also large boulders are often used and these are generally not retrieved, but remain permanently embedded in or resting on the sea floor, seriously interfering with such fishing methods as trawling and gill netting. There are, however, exceptions to this: for instance, stakes are often pulled up between fishing seasons to avoid damage by storms, ice or marine borers.

2. Gear tied to anchors or weights embedded in the floor of the sea, normally set for several weeks or a fishing season; the catch can be removed without lifting the entire installation.

The gear listed in this group is normally completely removed from its position at the end of each fishing season, although there are also exceptions to this—e.g., big boulders used to anchor bagnets and floating shade lures are frequently not retrieved.

3. Gear held in one place by anchors or weights embedded in, or resting on, the floor of the sea, but lifted *in toto* for removing each catch.

This gear is normally totally retrieved at the end of each fishing operation (usually daily), leaving no permanent mark on the bottom of the sea and causing no interference with navigation or fishing, except when actually in use.

The location and operation of "fixed gear" as discussed under (1) and (2) is governed by regulations in many countries, specifying markings and lights to reduce navigational hazards. Large stake nets and anchored traps, which extend far out from the coast, are sometimes marked on sea charts.

DESCRIPTION OF GEAR

1. *Gear with supporting members embedded in the sea floor, constructed on a site and left there to operate for prolonged periods (some parts left embedded in—or resting on—the sea bottom for several seasons, or even permanently).*

1.1 Barricades and hedges

(a) *Construction*: Walls or fences built of stone, wood, etc.; with or without labyrinths and/or collecting pounds of wicker or network. Brushwood and/or stones are heaped between stakes driven in the ground, screening the water during ebb.

(b) *Dimensions*: The height depends on the fall of the tide; extension is largely a matter of the natural topography of the area where the gear is built and of the flow of the tide.

(c) *Mobility*: The nature of this gear makes it practically immovable, and generally it stays in its initial position as long as it lasts, sometimes for several years, if maintained.

(d) *Location*: Usually set up in non-navigated estuaries, creeks, etc., in a position where they become dry at low water (L.W.), or slightly below L.W.-mark.

(e) *Operations*: The barrier is submerged during high water (H.W.). During the ebb it blocks the return to the sea for fish and crustaceans from the moment the barrier becomes awash. Water can still run out through screened openings, so that, at L.W., the catch can be retrieved.

(f) *Navigation*: In nearly all cases it is constructed in non-navigable waters; it can, however, cause obstruction and damage to vessels sailing outside of the normal channels at high tide. It is usually connected with some form of fishing rights and practically excludes the use of other fishing gear for that area.

(g) *Geographic distribution*: To be found nearly all over the world where suitable non-navigable flats have an appropriate tidal range.

1.2 Weirs and corrals (see Fig. 0)

(a) *Construction*: Wooden stakes, rammed into the bottom and connected with brushwood, wicker, etc., to form a screen; the whole structure is usually set out in a V-shape and may have staked webbing leaders. One or more retrieving pounds with their apex towards the ebb-direction, are built in. Extensive rebuilding is often required before each season.

(b) *Dimensions*: The height depends on the depth in which the gear is set and the tidal range of the area. The length of the wings can exceed 1,000 feet (300 m.).

(c) *Mobility*: As the gear is held down by stakes driven into the sea floor, it is practically immovable.

(d) *Location*: The structure is often set in estuarine bays, etc., where there is a fairly strong tidal flow. Also found in shallow waters offshore, yet rarely or never further than about 3 miles from the L.W.-mark.

(e) *Operation*: During the flood tide, the fish is led upstream past the corral wings. During the ebb, the wings lead the fish to the collecting pounds at the apex of the structure, or to non-return pockets built in, at intervals, along the wings.

(f) *Navigation*: Usually erected in shallow, non-navigable waters, the gear can reach further into open water than a barricade. As such, it can be a hindrance

to vessels sailing outside of the normal navigation channels. Usually connected with some form of fishing rights and practically excludes the use of other fishing gear in that area.

(g) *Geographic distribution*: Found in the Persian Gulf, Red Sea, South-Eastern Asia, Mediterranean, America and other regions.

1.3 Staked gill nets (See Fig. 1)

(a) *Construction*: Sections of webbing are hung between stakes which are driven into the sea floor. The stakes are commonly at about 20 foot-intervals and the nets are submerged only at high water.

(b) *Dimensions*: The height depends on the tidal range and the length on the topography of the bays or flats where the nets are fished.

(c) *Mobility*: Stakes are firmly embedded and braced with pegged stays; therefore practically immovable.

(d) *Location*: Estuaries, tidal flats.

(e) *Operation*: During the high tide the nets are submerged. Fish are gilled or entangled in the webbing between the stakes. When the water retreats during the ebb, the nets dry out and the fish can be removed.

(f) *Navigation*: The gear is normally outside of navigation channels; unlikely to cause serious obstruction to other types of fishing gear.

(g) *Geographic distribution*: Found in many parts of the world.

Example: in Bay of Fundy area in Nova Scotia, Canada, stakes 10 to 15 ft. (3 to 4.6 m.); depth of webbing 6 ft. (1.8 m.); tidal range up to 50 ft. (15 m.) in some areas; catch is retrieved at low water by driving along the line of stakes with horse and cart.

1.4 Fixed staked traps (See Fig. 2)

(a) *Construction*: The trap commonly consists of a chamber or heart which leads to the inner chamber or pocket; built on stakes rammed into the sea floor; wire or fibre webbing is hung between the stakes, forming the walls of the chambers. A leader fence, staked or floating, leads shoreward. The inner chamber often has bottom webbing.

(b) *Dimensions*: The heart can measure up to 100 ft. (30 m.) across, while the leader, extending shorewards, can be 1,000 ft. (300 m.) long. In some cases a series of traps may form a string extending several miles out from the coast.

(c) *Mobility*: Constructed on stakes firmly embedded in the sea bottom, it is practically immovable.

(d) *Location*: In shallow areas close to shore and across the established routes of migratory fish; usually less than 3 miles from shore.

(e) *Operation*: The fish travelling along the shore strike the leader and follow the webbing which leads them into the heart of the trap. From here, they are led to the inner chamber where they can be retrieved, by brailing, by a spiller or by hauling up the bottom web.

(f) *Navigation*: Usually built outside navigation routes and clearly visible, they generally cause no danger, but conceivably may cause some obstruction to navigation and fishing with other gear.

(g) *Geographic distribution*: Used in U.S.A., Canada, Denmark, Baltic countries, Japan and other eastern countries.

Example (A): fixed Alaska salmon trap. Set traps used in Alaska are stationary and constructed on stakes outward from the shore line. The stakes are connected by wooden stringers used primarily for the hanging of the leading webbing and to form walks from the shore to the pot of the trap. At present the maximum length of the lead and trap is 1,000 ft. (305 m.). The trap is V-shaped and so constructed that its walls lead the salmon to the pot or spiller. It may have hearts on only one side, or hearts on both sides or any arrangement applicable to local conditions, as the construction depends largely on the direction and strength of tides. Three-inch (76 mm.) mesh is used throughout the net.

Example (B): Danish staked traps. On the east coast of Northern Jutland numerous rows of staked traps extend a few miles offshore, with approximately 300 ft. (100 m.) between pounds. The wooden (or sometimes iron) stakes are rammed about 3-6 ft. (1-2 m.) into the sea floor and tarred cotton webbing is hung thereon. During the summer the webbing must be removed at least once a month for cleaning and drying. The stakes are generally pulled up in the fall to avoid damage by ice in the winter. The catch (mainly cod, herring, mackerel) is removed daily from the pound. In Denmark and Sweden regulations prohibit the building of such traps in many places where they would obstruct navigation. The location of fixed traps in Northern Kattegat is shown on sea-charts.

1.5 Staked bagnets (see Fig. 3)

(a) *Construction*: Two stakes driven into the sea floor are braced by anchors or stones. A conical bagnet is attached between the stakes, so that the tide flows through the net.

(b) *Dimensions*: The distance between the stakes can be up to 120 ft. (36.6 m.) and the stakes rise just above H.W.-mark. As many as a hundred such stakes may stand out in a row, each fishing crew working two nets.

(c) *Mobility*: The stakes are firmly embedded and fixed with large boulders. Every year after the fishing season the boulders are cut loose and the stakes brought in.

(d) *Location*: Normally the stakes are set in shallow tidal waters, such as estuaries, etc. In India, however, the stakes may be set as far as 15 miles offshore, in depths of up to 12 fathoms (22 m.). Positions are permanent year after year and net locations are protected by heritage or family rights.

(e) *Operation*: The bagnet, attached to the stakes with sliding rings, is lifted at every tide and the catch retrieved. It is then reset in the opposite direction for the following tide. Stakes are removed only during the monsoon periods.

(f) *Navigation*: Stakes are normally clearly visible to approaching vessels. Nets may, however, be dangerous to ships' propellers, especially during the seasons when the headlines are kept just below the surface. The anchoring boulders prevent fishing with other gear,

such as trawls and gill nets in these offshore waters, even when the stakes have been pulled out.

(g) *Geographic distribution*: India and other Far Eastern countries.

1.6 Fish Culture Racks built on stakes embedded in the sea floor. Oyster and Mussel Racks

(a) *Construction*: Platforms are built on stakes driven into the sea floor, from which trays carrying oyster seed (spat) are lowered into the sea. The whole construction is usually surrounded by a protective screen of wire netting. For mussel culture, ropes or sticks, carrying the mussel seed, are suspended from the platforms.

(b) *Dimensions*: Rows of stakes carrying the platforms range from a few yards to more than a hundred yards (90 m.) in length. The platform is above H.W. and usually well visible.

(c) *Mobility*: The structures, when built around embedded stakes, may be regarded as immovable; but when constructed as floating anchored rafts they can be moved to other suitable anchorage.

(d) *Location*: Mostly set up in low-range tidal waters less than one mile offshore, often close enough to have a fixed gangway to shore.

(e) *Operation*: Not a fishing gear, but equipment used in the culture of oysters and mussels which are grown under constant surveillance.

(f) *Navigation*: Built or anchored near the shore, they normally present no danger or hindrance to navigation or fishing.

(g) *Geographic distribution*: Northern and Western Europe, Mediterranean Region, Japan, America.

2. *Gear tied to anchors or weights embedded in the floor of the sea, normally set for several weeks or a fishing season, and the catch can be removed without the need to lift the entire installation.*

2.1 Floating Salmon Traps (see Fig. 4)

(a) *Construction*: The trap is constructed of floating logs which are solidly bolted together. Webbing is hung from this framework and forms the walls of the heart and trailing chamber. The whole construction is anchored offshore and held in place by several large anchors. A leader joins the trap to the shore and consists of a buoyed cable from which a wall of webbing is hung and held vertically by the weight of heavy stones. When set in deep water, all chambers have bottom webbing.

(b) *Dimensions*: The heart can measure up to 100 ft. (30 m.) across, while the leader, extending shorewards, can have 1,000 ft. (305 m.) length.

(c) *Mobility*: Because of the size and rigid construction, the traps are built as permanent structures. However, they are only fastened to the sea floor with heavy anchors, so that the trap actually can be moved to another anchorage, but this is rarely done.

(d) *Location*: Set across known migration routes of the fish along the coastline, often about 1,000 ft. (305 m.) offshore.

(e) *Operation*: The fish, swimming against the tide, strike the leader and, following it, are led into the heart of the trap from whence they are led into the inner chamber or pocket. From here they are removed by brailing or spilling.

(f) *Navigation*: The traps are placed outside the navigation channels and normally cause no hindrance.

(g) *Geographic distribution*: Used in Alaska (prohibited in Canada).

Example: In a typical average-sized Alaska trap, the leader is 400 ft. (122 m.) long; the wings, which form the heart, are 70 ft. (21.3 m.) long, while the pocket or brailing piece is 22 by 28 ft. (6.7 × 8.5 m.).

2.2 Tuna Traps (see Fig. 5)

(a) *Construction*: Walls of webbing, hung from heavy ropes, are held up by floats and weighted down by heavy hawsers and stones, form an enclosing structure (body) comprising several chambers. The last chamber (death chamber) has a bottom section which can be lifted. A vertical leader of webbing extends towards the shore and leads the fish to the entrance. The whole structure is firmly anchored. These tuna traps as well as the Alaska salmon traps and big Japanese set nets are the largest and costliest fishing gear in use.

(b) *Dimensions*: The trap is about 100 ft. (30 m.) broad and often has a length of about 1,300 ft. (400 m.). The shore leader can be 5½ miles (10,000 m.) in length, depending on the locality where the trap is set.

(c) *Mobility*: The trap and leader are held in position by a large number of heavy anchors, 165 to 1,100 lbs. (75 to 500 kg.) each, and is a permanent fixture during a fishing season.

(d) *Location*: The distance from the shore depends on the trail the tuna follow during their migrations.

(e) *Operation*: The fish striking the leader net are led into the trap and pass through the successive chambers into the death chamber. Several boats are employed to lift the bottom of this chamber to retrieve the catch, which is done eight-twenty times during each season.

(f) *Navigation*: Form a dangerous obstruction to vessels sailing inshore. The traps are usually marked by lights at night depending on local regulations. Trap locations are sometimes shown on sea-charts and mentioned in Pilot-books.

(g) *Geographic distribution*: To be found from the Southern coasts of Portugal, Spain, in the Mediterranean to the Black Sea.

Example: In a typical Mediterranean "Tuna Trap", the webbing may weigh as much as 100 tons and is supported by a frame of 22 mm. wire. Total length of the net is from 1,000 to 1,300 feet (300 to 400 m.); 100 to 200 large anchors are used. The leader may be up to 3 miles in length, while the trap itself may be located up to 5 miles offshore.

2.3 Japanese Set Nets (see Fig. 6)

(a) *Construction*: This type of trap consists of a large entrapping webbing structure, held up with floats,

and heavily anchored offshore. A vertical wall of webbing extends towards the shore and leads the fish to the trap. The gear is anchored with a great number of heavy stones or sandbags.

(b) *Dimensions*: The size of these nets differs very much. A typical Japanese set net (Otoshi-ami) has a leader net often over 3,000 feet (915 m.); length of the trap itself ranges up to over 1,800 feet (550 m.) and the depth to over 200 feet (61 m.).

(c) *Mobility*: Owing to its size and the amount of boulders or sandbags required to anchor it firmly, it can be termed a permanent fixture—during each fishing season.

(d) *Location*: Anchored offshore, across the known fish migration routes. In Japan, special permits are needed for operating these big traps and their number and exact location is strictly regulated.

(e) *Operation*: The heart of the net is lifted, at intervals of one or more days, by a large number of men in small boats to retrieve the catch, which consists of various species.

(f) *Navigation*: Placed near the shore, outside of normal shipping routes. Causes some hindrance to fishermen using other gear.

(g) *Geographic distribution*: Mainly found in Japan. Recently being introduced experimentally in neighbouring countries, such as the Philippines and Thailand.

2.4 Diverse types of Pound Nets and Simple Floating Traps

Other smaller set nets and traps than those mentioned under 2.1, 2.2, and 2.3 differ widely in size, shape and construction, but all are non-rigid, buoyed and anchored nets. They are generally located rather close to shore. Among these belong:

Newfoundland Cod Traps,

Nova Scotia Mackerel Traps,

Various U.S.A. Pound Nets, e.g. in Virginia and Great Lakes,

Japanese Koko-ami Nets (also used in the Baltic countries),

An infinite variety of anchored traps are used throughout the Indo-Pacific region.

Smaller trapnets, such as fykenets (often not floating, but resting on the sea floor) are used for catching eel and shrimp in Northern Europe; mainly in estuarine and shallow waters.

2.5 Anchored Bag Nets (dolnets) (see Fig. 7)

(a) *Construction*: Two large buoys are firmly anchored about 120 feet (37 m.) apart. Between the buoys, and attached to the anchor cables, a large bag net is held open so that the tide can flow through.

(b) *Dimensions*: Same as for the staked bag nets, under 1.5.

(c) *Mobility*: Anchors are lifted once a year (during monsoon period) for renewal of cables. Very often small anchors are used, together with large boulders, the latter are cut loose when the buoys are lifted.

The gear is permanent and fixed in one position during each fishing season.

(d) *Location*: On the east coast of India they are to be found at all depths, from the shore line to about 16 fathoms (30 m.), as far as 20 miles out.

(e) *Operation*: Same as for staked bag net under 1.5.

(f) *Navigation*: Buoys are not always visible, as they submerge at full tide strength and can be dangerous to ships' propellers. The rows of buoys set at right angles to the shore and the jettisoned boulders and anchors prevent fishing with other gears, such as trawls and bottom-set gill nets in these offshore waters.

(g) *Geographic distribution*: India and other S.E. Asian countries.

2.6 Rumpon Lures and other Fish Shades.

2.61 Rumpon (see Fig. 8)

(a) *Construction*: From a raft of bamboo sticks or other floating material, a weight or anchor is attached on a coir rope. At intervals of a fathom (1.8 m.) or more, clusters of palm or banana leaves are attached.

(b) *Dimensions*: Six to 12 bamboo sticks of about 8 ft. (2.5 m.) length, or other available materials, are tied together.

(c) *Mobility*: Can be moved by hauling up, if depth and anchoring weight are not too great; otherwise, the anchor weight (stone) is not retrieved.

(d) *Location*: Often anchored in deep, clear water, over 10 miles from the coast.

(e) *Operation*: The gear is left out for several days; the leaves form a shade in which the fish gather. Lift nets, encircling nets, etc., are then used to catch the fish.

(f) *Navigation*: Presents slight danger to fouling of propellers, if not spotted in time.

(g) *Geographic distribution*: Mainly in South East Asia (Indonesia, Malaya).

2.62 Kannizzati

(a) *Construction*: Floats, made up of bunched corks with a small marker buoy attached, are anchored offshore with heavy boulders. Several such floats are set up in line, at about 2-mile (3.7 km.) intervals. Light sisal line is used and the boulders cannot be retrieved.

(b) *Dimensions*: The float covers only a few square feet on the sea-surface.

(c) *Mobility*: Immovable, as the anchoring line is not strong enough for hauling up the boulder.

(d) *Location*: The floats are set in depths up to 600 fathoms (1,100 m.) at distances of up to 80 miles offshore.

(e) *Operation*: Certain species of migratory fish (mainly dolphins) collect around the floats. They are caught by setting an encircling net around the float and closing up. A series of such floats are worked, one after the other.

(f) *Navigation*: Floats and markers are well visible

in daylight — yet the line could be dangerous for ships' propellers.

(g) *Geographic distribution*: Mediterranean, mainly around Malta.

3. *Gear held in one place by anchors or weights embedded in, or resting on, the floor of the sea, but lifted in toto for removing the catch.*

3.1 Stow nets (see Fig. 9)

(a) *Construction*: Consist of a conical bag net held open by horizontal and vertical beams. The gear is lowered to the bottom and firmly anchored.

(b) *Dimensions*: The horizontal beams are up to 50 ft. (15 m.) in length, vertical beams up to 18 ft. (5.5 m.). Bridles and anchor line are often about 250 ft. (76 m.) long.

(c) *Mobility*: Net and anchor are lifted at each operation of the gear; i.e. at every turn of the tide.

(d) *Location*: Used mostly in coastal areas with tides of two to three knots, for catching herring, sprat, etc.

(e) *Operation*: The gear is set out on the same anchor at which the vessel rides, in such a way that the tide flows through the net. It is lifted at each turn of the tide or when sufficient fish have been caught.

(f) *Navigation*: The vessel lies at anchor above her gear and shows the regulation lights and daymarks. The gear does not hinder other fishing.

(g) *Geographic distribution*: Mainly in the North Sea, up to over 10 miles offshore (German Hamen nets; Dutch Stroopnets).

3.2 Bottom-set Gill Nets and Tangle Nets (see Fig. 10)

(a) *Construction*: A vertical wall of webbing, held up by floats and weighted down by sinkers, anchored to the sea bottom. Anchor lines are buoyed and usually marked by flags.

(b) *Dimensions*: Normally tied together to form sets of 200 to 400 fathoms length (370 to 740 m.); but one vessel may work several such sets of nets. Fishing height is usually less than 20 feet (6 m.).

(c) *Mobility*: During each operation, the nets and anchors are hauled aboard and then re-shot.

(d) *Location*: Normally in depths of up to 60 fathoms (110 m.), often over 10 miles from shore.

(e) *Operation*: The fish are gilled or entangled in the webbing of the net; the nets are lifted every day to retrieve the fish and reset in the same or different location.

(f) *Navigation*: The gear forms no obstruction to navigation, but interferes with — and is in turn interfered with by — trawling.

(g) *Geographic distribution*: In all seas.

3.3 Bottom-set Longlines (see Fig. 11)

(a) *Construction*: Sets of lines, with hooks attached

to branch lines, at regular short intervals, set out on or above the sea floor and maintained stationary with anchors at each end; each anchor is normally attached to a marker buoy, and surface floats are attached to the line, every 200-400 fathoms.

(b) *Dimensions*: A single string of set longline is normally several miles long and can measure over 10 miles in length with over 15,000 baited hooks.

(c) *Mobility*: The anchors are usually lifted during each operation of the gear; the lines are then reset in the same or a different location.

(d) *Location*: In depths to over 200 fathoms (370 m.) and up to 100 miles from shore.

(e) *Operation*: The lines are lifted at regular intervals, usually daily, to retrieve the catch.

(f) *Navigation*: The gear forms no obstruction to navigation (in Northern Europe, the marker buoys show lights at night). It does interfere with, and is often seriously interfered with, by trawling.

(g) *Geographic distribution*: In all seas.

3.4 "Pots" for scale fish, lobster, crabs, etc. (see Fig. 12)

(a) *Construction*: Crate-formed traps of various shapes, having non-return entrances; made of wood, wicker, wire-netting, metal, etc.

(b) *Dimensions*: Very small, only a few feet across.

(c) *Mobility*: The pots are weighted down by stones and lifted periodically.

(d) *Location*: Mainly on rocky or firm bottom; in up to 50 fathoms (90 m.) depth and up to 10 miles offshore.

(e) *Operation*: Pots are held down by stones, etc., and carry small marker floats. They are lifted at regular intervals (every day or every few days) to retrieve the catch.

(f) *Navigation*: Cause no obstruction; as they are normally used on rocky patches, they rarely cause any hindrance to other fishing methods.

(g) *Geographic distribution*: In all waters.

ANNEX

FIGURE 0. A fish weir at low water

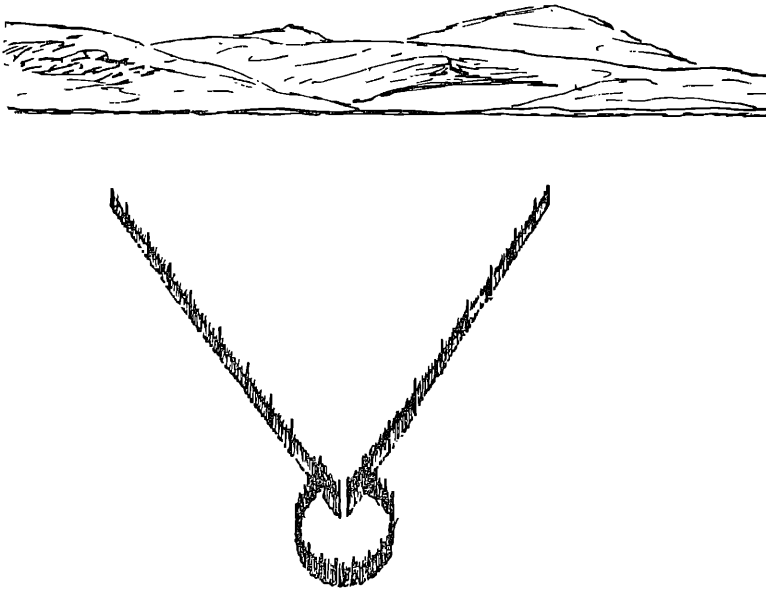


FIGURE 1. Staked gill nets

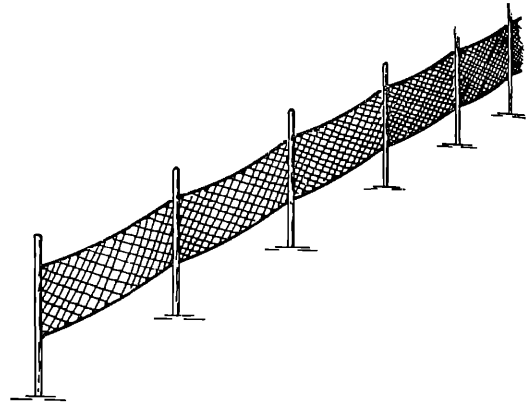


FIGURE 2. Cannery tender brailing salmon into scow from an Alaska salmon set trap (detail of brailer shown in inset)

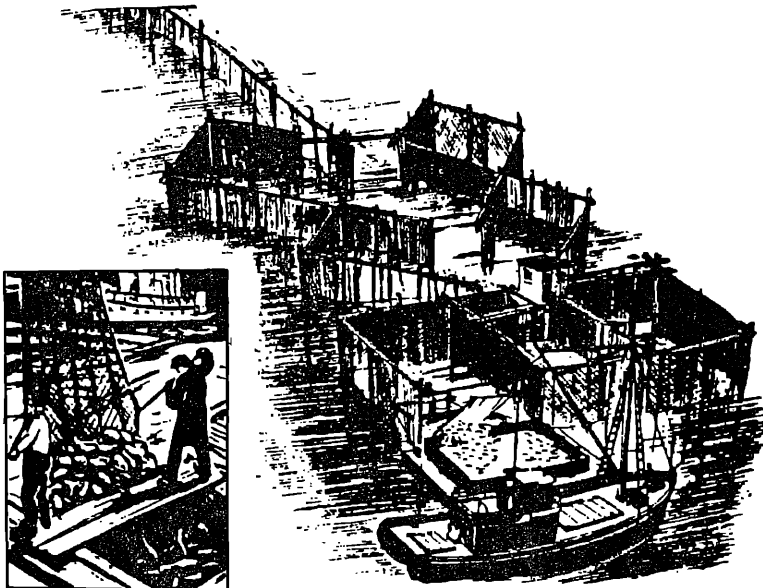
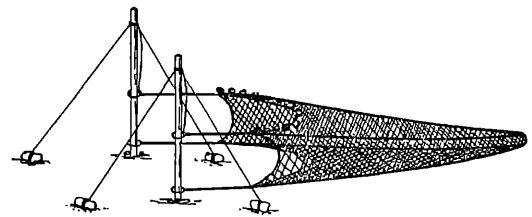
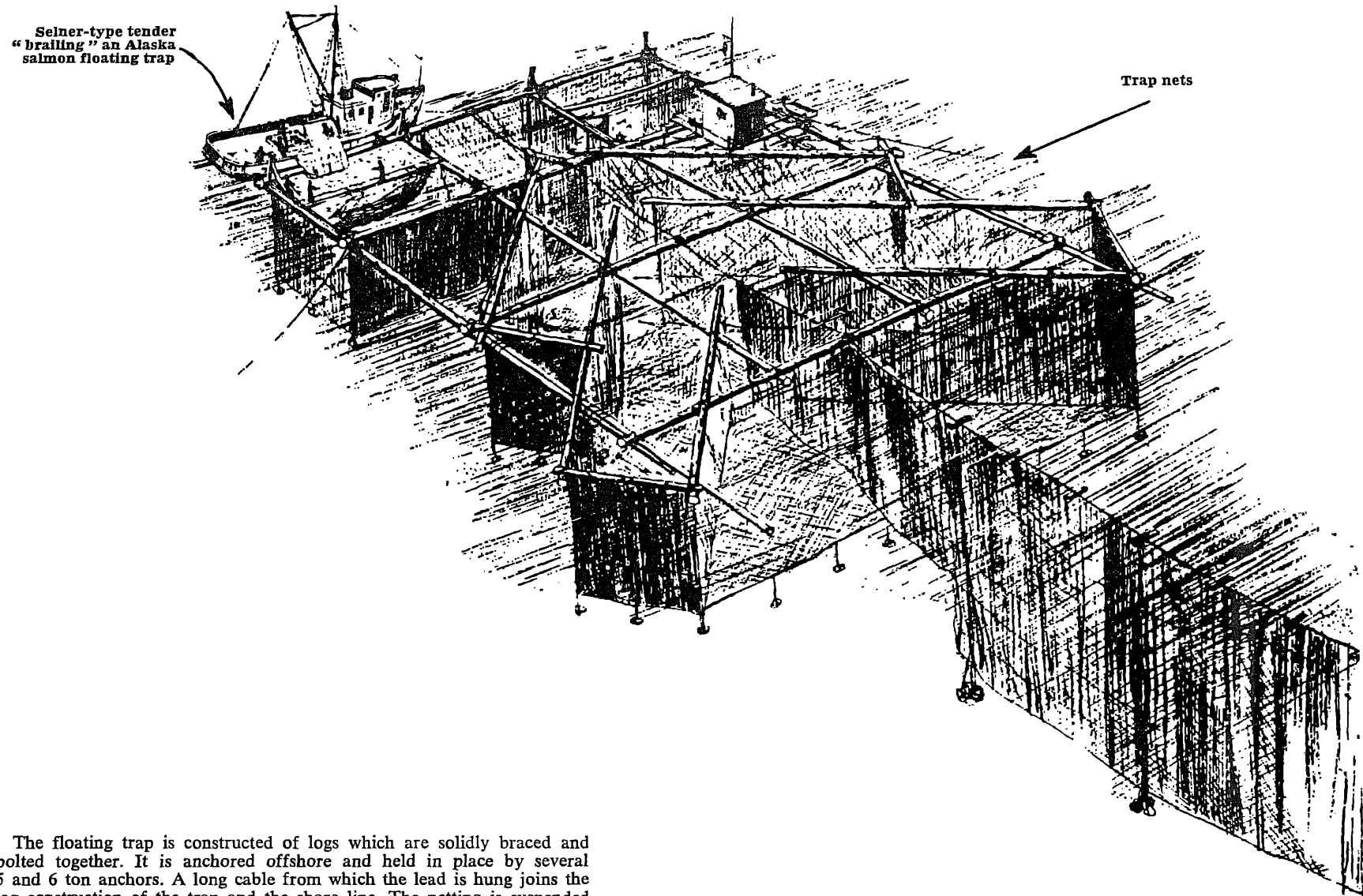


FIGURE 3. Staked bag net



(Courtesy R. J. Ederer Co.)

FIGURE 4. Alaska floating trap



The floating trap is constructed of logs which are solidly braced and bolted together. It is anchored offshore and held in place by several 5 and 6 ton anchors. A long cable from which the lead is hung joins the log construction of the trap and the shore line. The netting is suspended from the floating surface of the trap and weighted by heavy rocks.

FIGURE 5. Tonnara

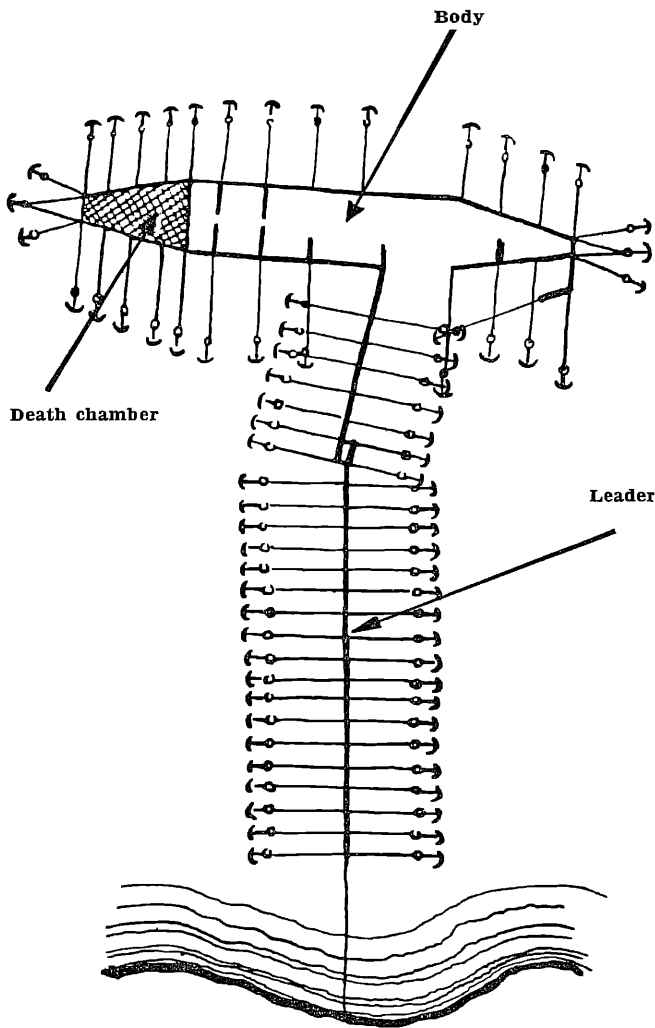


FIGURE 6. Common type of 1 mouth 1 bag trap net

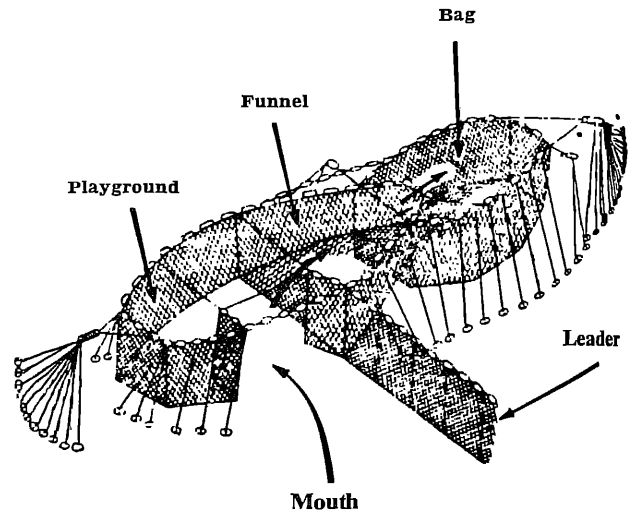


FIGURE 7. Anchored bag net

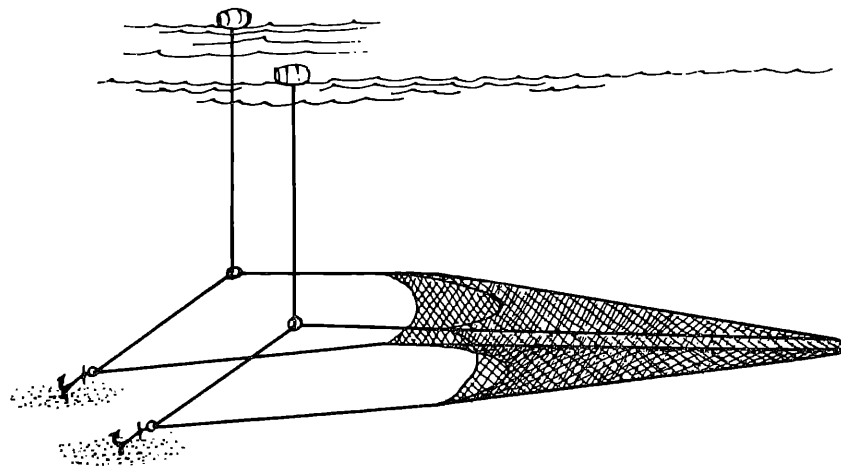


FIGURE 8. Coconut frond lure "Tendak", "Rompon"

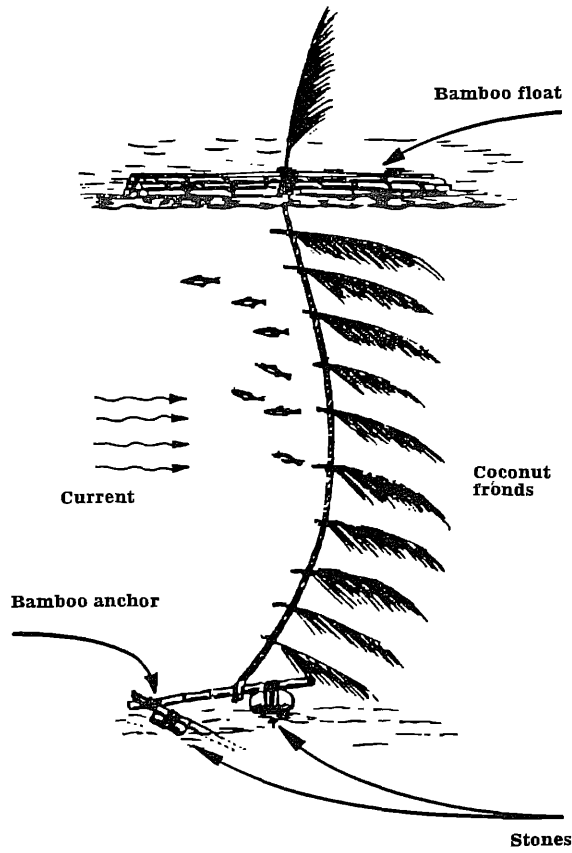


FIGURE 9. Stow net

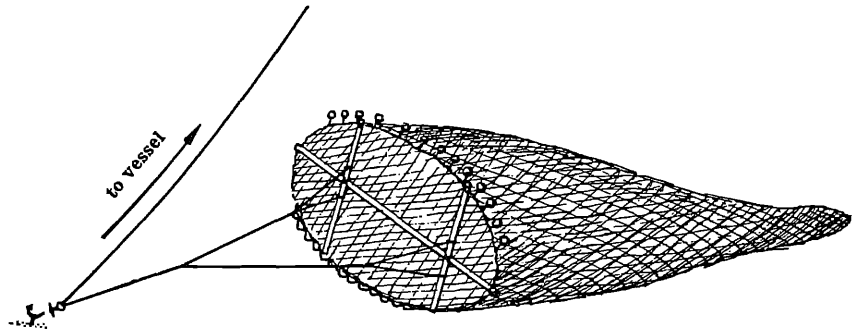


FIGURE 10. Bottom-set gill nets

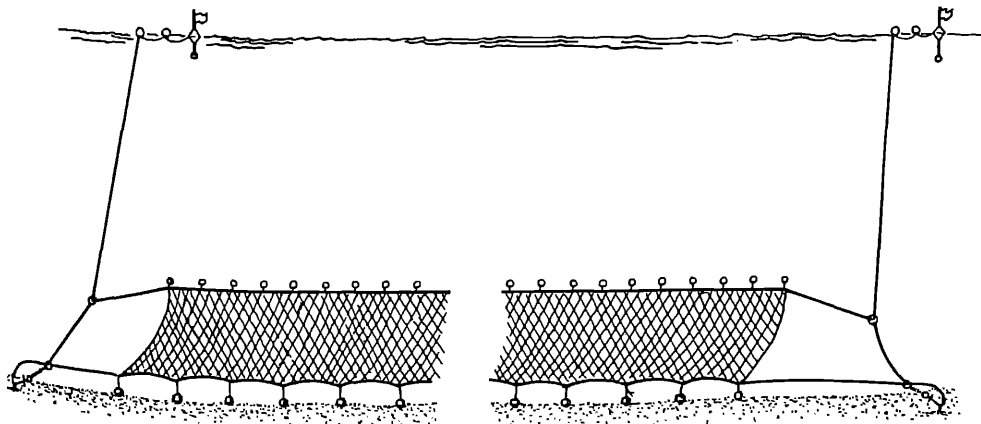
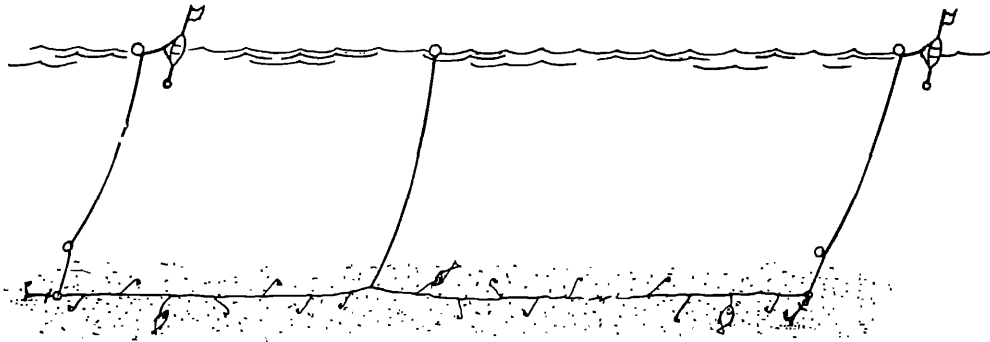
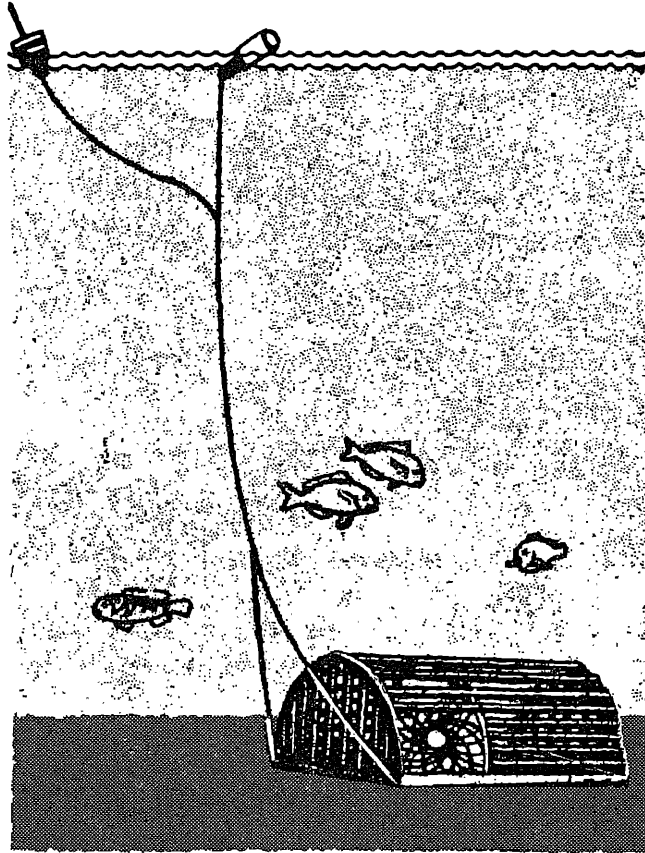


FIGURE 11. Bottom-set longlines



The set usually has marker buoys at each extremity and floats every 100-400 fathoms or so. In European countries the marker buoys carry a light at night.

FIGURE 12.



Lobsters are caught in small wooden traps or pots, which are baited with fish and lowered to the bottom at depths of 1 to 30 fathoms. Usually the traps are set singly, but in some localities, a trawl of as many as 12 traps may be fished. The traps are hauled daily or as often as conditions allow. A fisherman may operate 200 or more single traps, but the average is less than 100.

EXAMINATION OF LIVING RESOURCES ASSOCIATED WITH THE SEA BED OF THE CONTINENTAL SHELF WITH REGARD TO THE NATURE AND DEGREE OF THEIR PHYSICAL AND BIOLOGICAL ASSOCIATION WITH SUCH SEA BED

MEMORANDUM BY THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

(Preparatory document No. 10)

[Original text : English]
[6 November 1957]

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FOREWORD

The United Nations has requested the Food and Agriculture Organization to prepare a statement on the relations of living aquatic resources with the sea bed of the Continental Shelf as defined in article 67 of the articles concerning the law of the sea, adopted by the International Law Commission at its eighth session, in 1956. The following paper has been prepared in answer to that request and although not an exhaustive treatment of the question it does endeavour to show fully the complexities of the situation under examination. After indicating the kinds of relation that may exist between an individual organism and the bed of the Continental Shelf, it examines the changes in this relation that may take place throughout the life of an individual organism. It then, making use of the very extensive work on this subject, submits a classification of the organisms normally occurring as members of shelf communities in adult phase with an indication of the habitat, etc., of the juvenile phases of these adults.

Every effort has been made in preparing this paper to preserve a simplicity of language, but the subject is such that it has been necessary to employ certain terms which may not be familiar to the lay reader. It has, therefore, been thought advisable to append a brief glossary.

EXAMINATION OF LIVING RESOURCES ASSOCIATED WITH THE SEA BED OF THE CONTINENTAL SHELF WITH REGARD TO THE NATURE AND DEGREE OF THEIR PHYSICAL AND BIOLOGICAL ASSOCIATION WITH SUCH SEA BED

In considering the relations of living organisms with the continental shelf it is important to remember that this shelf is not merely a platform within or upon which there is a resting place for an organism for part or all of its life. The position of the shelf in relation to the continental (or island) land mass on the one hand, and to the continental slope and the abyssal bed on the other, causes it to exercise an influence on the play of hydro-dynamic forces in the water-masses that overlie it, and these are related to the forces operating in adjacent water-masses, both those of the ocean and the water outflowing from the continent. Moreover, the shelf receives, and provides a storage place for, a great diversity of materials. As a consequence the shelf is not merely a passive platform, but contributes to the creation of particular physical and chemical conditions that are of considerable significance to the living organisms. Conversely, the organisms exercise some influence on the characteristics of the shelf and contribute to creation of a milieu that is unique to those areas of the earth's surface where the shelf exists. Such facts are of importance because of their relation to the simple yet easily overlooked fact that whatever association aquatic organisms have with the shelf proper, they nevertheless live in water. Discussion of these associations therefore must recognize the role of the waters overlying the shelf as well as that of the physical shelf.

A discussion of the association of living aquatic resources with the continental shelf should then begin with an analysis of the types of relation or connexion that may exist, such relations being direct with the physical shelf proper, or indirectly with it through the

overlying water. The importance of this analysis will become clear when it is recognized that the existence of each organism may involve several different kinds of relation, and that the pattern of relations may vary as between different life phases. The value of this analysis will be made even more apparent when we come, later, in this paper, to consider a conventional classification of the organisms that make up bottom communities.

The relations involved can be classified with respect to the organism's requirements (1) for appropriate living space, (2) for its general physiological functions, (3) for its food and nutrition and (4) for reproduction. Although nutrition and reproduction, of course, are physiological functions and could be included under the second heading, and conversely, the second heading could be divided into many particular functions, we believe that the present plan is most convenient for present purposes, and most clearly reveals the nature of the relations involved. This plan can be elaborated, as follows:

A. Living space

The organism lives:

- (a) Within bottom materials,
- (b) On bottom materials, by attachment,
- (c) On the bottom surface, lying,
- (d) On the bottom, but moving,
- (e) In the water overlying the shelf.

B. General physiological functions

The organism finds physical and chemical conditions appropriate to its metabolism, movement and behaviour; included are factors such as temperature, salinity, light-intensity, water movement, and the nature and particle-size of the bottom materials.

C. Nutrition

Food supply of the organism is provided by:

- (a) Bottom detritus,

- (b) Bottom living organisms,
- (c) Organisms that live in shelf water.

D. Reproduction

The organism finds:

- (a) Conditions for maturation and spawning only on the shelf,
- (b) Favourable situation for placement of eggs in the bottom material or on it,
- (c) Conditions for larval development (after hatching) only on the shelf and in the water above it.

These organisms that have a "living-space" dependence on the shelf (especially those that live within, or fastened to bottom materials) find there, also, their general physiological nutritional and reproductive requirements, and thus are completely dependent upon the shelf. For this reason where examples are given of these relations, in Table 1 below, we combine the spatial and physiological relations. In contrast, other organisms have only one or more of the other relations with the shelf, as, for example, by visiting it for a brief period to spawn; nevertheless the importance of these other relations to the organism should not be underestimated. The denial or destruction of a breeding ground could presumably lead to the extinction of the stock that made use of it.

In only very few species of aquatic organisms is the entire life of each individual spent in close association with the shelf sea bed and the water lying immediately above it; in most organisms there is a free-swimming phase, in middle or surface waters. However, since in most cases the conditions of life for such a pelagic phase are found only in shelf waters, there continues to be for them a necessary and dependent relation between the organism and the shelf even in the free-swimming phase. This pelagic phase probably is a distribution mechanism which at the time may be very wasteful, because often large numbers of pelagic larvae drift from the shelf and are doomed to die.

TABLE 1 A

Examples of different types of relation of eggs with the shelf

<i>Living Space (and General Physiological Functions)</i>	
1. Within bottom	Eggs deposited in nests or cavities (rare). E.g., the amphipod <i>Corophium arenarium</i> deposits eggs in small buried brood-tubes.
2. Fastened to bottom	Eggs fastened to stones, or vegetation (e.g., Pacific herring), deposited in capsules, fastened to substratum (e.g., Periwinkle, <i>Littorina litorea</i>), or in gelatinous layers fastened to substratum (e.g., <i>Littorina obtusata</i>).
3. Surface of bottom and water immediately above it	Eggs deposited loose on bottom (e.g., Atlantic herring), or in gelatinous masses (e.g., Nemerteans), or in capsules (e.g., rays) or encrusted with sand (e.g., <i>Naticidae</i>). Brood protection common.
4. Supernatant waters at various depths	Many species, from all taxonomic groups of neritic, oceanic and benthonic animals have planktonic (freely floating) eggs; (e.g., nearly all starfish (echinoderms) and clams (bivalves); most <i>Actinia</i> , several polychaetes).

TABLE 1 B
Examples of different types of relation of larvae and young with the shelf

<i>Living Space (and General Physiological Functions)</i>	
1. Within bottom	This is a rare relation, found in the fauna of sand and of the intertidal zone. E.g., <i>Bledius spectabilis</i> and eunicid of polychaeto- <i>Diopatra neapolitana</i> .
2. Fastened to bottom	This also is a rare relation (e.g., a few tunicates).
3. Surface of bottom and water immediately above it	All non-pelagic larvae, e.g., larvae of most sand-fauna (e.g., ostracods, copepods), the young of haddock and of species whose young develop in egg-capsules deposited on bottom.
4. Supernatant waters at various depths	Planktonic larvae and young of majority of shelf organisms. (Most larvae feed while living planktonic life, some larvae however do not feed, but are planktonic only for distribution.*)
<i>Nutrition</i>	
1. Bottom detritus	Relatively rare (e.g., the feeding of settled larvae and those developed in the bottom substrata).
2. Bottom organisms	E.g., the feeding of young of haddock, and of the young of most organisms with non-pelagic larvae.
3. Neritic nekton and plankton	Majority of pelagic larvae feed on phytoplankton, some exclusively on zooplankton (e.g., decapod larvae).

* That is to say, the significance of their sojourn in the planktonic community lies in the distribution brought about by the transport of the plankton by currents, sometimes resulting in the plankton being carried into unfavourable situations where it dies.

TABLE 1 C
Examples of different types of relation of mature animals with the shelf

<i>Living Space (and General Physiological Functions)</i>	
1. Within bottom	Organisms buried in bottom material through which they can move; or living in cavities or holes e.g. certain molluscs; or in tubes they have constructed e.g. worms.
2. Fastened to bottom	Organism with root or anchorage in the bottom, or with outer skeleton cemented or in some way fastened to rock or other hard bottom.
3. Surface of bottom and water immediately above it	Immobile organisms lying on bottom (forams and some oysters); partially mobile but not swimming.
4. Shelf-waters at various depths	Strictly neritic forms, which include the majority of demersal fish.
<i>Nutrition</i>	
1. Bottom detritus (and micro-organisms living in it)	Most animals which are buried in the sediment feed on the detritus; there are also animals which pick detritus particles from the surface of sediment (e.g. polychaetes (worms), gastropods (shellfish), some decapods (crabs) etc.).
2. Bottom organisms	Hunting animals, e.g. starfish, species of fish (e.g. plaice and cod) feed on small bivalves and crustaceans.
3. Neritic nekton and plankton	Many sessile animals, e.g. clams, oysters etc. (filter feeders and "lurkers"); animals which visit bottom for rest and protection (e.g. shrimp); many fish species.
<i>Reproduction</i>	
1. Maturation and spawning	Many viviparous organisms and organisms which have brood protection, are benthonic because, perhaps, of a need for support. Many otherwise pelagic species spawn on coastal areas.
2. Deposition of eggs	In bottom (rare), loose on bottom in capsules or gelatinous masses, fixed to it, with gelatinous masses or capsules fixed with strings, or deposited in cavities.
3. Embryonic development	Brood protection is common among benthonic organisms. In pelagic larvae development occurs in the pelagic stage. Waters overlying the shelf usually have higher turbulence, which is important for pelagic larvae and young.

We have referred above to the existence of a special shelf (or neritic) environment, established by virtue of the presence and particular form of the shelf in relation with the continental land-mass on one hand and with oceanic water masses on the other; we also referred to the contribution made by the living organisms to the particular characteristics of this environment. It is necessary at this point to say something further about these two aspects.

Firstly, with respect to the identity (and in some cases autonomy) of a shelf environment. As indicated in earlier paragraphs, it should not be thought that there is to be found overlying the shelf a mass of water that derives its characteristics exclusively from the shelf and remains unaffected by influences exerted by water masses and current systems of the oceanic side. On the contrary, the shelf water characteristics may be very considerably affected by the oceanic waters, as indeed they are by the outflow from the continent. Again, the limits of a "shelf environment" may not be assumed to coincide with the limits of the shelf itself, as that might be defined in geographic and geological terms; instead, the limits may extend seawards beyond the edge of the shelf, or be confined landwards, according to the interplay of oceanic continental influences.

Secondly, with respect to the part played by aquatic organisms in determining the characteristics of the shelf and its overlying waters. In perhaps the most obvious case, the reef-building corals make very great bottom structures; other organisms make similar incrustations, still others contribute, by their dead-shells, to the formation of enormous deposits; in a different kind there are the rock-boring organisms. Of quite different significance is the presence of a considerable population of micro-organisms living on the surface and in the superficial layers of sediments; these include bacteria, benthonic diatoms, and other forms, all of which serve as food for filter-feeding organisms. Finally, we may not overlook the effect on the water of the physiological activity of the great mass of living material which is feeding, respiring and excreting, and thus causing a constant flux in the chemical characteristics of this water.

Having given in Table 1 examples of the various kinds of relation, in each life phase, regardless of any connexion between successive stages, we now give, in Table 2, examples of the changing pattern of relations as between the life phases of an individual organism.

TABLE 2
The association with shelf of various representative organisms during different phases of life

<i>Organism</i>	<i>Eggs</i>	<i>Larvae and young</i>	<i>Adults</i>
Sponges and Hydroids (general)	Usually pelagic. Asexual reproduction also occurs.	Short pelagic life of larvae.	Fixed on rocky bottom or on shells, plants, etc. Filter feeders of suspended matter and plankton.
<i>Ficulina ficus</i>	Pelagic (asexual reproduction also occurs).	Pelagic (relatively short time).	The young settle on empty mussel shells (usually <i>Astarte</i>) which lie loose on the bottom around them.
<i>Cliona celata</i>	Pelagic.	Pelagic (relatively short time).	Burrows into limestone or into great mussel shells.
<i>Tubularia larynx</i>	Brood protection.	Pelagic.	Fixed on rocky bottom or on stones lying on bottom.
Corals (general)	Asexual reproduction common; pelagic eggs also occur.	Mostly pelagic.	Usually fixed to bottom or on hard objects on it.
<i>Ceriantharia</i>	Pelagic.	Pelagic, feeding on plankton.	Usually live in sand. Important as fish food. Detritus feeders.
<i>Lophohelia prolifera</i> . . .	Mostly asexual reproduction by budding.	The larvae of sexual production pelagic?	Fixed to the bottom. Reef-building coral in deep cold waters.
<i>Sagartia troglodytes</i> . . .	Pelagic in some localities, viviparous or larviparous in other places.	Pelagic eggs develop into pelagic larvae that feed on plankton. Viviparous larvae are benthonic crawling around the bottom.	Fixed to hard bottom or to hard objects on it.
Nemertines (worms) (general)	Usually in lumps on the bottom, but many species have pelagic eggs.	Species with non-pelagic development are rare; species with pelagic larvae,* some of which feed on plankton, are common.	Live mostly on bottom, but can also move through water; most species live among seaweeds. Feed on detritus and small algae. Many are carnivorous, attacking Polychaetes.
<i>Lineus ruber</i>	Deposited in lumps in a green gelatinous mucus on the bottom.	Non-pelagic larvae develop on the bottom.	Lives on muddy bottom in shallow water. Feed on detritus and small algae.

* The asterisk refers to larvae that do not take in food, but derive their nourishment from the remaining yolk material of their egg. Such larvae are known as lecithotrophic.

TABLE 2 (continued)

Organism	Eggs	Larvae and young	Adults
<i>Cephalothrix linearis</i> . . .	Deposited on the bottom.	Pelagic.*	Lives usually among sea-weeds.
<i>Cerebratulus marginatus</i> . . .	Deposited on the bottom.	Free swimming feeding on plankton.	Lives in deeper waters on hard bottom. Can also swim in the water.
Bryozoa (sea mosses) (general)	Mostly viviparous, but egg-laying species also occur.	Short time pelagic larvae * are most common, but larvae of few egg-laying species are long time pelagic feeding on plankton.	Fastened, mostly on hard bottom. Filter feeders.
<i>Alcyonidium albidum</i> . . .	Pelagic ?	Pelagic feeding on plankton.	Fastened on hard bottom. Filter feeders.
<i>Flustella hispida</i>	Pelagic ?	Pelagic.*	Fastened on sea-weeds.
Polychaetes (worms) (general)	Few viviparous. Usually eggs fastened to the opening of tubes or are truly pelagic. Asexual reproduction also occurs. Some species can change the mode of reproduction according to the surrounding conditions.	Mostly pelagic and planktonic. Larvae of non-pelagic development in about 25% of species. Pelagic larvae * also occur. Polychaete larvae are eaten by herring, actinians, amphipods and Cumacea.	Mostly live in bottom materials. Some species can leave the bottom for spawning in water mass. Detritus feeders.
<i>Scoloplos armiger</i>	Laid in gelatinous, pear-shaped cocoons and attached to the sand by a rough string.	Larvae hatch from the cocoon in the crawling stage, without any pelagic life.	Lives in mud and muddy sand. Catch microfauna and organic detritus. Very important as food for demersal fish.
<i>Nereis diversicolor</i>	Either loose on the bottom or pelagic.	Short time pelagic.*	Lives in sandy mud. Leave the bottom during spawning, which occurs near the surface.
<i>Nereis pelagica</i>	Both pelagic, and lying on the bottom.	Developing on bottom in a crawling stage or pelagic feeding on plankton.	Lives on rocky bottom, but can also swim in the water.
<i>Nephtys caeca</i>	Ova are well developed in the coelom of a female before release into the water.	Long time pelagic feeding on plankton.	Digs into the mud, but can also swim in the water.
Crustaceans (shrimps, lobsters, etc.)			
HARPACTICOIDS	Mostly pelagic.	Mostly pelagic and feeding on plankton.	Live mostly on all kinds of bottom, but can also swim; mostly detritus feeders.
CIRRIPEDS	Brood protection common.	Usually pelagic.	Fixed on stones, ships, etc. Filter feeders.
CUMACOA	Brood protection common.	Usually pelagic.	Live mostly on bottom, but occur sometimes in water mass. Important as fish food; detritus and plankton feeders.
AMPHIPODS	Brood protection common.	Mostly pelagic.	Most species pelagic, some species on bottom substrata with ability to swim (e.g. <i>Gammarus locusta</i> on sea-weeds), some living in bottom substrata (e.g. <i>Hippomedon</i> , <i>Haploops</i> , etc.). Bottom living species are detritus feeders.
DECAPODS (general)	Brood protection and also pelagic eggs.	Most larvae have long pelagic life and are feeding on smaller zooplankton organisms.	Mostly live on bottom as well as in the water above, but also crawling only on bottom. Many species of great economic importance. Mostly detritus and plankton feeders.
<i>Pandalus borealis</i> (shrimp)	Brood protection.	Pelagic feeding on plankton.	Lives mainly on bottom, feeds on smaller organisms and partly on organic detritus. During the night may swim around.

* See footnote p. 190.

TABLE 2 (continued)

Organism	Eggs	Larvae and young	Adults
<i>Carcinus maenas</i> (beach crab)	Part-time brood protection. Eggs are released in an advanced state of development.	Pelagic feeding on plankton.	Lives usually on sandy bottom in shallow water.
<i>Eupagurus bernhardus</i> (hermit crab)	Brood protection.	Pelagic.	Lives in empty gastropod shells (e.g., <i>Littorina</i>) crawling around the bottom in this shell; important fish food.
<i>Homarus vulgaris</i> (lobster)		Pelagic.	Lives under stones and among seaweeds. Economically exploited.
Molluscs			
GASTROPODS			
(general)	Most deposit their eggs in capsules which are fastened to the bottom. Few genera spawn their eggs in a gelatinous layer, attached to a substratum. Primitive gastropods spawn eggs freely into the water. Egg and brood protection as well as viviparous species occur.	The larvae, developed from gelatinous eggs or from capsules, usually remain on the bottom. More than half of the species have larvae with long pelagic life, species of short pelagic life are relatively rare. The gastropod larvae are eaten e.g. by herring, mackerels, etc.	Different species are adapted for different conditions of life. Most species live in bottom substrata or lie on it; crawling gastropods also exist. Mostly detritus feeders.
<i>Littorina littorea</i> (periwinkle)	Deposited in capsules which usually are pelagic but may also be fastened to the bottom.	Pelagic feeding on plankton.	Lives on bottom in shallow water.
<i>Littorina obtusata</i>	Deposited in gelatinous mucus, fastened to stones or seaweeds.	Larvae develop to crawling stage with small shell within the gelatinous mucus, on bottom.	Crawls slowly on the bottom or lying on it.
<i>Gibbula cineraria</i>	Pelagic.	Pelagic.	Lives on hard bottom. Good fish food.
BIVALVES (mussels)			
(general)	Brood protection is common. On the bottom fastened eggs as well as pelagic eggs occur.	Mostly pelagic. The young of bivalves, unable to move in adult stage, are for a long time able to move in water mass or crawl on the bottom.	Majority occur in bottom substrata and fixed on it. Several crawling species exist. Many species important as fish food and as food for man (oysters, edible mussel, etc.). Detritus feeders.
<i>Nucula nitida</i>	Pelagic.	Pelagic.	Lives in soft bottom.
<i>Mytilus edulis</i> (edible mussel)	Pelagic.	Pelagic, feeding on plankton.	On hard bottom fastened to bottom substrata in shallow water to a depth of ca. 50 m., or lying loose on it.
<i>Ostrea edulis</i> (oyster)	Egg and brood protection (Embryos develop in mantle cavity to veliger stage).	Pelagic.	In shallow water and on tidal flats, fastened or on artificial support. Is cultivated. Filter feeder.
<i>Cyprina islandica</i>	Pelagic.	Pelagic, planktotrophic.	Buried in the fine sandy mud or sand. The siphon reaches the sediment surface. Important as fish food.
<i>Teredo megotara</i> (shipworm)	Brood protection.	Pelagic.	Burrows into wood, often doing much damage to wooden ships, harbour constructions, etc.
CEPHALOPODS			
(Squids and octopi)	Eggs usually lying on bottom in long capsules.	Pelagic.	Most species pelagic; some live on bottom substrata only; large octopi live on and in bottom substrata and can also swim. Detritus feeders, and feeders on other benthonic animals.

TABLE 2 (continued)

<i>Organism</i>	<i>Eggs</i>	<i>Larvae and young</i>	<i>Adults</i>
Echinoderms			
(general)	Usually the eggs are pelagic, brood protection occurs, specially in colder areas; few species are viviparous.	Usually with long pelagic planktotropic life, but also pelagic lecithotrophic life occur.	Most species crawl on bottom feeding on other benthonic animals. Some live in the bottom substrata and some are fixed on it.
<i>Asterias mülleri</i> (starfish)	Brood protection.	The young leave the mother as fully developed young bottom stages.	Crawls on the bottom.
<i>Solaster endeca</i>	Pelagic, floating singly at the surface.	Pelagic.*	Crawls on the bottom.
<i>Ophiura robusta</i> (brittle-star)	Pelagic.	Pelagic feeding on plankton.	Lives mainly on bottom.
Tunicates	Mostly asexual reproduction. Eggs are pelagic but brood protection occurs in some species.	The larvae of sessile tunicates are mostly fixed to bottom substrata; larvae are pelagic for only a very short time.	Most species are pelagic, only Ascidiarians are fixed on hard bottom. Filter feeders.
Pisces (fish)			
Rays and Sharks	Eggs deposited in capsules on the bottom.	Larvae developed in capsules; young live on bottom.	Often on bottom substrata feeding on other benthos animals.
Herrings	Most species have pelagic eggs (e.g. pilchard, sprat, mackerel). By some species lying on bottom (Atlantic herring) or fastened to the vegetation (Pacific herring).	Pelagic, feeding on.	Pelagic.
Plaice	Pelagic.	Pelagic.	Spend most of their life on bottom, feeding mostly on benthonic animals.
Haddock	Pelagic.	Pelagic, young lie often on bottom, feeding on bottom animals.	Often on bottom, feeding partly on benthonic animals.

* See footnote p. 190.

It will be seen that the task of examining the association between organisms and the continental shelf is complicated by two principal considerations. Firstly, there is the difficulty of biologically designating precisely the limits of the shelf and the limits of the influence exerted by it. Especially is this so since, remembering that the organisms concerned live only in aquatic medium, the shelf cannot be considered only in terms of the solid materials of which it is constructed: the water overlying the shelf is as important as the shelf-material. Secondly, there is the complication of the differences of relations for different life-phases; this complication is the greater because of the diversity of organisms in this zone: most principal groups of animals, and many groups of plants, are represented in the shelf-communities.

The conventional approach to the analysis of the complex communities of the shelf is to consider the

organisms which normally appear in these communities, chiefly in adult form, and to classify them according to habits and normal habitat. Several classifications have been made along these lines; table 3 sets out in the first column a classification drawn up in accordance with the more generally accepted views on this question. The second column describes the habits and habitats of different groups of adult organisms that enter or live in this zone. The organisms in the first three classes have living space dependence on the shelf, both materials and water, during their adult life; those of the fourth class have other kinds of dependence on the shelf during adult life, and these are chiefly with water overlying the shelf, but sometimes with shelf-material. The third column shows the habitat, habits, etc., of the eggs, larvae and young of certain organisms representative of each group where their young stages are associated with the shelf.

TABLE 3

Classification of organisms normally occurring as members of shelf communities in adult phase, with indication of habitat, etc., of juvenile phases

Classification	Definitions, examples, habits and habitats	Larval life
A) In-biota . . .	<i>Organisms which spend all their post-larval life within the material of the bottom, feeding and growing there.</i>	
(a) Meso-biota . . .	<i>Animals which are completely buried in the substratum itself; some in its interstitial spaces. They may move within this medium by digging while feeding, for example, or move about within the interstices. Some examples of animals in this group are: certain annelid worms, such as <i>Polygordius</i> and <i>Protodrilus</i>; certain copepods (crustaceans), <i>Paramesochra</i>, <i>Evansula</i>; and certain bivalved molluscs and gastropods.</i>	The majority of animals living in sand deposit their eggs in the sand and the larvae develop there or in the overlying water. Mesobiota living in mud usually have pelagic larvae, but viviparity and brood protection also occur.
(b) Endo-biota . . .	<i>Animals which live in cavities or holes and tubes which they construct in the bottom substratum. It is possible for some of them to leave these holes or tubes if, for example, the immediate environment becomes unfavourable, or in order to spawn. Examples are: certain annelids, such as <i>Arenicola</i>; certain clams, such as <i>Mya</i>, and boring isopods, such as <i>Sphaeroma</i>. Others, such as the boring clams or <i>Pholadidea</i>, bore into rocks and become prisoners in their own cavities. There are also animals such as the sea cucumber, <i>Cucumaria pseudopopulifera</i>, which, because of growth after entrance, may become imprisoned in the old burrows of rock-boring clams.</i>	Spawning often on the surface of sand and mud or in free waters. Eggs can also be deposited in the tubes in the mud (e.g. <i>Corophium arenarium</i>) or in capsules and in gelatinous masses on the surface or near the mouth of their tubes (e.g. some polychaetes). Pelagic larvae are most common for these animals. Asexual reproduction occurs.
B) Epibiota . . .	<i>Organisms that in post-larval form are fixed to the bottom and feed, grow and reproduce there.</i>	
(a) Fixo-sessilo . . .	<i>Organisms which fasten themselves to the hard bottom substratum or to hard objects on it (such as stones, big shells etc.) during their entire adult life or during a great portion of it. There are organisms that fasten themselves to the substratum by means of their outer skeleton or by secretions; the hydroids (Hydrozoa) fasten themselves by means of their chitinous periderm; gooseneck barnacles have a leathery stalk; the tunicates are fixed by their cellulose-like test; certain molluscs fasten themselves by means of calcareous shells; sea mussels (edible mussels), such as <i>Mytilus</i>, use a byssus (a bundle of threads secreted by the foot). The large brown algae (kelps) are held to the substratum by a root-like hold fast.</i>	Asexual reproduction occurs in many species. The larval stage is usually neritic-pelagic. Feeding on plankton. Viviparity occurs in this group. Before settlement the young of many species can crawl along the bottom.
(b) Rhizo-sessilo . . .	<i>Organisms which are fastened to the soft bottom (sand or mud) by various means. For example, a root-shaped plexus is formed by the crinoid, <i>Rhizocrinus</i>; alcyonarians, such as <i>Pennatularia</i>, have a basal stalk which is embedded in the sand or mud. Higher plants, such as <i>Zostera</i>, have rhizomes and roots for attachment.</i>	The larval stage is usually neritic-pelagic, feeding on plankton. Asexual reproduction occurs in many species as well as viviparity. Many species have non-pelagic larvae.
C) Suprabiota . . .	<i>Organisms that lie on or more freely about on the bottom and feed, grow and reproduce there.</i>	
(a) Libero-sessilo . . .	<i>Organisms that lie on the sea bed in the adult stage, but are not fixed to it, and are incapable of active travel. Examples are: flat oysters and foraminifera.</i>	Larval stage usually planktonic. Brood-protection also common. The non-pelagic larvae and young can crawl around on the bottom.
(b) Hemi-sessilo . . .	<i>Organisms which, although capable of moving on the substratum during their adult life, usually settle in one place and remain there for variable periods of time, or do not move very far away. The animals are sessile during feeding, but move when disturbed. Change of location may be caused by environmental conditions adverse for certain purposes, e.g. breeding, etc. Some of these organisms (as certain annelids) may encase themselves in fixed tubes. Some are held against the substratum by spinous projections. Chitons, limpets and other molluscs crawl slowly over very small distances only — although some may be almost sessile on a so-called foot.</i>	Most eggs and larvae are pelagic. Eggs can be shed singly and adhering separately to substrata. Brood protection occur. Planktonic, lecithotrophic larvae are rather common in this group.
(c) Reptovagilo . . .	<i>Organisms which during their adult stages are capable of movement, but only on the sea bed. This group of organisms includes forms such as starfish and some large crustacea (e.g. large crabs) and octopi which range more widely than do the forms described above and which do not hold themselves in one place for long periods of time.</i>	Brood protection common, but majority have pelagic eggs and larvae. The larvae feed usually on phytoplankton, but in some groups also on zooplankton (e.g. decapod larvae).

TABLE 3 (continued)

Classification	Definitions, examples, habits and habitats	Larval life
(d) Bivagile	<i>Organisms which can crawl on the bottom and also move freely through the waters. As examples are: Cumacea, some shrimp species, Mesidotea entomon, Gammarus locusta, etc. To this group belong also haptic animals which are vagile on the bottom while searching for food, but attach themselves when disturbed (e.g. tardigrade Batillipes, annelid Diuredrilus).</i>	Mostly pelagic eggs and pelagic planktonic larvae.
D) Swimming organisms	<i>Organisms that swim freely in the shelf water, some of which remain in the shelf water all their post-larval life whilst others visit these waters for only part of the post-larval life; of the former, some spend most of the time on or near the bottom or even in it whilst others live in middle and/or surface waters; of the latter, some visit for reproductive purposes, others for feeding, some for both these purposes, and others merely cross these waters.</i>	
I. PERMANENT AND SEMIPERMANENT		
1. Demersal fish	<i>Fish which spend most of their post-larval life over the shelf and close to the bottom or on the bottom substrata and feed mainly on the benthonic organisms. This group can be divided into three sub-groups:</i>	
(a) Flatfish	<i>Fish which have very flattened bodies, and spend much of their time on the sea floor. The main food is taken from the bottom. Generally, but not always, the range of migration of these fishes is smaller than of the following sub-groups. Examples are the plaice, soles, halibuts, turbot, flounders, etc.</i>	Mostly pelagic egg and larvae. The floating eggs are found in different layers of water.
(b) Gadids	<i>Cod-like fishes closely related to the sea bed, but which move from deep to middle or shallow waters usually for feeding and breeding purposes. Some species migrate long distances over deep oceanic areas (e.g. cod). Part of the food is taken from the bottom and part from the water mass. Examples of this sub-group are: cods, haddock, whittings, pollacks, etc.</i>	Mostly pelagic egg and larvae. E.g. the egg of the hake floats freely to the surface from deep or shallow waters, where they are laid. They drift on the surface, where they hatch. Few demersal larvae also occur (e.g. haddock).
(c) Percomorphs	<i>Perch-like fishes which live preferably in rocky or coral bottom or wherever they may find shelter and food near the sea bed. (E.g. perches, croakers, breams, basses.)</i>	
2. Pelagic fish	<i>Fishes which spend most of their life in the upper layers of the water and feed mainly on plankton or other pelagic fish. Here two sub-divisions can be made:</i>	
(a) Clupeoias (and ecologically related species)	<i>Herring-like fishes which live comparatively near to the shore, dwelling either at or near the surface are: herrings, sardines, sprats, anchovies, menhaden, etc. They make extensive wanderings comparatively close to the coasts, appearing at certain times and places for the purposes of feeding and spawning.</i>	Eggs lying on the bottom or fastened to it or are pelagic. E.g. the Pacific herring which lays adhesive eggs in coastal waters, attached to vegetation or which deposits them on the sea floor (Atlantic herrings). Sardines' eggs drift in the upper layers of the water. Mostly pelagic egg and larvae.
(b) Others	<i>Other examples of fishes which live in bays, inlets, channels and offshore at or near the surface are: jacks, pompanos, amberjacks, etc. Oceanic pelagic fish (e.g. tunas, mackerels, sharks) may in most places live in the waters above the continental shelf where there is higher concentration of food available.</i>	
II. VISITORS		
1. To reproduce	<i>Fish and mammals which migrate to coastal areas for spawning. E.g. Pacific herring which fastens its eggs to the vegetation near coast and in estuaries, channels (milkfish), which spawns in coastal areas. Mulletts spend most of their life in coastal lakes, rivers and bays, spending only short periods in marine waters, spawning probably occurring in sea water, near the coast. Coastal breeders of aquatic mammals which give the birth to the young on coast or on ice, belong to this group. They migrate long distances and feed mainly on fish (e.g. seals).</i>	

TABLE 3 (continued)

Classification	Definitions, examples, habits and habitats	Larval life
2. To feed	Most demersal fish and majority of pelagic species feed on continental shelf, either on the benthonic animals (demersal fish) or on the rich plankton crop (pelagic fish).	Most pelagic larvae feed on the plankton in the waters above continental shelf, which is generally more productive than offshore areas.
3. In transit	<i>Fishes which move from the sea to the fresh water, or from fresh water to the sea for spawning purposes.</i> (E.g. salmon, anadromous fish and eel, <i>Anguilla</i> , catadromous fish). Shads and smelt are other examples. Lagoon and brackish water fish can also be considered as a sub-group of migratory fish. This group of fish live near the bottom in coastal waters and brackish water bays in river mouths, but migrate for certain periods into sea water.	Salmon spawn in fresh water (most species in rivers). The young develop also in fresh water. Eels cover vast oceanic areas during their spawning migrations, and spawning takes place on definite grounds in the ocean at mid water.

List of Special Terms

Abyssal (adj.)	Of the deep sea (usually below 1,000 m. depth).
Amphipod (n.)	A group of crustaceans.
Anadromous fish	Fish which spend most of their adult life in salt water, but periodically migrate into fresh water for spawning purposes.
Asexual (adj.)	Sexless ; without involving sexual differentiation.
Benthonic (= benthic) (adj.)	Pertaining to benthos.
Benthos (n.)	Aquatic animals and plants spending most or all of their life on or in the bottom.
Biota (n.)	Plants and animals, generally referred to a region or a special environment.
Bivagile (adj.)	Of organisms which can crawl on the bottom and also move through the free water.
Bivalves (n.)	Two-valved aquatic animals, such as clams, mussels.
Brood protection	Protection of eggs after being shed from the ovary until hatching, or until the young are able to move and feed.
Byssus (n.)	A bundle of threads by which certain mussels adhere to rocks or other substrate.
Catadromous fish	Fish which spend most of their adult life in fresh water, but migrate into the sea (salt water) for spawning.
Chitin (n.)	A horny substance, forming the harder part of the outer integument of insects, crustaceans, etc.
Clupeoids (n.)	Herring-like fishes ; (adj. — clupeoid).
Coelom (n.)	The body cavity.
Community (= association) (n.)	A group of species living under the particular conditions offered by a particular situation (in a biotope).
Copepod (n.)	A minute crustacean, belonging to the family Copepoda.
Demersal animals, (fish, etc.)	Animals which spend most of their life close to or on the bottom.
Detritus (n.)	Non-living particulate matter in the water.
Echinoderm (n.)	A member of the phylum Echinodermata, marine organisms including starfishes, sea urchins and their allies.
Endo-biota (n.)	Organisms, which live in cavities, or holes and tubes which they construct, in the bottom.
Epi-biota (n.)	Organisms which occur entirely above the bottom surface, but are fixed to it or have some special anchoring organ sunk in the bottom.
Fixo-sessile (adj.)	Of organisms that fasten themselves to the hard bottom or on hard objects on it, during their entire adult life or the greater part of it.
Gastropod (n.)	A member of large class of molluscs, which includes most forms that have a univalve shell.
Habitat (n.)	The site in which an organism normally lives ; refers also to the environment to be found at that site.

Haptic Hemi-sessile (adj.)	Of organisms which, although capable of moving on the bottom during their adult life, usually settle in one place and remain there for extended periods and do not move far away.
In-biota (n.)	Organisms which spend most of their post-larval life within the sea bottom material.
Intertidal zone	The area between high and low water.
Larviparous (adj.)	Of organisms in which embryonic development proceeds to larval stage within the body, the young being produced as larvae which continue development outside the body of the parent.
Libero-sessile (adj.)	Of organisms which lie on the sea bed in the adult stage, but not fixed to it, although incapable of active travel.
Lurker (n.)	An animal whose feeding habit is to lie in wait for prey.
Meso-biota (n.)	Organisms completely buried in the bottom itself or living in its interstitial space.
Nekton (n.)	The free-living actively swimming organisms (e.g. fish).
Neritic (adj.)	Of or pertaining to the coastal and shallow waters of the aquatic environment above the continental shelf.
Pelagic (adj.)	Of or pertaining to surface waters ; e.g. pelagic fish — fish which spend most of their life in the upper layers of the water.
Periderm (n.)	The cortical tissue derived from the phellogen growth.
Phytoplankton (n.)	See plankton.
Plankton (n.)	Small organisms suspended in the water mass without or with only very limited mobility : phytoplankton — plant plankton. zooplankton — animal plankton.
Planktonic (adj.)	Of or pertaining to plankton.
Planktotrophic (adj.)	Of organisms feeding on plankton.
Polychaet (n.)	An organism belonging to the order of annelide worms, Polychaeta.
Repto-vagile (adj.)	Of organisms which during their adult stage are capable of movement only on the sea bed.
Rhizo-sessile (adj.)	Of organisms which are held to the soft bottom (mud or sand) by various means.
Sedentary (adj.)	Of bottom living organisms which, although not fixed to the bottom, move little if at all.
Sessile (adj.)	Attached and not free to move about.
Supra-biota (n.)	Organisms which lie on or move freely about on the bottom substratum.
Suspended matter	Particulate matter in the water.
Turbulence (n.)	Irregular nonlinear movement of water particles in a water mass.
Vagile (adj.)	Wandering, mobile.
Viviparous (adj.)	Of organisms in which development in the parent body continues to assumption of adult form.
Zooplankton (n.)	See plankton.

A BRIEF GEOGRAPHICAL AND HYDROGRAPHICAL STUDY OF BAYS AND ESTUARIES
THE COASTS OF WHICH BELONG TO DIFFERENT STATES

BY COMMANDER R. H. KENNEDY

(Preparatory document No. 12) *

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INTRODUCTION

The International Law Commission, in paragraph 7 of its commentary to article 7 (Bays)¹ stated that it "felt bound to propose only rules applicable to bays the coasts of which belong to a single State". The Commission continued that, as to other bays, it "does not

have sufficient data at its disposal concerning the frequency of such cases or the regulations at present

* This paper was prepared at the request of the Secretariat of the United Nations but should not be considered as a statement of the views of the Secretariat.

¹ Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159), p. 16.

applicable to them". A similar difficulty was experienced in drafting article 13 (Delimitation of the territorial sea at the mouth of a river) and, as the comment on paragraph 2 of that article makes clear, the rule contained in article 13 is, due to a similar lack of the necessary data, confined to cases where the coasts of an estuary belong to a single State.

The purpose of the present study is, therefore, to provide a brief geographical and hydrographical description, together with maps, of bays and estuaries the coasts of which belong to different States. It is hoped that, by so doing, the Conference might have sufficient data upon which to base a broader formulation of the relevant rules.

It will be apparent from the study that it does not pretend to comprehend all such bays and estuaries throughout the world; nor are those included necessarily suitable for navigation. However, within practical limits, each bay or estuary is described in its essential features and references are given to assist in a more detailed examination should it be required. The references are to Charts and Sailing Directions published by the Hydrographic Department of the British Admiralty; when using the Sailing Directions (Pilots), their latest supplements should also be consulted. Miles referred to in the descriptions are sea miles, each constituting one sixtieth of a degree of latitude at the place being described. Special regulations regarding navigation, etc. in the few places where they are known to exist have been included; in the others it has been assumed that the only rules which apply are those customary for "innocent passage".

The configuration of the coasts on the sides of certain bays or gulfs may affect the size of any area lying between the belts of territorial sea therein. The arcs of circles from the prominent points on the coast, or from certain features which dry between tides, control the limits of these belts. They may thus reduce the separation of the limits from a distance equal to the maximum width of the bay less the sum of the breadths of the belts of territorial sea.

Although these are primarily physical studies, the positions of international boundaries, either as terminations of the land boundaries or those through the sea, have been mentioned; these positions, where given, must, however, be considered as approximate only. No comments or suggestions have been offered regarding the continuation of the land boundaries to the high seas. These studies should prove useful examples for the consideration of wider problems of bays and estuaries in general if the existence of the state boundaries be neglected.

I. AFRICA

1. Waterway at 11°N. ; 15°W. (approx.) between French Guinea and Portuguese Guinea (Annex, map No 1)

References : Chart No. 600

Africa Pilot, Volume I, Eleventh Edition, 1953

The area in the vicinity of the position where the land boundary between Portuguese and French Guinea

meets the sea is low and swampy and, as it lies in the proximity of the deltas of several rivers, is liable to change in configuration; the chart is based on an old survey and the scale is small; exact present-day details are not available.

As charted, the terminus of the land boundary is on the north side of the River Tristao, a creek about three-quarters of a mile wide, running in a north-west, south-east direction. This creek joins the Kasset River to the mouth of the River Camponi and separates Aube Island from the mainland; it is about 8 miles long. The Kasset River, flowing past the northern end of Aube Island, is the southern end of the creek separating Katak Island from Aube Island and the mainland; it is nearly a mile wide.

Katak Island and the mainland northward and eastward of it are Portuguese territory; Aube Island is French.

The approach to Kasset River is eastward of Sene and Samba, two sandy islets joined by a drying bank, between 6½ and 3 miles south-westward of Katak Island, and westward of the breakers which extend up to 8 miles south-westward of Aube Island. Depths in this approach are charted between 1½ and 4½ fathoms, but no depths are shown in the Kasset or Tristao Rivers or in the south-eastern approach to the latter.

About 15 miles south of Sene Islet lie Alcatraz Islet and Reef; the islet is a small volcanic rock, 40 feet high. A little over a mile south-westward of this islet, Wreck Islet is charted; this was reported in 1904 to have disappeared and a depth of 2 fathoms was obtained in its position. The reefs and fould ground extend 7 miles south-westward from Alcatraz Islet and are known as Alcatraz Reef.

Conflict Reef, with numerous rocky and sandy dangers, some above water and others below, lies 19 miles south-eastward of Alcatraz Islet and about the same distance southward of the south-eastern end of Aube Island. No soundings are charted between.

There is no entry or anchorage for ships of any size in the River Tristao.

As no detailed survey has been made of the area, there may be many undiscovered dangers there.

2. Estuary of the Kunene River (Annex, map No 2)

References : Chart No. 1806

Africa Pilot, Part II, Tenth Edition 1951

The Kunene, or Cunene, River separates Angola from South West Africa. Near its mouth, it passes through a sandy desert region which is almost rainless, although at times there are heavy dews. It only reaches the sea during the inland rainy season, at other times it is effectually barred by a sandbank on which the sea breaks furiously. The coasts on both sides of the mouth are comparatively straight, but in its immediate vicinity there is a slight inward curvature over a distance less than 5 miles with a penetration from the general line of less than a mile. Roughly half the coastline of the indentation is Portuguese. The area is uninhabited and there are no navigable channels. Great caution is neces-

sary in navigating near the coast as the surveys are very imperfect.

3. Estuary of the Kolente or Great Skarcies River (Annex, map No 3)

References : Charts Nos. 601, 686

Africa Pilot, Part I, Eleventh Edition, 1953

This estuary may be considered to lie between Sallatuk Point in French West Africa and Ballo Point in Sierra Leone, about $15\frac{1}{2}$ miles south-south-eastward. The coast is low, fronted by trees and mangroves and is cut into by many creeks. The Great Skarcies and Little Skarcies, or Kabra, River enter the estuary at its south-eastern end. From the mouth of the latter, the coast trends $17\frac{1}{2}$ miles north-westward to Sallatuk Point and $7\frac{1}{4}$ miles westward to Ballo Point. The whole of the area is shoal and is cluttered with drying mudbanks, the natures of which are continually changing. There are many breakers in the area. Yelibuya Island, low and about 3 miles across, lies close offshore about 5 miles south east of Sallatuk Point; Kortimaw Island, with an extensive drying bank seaward of it, lies $3\frac{1}{2}$ miles further south-eastward, with an islet between it and the coast north-eastwards. In 1933 there was an above-water mudbank 3 miles south-westward of Kortimaw Island; the drying portion of this bank extended 2 miles westward and nearly 3 miles south-westward. The main entrance channel to the rivers allows access to small craft of 9-foot draught; it lies between Yelibuya and Kortimaw Islands and thence between the latter and the coast. Another channel leads between Kortimaw Island and Ballo Point, an extensive bar of shoals, shifting sand and mud, renders it difficult of access.

The boundary between Sierra Leone and French West Africa follows the Kolente River for a considerable way but, before reaching the estuary, branches westward to meet the coast about a mile south-eastward of Sallatuk Point.

4. The mouth of the Manna, or Mano, River (Annex, map No 4)

References : Charts, Nos. 1363, 2478

Africa Pilot, Volume I, Eleventh Edition, 1953

The boundary between Sierra Leone and Liberia reaches the sea at the mouth of the Manna, or Mano, River. The coast on both sides is comparatively straight, and runs in a general north-westerly and south-easterly direction for a number of miles. For the last $2\frac{1}{2}$ miles of its journey, the river flows north-westwards parallel to the coast and is separated from the sea by a narrow strip of tree-covered sand. The mouth of the river is, in effect, closed, and breakers extend around its mouth. The remains of an old factory can be seen near the mouth.

5. Tana River (Annex, map No 5)

References : Chart No. 1359

Africa Pilot, Volume I, Eleventh Edition, 1953

The boundary between Ghana and French West

Africa follows the Tana River to the Tana or Tendo Lagoon, the northern coast of which is French territory, and the eastern end of the southern coast is the territory of Ghana. The French boundary crosses the lagoon in a southerly direction to meet the land boundary which crosses the low spit, about $1\frac{1}{2}$ miles wide, separating the lagoon from the sea, in a southerly direction, to reach the coast close west of the village of Newtown.

The sea coast is comparatively straight for many miles. Access to the lagoon from the sea is about 7 miles west of Assini, situated $12\frac{1}{2}$ miles west of Newtown. Owing to the nature of the bar there, passage into the lagoon is only possible during the Harmattan season.

6. Cavally River (Annex, map No 6)

References : Charts, Nos. 1980, 1365

Africa Pilot, Volume I, Eleventh Edition, 1953

The "thalweg" of the Cavally River forms the boundary between Liberia on the west and French West Africa on the east. The river, about 100 yards wide only on its entrance to the sea, cuts at right angles through a straight length of coastline about 9 miles long, which at both ends bends away in a convex curve. The entrance to the river is between two sandbanks about 20 feet high. There are submerged rocks about a quarter of a mile offshore and three-quarters of a mile south-westward of the entrance.

It is reported that the river can be navigated by small power vessels for about 50 miles; the entrance channel, however, is constantly changing, and its bar has the reputation of being the most dangerous on the coast; surf boats are often capsized and many lives lost annually. Vessels can anchor in depths of 7 to 9 fathoms about a mile south of the entrance. There is a French customs house close to the entrance.

7. Estuary of the Rio Muni (Annex, map No 7)

References : Charts, Nos. 1356, 1887

Africa Pilot, Part II, Tenth Edition, 1951

The "thalweg" of the Rio Muni where it enters the sea forms the boundary between Spanish Guinea and French Equatorial Africa. The Rio Muni flows into the north-east corner of Corisco Bay, and the River Mondah into the south-east corner. This bay has an entrance 33 miles wide and a penetration inland of 17 miles. The coast at the north-east corner of the bay is roughly in the shape of a semi-circle with a diameter of $12\frac{3}{4}$ miles; the Rio Muni enters through the south-eastern side. The breadth across the mouth of the river is about a mile. Within about $5\frac{1}{2}$ miles south-westward of the mouth are the two Spanish islands of Elobey. Isla de Corisco lies midway between the entrance points of Corisco Bay.

Depths in the bay are for the most part shallow, with the exception of the approaches to the two rivers; the approach to Rio Muni has a least depth of about 4 fathoms and runs in a straight line, passing about $2\frac{1}{2}$ miles south of the southernmost point of the coast at the northern end of the bay; the approach to the

River Mondah passes north and east of Isla de Corisco ; both these channels are buoyed.

Other islets in the bay are : Leva, about a mile south of Isla de Corisco ; Conga, with a small drying rock half a mile south-westward, $3\frac{3}{4}$ miles south-south-eastward of Isla de Corisco ; Bane, with detached drying banks up to $1\frac{3}{4}$ miles eastward and $2\frac{3}{4}$ miles north-eastward, about $5\frac{1}{2}$ miles south-east of Isla de Corisco. Other drying banks are : Banc Acanda, $1\frac{1}{2}$ miles north of the western entrance point of River Mondah ; Recife Buyumba, about $1\frac{1}{2}$ miles offshore and about $10\frac{1}{2}$ miles east of Isolote Bane ; a bank and reefs extending $1\frac{1}{4}$ miles south of Isla Elobey Chica and about a mile east of Isla Elobey Grande ; and Piedra Ugoti, about $1\frac{1}{4}$ miles offshore westward of Punta Corona, at the north-western end of the bay.

Both the whole of Corisco Bay and the bay forming its north-eastern end formed between Punta Mosquitos and Pointe Elobey conform to the International Law Commission's definition of a "bay" in article 7 of the 1956 report. About a fifth of the coastline of this smaller bay is French ; about a third of the coastline of the whole of Corisco Bay (excluding that of the islands and islets) is Spanish.

There are no ports in the bay ; there are anchorages off the various settlements in the rivers.

8. Estuary of the Congo River (Annex, map No 8)

References : Charts, Nos. 604, 638

Africa Pilot, Part II, Tenth Edition, 1951

The river Congo flows in a westerly direction to its mouth ; the northern side is Belgian territory and the southern is Portuguese. For the purpose of this description the estuary will be considered as seaward of a line joining Pointe Bulabemba on the northern bank to the entrance to the Rio do Fuma-Fuma on the southern bank, about $2\frac{3}{4}$ miles southward. The northern side comprises the entrances to two creeks lying between Pointe Bulabemba and Pointe Française about $2\frac{3}{4}$ miles west-north-westward, thence the south-west coast of Presqu'île de Banana which continues in a north-westerly direction for 23 miles to Ponta N'gelo, near which is the boundary with the Portuguese territory of Cabinda. The southern side continues in a westerly direction from the mouth of the Rio do Fuma-Fuma for 8 miles, thence turns north-north-eastward for $2\frac{1}{2}$ miles to Ponta do Padrao, whence it turns abruptly south-westwards for $4\frac{1}{2}$ miles to Ponta da Moita Seca. Thus, the entrance to the estuary between Ponta N'gelo and Ponta da Moita Seca is 25 miles wide ; the width between Ponta do Padrao and the low-water line of Pointe Française is $5\frac{1}{4}$ miles, and the breadth southward of Pointe Française is $4\frac{1}{2}$ miles. The penetration inland from the line joining the entrance points is about $11\frac{1}{2}$ miles.

There are no islands in the estuary ; drying banks close to the low-water line of the coast are charted off the mouth of the Rio do Fuma-Fuma, and in the mouths of rivers $2\frac{3}{4}$ and 5 miles westward of that river ; their outer edges do not lie more than half a mile offshore. The low-water line of Pointe Française is situated nearly half a mile southward of that point.

Depths from the coast graduate to the 10-fathom contour, and then descend abruptly into a deep gully running eastward from ocean depths right into the entrance to the river ; depths in this gully, inside the estuary, exceed 300 fathoms in places.

Vessels approaching from north-westward should keep at least $5\frac{1}{2}$ miles off the shore north of the river entrance until within about 3 miles of Ponta do Padrao, when course may be shaped for the river mouth. Beyond a position south-eastward of Pointe Française, the River Congo is well buoyed.

On the northern side the principal port in the estuary is Banana, in the creek east of Presqu'île de Banana, where there is anchorage in 3 fathoms and a wharf ; there is a bar to cross with 18 feet of water over it ; tidal streams are very strong. It is a pilot station for the River Congo. Vessels bound to and from ports in the Belgian Congo must enter or clear there and pass the health officer. On the southern side is the Portuguese port of Santo Antonio do Zaire, the principal town of the district. It lies about three-quarters of a mile within a creek south-east of Ponta do Padrao. There is a bar with only 7 feet of water over it and the river current flows strongly across the entrance.

Vessels awaiting daylight to make the entrance can find good anchorage one to two miles off Ponta da Moita Seca, also half a mile off shore south-west of Ponta do Padrao and $2\frac{3}{4}$ miles west of Pointe Française.

9. Mouth of the Orange River (Annex, map No 9)

References : Charts Nos. 897, 632

Africa Pilot, Part II, Tenth Edition, 1951

The Orange River, near its mouth, separates South West Africa, on its western and northern sides, from the Union of South Africa. The river, within its mouth, is over a mile wide but is full of ready islets ; in the dry season shoals and sandbanks are everywhere visible in its channel. The river breaks through a long sandy spit to reach the sea ; its mouth is only about 175 yards wide, and the sea breaks right across it. For many miles north-westward of the entrance, the coast is comparatively straight and sandy. This nature continues south-eastward for about 2 miles when the coast is fronted by drying rocky ledges. About 7 miles from the mouth, the coast turns from its general south-easterly trend to a south-south-westerly direction for 2 miles to form Peacock Roadstead, where it is reported that some shelter from the swell and the prevailing south-south-westerly wind may be obtained. The boundary is the north and west bank of the River.

II. AMERICA

1. Passamaquoddy Bay (Annex, map No 10)

References : Chart No. 464

Nova Scotia and Bay of Fundy Pilot, Ninth Edition, 1947

The boundary between the United States of America and Canada passes through Passamaquoddy Bay to the sea. The entrance to the bay lies between West Quoddy

Head and Bliss Island, 13 miles north-north-eastward, and is obstructed by Campobello and Deer Islands, both large, and by numerous smaller islands and dangers. The penetration inland of the bay varies between about 10 and 18 miles.

There are three navigable approaches to the inner part of the bay which gives access at its north-western end to the St. Croix River, down which the boundary runs, viz (i) between the coast north-westward of West Quoddy Head and the south end of Campobello Island, thence between the latter island and Moose Island, thence between the latter island and the south-western end of Deer Island; (ii) north of Campobello Island, thence between that island and the east coast of Deer Island and then between the south-west coast of the latter and Moose Island; (iii) between Macmaster Island, with the islets and dangers south-eastward, all lying northeast of the northern end of Deer Island, and the mainland coast further north-eastward. Least depths in the fairways of these channels are: (i) dredged to 12 feet over a width of 500 feet; (ii) 17 fathoms; and (iii) $4\frac{3}{4}$ fathoms. Local knowledge is essential for the navigation of (i) and (iii) for, besides being narrow, these fairways are tortuous and the tidal streams are strong. The rise and fall of the tide is about 20 feet. In general, depths in the middle of the main part of Passamaquoddy Bay are between about 10 and 24 fathoms.

At the south-western end of the bay, south of Moose Island, is the only entrance to Cobscook Bay and several other irregular-shaped bays cluttered with islands.

Small ports within the area are: On the United States side—Lubec, opposite the south-west end of Campobello Island and Eastport on the south-east of Moose Island. On the Canadian side—St. Andrews, on the south-east side of the entrance to St. Croix River; Chamcook Harbour, about 3 miles north of St. Andrews; Welshpool, on the western side of Campobello Island; and Lords Cove on the north-eastern side of Deer Island.

Very approximately, about a third to a half of the coastline of the bay is United States territory (excluding that of the islands).

The Wolves, a group of five islands and a number of rocks, front the entrance to the bay towards the northern end. The southernmost is situated approximately 12 miles north-east of West Quoddy Head and the northern about $6\frac{1}{2}$ miles east of Bliss Island and $4\frac{1}{2}$ miles offshore.

The sum of the lengths of possible closing lines between West Quoddy Head-Campobello Island-Bliss Island could be 8 miles. The bay conforms to the Law Commission's definition in article 7 of the 1956 report.

The sum of the lengths of possible closing lines between West Quoddy Head-Wolves-Bliss Island total about 19 miles, and so the bay in this case would fall outside that definition.

The boundary from the St. Croix River passes in a straight line to the passage between Deer Island and the American coast, thence about midway between that island and Moose Island; after which it continues in straight lines about midway between Moose Island and

the southern end of Campobello Island, to continue between the south-western end of the island and the mainland coast to the Bay of Fundy. About midway between the coast of Campobello Island and Grand Manan Island, it turns south-westward and then runs midway between the latter island and the United States coast.

The boundary lines towards the south-west end of Campobello Island were established after consideration of the fishing and other interests of the two States and do not form a median line or "thalweg". The navigable part of the channel at one place is on the United States side of the boundary.

2. Gulf of Honduras (Annex, map No 11)

References: Charts, Nos. 1573, 1219

West Indies Pilot, Volume I, Tenth Edition, 1941

The Gulf of Honduras at the western end of the Caribbean Sea is about 50 miles across at its entrance and penetrates about 46 miles. At the south-western end is Honduras Bay, roughly rectangular in shape, with an entrance $12\frac{1}{2}$ miles across between Cape Three Points and Orange Point and a penetration of $12\frac{1}{4}$ miles in a south-westerly direction and about 20 miles in a southerly direction. The boundary between British Honduras and Guatemala is the River Sarstoon, which enters the bay on its western side about 12 miles south-westward of Orange Point. From Cape Three Points the coast trends in a straight line south-eastward for about 33 miles, then turns abruptly north-eastward for 27 miles. About 21 miles south-east of Cape Three Points, the Rio Moncagua enters the sea; this is the boundary between Guatemala and Honduras.

Fronting the coast of British Honduras up to a distance of about 5 miles off shore for a distance of 18 miles north-eastward of Orange Point are a number of sand cays and shoals. Depths in the bay shoal from about 12 fathoms in the middle gradually to the shore. A dangerous spit extends about $7\frac{1}{2}$ miles off shore from a position 7 miles south-south-eastward of Cape Three Points. There are several detached shoals charted.

From a position about 17 miles north of the mouth of the Rio Moncagua, a string of sand cays, reefs and dangers extends north-north-eastwards and northwards to front the coast of British Honduras up to 20 miles off-shore. The main shipping tracks to Honduras Bay and northwards to Belize and other ports of British Honduras pass between the cays and dangers on the northern side and the mainland southward.

The coast trends south-eastwards from the mouth of the Rio Moncagua for about 6 miles and then turns north-eastward to Omoa Harbour. The distance from the mouth of the river to the harbour is 15 miles, but the bight does not conform to the definition of a "bay" in the Law Commission's 1956 report.

There are no islands or drying features in Honduras Bay nor in the vicinity of the coast near the mouth of the Rio Moncagua.

Guatemalan ports within Honduras Bay are Port Livingstone at the entrance to the River Dulce, leading to an extensive lake—vessels drawing more than 6 feet

anchor off; Santo Tomas, in a small bight in the south-east corner of the bay, has a channel dredged to 30 feet leading to a wharf; Puerto Barrios, in the same bight, has a pier with a berth of 25 feet alongside.

The coastline of Honduras Bay measures very approximately about 70 miles, out of which about 14 miles are in the territory of British Honduras.

3. Gulf of Fonseca (Annex, map No 12)

References: Charts, Nos. 1960, 1049

West Coasts of Central America and United States Pilot, Sixth Edition, 1950

The entrance to this gulf lies between Punta Cosequina on the south and Punta Amapala, 9 miles north-westward. The gulf is shaped somewhat like that of a hand with "fingers" formed by a bay in which is Puerto La Union, Bahia Cismuyo, Bahia San Lorenzo and the "thumb" by the indentation in which is Moneypenny Anchorage and into which the Negro River, Estero Blanco and Estero Real flow. The penetration inland from the line joining the entrance points to the various "fingers" are: 30, 27, and 32; it is 32 miles to the end of the "thumb".

A large proportion of the coastline of the gulf is mangrove swamp, while other parts form the steep coastline round nearby volcanos. There are a number of islands in the gulf, the principal ones are: Farallones, about 9 miles within the entrance and 5 miles from the eastern shore; Meanguera and Meanguerita, near the middle of the "palm" 10 miles within the entrance and 6 miles from the north-west shore; Conchagueta, midway between Meanguera and the shore and the shore north-westward; Tigre, about 3½ miles north-east of Meanguera; Martin Perez, 2 miles north of Conchagueta, with Isla Punta Sacate three-quarters of a mile north-westwards and the same distance off shore; Exposicion, about 1½ miles north-west of Tigre with Inglesera, Violin, Coyote and Garova within 2½ miles westward of it, and all lying in the approach to Bahia Cismuyo; Sacate Grande, about a mile north of Tigre, between Bahia Cismuyo and Bahia San Lorenzo and separated from the mainland by a narrow creek.

The boundary between El Salvador and Honduras meets the gulf in the entrance to Rio Goascoran, on the north side of the "finger" in which is Puerto La Union; the boundary between Honduras and Nicaragua meets the sea in the "thumb" in the vicinity of the mouths of the Negro River and Estero Blanco. Of the islands, Meanguera, Conchagueta, Martin Perez and Isla Punta Sacate are territory of El Salvador and Sacate Grande, Tigre, Exposicion, Inglesera, Violin, Coyote and Garova are territory of Honduras.

Depths in the entrance to the gulf are about 20 fathoms, these in general graduate to the shores; north-eastwards, northwards and north-westwards of Meanguera depths are everywhere less than 6 fathoms. In the "fingers" drying banks extend off shore as far as 1½ miles in places, with shallow depths a considerable way seaward of the low-water lines. Nearly the whole of the western side of Bahia San Lorenzo is filled by an extensive detached drying bank. Another

small drying bank lies south of this bay and 3½ miles east of Tigre. Except for a few channels, the whole of the northern end of the gulf is shallow.

Ports within the gulf are: Amapala, a port of entry and the only accessible one on the Pacific coast of Honduras, at the north-west corner of Tigre. It has an open anchorage in depths of 7 fathoms, but limiting depths in the approach are 3½ fathoms. The fairways lie on either side of Meanguera.

Puerto La Union, or Cutuco, in the north-west "finger" of the gulf, is a land-locked harbour and the principal port of entry for El Salvador; there is a wharf with 30 feet of water alongside, but the limiting depth is 24 feet on the bar in the approach; the fairway runs between Conchagueta and the mainland westward.

Estero Real in Nicaragua is navigable for about 20 miles by vessels which can cross the bar, which has 18 feet over it. There are a few trading stations in this river. Well-sheltered anchorage may be obtained in Moneypenny Anchorage in the approach to this river.

As a very approximate estimation, about half the coastline of the gulf is territory of Honduras and the other two States have about a quarter each.

In 1916-1917 the question of the status of the Gulf was brought before the International Court of Central American Republics. Briefly, the Court in its Judgment stated that the gulf was an "historic possessed of a character of a closed sea", and that, outside the three-mile limits of territorial waters enclosing the exclusive property of each of the three States, co-partnership should exist in the ownership of the remaining waters.

4. Salinas Bay (Annex, map No 13)

References: Charts, Nos. 587 (Plan), 1049, 2145

West Coasts of Central America and United States Pilot, Sixth Edition, 1950

The boundary between Costa Rica and Nicaragua meets the sea on the northern side of Salinas Bay on the Pacific side of Central America.

The bay, running in a general east-south-easterly direction, is entered between Punta Sacate and Punta Arranca Barba about 2½ miles north-north-westward. It has a length of 4½ miles, and minimum and maximum widths of 2 and 3 miles. About 1¼ miles east of Punta Sacate, and three-quarters of a mile off shore, lies the island of Salinas; south-eastward of this, and extending up to half a mile off shore, lies a group of detached drying rocks. A group of smaller rocks, some above-water and others drying, lies 400 yards off shore, half a mile east of Punta Arranca Barba. The head of the bay dries out in places for nearly half a mile.

Depths in the entrance are from 11 to 15 fathoms, further in towards the middle of the bay, they are 6 to 9 fathoms; the coastal banks, with less than 3 fathoms over them, extend up to half a mile off shore and rather more than a quarter of a mile east and south of the island of Salinas. On the latter, and 200 yards north-west of the island, is a small above-water rock and a drying rock about 400 yards east of the island. Good sheltered anchorage from a westerly blow may be obtained south-

south-westward of the island of Salinas. There are no ports in the bay.

The international boundary meets the coast about two-thirds of the way along the northern shore, thus about one-third of the coastline is Nicaraguan territory.

The bay conforms to the definition in article 7 of the Law Commission's 1956 report.

A promontory, of which Punta Sacate forms the northern point, separates Salinas Bay from Elena Bay, the south-western entrance point of which is Punta Blanca, about 11 miles south-westward of Punta Sacate. A line 15 miles long running northwards to the Nicaraguan coast, would enclose an area of sea which conforms to the Law Commission's definition of a "bay" in its 1956 report. Considering these two bays as one indentation, about one-quarter of the coastline would form Nicaraguan territory.

5. Chetumal Bay (Annex, map No 14)

References : Chart No. 1204

West Indies Pilot, Volume I, Tenth Edition, 1941

Chetumal Bay, the entrance to which lies about 25 miles north of Belize, runs in a general northerly direction. Its western side is formed by the coasts of British Honduras and Mexico, its eastern side by the Mexican coast and by the west coast of Ambergris Cay, which is territory of British Honduras. The entrance to the bay lies between the south end of Ambergris Cay and the coast of British Honduras 12 miles westward. The penetration of the bay is 57 miles. The general width is about 13 miles and the extreme width about 20 miles.

Ambergris Cay is about 19 miles long in a north-north-easterly direction, and has an average width of about $3\frac{1}{2}$ miles; between this and the mainland are a number of cays, the principal of which are Mosquito, Guana, Blackadore Swab and Deer Cays. Other islets are Shipstern Cay, close to the mainland coast of British Honduras and 24 miles within the entrance; Tamalca Island on the west side, close off the Mexican coast and 43 miles within the entrance; also an unnamed cay, about a mile north-west of Ambergris Cay.

Rivers flowing into the bay, each forming a highway for inland communication, are, on the west side, New River, Hondo River and Rio S. Jose; on the north side, Rio Kirk. New River is in British Honduras; the Hondo River forms the land boundary and the others are in Mexico.

The whole of the bay is shallow. A bar of mud, with depths of 5 feet over it, extends right across the entrance to the bay; channels within the bay leading to the mouths of the rivers are marked by beacons and have depths of from 8 to 12 feet.

There are settlements at Corosal near the mouth of the New River and at Consejo, about 6 miles north-eastward, in British Honduras; and at Payo Obispo or Chetumal, close north of the Hondo River, at Calderitas and Ubero, about 4 and 10 miles, respectively, northward of that river, in Mexico.

The boundary through the bay has been laid down

in straight lines as indicated on the chartlet; it meets the sea after passing through the narrow channel, named Boca Bacalar, between the north end of Ambergris Cay and the southern tip of the Mexican coast. A narrow canal is charted cutting through this southern tip of the Mexican coast and thus giving access to the Mexican part of the bay entirely through Mexican territory.

Very approximately, half the coastline is in the territory of each state.

6. San Juan River (Annex, map No 15)

References : Chart No. 1139

West Indies Pilot, Volume I, Tenth Edition, 1941

The San Juan River forms the boundary between Costa Rica and Nicaragua on the Caribbean side of Central America. The river reaches the sea through a delta and the boundary follows the principal branch, close to the mouth of which is the small port of San Juan del Norte or Greytown Harbour. Owing to silting, this port is almost disused now. Southward of the delta, the coast runs in a south-south-easterly direction for many miles and is comparatively straight. The coast, at the delta itself, trends at right angles to this stretch for about 5 miles whence the main coasts run northwards and north-north-eastward to form a narrow indentation with a length across its entrance of nearly 40 miles and a maximum penetration of about 12 miles. This in no way conforms to the definition of a "bay" in article 7 of the Law Commission's 1956 report.

The delta is formed primarily of swamp, low sand and mud bars, and is fronted by spits, on which the sea continually breaks heavily, enclosing shallow lagoons; all are liable to frequent changes. In 1937, the main channel entrance had but 5 feet over the bar.

The best anchorage is about $2\frac{1}{2}$ to 3 miles northward of a disused light tower towards the western end of the delta, in depths of about 10 fathoms, and always at least a mile outside the breakers, which extend up to half a mile off shore. Eastward and southward of the delta, depths of 100 fathoms lie 7 or 8 miles off shore, but 5 miles northward they are 15 miles off. There are no dangers in the approach other than the coastal banks.

7. Mazanillo Bay (Annex, map No 16)

References : Charts, Nos. 463, 486; U.S.H.O. No. 2646

West Indies Pilot, Volume III, Fourth Edition, 1946

Mazanillo Bay may be considered to lie between Iacos Point and the eastern extreme of the entrance to Fort Liberté Bay about 6 miles south-westward, and to lie in the angle of the coast where the north coast of the Dominican Republic turns from a general south-westerly direction to the westerly direction of the coast of Haiti. The penetration inland is 5 miles. Iacos Point is situated on the north-west side of a peninsula of which Monzillo Point is the southern extreme. For this extreme, the coast turns north-north-eastwards for $2\frac{1}{2}$ miles and thence trends southward for about $5\frac{1}{4}$ miles to the entrance to Estero Balza, a shallow lagoon, the entrance of which is now closed by mangroves, thence the coast

turns abruptly westward. The mouth of the Massacre River, which forms the boundary between the Dominican Republic and Haiti, is $1\frac{1}{2}$ miles west of the entrance to Estero Balza.

Mangrove swamps form the northern and eastern sides of the bay; in the latter side are two shallow indentations or lagoons, most of which lie behind the coast, the southern of these is fronted by a mangrove islet named Barriga de Vaca.

The bay is deep except on its northern and eastern sides. There are depths of 320 fathoms in the entrance, and depths of 100 fathoms are found less than half a mile from the southern shore, within a mile of Monzillo Point and about $1\frac{1}{4}$ miles from the south-east corner of the bay. East and south-east of the promontory on which is Monzillo Point is a shallow coastal bank with depths of less than 3 fathoms; depths to 10 fathoms extend up to half a mile from this bank. About a mile east of the mouth of the Massacre River is Puerto Libertador, a small settlement with a pier, 745 feet long, having a depth of 46 feet at its outer end, decreasing to 10 feet at its inner end.

Approximately one-third of the coastline of the bay as described above lies in the territory of Haiti.

North and north-west of the promontory at the northern end of the bay are the Seven Brothers, small islets lying at the western end of the extensive shallow Monte Cristi Bank. Arenas, the outermost, lies 7 miles offshore and Torotu, the innermost, is $2\frac{1}{2}$ miles offshore.

Close beyond the bay westwards is the narrow entrance, about $1\frac{1}{2}$ miles long, leading to Fort Liberté Bay, which is land-locked with a length of about 5 miles and a general width of about a mile. There is a good anchorage in depths of 9 fathoms off the settlement of Fort Liberté.

8. Gulf of Paria (Annex, map No 17)

References: Charts, Nos. 1480, 1801, 483A
West Indies Pilot, Volume II, Tenth Edition, 1955

The Gulf of Paria is an extensive gulf roughly rectangular in shape, with an east-west length of about 70 miles and a north-south breadth of about 30 miles. It is entered near its north-east corner through the Dragon's Mouth, and near the middle of the southern side through the Serpent's Mouth. Both these entrances are described in the study on "Straits which constitute Routes for International Traffic" (A/CONF.13/6)².

The north-eastern, eastern and approximately half the southern shore are formed by the coasts of Trinidad and the remainder by the coast of Venezuela.

Depths in the middle of the Gulf are from 16 to 10 fathoms. The western and south-western shores are fronted by extensive, shallow coastal banks, depths of less than 3 fathoms being found in places up to 10 miles offshore. The western and south-western sides form part of the delta of the Orinoco River.

Guiria, on the Venezuelan coast on the north side of the Gulf, is a port of entry for the San Juan River which empties into the western end of the gulf. There is a pier 200 feet long with a depth of 15 feet alongside. The important oil shipping of Caripito is 53 miles up the San Juan River; vessels with a draught of 32 feet in fresh water can berth there.

Pedernales and Capure on the south side of the Gulf have important oil installations near them.

Ports in Trinidad are Point Fortin and Brighton on the south shore, Point à Pierre on the east shore and Port of Spain on the north-east shore. All are oil-loading ports and can accommodate deep draught vessels.

In 1942, a treaty was signed between the Governments of the United Kingdom and Venezuela dividing the submarine areas of the Gulf. This dividing line runs approximately in a straight line from the south-western end of the Dragon's Mouth to the Serpent's Mouth. This has no relation to the status of the waters above the continental shelf.

The following regulations are enforced by Venezuela: in Venezuelan territorial waters the Venezuelan flag must be displayed continuously at the fore; at night, on demand, the name of the vessel must be signalled by morse lamp.

9. Bay of Ancón de Sardinias (Annex, map No 18)

References: Chart No. 2257
South America Pilot, Volume III, Fourth Edition, 1954

Bahia de Ancón de Sardinias is a shallow bight in the coast between the mouth of Rio Vainillita and Punta Mangles, 33 miles north-north-eastward. Its penetration is about 12 miles. In the bight are four large openings which resemble river mouths and are the entrances to a complex system of creeks resembling a delta.

From south to north these are: R. Santiago, the entrance to which is reputed to be shallow; La posa del Puerto, about 4 miles long in a south-easterly direction and three-quarters of a mile wide, with depths of from $2\frac{1}{2}$ to 4 fathoms, but depths in the approach are 2 fathoms; Bahia San Lorenzo, also with depths of 2 fathoms in the approach, is about 4 miles long with widths varying between $1\frac{1}{2}$ miles and half a mile and it has depths of from 6 to 10 fathoms; Panguapi Bay, about 2 miles wide, is the estuary of the River Mataje which forms the boundary between Ecuador and Colombia; no details are available, but the estuary appears to be shallow. North of Panguapi Bay is the southernmost mouth of the delta of the River Ancón.

The whole of the eastern side of the bay is filled with shallow and drying banks and local knowledge for navigation to the entrances named above is essential; the whole coast is low and featureless. Vessels should not normally approach the coast within depths of 10 fathoms, which lie between 4 and 8 miles offshore.

Población de la Tola, a small port, lies about a mile within the River Santiago. Puerto de San Lorenzo lies at the head of Bahia San Lorenzo and about 12 miles east-north-east of La Tola; it has rail communication with Quito, the capital of Ecuador.

² *Supra*, p. 114.

Including only the most seaward coastlines of the outer islands, about one-third of the coastline of the bay lies in Colombia.

Available charts are inadequate for a fuller description.

10. Bay of Oyapok (Annex, map No 19)

References : Chart No. 1802

West Indies Pilot, Volume II, Tenth Edition, 1955

The Bay of Oyapok is the estuary of the River Oyapok which forms the boundary between French Guiana on the west and Brazil on the east. The coast of the estuary on its eastern side trends north-north-eastwards to Cape Orange, the natural entrance point, where it turns south-eastwards; that on the western side trends northward to a prominent point abreast Mont d'Argent, and then trends north-westwards, past a point fronting a hill called Fausse Mont d'Argent, about 5 miles from Mont d'Argent. With the exception of these hills, the whole coast is low and fronted with mangroves. Cape Orange is a rounded cape; the low-water line is charted as lying up to 3 miles northward of it.

The entrance to the estuary may be considered as lying between the low-water line off Cape Orange and the point close to Mont d'Argent, a distance of 10 miles, or between that cape and the coast off Fausse Mont d'Argent, a distance of about 12½ miles. The penetration to where the River Oyapok narrows to about 2 miles is in the first case about 12 miles, and in the second about 15 miles.

The River Uassa enters the estuary on the eastern side about 6 miles south-south-west of Cape Orange; it has depths in its entrance of 8 feet.

The River Uanares flows into the western side of the estuary about 8 miles south of Mont d'Argent; it also is shallow.

The estuary is encumbered with shoals on which the sea breaks heavily during the winter; it has not been completely surveyed and navigation in it is difficult and dangerous. The 3-fathom depth contour is charted 7 miles offshore in the approaches. Two drying banks are charted off the mouth of the River Uanares, but the survey is old and there is little doubt that depths and drying features in the estuary are liable to frequent changes.

Vessels of less than 10-foot draught can anchor about a mile off the coast near Point d'Argent, where there is a small jetty. Vessels of light draught can ascend the River Oyapok for about 30 miles to St. George.

About half the coastline is Brazilian territory.

11. Estuary of the Maroni River (Annex, map No 20)

References : Charts, Nos. 534, 1802

West Indies Pilot, Volume II, Tenth Edition, 1955

The River Maroni forms the boundary, near its mouth, between French Guiana and Surinam; it enters the sea through a comparatively straight stretch of coast-

line which runs in a general west-north-westerly direction for many miles. The entrance to the river proper lies between Pointe Française on the east and Galibi Point about 2 miles westward. From the latter point the coast runs north-north-westward for 5¾ miles to Kaaimanshoofd, the western natural entrance point of the estuary, and thence turns westward. From Pointe Française, the coast turns abruptly east to form the mouth of Rivière La Mana which, flowing west-north-westwards, is separated from the sea by a narrow neck of land terminating at Pointe Isère, the eastern natural entrance point, about 3 miles east-north-east of Pointe Française. The low-water lines of the coast extend about 1½ miles and half a mile north of Pointe Isère and Kaaimanshoofd respectively. The estuary thus has an entrance about 8½ miles wide, with a penetration of about 4½ miles.

The estuary is shallow, but the tide rises about 8 feet at spring tides. It is approached between Tijger Bank on the west and Banc Français on the east. The former, with depths of less than 6 feet, extends about 8 miles north of Galibi Point—there is a drying patch about 3½ miles north of that point; the latter, with similar depths, extends about 6 miles north of Pointe Française. In 1955, least depths on the recommended track through the estuary were 7 feet, and ships of about 15-foot draught could reach Albina in Surinam and St. Laurent in French Guiana, both about 15 miles above Galibi Point, Rivière La Mana can be navigated by vessels of about 12-foot draught to Mana, a French settlement, about 10 miles within Pointe Isère.

The recommended track into the Maroni River passes close to the French shore at and within Pointe Française. The track from seaward is marked by buoys, which are moved to conform with the alterations in depths between and over the banks. Local knowledge is essential.

About one-third of the coastline of the estuary is French.

12. Estuary of the Corentyn River (Annex, map No 21)

References : Charts, Nos. 99, 1801

West Indies Pilot, Volume II, Tenth Edition, 1955

The boundary between British Guiana and Surinam follows the Corentyn River near its mouth. The estuary of the river may be considered to extend seaward from a line joining Bluff Point on the east bank to a position on the British Guiana coast 4½ miles westward. The coast from Bluff Point trends north-eastward for 7 miles, and then turns eastward; Turtle Bank, which dries, extends up to 2½ miles offshore from this latter bend in the coast. The Nickerie River enters the estuary on its south-eastern side about 3 miles north-east of Bluff Point. The coast from opposite Bluff Point trends northward for about 5 miles, and then gradually trends in a curve north-north-westward and north-westward. The outer end of the estuary may be considered as a line joining the north-west corner of Turtle Bank to a position on the coast of British Guiana 15 miles west-north-westward.

The estuary is shallow; the 3-fathom contour lies about 2 miles north of Turtle Bank and continues in a north-westerly direction across the approach to the estuary; at the north-western end it is about 8½ miles off shore. Near the middle of the estuary are two banks, close together and shallower than the rest of the estuary; navigation channels lie both east and west of them. Depths in the channels across the bar are about 8 feet and the rise of the tide is about 8½ feet. Tidal streams are strong near the river mouths.

Five drying banks are charted in the estuary; these lie 1¾ miles north-west of Bluff Point; 4 miles west-north-west of that point and three-quarters of a mile off shore; 5¼ miles north-west of the point and three quarters of a mile off shore; 5½ miles north-west of the point and nearly 1½ miles off shore; and 4¾ miles north-west of the point and 2¾ miles off shore.

In the winter, heavy seas occur in the estuary and ships of 9 feet draught only can enter the river—in the summer a draught of 16 feet is possible. The river gives access to the settlement of Tropica in Surinam about 60 miles up the river.

The small ports of Niew Nickerie and Wageningen lie about 2½ and 24 miles within the Nickerie River. They can be reached by vessels with a 13½-foot draught.

About half the coastline of the estuary is Surinam territory.

13. Boca de Capones (Annex, map No 22)

References: Charts, Nos. 586, 1813

South America Pilot, Volume III, Fourth Edition, 1954

The boundary between Peru and Ecuador runs northwards to meet the coast in Boca de Capones, a narrow inlet running approximately east and west between the mainland on the south side of Golfo de Guayaquil and several islands close off shore. The eastern end of Boca de Capones connects with Estero Grande, a similar, but wider inlet, and its western end with the Pacific Ocean.

Abreast the termination of the land boundary, the waterway is about a mile wide between the mainland and the south side of Isla Templeque, but is obstructed near its middle by an islet about a mile long and half a mile wide. About a mile west of the boundary, the waterway is constricted to about half a mile in width. It then continues westward between the north side of Isla Mato Palo and the south coast of an unnamed island of which Punta Payana is the north point; Boca Payana separates this island and Isla Templeque. The waterway thence widens to a general breadth of nearly 1¼ miles and continues westward for about 3½ miles; it is, however, obstructed by Isla Correa, about 3 miles long and half a mile wide, and by three islets in the channel south of the island and two islets and two drying mud flats north of the island. The waterway thence continues north-westward for about 2 miles to its entrance into the Pacific, having a general breadth of rather more than half a mile. Within three-quarters of a mile seaward of the entrance are two drying mud banks. South of Isla Correa, a creek named Estero del Salto leads west-south-westward to Bahía de Tumbes.

Depths in both Boca de Capones and Estero Grande are shallow and in general vary between one and 7 feet. The rise of the tide is about 6 feet.

It is most probable that the coastline and depths in the area are subject to continual change.

There are no ports within the area.

Accepting that the islands north of Boca de Capones are territory of Ecuador, the coastlines are about equally divided between that state and Peru.

14. Rio de la Plata (Annex, map No 23)

References: Charts, Nos. 2522, 3064, 3561, 1749, 2039

South America Pilot, Part I, Ninth Edition, 1945

Rio de la Plata is an extensive, funnel-shaped estuary formed by the confluence of Rio Parana and Rio Uruguay; the latter river forms the boundary between Uruguay and Argentina. The northern shore of the estuary is Uruguayan territory and the south-western Argentinian. As generally accepted, the entrance lies between Punta del Este and Cabo San Antonio, 120 miles south-westward; the penetration inland is about 160 miles. The estuary is remarkably shallow. The outer part seaward of Montevideo and Punta Piedras, about 57 miles south-westward, is divided into two channels by the extensive shoals Rouen Bank, 50 miles north-east of Cabo San Antonio, and Banco Ingles, together with Archimedes Bank, about 35 miles further northward. Several islets lie off the Uruguayan coast between Punta del Este and Montevideo, the most seaward of these are I. de Lobos, 4½ miles south-south-east of Punta del Este, and I. de Flores, about 6 miles off shore and about 12 miles east of Montevideo.

The inner part is encumbered with extensive shallow banks with less than 3 fathoms over them, which almost fill the estuary. The principal of these are Banco Ortiz, extending from the northern shore; Banco Chico, midway between that bank and the coastal bank extending from the Argentinian shore; and Playa Honda, filling the north-western end of the estuary. Channels, marked by buoys and beacons, have been dredged through these banks to give access to the various ports.

Isla Farallon, the most seaward of a group of islands, lies 3½ miles west of Colonia, about 88 miles above Montevideo; the estuary here is about 20 miles wide. About 24 miles north-west of this island is Isla Martin Garcia; this lies in the mouth of the Rio Uruguay and abreast the delta of the Rio Parana. The estuary is here about 12¾ miles wide. About 10 miles further north, the mouth of the Rio Uruguay narrows to a width of about 4 miles.

The principal ports in the estuary are:

On the coast of Uruguay: Montevideo, about 60 miles west of Punta del Este, channel dredged to 33 feet; Colonia Roads, about 88 miles above Montevideo, which vessels with draughts of less than 15 feet can reach.

On the coast of Argentina: La Plata, about 21 miles south of Colonia, channel dredged to 25½ feet; Buenos Aires, 27 miles north-westward of La Plata, dredged to 27½ feet.

Depths are maintained in the entrance to the Rio Uruguay to allow vessels drawing up to 23 feet to enter and navigate for about 100 miles.

Pilotage is compulsory in the estuary, except for coasting vessels, beyond a line joining Montevideo to Punta Piedras. A vessel bound for an Uruguayan port on Rio Uruguay should either pick up an Uruguayan pilot at Montevideo or take an Argentine pilot, who will conduct her as far as the roadstead of the Uruguayan port.

About half the coastline of the estuary is Uruguayan.

15. Estuary of the Coco (Wanks) River (Annex, map No 24)

References : Charts, Nos. 2425, 1218
West Indies Pilot, Volume I, Tenth Edition, 1941

Information regarding the estuary is scanty and old; it is known that the coastline and depths are liable to frequent changes due to the alluvial deposits from this large river.

The river near its mouth forms the boundary between Honduras on the north and Nicaragua on the south. The land everywhere near the entrance is low and swampy and covered with trees.

Almost filling the entrance in the delta is Isla Martinez, an island about $1\frac{3}{4}$ miles long and nearly a mile wide. The main entrance to the river, less than a quarter of a mile wide, lies southward of this island, between it and Isla San Pio, a long narrow islet. Southward of the latter is a shallow lagoon about $1\frac{1}{2}$ miles long and half a mile wide, almost enclosed by other islets. There is a secondary narrow and shallow entrance channel west of Isla Martinez.

Within a mile eastward and south-south-eastward of Isla Martinez lie other islets. Depths of less than 3 fathoms are charted within $1\frac{3}{4}$ miles north, east and south-east of Isla Martinez and these shallow depths are reported to be extending. A shifting bar fronts the river entrances, having depths from 3 to 6 feet, and the sea constantly breaks on it. At high water, vessels drawing 4 feet can at times cross the bar to reach Puerto Cabo Gracias a Dios on the south side of Isla Martinez.

16. Rio Grande (Annex, map No 25)

References : Charts, Nos. 3980 ; U.S.C. and G. 1117
West Indies Pilot, Volume I, Tenth Edition, 1941

The Rio Grande separates Mexico on the south from the United States of America on the north. The river enters the sea in a north-easterly direction through a comparatively straight stretch of coastline running in a general north-south direction for many miles. The river mouth is narrow, and is fronted by a bar over which it is reported that a depth of about 4 feet can be carried. No recent survey has been made and the channel is changeable.

By international agreement the river is not used for navigation, and special permission is necessary for any boat to enter it. The port of Brownsville lies on the

northern bank about 55 miles from the mouth by river, but about 20 miles in a direct line. This port is reached by a canal leading from Brazos Santiago, about 6 miles north of the river entrance. Brazos Santiago is a narrow pass leading into Laguna Madre, an extensive, shallow lagoon, separated from the sea by Brazos and Padre Islands, two long and very narrow strips of land. The former, in 1940, was no longer an island, but joined the mainland immediately north of the mouth of the Rio Grande.

III. ASIA

1. Gulf of Aqaba (Annex, map No 26)

References : Charts, Nos. 756, 3595
Red Sea and Gulf of Aden Pilot, Tenth Edition, 1955

The Gulf of Aqaba is a long narrow gulf on the eastern side of the Sinai Peninsula. The western shore is Egyptian, the eastern shore is Saudi-Arabian and the head of the gulf is Israeli and Jordanian territory. The islands of Tiran and Sinafar front the entrance. The length of the gulf is about 96 miles. The breadth at the entrance between Nabq and Ras Fartak is $5\frac{3}{4}$ miles. About 17 miles above Ras Fartak the breadth is $14\frac{1}{2}$ miles, which is the widest part of the gulf; thence abreast El Kura it is $12\frac{1}{2}$ miles wide, abreast El Mamlah, the width is 9 miles, thence this general width is maintained, varying from between $8\frac{1}{2}$ and 11 miles, to within 15 miles of the head. The head then narrows to a width of 4 miles abreast Ras el Masri, whence a general width of about 3 miles is maintained for 4 miles to the head.

The whole of the gulf is deep; depths of over 800 fathoms occur near its middle.

The only islets inside the gulf are Humaidha and Fara Un, both close inshore, the former off the eastern side $20\frac{1}{2}$ miles from the head, and the latter off the western side $7\frac{1}{2}$ miles from the head.

Tiran Island, in the approach, is separated from the Egyptian coast by the Strait of Tiran, about 3 miles wide; it lies about $4\frac{1}{2}$ miles south of Ras Fartak; Sinafar Island lies about $1\frac{1}{2}$ miles east of Tiran, with a reef in between. The north-west, north and east coasts of these islands are fronted by drying coral reefs. About midway between the west side of Tiran Island and the Sinai coast, westward, a line of drying coral reefs lies diagonally across the strait, forming on the west, the Enterprise Passage and, on the east, the Grafton Passage. The former has a minimum breadth of 1,300 yards, and the latter a minimum breadth of 950 yards between the central reefs and those extending from the coasts. Both these passages are deep. East and north of Sinafar and Tiran islands there would appear to be a tortuous channel between the coral reefs into the gulf, with a least depth of 9 fathoms and a width of less than half a mile; this area has not been surveyed in detail, and the available information is very old.

The Jordanian port of Aqaba lies on the eastern side at the head of the gulf, and the Israeli port of Eilath is on the western side of the head.

Of the coastline, over 100 miles are in the territory of both Egypt and Saudi Arabia, while about 3½ miles are territory of Jordan and about 6 miles are territory of Israel.

2. Shatt al-Arab (Annex, map No 27)

References : Charts, Nos. 2884, 3842
Persian Gulf Pilot, Tenth Edition, 1955

The Shatt al-Arab is a large river combining the waters of the Rivers Tigris and Euphrates, which enter the head of the Persian Gulf. Near its mouth, its eastern bank forms the boundary between Iraq to the west and Iran to the east.

The river mouth is funnel-shaped; at Fao, the river is about half a mile wide, it thence widens gradually over a distance of 5½ miles to its mouth, where it is about 4¾ miles wide, between Ras al Bishr and Ras al Abadan north-eastward. Both banks are very low and swampy and are fringed with drying mud banks.

Extensive drying mud banks extend south-eastward from Ras al Bishr and Ras al Abadan; the former, Maraqat Abdullah, up to 8¾ miles offshore, and the latter, Maraqat Abadan, up to 6½ miles; it is probable that both extend to seaward. Depths under 3 fathoms extend for about 4½ miles further seaward of these banks and form a bar. For a considerable distance seaward of the bar, depths are irregular. An artificial channel, marked by buoys, beacons and lights, has been dredged across the bar, giving access to vessels of about 32-foot draught at high water spring tides. The rise of the tide is about 9½ feet.

The principal ports in the river which can be reached by vessels of the above-mentioned draught are Fao and Basrah on the Iraqi side and Abadan and Khorramshahr on the Iranian side. Abreast the two latter ports, the international boundary leaves the bank and runs in the *thalweg* of the river.

Pilotage is compulsory within the river and its direct approach. The limits of the port of Basrah extend from the sea for 88 miles up the river. There are various regulations in force regarding speed, overtaking, entering the dredged channels on a falling tide, etc.

The amount of coastline at the river mouth appertaining to Iraq and Iran is about equally divided, but it should be remarked that the international boundary is the Iranian bank of the river.

3. Khor Abdullah (Annex, map No 28)

References : Chart No. 2884
Persian Gulf Pilot, Tenth Edition, 1955

Khor Abdullah separates the eastern side of the large island of Jazirat Bubiyan from the mainland of Iraq; Khor Sabya, a narrow creek only available for boats at half-tide, runs between the island and the mainland of Kuwait.

The entrance to Khor Abdullah may be considered as a line joining the southern corner of Maraqat Abdullah, the extensive mudbank fronting the coast of

Iraq westward of Ras al Bishr, and the edge of the drying mudbank off Jazirat Bubiyan, about 6½ miles south of Ras al Qaid. The breadth of the entrance is thus about 14 miles. The inner end of the Khor may be considered as where the waterway divides to pass on each side of Jazirat Warba; the penetration is thus 23 miles. Both banks are low, alluvial land covered in places with reeds and grass; drying mudbanks extend into the Khor for about 1¾ miles from the line of the coast, except off the south-east end where the bank itself continues in a south-easterly direction for about 8 miles between the Khor and the approach to the Shatt al-Arab.

Depths across the entrance are varied; there are a number of shoals with depths of less than 3 fathoms lying in line with the main direction of the Khor. Fasht al Aik, a small bank lying about 6¾ miles east-south-eastward of Ras al Qaid, dries 3 feet; a similar bank lies 3¼ miles eastward of the same point, and one drying 4 feet lies between the latter and that point. The least depth charted in the main channel and its approach is 22 feet. Buoys mark the line of the channel. In 1955, this marked channel entered the Khor near its middle, but about 3½ miles above Ras al Qaid it lay nearer to Jazirat Bubiyan than the Iraqi shore.

Anchorage may be obtained by vessels with local knowledge anywhere in the Khor, according to draught, but anchorage should not be taken up at the east-south-eastern end on account of submarine cables. Vessels may also find anchorage off Umm Qasr, where there is a jetty, about 12 miles above the eastern end of Jazirat Warba.

The boundary between Kuwait and Iraq runs through the Khor Abdullah, so about half the low-water coastline is in the territory of each state.

The Iraqi waters of the inlet are included in the port of Basrah.

4. The Sunderbans (Hariabhanga and Raimangal Rivers) (Annex, map No 29)

References : Chart No. 859
Bay of Bengal Pilot, Eighth Edition, 1953

The boundary between India and East Pakistan reaches the sea in the vicinity of the mouths of the Hariabhanga and Raimangal Rivers, two of the rivers forming part of the delta of the River Ganges.

These two rivers meet in a common estuary, with an entrance about 4½ miles wide, and are separated near their mouths by an island 12½ miles long in a north-south direction with a general width of about 2½ miles. The southern end of this island lies back about 5 miles from the general line of the coast formed by the other islands of the delta. Thus, the estuary of the two rivers has a penetration of about 5 miles, a width at the entrance of about 4½ miles and a maximum width of 7¾ miles. The breadth of the Hariabhanga River when it enters the estuary at the north-west corner is about 2 miles wide and the breadth of the Raimangal River in the north-east corner is 2½ miles.

The deep channels from the river mouths, with depths of from 4 to 10 fathoms, lie towards the sides of the estuary, leaving a shallow bank between and south

of the island separating the rivers. A small area, dry at low water, is charted on this bank and about a mile south of the island; depths of between a half and 3 fathoms extend from the island as far southward as the entrance to the estuary. Seaward of the entrance, the channels unite to form a single approach over a distance of about 15 miles between the coastal banks, with depths of less than 3 fathoms. The general breadth of the approach channel is $1\frac{1}{2}$ miles; depths therein are from $3\frac{1}{2}$ to 8 fathoms. On the western coastal bank are three patches, marked by breakers and which probably dry at low water; these lie $1\frac{1}{2}$, 5 and 10 miles south of the entrance to the estuary.

Tidal streams are almost certainly strong and local knowledge is essential for navigating in the vicinity, as the banks are subject to change; the land is low and there are no navigational marks.

About half the coastline of the estuary is Indian and the remainder Pakistan.

5. Sir Creek (Annex, map No 30)

References : Chart No. 118

West Coast of India Pilot, Ninth Edition, 1950

The north-west bank of the Sir River forms the boundary between Pakistan and India. This river forms one of the mouths of the delta of the River Indus.

The coast is low and flat throughout and partially flooded at high water to a considerable distance inland. It was reported in 1952 that the whole of the Indus delta coastline, coastal flats and depth contours had extended seaward as much as 5 miles in places; that the sea-face was generally formed by a narrow belt of low sand hills, fronted by drying sandbanks and backed by mangrove swamps interspersed by mud-banked tidal creeks. In consequence, therefore, the following description from the existing chart, based on an old survey, must be treated with reserve. It is not normal for any vessels except of light draught and up-to-date local knowledge to approach the coast within depths of 10 fathoms.

The following description is from the chart :

The entrance was funnel-shaped and ran in a north-easterly direction from the general north-westerly trend of the coast of the Indus delta. Its southern entrance point, which was low, flat land about 2 feet high, was fronted up to a distance of about 2 miles by a sandbank which dried in places. The north-western entrance point was formed by an islet from 2 to 4 feet high, about 8 miles north-west of the southern entrance point. The penetration of the inlet was about 6 miles to the restriction of the creek to a breadth of about $1\frac{3}{4}$ miles. The northern shore consisted of sand and mud which dried from 2 to 5 feet, the south-eastern side was of sand and mud with scattered mangroves intersected by creeks. Extending from the northern side was an extensive flat with depths of only a few feet and on which were these drying banks. The entrance channel, with depths of up to 7 fathoms, lay close to the southern shore and was about a mile wide, but approach thereto was restricted by an extensive bar lying seaward of the estuary, over which there was a limiting depth of 2 fathoms. There are no ports within the estuary. It was possible for light draught craft which could cross the bar to navigate the Sir River for a considerable distance.

During the south-west monsoon, the whole of the coast is fronted by breakers when the sea breaks in depths greater than 3 fathoms, which are found many miles off shore.

Rather more than half the coastline of the estuary lies on the Pakistan side.

6. Naaf River (Annex, map No 31)

References : Chart No. 3493

Bay of Bengal Pilot, Eighth Edition, 1953

The Naaf River near its mouth forms the boundary between Pakistan and Burma. The river discharges into the sea between Shahpuri Point and Cypress Point, about a mile east-south-eastward. An extensive drying sand and mud flat extends about $1\frac{1}{2}$ miles southwards and nearly 2 miles south-eastwards of the latter point: on this flat and about half a mile south of the point is a small, low islet. Off the northern side of the entrance there are no drying features. Inside the entrance, the river has a comparatively uniform width of about a mile for a distance of 10 miles, and runs approximately parallel to the coast; depths in the middle vary between 12 and $5\frac{1}{4}$ fathoms; thence the river widens and becomes shallower.

A closing line tangential to the low water lines of the coast on either side of the river entrance has a length of about $3\frac{1}{2}$ miles, and the penetration from this to the line joining the natural entrance points of the river is three-quarters of a mile.

The entrance is fronted by shallow flats which form a bar; that south-west of Shahpuri Point is named Shahpuri Flat and that south of Cypress Point, Cypress Sands. These have depths of less than 3 fathoms over them and extend for $4\frac{1}{2}$ miles southward and westward of the former point, their least depths in places are about a foot. St. Martin's Island, consisting of an island about 3 miles long and two islets southward of it, all joined by a reef, is connected to the south-western end of Cypress Sands and lies about $5\frac{1}{2}$ miles south-south-west of Shahpuri Point. St. Martin's Reef, a ridge of sunken rocks, lies about $5\frac{3}{4}$ miles west of the northern end of the island. Sitaparokia Patches, with about $1\frac{1}{2}$ fathoms over them, lie from $4\frac{1}{2}$ to 8 miles south-east of the island.

In 1944, there were two channels across the bar, one north-west of St. Martin's Island, had a least depth of 8 feet, the other, named Patrick's Gut, had a depth of 11 feet and lay north-east of the island; the latter is marked by a buoy. The tidal streams set across the approaches to the bar at about one knot.

The principal anchorage is off Maungdaw, a town on a creek in the eastern bank of the river about 7 miles above the entrance. Depth of water there is about $4\frac{1}{2}$ fathoms.

7. Estuary of the Pakchan River (Annex, map No 32)

References : Charts, Nos. 3051, 3052

Bay of Bengal Pilot, Eighth Edition, 1953

The Pakchan River, near its mouth, forms the boundary between Burma and Thailand. The river entrance lies between Victoria Point, the southern extreme of

Burma, and the low-water line of the mainland about $3\frac{1}{4}$ miles southward. Pulau Ru lies between one and $3\frac{1}{2}$ miles south-south-westward of Victoria Point and fronts the river entrance, Pulau Ganga lies about 2 miles west of the island. South-south-westward of this island, a chain of islands and islets fronts the Thailand coast up to a distance of 10 miles off shore; the longest of these are: Pulau Pingngwe, Goh Chang and Goh Piam. West and north-west of Victoria Point lies another group of islands extending up to $5\frac{1}{2}$ miles off shore; the principal of these are Pulau Besin, Pulau Perlin, Pulau Jungis and Pulau Tonton, the last connected to the coast by a drying bank. Fifteen miles west of Victoria Point is St. Mathew's Island, a large island forming one of an extensive chain fronting the coasts of both Burma and Thailand.

The river, for about 9 miles within, has a general breadth of about $2\frac{1}{4}$ miles, with depths of from $4\frac{1}{2}$ to 11 fathoms. The approaches to the river mouth are encumbered by numerous islands, reefs and shoals; depths of less than 3 fathoms extend up to 9 miles north-west, $5\frac{1}{2}$ miles west and $8\frac{1}{2}$ miles south-west of Pulau Ru, but there are three main channels of approach. The northern passes between Pulau Jungis and Pulau Tonton, thence north of Pulau Ru; this channel has a least depth of 11 feet; the western lies between Pulau Perlin and a reef less than a mile southward of that island, thence north of Pulau Ru, and this channel has a least depth of 20 feet in it; the southern passes between Goh Chang and the shallower water south of Pulau Pingngwe, then east of that island, of Pulau Saung Kharan and the islets southward and eastward of it, and thence south-eastward of Pulau Ru, the least depth in this channel is 30 feet. As none of these channels are buoyed, great caution is necessary in their navigation.

Vessels usually anchor about half a mile south of Victoria Point in depths of from 5 to 10 fathoms. Small craft can also anchor in Victoria Point Harbour, a small area with depths of about 15 feet close north-east of the point or in similar depths off the entrance to Ra-Nohng Creek. The Burmese settlement of Kawsong is on Victoria Point and the Thai town of Ra-Nohng is about 2 miles up the creek of that name.

The international boundary runs eastward and south-eastward of Victoria Point, thence east of Pulau Ru, thence between that island and Pulau Saung Kharong. Goh Chang and Goh Piam are Thai territory. St. Mathew's Island, with the islands lying within 17 miles south-south-westward of it, are Burmese territory.

8. Sibuko Bay (Annex, map No 33).

References: Charts, Nos. 2576, 2099, 1861

Eastern Archipelago Pilot, Volume I, Sixth Edition, 1950

Sibuko Bay is a large indentation in the coast of Borneo between Bum-Bum Island and Mandul Island, 71 miles south-westwards. The northern part of the bay is territory of North Borneo and the southern part is Indonesian. Bum-Bum Island, also forming the southern entrance point to Darvel Bay, is separated from the mainland by a channel about half a mile wide, and is

fronted on its south side by extensive reefs lying up to $7\frac{1}{2}$ miles from it. Mandul Island is a large island in the delta of the Sungei Sesayap. The coast of the western part of the bay is cut into by the mouths of numerous rivers, the largest of which are the Simengarais and Sibuko on the south-western side and the Kalabakang. The penetration of the bay is about 43 miles. The inner portion is almost completely filled by the large islands of East Nunukan and Sibetik. The former is separated from the islands south-east of the delta of Sungei Sibuko by a channel about $2\frac{1}{2}$ miles wide, from Sibetik Island by a channel 4 miles wide which is nearly filled by an island. Sibetik Island is about 19 miles long, and is separated from the mainland northward by distances varying between 4 and $5\frac{1}{2}$ miles. The water extending off the north-eastern and northern coasts of the island and north-westwards as far as the mouths of the Kalabakang River is known as Cowie Bay. The north-western and western coasts of Sibetik Island are separated from the mainland by Coalmine Reach, a narrow channel with a least width of about half a mile.

The northern coast of Sibuko Bay is fronted by coral reefs; the principal of these are Ligitan Reefs, lying from about 5 miles south-westward to 12 miles west-south-westward of the southern end of the reef extending from Bum-Bum Island, and about $4\frac{1}{2}$ miles from the mainland coast; several other reefs lie within 7 miles west-south-westward of these. There are numerous dangers lying up to $11\frac{1}{2}$ miles off shore. A rock, which dries one foot, lies about $9\frac{1}{2}$ miles south-east of the eastern end of Sibetik Island, and Makasser Banks, which are awash at low water, lie 5 miles east-south-eastward of the south end of the island. Drying spits extend about 3 miles south-east of East Nunukan and about $4\frac{1}{2}$ miles from Ahus, an island about 4 miles north of Mandul.

Depths at the northern end of the outer part of the bay are over 100 fathoms; the whole of the southern half is shallower and depths vary between about 30 and 4 fathoms. The channels south and north of East Nunukan Island are from 4 to 7 fathoms; in the approach to and in Cowie Bay the depths are from 4 to 10 fathoms, but there are depths, however, up to 17 fathoms in that part off Tawau; in the north-west end of Cowie Bay, which part has not been surveyed in detail, depths would appear to be shallower. In Coalmine Reach depths are between 6 and 12 fathoms; the channels leading south-eastward from it to that between Sibetik and East Nunukan Islands are shallower and have depths of about 2 fathoms.

Tawau, on the North Borneo coast opposite the middle of Sibetik Island, is the only port of consequence in the area. It has a pier with 17 feet of water alongside. Vessels also load logs at an anchorage at the north-east end of Coalmine Reach. Semporna, in the channel between Bum-Bum Island and the mainland, is a small fishing port.

Tidal streams in Cowie Bay and its approach run up to $2\frac{3}{4}$ knots. There are several beacons marking some of the reefs and there are navigational lights at Tawau and on the coast about 6 miles eastwards to assist approach at night.

Cowie Bay and its approach have a breadth at the entrance, from the east end of Sibetik Island to the main-

land north-north-eastward, of about 11½ miles and a penetration of 29 miles.

The international boundary runs through the Sino Solan River, thence midway between its eastern entrance point and the north end of East Nunukan Island to the parallel of 4° 10' North, thence it crosses Sibetik Island on this parallel.

Thus, in Cowie Bay and its approaches about one-eighth of the coastline is Indonesian and the remainder territory of North Borneo. In Sibuko Bay as a whole, when including the coastline of Sibetik and Nunukan Islands, as a rough approximation about half the coastline belongs to each State.

IV. CHINA

1. The Hong Kong area

References : Charts, Nos. 3026, 2562, 3605

China Sea Pilot, Volume I, Second Edition, 1951

The Hong Kong area involves the territories of three states, that of China, the Portuguese territory of Macao and the British territory of Hong Kong and its leased territory; these will be dealt with in three parts: (a) the China and Hong Kong territory on the west; (b) the China and Hong Kong territory on the east; and (c) Macao.

(a) Deep Bay (Annex, map No 34)

On the west, the Treaty boundary between China and Hong Kong crosses the neck of the promontory at the southern end of which is the island of Hong Kong, and reaches the coast close westward of the mouth of the river which enters the sea at the head of Deep Bay or Hau Hoi Wan. The boundary thence follows the high water line of the northern and western shores of the bay to South-West Point, its northern natural entrance point.

Deep Bay is entered between South-West Point and Black Point, 4 miles southwards, and has a penetration of about 8½ miles. The narrowest part of the bay lies about 4 miles within the entrance and is 2 miles wide. Mud flats, which dry, extend up to about three-quarters of a mile from the coast on all sides of the inner part of the bay. About 3¾ miles within South-West Point, and about a mile from the north-west shore, is a small drying rock; a similar rock lies nearly half a mile off the south-east shore and about 6¾ miles within Black Point.

North-west of the bay lies the entrance to the Chu Chiang or Canton River. Near the middle of this entrance, and fronting Deep Bay, is the Chinese island of Nei-Ling-Ting; this island is 5 miles south-west of the northern entrance point of Deep Bay and 4¾ miles west of its southern entrance point. About 2 miles south-west of Black Point is Tung K'wu, an islet, the northern of a group extending about 2½ miles southward, all of which are Hong Kong territory.

Depths in the bay are between one and 3 fathoms at the south-western end and less than one fathom at the head of the bay. A deep channel leading past the north end of Lantao, from the waters of Hong Kong

harbour, leads across the entrance to the bay and eastwards of an extensive bank with less than 3 fathoms over it, on which lies Nei-Ling-Ting, into the Chu Chiang.

There are no ports within the bay.

Approximately half the high water coastline of the bay is in Chinese territory and the remainder is territory of Hong Kong.

(b) Mirs Bay (Annex, map No 35)

On the east, the Treaty boundary between Chinese and Hong Kong territory meets the coast close eastward of Sha Tau Kok, a village near the head of Starling Inlet, an indentation at the north-west end of Mirs Bay. The boundary thence runs north-eastwards along the high water line of Mirs Bay to Chun Pei Ngaam, the eastern natural entrance point of Mirs Bay.

Mirs Bay is entered between Chun Pei Ngaam and Tam Long Sui, a headland about 5¾ miles west-south-westward. The penetration of the bay to its north-western end is about 14 miles. Its eastern and northern shores are comparatively regular, but the western side has many deep indentations. The principal of these are Tolo Channel and Starling Inlet.

Tolo Channel, about the middle of the west coast of the bay, is about 6 miles long and about three-quarters of a mile wide; its south-western end widens into an area about 5½ miles long, with a maximum width of about 3 miles, somewhat encumbered with islands, forming Tolo Harbour, Plover Cove and Tide Cove.

Starling Inlet at the north-west end of the bay runs in a south-westerly direction for about 3½ miles, with a general breadth of about three-quarters of a mile.

There are a number of islands and islets in Mirs Bay; the most important of these are as follows:

Gau Tau, an islet, near the middle of the bay and 2¾ miles within the entrance; a drying rock lies about half a mile south-west of it.

South Gau, about 2¼ miles within the entrance and more than a mile off the western shore.

Peng Chan, about 6¼ miles within the entrance and about 1¼ miles from the north-east shore.

Peak Rock, near the middle of the northern side of the bay and a third of a mile off shore.

In the southern approach to Tolo Channel are Tap Mun Chau and Chik Chau, with several islets near them.

Between Tolo Channel and Starling Inlet are Ngo Mei Chau, Pak Sha Chou and Crooked Island with other islets and rocks between them and the mainland.

Depths in Mirs Bay are in general between 7 and 12 fathoms, but are less in Tolo Harbour, Starling Inlet and the various coves around the bay. In general, the coasts are steep-to, but the ends of Tolo Harbour, Tide Cove and Starling Inlet all dry out.

Navigation within the bay is not difficult, but care must be taken to avoid numerous fishing stakes, some of which are situated in depths up to 9 fathoms. There are no ports in the bay, but there are several snug anchorages for vessels with local knowledge. Good anchorage may be obtained in the bay during typhoons.

Excluding the coastlines of the many islands and that of the inlet of Tolo Channel, about half the high water coastline of the bay is Chinese and the other half the territory of Hong Kong.

(c) *The Macao area* (Annex, map No 36)

The Portuguese settlement of Macao consists of the small peninsula at the south-eastern end of Aomen Tao, a large Chinese island towards the south end of the delta of the Chu Kiang, Ilha de Taipa and Ilha de Coloane. The northern boundary is on the narrow isthmus joining the peninsula to Aomen Tao. The peninsula is about 2½ miles long and about 1½ miles wide. I. de Taipa lies about 1½ miles southwards of the southern extremity of the peninsula and I. de Coloane about a mile southward of the I. de Taipa.

A breakwater extends nearly 2 miles south-eastward from the south-eastern end of the peninsula, and off its end there is a short detached breakwater parallel to it. A drying bank surrounds I. de Taipa, and a similar bank connects I. de Coloane to the Chinese islands north-westward and westward of it. Between the peninsula and I. de Taipa, a narrow drying spit extends eastward from the southern side of the island close westward of the peninsula. Close off the eastern end of I. de Taipa is a small rock 36 feet high and, nearly a mile northward of it, is a drying rock.

The whole of the area lies within the one-fathom depth contour, and the port is liable to silting. At high water, vessels of less than 14-foot draught can enter; the rise of the tide is about 9 feet at springs.

About 3½ miles north-east of the peninsula, and up to 2 miles off shore, lie the Chinese islets of Ta-Chou-Chou. About 2¼ miles south of the southern side of I. de Coloane is the south-east extremity of the Chinese island of Ta-Heng-Chin. About 8 miles eastward of the extremity of the breakwater lies the Chinese islet of Ching Chou; this is the northern of a chain of islets which extends about 10 miles south-south-westward.

Pilotage is compulsory in the port of Macao.

2. *Yalu River* (Annex, map No 37)

References: Charts, Nos. 1256, 1257, 3652

China Sea Pilot, Volume III, Second Edition, 1954

The Yalu River forms the boundary between China and North Korea and flows into the northern side of the Hwang Hai or Yellow Sea. Its estuary may be considered as lying north of a line joining Tefa To, an island 8 miles south of the southern extremity of Chorusan Peninsula on the east side of the estuary, to Kulungshan on the western shore about 34 miles north-westward. The estuary is funnel-shaped and has a penetration northwards of about 17 miles to where the river narrows to a width of 3 miles.

A number of islands and islets lie within the estuary, the principal of these are:

Ka To and several islets lying between the Chorusan Peninsula and Tefa To.

Banjo Islands, 6 in number, about 10 miles west of the western coast of the Chorusan Peninsula.

Oyan To, about midway between Ka To and the Banjo Islands.

Un To, about 2½ miles north of the western islands in the Banjo group.

Katchiri To, about 3½ miles north-east of Un To.

Tashi To, about 4 miles north of Un To.

Shinto Islands, comprising a large island and several islets, about 11 miles north-west of the Banjo Islands and about 6 miles from the western shore of the estuary. Northward of these islands towards the part where the estuary rapidly narrows are several low, flat, swampy islands.

The Banjo Islands lie on a large drying bank which extends 4 miles southward of them. Westward and northward of this bank, almost the whole of the estuary is filled with numerous banks of sand and mud, most of which dry; these banks are intersected by many channels which are constantly shifting. Drying mud flats also extend up to 3 miles from the western side of Chorusan Peninsula; between these and the banks off the Banjo Islands are two deep-water channels which are obstructed by flats at the northern ends.

There are only two practical channels into the river, one west of the Banjo Islands and the other west of the Shin To Islands; the former is that more generally used, as the northern end of the latter is liable to shift. The fairways and depths in the river vary from month to month, and the limiting draught of vessels using them are determined from time to time by the pilots. Vessels with a draught of 13 feet can usually reach Ryuganpo on the east bank, about 10 miles above the Shin To Islands, and those with a 10-foot draught might reach Shingishu on the east bank and Antung on the west bank about 13 miles further up river. There is anchorage near Tashi To, to which goods are transported by lighter. Close north-eastward of this, on reclaimed land extending from the mainland, is an artificial port with depths up to 30 feet alongside, whence iron and aluminium are shipped. This was still being completed in 1949 when the depth in the approach channel was 20 feet. In the estuary, the rise of the tide at springs is about 21 feet and at Antung it is about 10 feet. The channels are marked by buoys and beacons which are frequently moved as the channels alter. Tidal streams in the estuary are strong and may run at a rate of 3¾ knots, while in the river at time of floods, a rate of 5 knots with the ebb may occur. From the end of October to the beginning of May, the river may be closed by ice. It is dangerous to take the ground in the estuary or river as the sand banks are very steep and with a falling tide a vessel is liable to capsize; this is a particular danger owing to scour should a vessel be grounded athwart the channel. All vessels should employ a pilot.

The international boundary lies towards the western side of the estuary. Approximately one-third of the coastline of the mainland of the estuary lies in Chinese territory.

3. Mouth of the Tyumen River (Annex, map No 38)

References : Chart No. 2432

South and East Coasts of Korea, East Coast of Siberia and Sea of Okhotsk Pilot, Fourth Edition, 1952

The Tyumen River near its mouth forms the boundary between North Korea on the south and the Union of Soviet Socialist Republics on the north. The western bank is high, but the eastern bank is a marshy plain. At the time of the survey for the chart, the river had an entrance about 1 ¼ miles wide which was nearly closed by a narrow islet about three quarters of a mile long, the seaward coast of which followed the general direction of the shore. There were only narrow channels on each side of the islet leading into the river and that on its north-eastern side was the wider. Within this islet, and towards the Korean side, were several other islets extending about 1 ¾ miles up the river.

Depths close off the islet in the entrance are charted as 3 and 1 ¾ fathoms, but in 1923, the date of the last available information, the average depth in the entrance was about 6 feet. Small craft with local knowledge could then enter the river in calm weather. The river is much swollen in spring when the snow melts and after heavy rains ; it is frozen over for several of the winter months. A high-power coastal navigational light is situated on the eastern side of the mouth of the river ; there is another about 3 miles south-west of it.

It is believed that the international boundary passes through the channel on the north-eastern side of the islet in the entrance.

V. EUROPE

1. Gulf of Trieste (Annex, map No 39)

References : Charts, Nos. 201, 1434

Mediterranean Pilot, Volume III, Seventh Edition, 1946

The Gulf of Trieste lies at the north-east corner of the Adriatic Sea. The international boundary between Italy and Yugoslavia meets the sea in a small bay formed between Grossa Point and Sottile Point on its south-eastern side.³

The Gulf may be considered to extend from Salvore Point, the north-westernmost point of the Istria Peninsula and Porto Grado about 12 miles north-north-westward. The gulf is roughly in the shape of a rectangle, and has a penetration of about 13 ½ miles. The narrowest part is about 9 ½ miles wide. Its south-eastern shore is steep-to and is indented by several small bays, the principal being Perano Bay, Capo D'Istria Bay, San Bartolomeo Bay and Muggia Bay. The north-eastern shore is also steep-to and is comparatively straight ; the north-western shore is low, swampy, intersected by a

³ See now the Memorandum of Understanding between Italy, the United Kingdom, the United States of America and Yugoslavia regarding the Free Territory of Trieste, London, 5 October 1954. Annex I to this Memorandum gives the new agreed boundary. U.K. Cmd. 9288, Miscellaneous No. 30 (1954) Trieste.

number of creeks and is fronted by a drying mud bank. Panzano Bay, about 3 miles across, cuts into the north corner of the gulf.

Depths in the gulf are in general between 12 and 8 fathoms. In the small bays on the south-eastern shore, they are slightly less, and depths less than 6 fathoms extend up to 3 miles from the north-western side. About 3 miles east of the entrance to Porto Grado the drying mud bank extends up to a mile offshore, and off the mouths of the Izonzo River, about 6 miles north-eastward, the drying banks extend up to a similar distance.

The modern port of Trieste lies on the coast close northward of Muggia Bay which also forms part of it. This bay is partially enclosed by a detached breakwater. The largest ships can be accommodated. Trieste is a free port. Monfalcone lies inside the head of Panzano Bay and is the centre of a ship-building industry.

The international boundary meets the coast near the head of San Bartolomeo Bay, which lies 10 miles north-eastward of Salvore Point. It is a small indentation between Grossa Point and Sottile Point about a mile north-eastward, the penetration is a little more than half a mile, but does not conform to the definition of a bay in article 7 of the International Law Commission's 1956 report. The Italian quarantine station for Trieste is situated at the northern end of the bay.

Other than the banks and shallows on the north-western side and a few submerged wrecks, there are no navigational dangers in the Gulf and navigation is simple. For night navigation there are ample high-powered lights. There is a rise of only one to 2 feet in tide, but the general water level, with prolonged winds, may alter by several feet. The Gulf is subject to Boras, which are gale force winds and violent squalls from between north and east which frequently set in with little or no warning and may blow for several days.

Very approximately, a quarter of the coastline of the Gulf is in Yugoslav territory.

2. Ems and Dollart (Annex, map No 40)

References : Charts, Nos. 2181, 3761, 3509

North Sea Pilot, Part IV, Tenth Edition, 1950

The estuary of the River Ems, between the high water lines, is shaped roughly like a bent funnel, and for the main part lies between the East Friesian coast of Germany and the Groningen coast of the Netherlands. Its seaward limit may be considered as extending from Norddeich on its northern side to the Netherlands coast about 18 miles south-westward. The penetration inland is about 20 miles. The coasts on both sides are low and flat and for considerable distances are formed by dykes. That from Norddeich trends south-south-westwards and southwards for about 18 miles to Knock, and then turns abruptly eastward for about 7 miles to the mouth of the River Ems, which is about three-quarters of a mile wide. At the river mouth, the coast turns to a southerly direction for about 5 ½ miles, thence westward for about 5 miles, and thence in a curve northward and north-westward for a similar distance to form The

Dollart. From the western entrance point of The Dollart, the coast turns to a west-north-westerly direction for about 6 miles to Delfzijl, and thence in a northerly direction for the same distance, whence it turns west-north-westward for about 6 miles to the south-western end of the estuary. The coast then continues westward and west-south-westwards. Thus The Dollart is a bay at the inner end of the estuary, roughly square in shape with an entrance about 5 miles wide, a penetration of a similar distance and a maximum width of just over 6 miles.

A number of islands front the estuary. The most important is Borkum, lying about 12 miles west of Norddeich and about 6 miles from the Netherlands coast. This island lies on a drying bank which extends about 6 miles south-eastwards from it and into the estuary. About 2½ miles north-east of Borkum lies the island named Memmert Sand, with the western end of Juist about half a mile northward of it. Both these islands lie on an extensive drying bank which stretches up to 10 miles from the coast south-south-westwards from Norddeich. Rottumer Oog, with Rottumer Plaat 1¼ miles westward, lies about 3 miles south-west of Borkum on the extensive drying bank which stretches nearly 7½ miles northward of the Netherlands coast at the western end of the estuary as described above.

Detached drying sand banks lie up to 2½ miles north-west of Borkum. Inside the estuary at its northern end, the low water line is situated about a mile from the coasts on either side, but further in, from Knock eastwards and off Delfzijl, it is close to the coast. Parallel to the coast, off the latter port, however, there are three extensive detached drying banks which nearly fill the estuary. The narrow channel leading to Emden and the River Ems is confined on its southern side by a large drying bank extending from the east shore of The Dollart, which bay or indentation is almost completely filled by a drying bank.

Except for the main navigational channels, depths in the estuary are shallow. Shoal water also extends 10 miles west and 6 miles north-west of Borkum. There are channels on both sides of Borkum, that on the north is named Oster Ems and that on the south Wester Ems; the former is not of importance to sea-going traffic, the latter is divided into two by a shallow bank. Depths in all the channels in the estuary are liable to frequent change. Between Knock and Emden the channel is dredged over a narrow width and a depth of 23 feet is maintained. Vessels drawing up to 29 feet can, at high water, reach Emden on the north side of the estuary and Delfzijl on the western side; both these ports have berthing accommodation and all modern facilities. They both give access to extensive inland canal systems. Delfzijl can be reached by the deeper draught vessels by passing east, south and then west of the extensive detached drying banks lying off this port, or by light draught vessels by a direct channel between them and the Netherlands coast. The main channels are all well buoyed and marked by beacons and lights. The rise of the tide is about 10 feet at spring tides. In winter the channels are seldom completely frozen over. Pilotage is strongly recommended for ships without local knowledge. Other small ports in the estuary are Norddeich, which has a depth of about 7 feet in the approach;

Termunterzijl, about 4 miles east-south-east of Delfzijl, which has about 4 feet in the approach channel, and Nieuwe Statenzijl in The Dollart; both the latter ports give access to the Netherlands inland waterway system. The River Ems is navigable for sea-going vessels for about 22 miles.

The international boundary between Germany and the Netherlands meets the coast near the south-east corner of The Dollart, thence runs northward to a line joining the entrance points of that inlet, whence it turns westward along this line and continues westwards and northwards near the Netherlands coast to a position about 5 miles north of Delfzijl; it there leaves the immediate vicinity of the coast and continues seaward in a curve to a position between the islands of Borkum and Rottumer Oog.

3. Lough Carlingford (Annex, map No 41)

References : Charts, Nos. 44, 2800, 2810

Irish Coast Pilot, Tenth Edition, 1954

Lough Carlingford lies between Eire and Northern Ireland; the international boundary meets the west bank of the Newry River about 1¼ miles above Warrenpoint at the head of the lough. The entrance to the lough is between Cranfield Point in Northern Ireland and Ballagan Point in Eire, 2 miles south-westward. The lough is restricted 2 miles within the entrance to a width of one mile and thence abruptly widens to 3 miles. A general width between one and 2 miles is thence maintained to the head into which the Newry River flows abreast Warrenpoint. The penetration of the lough is about 8 miles.

The low-water line extends for about 300 yards off Cranfield Point and a drying rock lies about 400 yards further seaward. Off Ballagan Point, the low-water line extends as a spit about half a mile south-eastwards; there are a few detached drying rocks within 300 yards of the end of this spit. Close within the entrance, the lough is almost completely obstructed by shoals and drying rocks lying near the middle, whose positions can best be seen on the chart; on the largest of these is a small island named Block House Island. About 1¾ miles within, towards the north-eastern side, is Green Island, with drying rocks between it and the coast eastwards. Northward of this island, where the lough widens abruptly, the low water lines extend from the eastern shore for about 1¼ miles and from the western for about three-quarters of a mile over a distance of about 1½ miles; there are several drying patches near the middle of the lough here. Elsewhere within the lough, the low water line is, in general, less than a quarter of a mile off shore.

The following small ports lie within the lough :

(i) *On the Eire side* : Greenore, with about 14 feet of water at its pier, lying about 2 miles within the entrance; Carlingford, about 1¾ miles further in where there is a small tidal harbour which dries out.

(ii) *In Northern Ireland* : Warrenpoint, at the head of the lough on the eastern side of the Newry River, where there are small quays which dry out and a patent slip; Victoria Lock, 2½ miles within the Newry River and at the entrance to a ship canal, where there are

quays with 16 feet of water alongside; and Port Newry, 5½ miles north-west of Warrenpoint and reached by the ship canal, where there is a wet dock with a depth of 13 feet.

There are two approach channels to the lough between shoals lying in the entrance; the eastern is that most generally used and it runs about a quarter of a mile west of the low water line off Cranfield Point; a depth of 17 feet is maintained therein by dredging. The channel thence passes eastward of Block House Island and the drying rocks in the entrance. Sheltered anchorage may be obtained in depths of from 7 to 10 fathoms between these rocks and those off Green Island. Above Greenore, there is a bar across the lough with a least depth of 11 feet on the leading line. Above this, the depths near the middle of the lough increase to between 30 and 42 feet in the fairway. For 2½ miles from the head of the lough, the water shoals gradually to a depth of about 4 feet off the entrance to the Newry River. The intricate channels into the lough are well marked by buoys and navigational lights. The rise of the tide is 15 feet at springs. Tidal streams are strong; in the entrance they may run up to a rate of 3½ knots, and off Greenore up to 5 knots. It is recommended that vessels take a pilot.

Approximately half the coastline of the lough is territory of Eire.

4. Lough Foyle (Annex, map No 42)

References: Charts, Nos. 46, 2499, 2486
Irish Coast Pilot, Tenth Edition, 1954

On the north coast of Ireland, the boundary between Eire and Northern Ireland meets the coast in the south-west corner of Lough Foyle. This lough is the extensive estuary of the River Foyle which flows into its head. It is entered between Magilligan Point in Northern Ireland and the Eire coast little more than half a mile north-westward; the penetration is about 12½ miles. From Magilligan Point, the lough gradually broadens to reach a maximum breadth of 6¾ miles about 7 miles within the entrance; it then gradually narrows again to the head where the River Foyle, at its entrance, is about half a mile wide. The greater part of the lough is occupied by shoals. The low-water line on the eastern side of the lough extends up to 1½ miles off shore in places, while off the north-western shore it is comparatively close in. There are a number of drying patches within the lough, the principal of these are on the following banks, the positions of which can best be seen on the chart; the sizes, shapes and exact positions of the drying patches are liable to frequent changes: McKinneys Bank, North Middle Bank, Great Bank, South Middle Bank and Roof Banks.

The channel through the entrance is deep and continues for a distance of about 4 miles, having an average width of about half a mile, with depths greater than 6 fathoms; this area affords secure anchorage for large vessels and there are a number of mooring buoys. The navigational channel thence continues between the coastal bank on the north-west side of the lough and the North Middle and Great Banks to the entrance to the River Foyle. The axis of this channel lies at a maximum

distance of just over half a mile from the low water line off the Eire shore. A constant depth of 20 feet at low water is maintained in the channel by dredging operations carried out by the Londonderry Port and Harbour Commissioners. The rise of the tide at springs is about 8 feet. Tidal streams run at maximum rates of between 2 and 3½ knots, the latter rate in the entrance. This channel is amply marked by beacons carrying navigational lights.

The area south-east of this main channel consists primarily of sand and mud banks with little or no water on them at low tide, interspersed with channels running in the general direction of the lough; none of these, however, give access to the River Foyle.

Londonderry is the only port within the lough; it lies in Northern Ireland about 5 miles up the River Foyle. There are berths there with modern facilities which can accommodate vessels up to 23½-foot draught. Moville is a town on the Eire coast about 2¼ miles within the entrance, it has a small boat harbour and landing can be effected.

Pilotage is compulsory within the lough. The pilot station is close southward of Inishowen Head (see below).

The land boundary between Eire and Northern Ireland meets the coast in the vicinity of Muff, on the western side of the lough near its head.

Rather more than half the coastline of the lough is territory of Northern Ireland.

Outside the entrance to the lough, the Eire coast continues in a north-easterly direction for about 2½ miles to Inishowen Head and thence turns north-westwards; the coast of Northern Ireland at Magilligan Point turns south-eastwards and eastwards in a curve for about 8½ miles; it then trends northward and north-eastwards to Ramore Head, whence it takes a general east-north-easterly direction. The approach to Lough Foyle may be considered as lying between Inishowen Head and Ramore Head, 9 miles eastward. Northwards of Magilligan Point, a shallow bank named The Tuns extends for 3 miles with its western edge parallel to and about three-quarters of a mile from the Eire coast. This bank is separated from the coast of Northern Ireland by a narrow channel with a least depth of 12 feet. The channel between the bank and the Eire bank is deep and is that normally used. Eastward of The Tuns is a trawling ground.

5. Flensburg Fjord or Flensburger Förde (Annex, map No 43)

References: Charts No. 3562, 2117
Baltic Sea Pilot, Volume I, Seventh Edition, 1944

The Flensburg Fjord or Flensburger Förde, as known to the Germans, is a narrow, winding fjord projecting westwards into the land from the extensive water area south of the Little Belt in the western end of the Baltic. Its entrance points may be considered as Pøls Huk, the south-eastern extreme of the Danish island of Als, and

Falshöft, the north-western entrance point of Kiel Bay about 7 miles south-westward. The entrance is rapidly narrowed to a width of about $3\frac{1}{2}$ miles between Kegnes, a peninsula on the south side of Als, and Birknack, a prominent point on the German mainland which forms the north-eastern entrance point of Geltinger Bucht. The fjord is then widened to its maximum breadth of $9\frac{3}{4}$ miles by Geltinger Bucht on the south side and Sønderborg Bucht on the north. The former bay has an entrance 4 miles wide and a penetration of $2\frac{3}{4}$ miles; the latter has a breadth at its entrance of 5 miles and a penetration of about $3\frac{1}{2}$ miles; Als Sund, the narrow strait separating the island of Als from the mainland of Denmark, leads from the head of the bay. West of these bays and $9\frac{1}{2}$ miles within the entrance, the fjord narrows to a breadth of about $1\frac{3}{4}$ miles; thence general widths of one to $1\frac{3}{4}$ miles are retained to its head. About 14 miles within its entrance, the fjord changes its general westerly direction to a northerly one for about $2\frac{1}{4}$ miles; thence, doubling round the northern end of the peninsula of Holnis, it takes a general south-westerly direction for about $7\frac{1}{2}$ miles to its head. North of Holnis, the northern shore is indented by Nybøl Nor, a sheet of water about 2 miles long and nearly a mile wide which is entered by the very narrow Egersund. West of Holnis is the narrowest part of the fjord, where it is about three-quarters of a mile wide. There are two islands within the fjord; these lie close together with their extremes about half a mile from the Danish shore, about midway along the innermost reach of the fjord.

Depths in the fairway through the outer part of the fjord as far as the western extreme of Sønderborg Bucht are no less than 10 fathoms, thence they decrease to general depths of more than 5 fathoms, except in the narrows off Holnis where there are some shoals, the least depth on the leading line there is about 22 feet. Under ordinary conditions, vessels with a draught of $19\frac{1}{2}$ feet can berth at Flensburg. Shoal water, in general, extends seaward off most of the prominent points. An extensive bank, with less than 6 fathoms over it and a least depth of one fathom, lies in the middle of the entrance to the fjord, the main approach channel for larger ships leads south of this. The main fairway through the fjord is well marked by buoys and leading beacons. There are ample lights for night navigation.

There is no appreciable tidal movement, but the water level may alter dependent on the direction, strength and duration of the wind. The ordinary variation is only about a foot, but prolonged gales between west and north-west lower it, at times, from 5 to 7 feet below the mean level. The fjord freezes completely over only in severe winters, when it may be closed from one to two months.

The main ports within the area are Flensburg, on the German side, and Sønderborg and Egersund on the Danish side. Besides these, there are a number of small fishing harbours and piers for the shipping of tiles and other local manufactures. Flensburg has considerable quayage and can berth vessels drawing $19\frac{1}{2}$ feet; there are modern facilities and repairs can be executed. Sønderborg, lying close within Als Sund, has piers and wharves with depths of from 8 to 24 feet alongside and

other facilities. Egersund has a number of small piers with depths alongside of from 12 to 15 feet.

The international boundary meets the coast at the north-western corner of the head of the fjord, and thence continues eastwards to approximately the axis of the fairway through the fjord, which it follows to the entrance. The boundary is marked for the most part by leading beacons and lights.

Both German and Danish pilots may serve in the waters of either country but a vessel may be piloted into a harbour only by a pilot of the country which owns the harbour.

Vessels navigating in the fjord are forbidden to close either the German or Danish coasts within a distance of 200 metres without special permission, except in the case of ordinary navigation through the narrow channel west of Holnis. Navigation is also forbidden in the waters between the northern side of the Kegnes Peninsula and the coast northwards. Landing from Danish territorial waters may only be effected at Sønderborg, Egersund and Graasten, and police permission is required to do so. The above regulations apply west of a line joining the south-east extremity of Kegnes and Birknack.

Intensive fishing is carried out throughout the year in the whole fjord.

Approximately half the coastline is Danish and the other half is German.

6. Estuary of the Bidasoa River (Annex, map No 44)

References: Chart No. 2665 and plan

Bay of Biscay Pilot, Fourth Edition, 1956

The Bidasoa River for the last few miles of its course forms the international boundary between France and Spain. At the international bridge at Hendaye, the river flows into an estuary almost completely filled with banks which dry several feet at low water. This estuary is about $1\frac{3}{4}$ miles long and has a maximum width of about three-quarters of a mile; its seaward end is constricted to a width of about a quarter of a mile by a low sand spit terminating in Pointe Française. There are breakwaters from this point and the opposite shore. The estuary then opens out into a bay named Higuier Road. The entrance to this bay lies between Cabo Higuier, the northern point of an islet on a drying ledge extending from the northern end of Punta Erdico on the Spanish coast, and Pointe Ste. Anne on the French coast nearly two miles east-south-eastward. The penetration of the bay to Pointe Française is about $1\frac{1}{4}$ miles. Les Briquets are detached rocks, which dry 6 feet with their outer edge three-quarters of a mile north of Pointe Ste. Anne; Roches Noire are some small detached above-water rocks lying on a drying ledge which extends about a quarter of a mile northward of that point.

Depths in the entrance to the bay are about 11 fathoms. These depths decrease to the head where the drying banks intersected by the winding channel from the river extend nearly half a mile northward of Pointe Française and for a similar distance from the south-western shore. The narrow channel into the river has about a foot of water in it at low tide.

Anchorage may be obtained in the bay, sheltered from winds from the east through south to west. With winds from seaward this anchorage is unsafe. There is a small harbour of refuge formed by two short moles about a quarter of a mile southward of Punta Erdico; its entrance is 100 feet wide and depths within from 9 to 20 feet. The rise of the tide at springs is about 14 feet.

Fuenterrabia is a small fishing centre on the Spanish side of the estuary nearly opposite Hendaye.

Within the bay is a "neutral area" for the use of both French and Spanish vessels; this is marked by the alignment of beacons on the shore. This area to the low-water line at the head of the bay is less than three-quarters of a mile long and nearly a mile wide and encloses the best anchorage. From the northern end of this area, the international boundary through the territorial sea passes northward about equidistant from Cabo Higuier and Les Briquets.

About half the coastline is French and the other half is Spanish.

7. The mouth of the River Mino (Annex, map No 45)

References : Chart 1752

West Coasts of Spain and Portugal Pilot, Third Edition, 1946

Owing to the small scale of the available charts, this description is perforce brief.

The lower reaches of the River Mino form the boundary between Spain on the north and Portugal on the south. The entrance lies between Punta de los Picos and Ponta Ruiva about three-quarters of a mile southward. About a quarter of a mile westward of the latter point is a low islet with a fort on it, named Ilha Insua. The river mouth is fronted by a rocky bar; there are, however, channels leading on both sides of Ilha Insua; that on the north is widest and is encumbered with rocks but has a depth of about 10 feet in the fairway at high water springs; that on the south side also has many shoals and a depth of 13 feet at high-water springs. The sea breaks across both channels if there is any swell; the depths are variable.

Within the river are many shifting shoals and banks; entry and passage can, however, be made by light draught craft with the aid of an experienced pilot. About 1½ and 2 miles within the entrance are two fishing villages one on each bank of the river; anchorage may be obtained off them in depths of about 10 feet.

Both Spanish and Portuguese pilots can be obtained.

8. Idefjord and its approaches (Annex, map No 46)

References : Charts Nos. 3160, 2330, 121

Norway Pilot, Part I, Seventh Edition, 1948

The boundary between Sweden and Norway meets the sea near the western side of the head of Idefjord, thence passes through this fjord, through Ringdalsfjord, Svinesund, Saekken and thence seaward through the islands and rocks off-lying the coast. This description will follow the above order.

Idefjord is a long, straight fjord, running in a north-north-westerly direction, about 9 miles long with a general width of less than half a mile. Its maximum and minimum breadths are three-quarters of a mile and about 300 yards. Its general depths are from 18 to 5½ fathoms, except for about 1¾ miles from the head which shoals from depths of 2 fathoms. The small islet of Halleholm lies about 6 miles from the head towards the eastern side and is territory of Sweden.

The north-eastern end of the fjord widens somewhat but is partially filled by the islands of Brattøen and Sauøen, both of which lie on the Norwegian side of the boundary. At the north-eastern corner of the fjord lies the small port of Halden, where there are berths alongside in 16 to 25 feet.

At the north-western end of Idefjord, the waterway turns abruptly south-westwards to become Ringdals Fjord and then Svinesund. Ringdals Fjord is about 1¾ miles long with a general width of about a quarter of a mile. The channel is restricted at the north-western end to a breadth of little more than 100 yards by the Norwegian islet of Knivsø.

Svinesund joins Ringdals Fjord to Saekken; it is about 2½ miles long and is extremely narrow. About half way along it is crossed by a bridge with a height of 190 feet. Westward of this is a dredged part of the channel having a breadth of 128 feet with a depth of 23 feet.

Saekken is the continuation of the channel seaward. This cuts across the southern end of the sheet of water lying between the mainland and the islands of Kirkø and Singlø, known as Single Fjord, thence continues in a south-south-westerly direction between the Norwegian islands of North and South Sandø and the Swedish mainland, and thence between the Norwegian island of Herføl and the Swedish islets of Tjurholm and North Hallsø to the northern end of Koster Fjord.

This stretch of the channel is about 8 miles long and has a maximum width of rather less than half a mile; it is deep with depths of from 25 to 60 fathoms. Herføl, South and North Sandø, with a few rocks lying off them, are the south-easternmost of a chain of islands and islets of which Kirkø and Vesterø are the largest, extending 11 miles north-westward from the Swedish mainland and about 7 miles southward of the Norwegian mainland.

Tjurholm and N. Hallsø are the northernmost of a chain of islands extending southwards for many miles, separated from the Swedish mainland and each other by very narrow channels. In general, their western extremities lie from about 1½ to 3 miles from the mainland.

Seaward of Herføl and N. Hallsø, the channel and boundary take a west-south-westerly direction for about 8 miles to the main waters of the Skaggerrak, close northward of Grisbadarna, a group of shoals with a least depth of one fathom.

South-westward of the chain of islands of which Herføl forms the southernmost, and on the Norwegian side of the boundary, are a number of shoals and detached above-water rocks and islets; these lie in two groups. The inner group extends about 2 miles north-

westward and lies from about 2 to 3½ miles westwards of Herføl; the largest islet is Tisler, and the most southern above-water rock is Svarteskjoer, which lies about 2 miles from Herføl and a mile north of the boundary. The outer group, enclosed within an area about three-quarters of a mile wide, extends about 4 miles north-westwards from Knubben, a small above-water rock close south of Heia, the largest in the group, lying about 5¼ miles west-south-westward of Herføl. Heifluene is a group of sunken rocks, some of which are awash at low water, lying up to half a mile south-east of Knubben.

On the Swedish side of the border, a chain of islands, islets and rocks lies approximately parallel to the outer edge of the islands mentioned above, lying south of Tjørholm and close to the mainland coast; Koster Fjord about 1½ miles wide separates these two chains. This outer group extends southward for about 11 miles from Kostersten, a small above-water rock, lying 2 miles south-west of N. Hallsø. The largest islands in the group are N. Koster and S. Koster; the most north-western above-water rock is St. Drammen; this lies about 2¼ miles south-west of Kostersten and just over a mile from the international boundary. About 3 miles west of this rock are the Grisbadarna shoals.

On the Swedish mainland coast about 5 miles east of Kostersten is the small port Strømstad. On the Norwegian mainland about 10 miles north-west of the entrance to Svinesund is the port of Frederikstad.

The international boundary for about 4 miles from Grisbadarna is marked by buoys, and thence by leading beacons.

South-eastward of the boundary, between Grisbadarna and North Koster, is a fishing ground in which it is prohibited to anchor.

9. Head of Bottenviken (Annex, map No 47)

References : Chart 2302

Baltic Pilot, Volume III, Fourth Edition, 1951

The boundary between Sweden and Finland meets the coast at the mouth of the Torne River, which discharges into the head of Bottenviken; it thence continues southward between the numerous islets lying off that part of the coast. The river mouth, about a quarter of a mile wide, enters the sea between the Swedish mainland and the Finnish island of Pirkkiö and about 1½ miles south of the Finnish town of Turniö. Sellei is an island close south of Pirkkiö; its southern end is about 5 miles south of Turniö.

From the river mouth, the mainland coast of Finland runs in a general south-easterly direction for about 17 miles to a promontory named Maksniemi; the mainland coast of Sweden runs in a general west-south-westerly direction from the river mouth for about 25 miles. A large number of islands and above-water rocks front the coast up to a distance of nearly 14½ miles, their positions can best be seen on the chart; only the principal ones will be mentioned here.

The largest islands, 3½ miles long and 3 miles wide is Seskar lying 10 miles south-west of the river mouth.

Puukko is a small islet about 1½ miles southward. About 11 miles southward of Seskar is Malören, the southernmost in this area. Sandskar lies about 5 miles north-east of Malören, with Seskarfurö between it and Seskar. About 10 miles east-north-east of Sandskar, with several islets in between, lies the islet of Sarvi, with another close north-eastward. These latter two are close westward of the Swedish-Finnish boundary which runs about midway between them and a group of four islets about half a mile eastward, the north-eastern of these is Maasarvi. Möyly, a small above-water rock, lies 4 miles south-eastward of this group and is the southernmost Finnish above-water feature in the area now described; it lies about 10 miles west-south-westward of Maksniemi.

Other islets and rocks lying near the boundary are: Knifskär, two islets and a rock, 3 miles north of Sarvi on the Swedish side; a group of five islets and rocks of which Pensaskari is the largest, about 1½ miles east of Knifskär; Kataja, an islet 2 miles north of Knifskär with the two islets of Hamnskär westward and a group of four islets and rocks close south-south-westward, the largest of which is Inakari. The boundary passes west of the islet close southward of Inakari, thence between them and thence east of Kataja. Northward of Kataja, a chain of above-water rocks extends for 2 miles, the northernmost of these is named Launikari. About 1½ miles eastward of Launikari and within a mile southward of Sellei, on the Finnish side of the boundary, lies a chain of rocks extending from the latter island. The boundary runs between Sellei and two islets lying about half a mile west of its western extreme. Kraseli and another Swedish islet close northward lie off the mouth of the Torne River.

Two buoys mark the outer line of the boundary between Maasarvi and Knifskär, thence to the Torne River the boundary is indicated by the alignments of pairs of beacons set up on the islets and rocks.

The whole area is encumbered with innumerable shoals and dangers; the fairways in use between them are marked by beacons, buoys and lights. The area is likely to be closed by ice from the middle of November to the middle of May. With strong and prolonged winds from the northern quarters the water level is liable to drop by several feet; conversely, with winds from the southern quarters, it is likely to rise. There is no tide as such.

The principal ports within the area are:

On the Finnish side, Kemi, about 11½ miles south-east of the entrance to the Torne River, where there are depths at the quays of from 10 to 21 feet and in the roads up to 24 feet; Röyttä, the port for the town of Tornio lying a short way up the river, which is on the west side of Sellei and where there are depths of 20 feet at the quays.

On the Swedish side, Haparanda, on the mainland opposite Tornio, where there is a quay with a depth of 19 feet alongside, and Neder Kalix, about 24 miles west of Tornio, where there is a depth in the roads of 27 feet. There are several landing places between Kemi and Röyttä and also on the Swedish coast west of the river entrance.

Pilotage is compulsory for navigation in both Finnish and Swedish waters. Finnish customs regulations prescribe that vessels bound for Kemi must adhere to the route past Kemi lightvessel, or past Ulkokrunni and, if bound for Tornio, to the route past Malören lighthouse and Puukko in Swedish waters or past Kemi lightvessel to Røyttä.

10. The area of Viro Lachti (Annex, map No 48)

References : Chart No. 2247

Baltic Pilot, Volume III, Fourth Edition, 1951

The boundary between Finland and the USSR cuts the coast in the south-east corner of Viro Lachti, an indentation lying between Gevonemi and a point on the mainland 3 miles north-north-eastward. Extending 5 miles seaward of the latter point are the islands Laid-salm, Padio and Pukion Sari, all territory of the USSR, these are separated by very narrow channels. The penetration of Viro Lachti, from a line joining Gevonemi to the west extreme of Padio, is $5\frac{3}{4}$ miles. Within these limits about one-third of the coastline is USSR territory and two-thirds is Finnish.

Numerous islets lie within 3 miles of the coast westward of Gevonemi and east and south-east of Padio and Pukion Sari, which can best be seen on the chart. Less than half a mile south-east of Gevonemi is the Finnish islet of Vango with the USSR islet of Martin close south-east of it. Three-quarters of a mile west of the latter lies Santio, a Finnish islet, with Parrio another close westward. About $1\frac{1}{4}$ miles south of Parrio lies the islet of Kinnar, the largest of a group of islets and rocks, and the boundary runs through the group. About a mile south of this group is another cluster of above-water and submerged rocks, the largest of which is Gouör; the boundary passes northward, eastward and southward of it. Five and one-quarter miles southward of this cluster is Hallikarti, a smaller group, with Kivikari and Matakarti, two similar groups, lying $1\frac{1}{2}$ and $2\frac{1}{4}$ miles north-westward and westward respectively of the latter, with the boundary passing between. The southern end of the demarcated boundary lies 4 miles south-south-westward of Matakari and about midway between the island of Sommars and Itakari, the easternmost of a large group of Finnish islands and rocks $9\frac{1}{2}$ miles north-westward. The boundary throughout is marked by buoys and beacons.

Depths throughout the whole area are irregular and there are many shoals and submerged rocks; Viro Lachti itself is encumbered by islets, above-water rocks and shoals.

There are no ports of any consequence; a loading place is situated about $1\frac{1}{4}$ miles within Gevonemi which vessels drawing 24 feet can reach; an authorized track for vessels drawing up to 10 feet leads to the head of the bay. Shtandar or Kavö Road, situated between Martin and Padio, is sheltered except for the south-eastern quarter and there are depths of from 8 to 10 fathoms.

Anchorage may be obtained in Finnish waters north of Santio in depths of about 7 fathoms. The dangers in the approaches to both these anchorages are buoyed.

The area is likely to be closed by ice from January to April.

There is no tide, but prolonged winds from east or west are liable to effect a change in water-level.

Pilotage is compulsory in both Finnish and USSR waters.

11. Estuary of River Guadiana (Annex, map No 49)

References : Charts, Nos. 2680, 92

West Coasts of Spain and Portugal Pilot, Third Edition, 1946

The River Guadiana for the last few miles of its course forms the boundary between Portugal and Spain. It discharges through a comparatively straight stretch of coast running in an east-north-easterly direction for about 20 miles. About $1\frac{1}{2}$ and $2\frac{1}{4}$ miles within the entrance, two narrow creeks lead eastward off the main river to discharge into the sea through the River Higerita, about $2\frac{1}{2}$ miles eastward of the main mouth, thus forming the islands of Canela and Salon; both these channels almost dry at low water.

On the western side of the entrance to River Guadiana, a drying sandspit extends nearly $2\frac{1}{4}$ miles south-eastward, and drying banks extend about a quarter of a mile south of Isla Canela. The distance between the end of this spit and the drying banks is about three-quarters of a mile. This entrance is fronted by a bar composed of sand banks which completely change at times of heavy floods in winter and of onshore gales. At times, some of these banks may be above water. The entrance channel is marked by buoys which are moved after alterations in the channel.

The small port of Villa Real de Santo Antonio lies on the Portuguese side about a mile within the entrance. Vessels drawing up to about 18 feet can reach this port and those drawing 17 feet can reach the piers at Pomarao about 22 miles up river. Tunny fishing nets may be found at times up to $5\frac{1}{2}$ miles off shore and a large sardine fishery takes place near the river entrance.

The rise of the tide is about 11 feet at springs.

Pilotage is compulsory.

12. The mouths of the River Evros (Annex, map No 37)

References : Chart No. 1086

Mediterranean Pilot, Volume IV, Eighth Edition, 1955

The principal mouth of the River Evros, known to the Turks as Meric and once known as Maritsa, forms the boundary between Greece and Turkey. The river discharges through a delta on the eastern side of a bight lying between the coast about 3 miles north-west of Gremea Burnu and Ak Makri about 20 miles north-westward. The penetration of this bight is $6\frac{1}{2}$ miles. The island of Samothraki, about 21 miles off shore, fronts the bight.

The coast of the delta extends for about $6\frac{1}{2}$ miles in the northerly direction. The principal of the river

mouths lies at the southern end. The mouths through the delta and its coast are liable to alteration. At the time of the survey for the chart, several low, narrow islets fronted the delta, lying up to half a mile off shore.

On the eastern side of the bight, depths of less than 3 fathoms are found up to 1½ miles off shore, the northern side is comparatively steep-to.

Depths on the bar of the principal mouth are usually

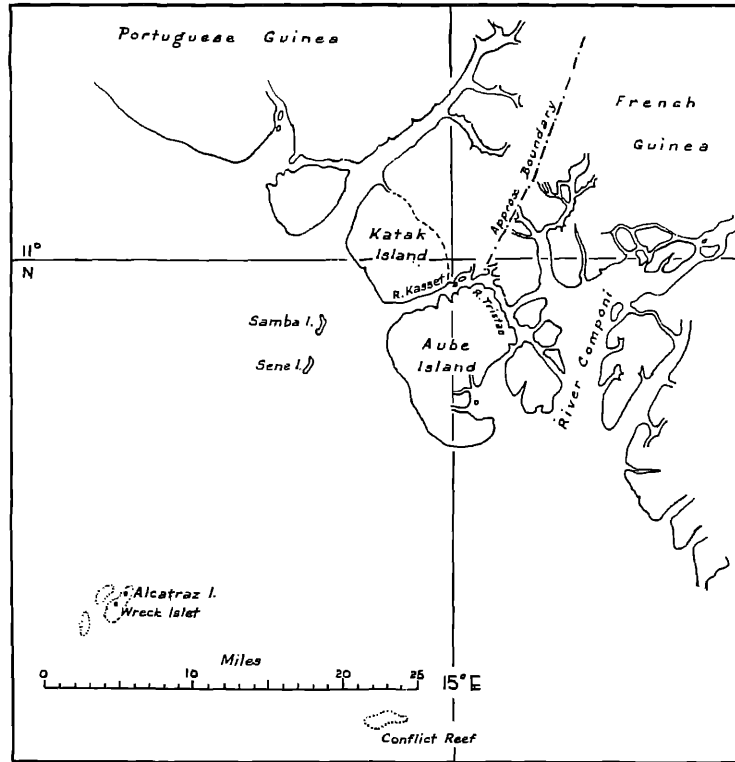
about 3½ feet. There is trade by small craft with the Turkish town of Enez, 2 miles within the principal mouth; Edirne, 70 miles up river, can be reached by barges. The port of Alexandroupolis, which has a small harbour with depths of about 18 feet, lies about 7 miles east of Ak Makri.

About a quarter of the coastline of the bight described above is in Turkish territory.

ANNEX

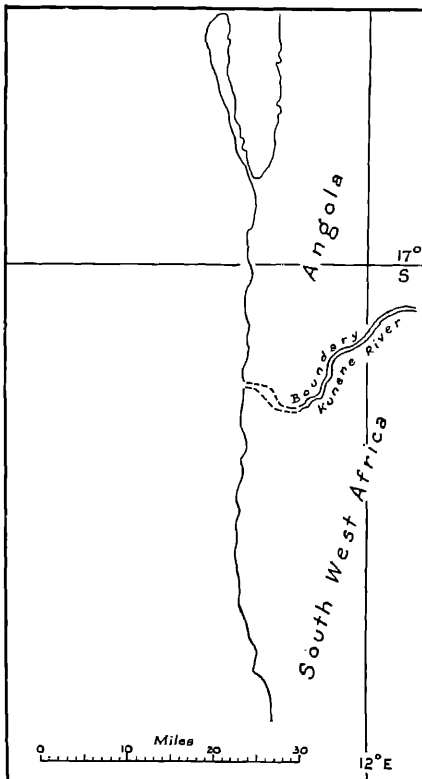
MAP NO. 1

Waterway at 11°N, 15°W (approx.) between French and Portuguese Guinea



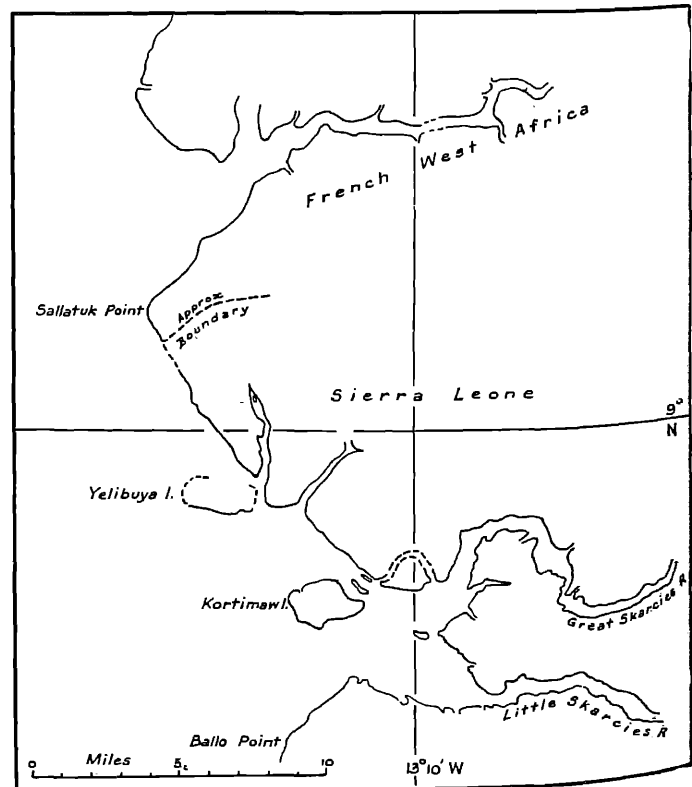
MAP NO. 2

Estuary of Kunene River

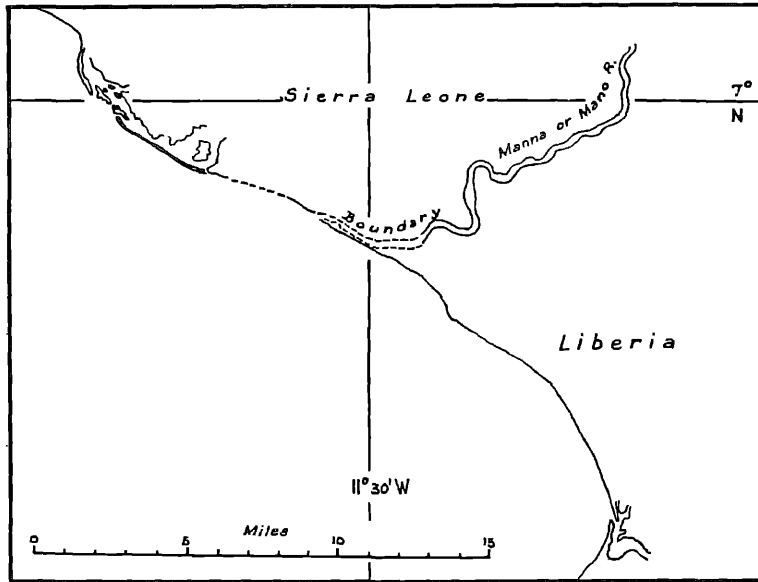


MAP NO. 3

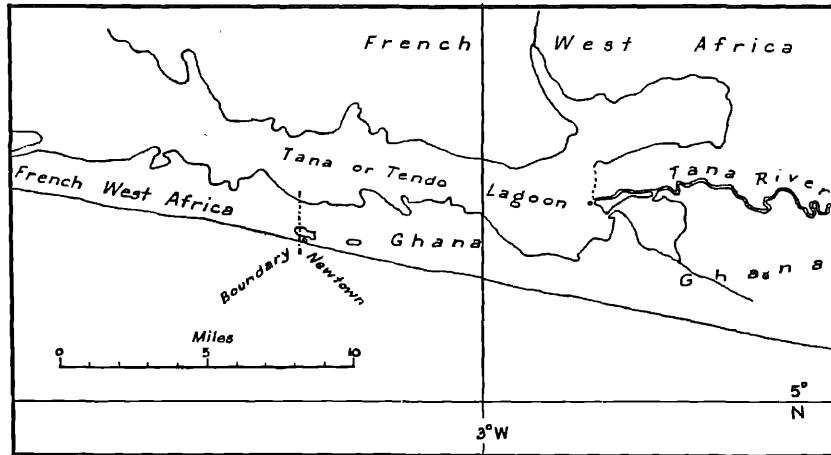
Estuary of Kolente or Great Skarcies River



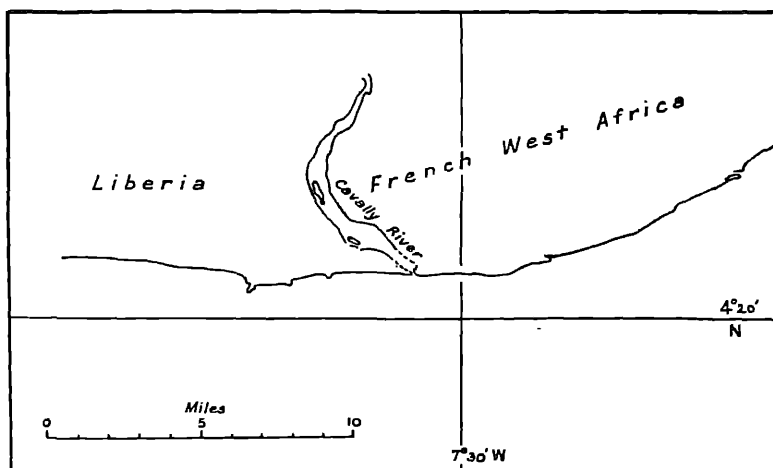
MAP NO. 4
Mouth of Manna or Mano River



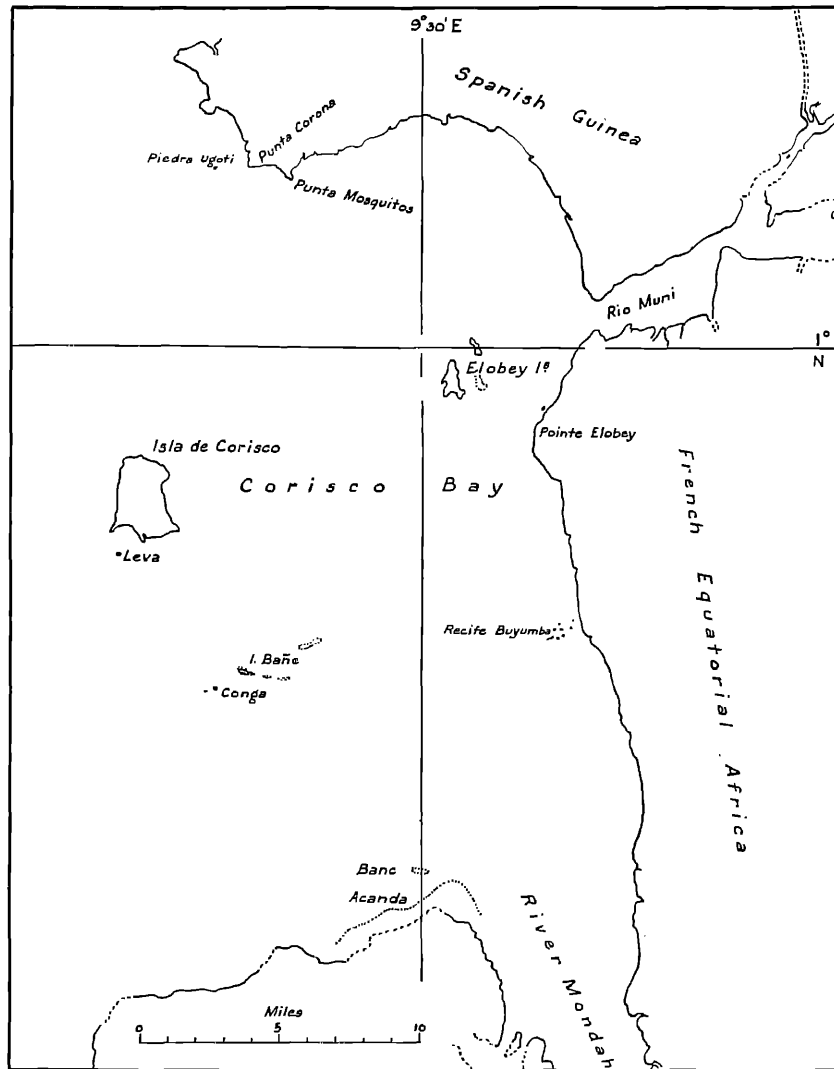
MAP NO. 5
Tana River



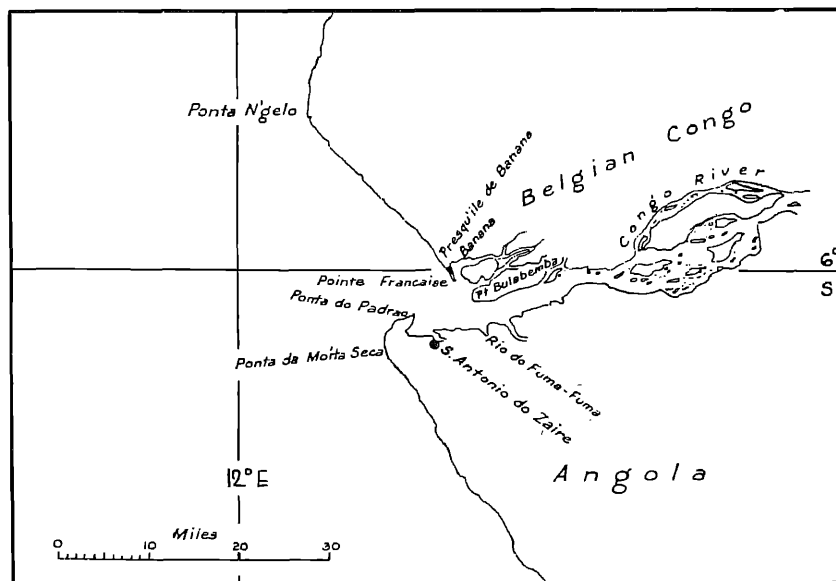
MAP NO. 6
Cavally River



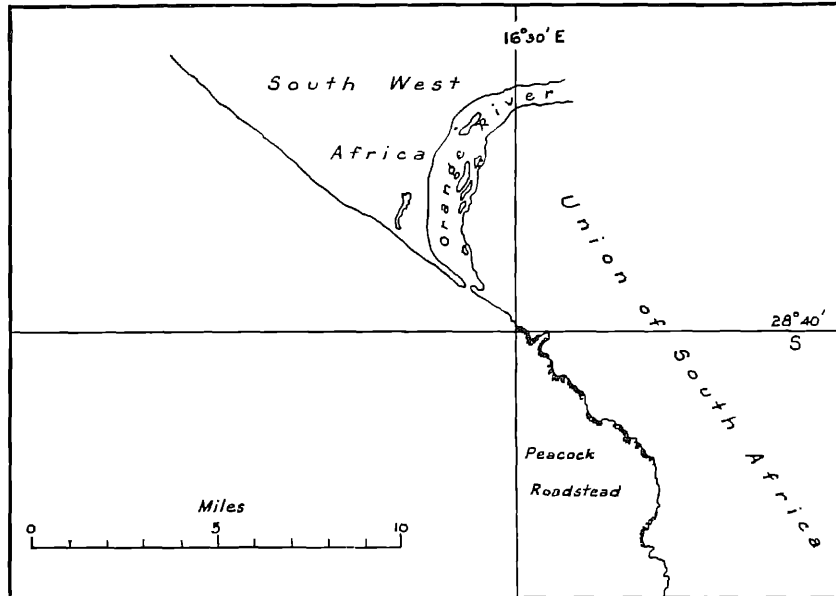
MAP NO. 7
Estuary of Rio Muni



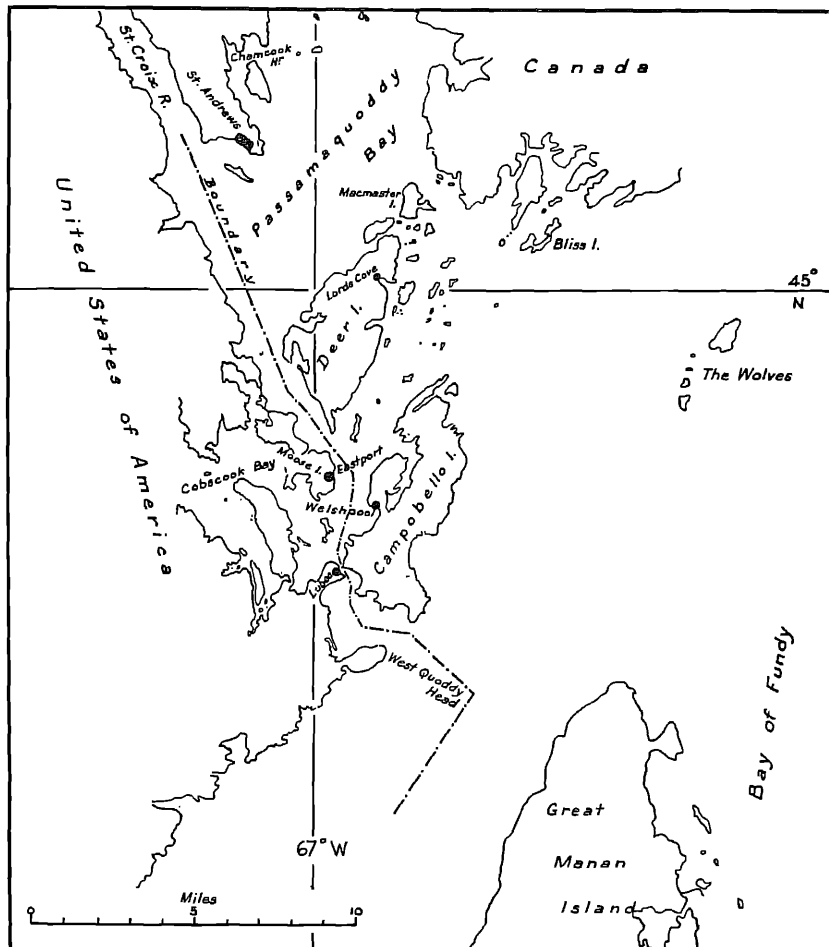
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Estuary of Congo River



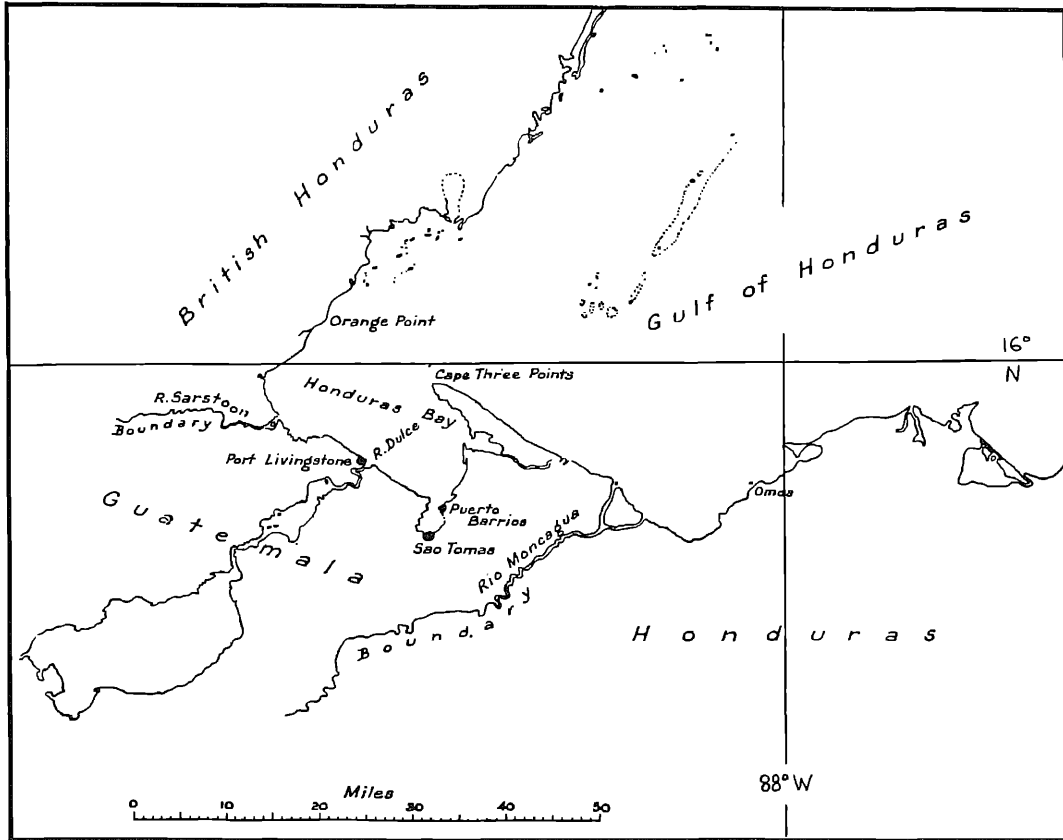
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Mouth of the Orange River



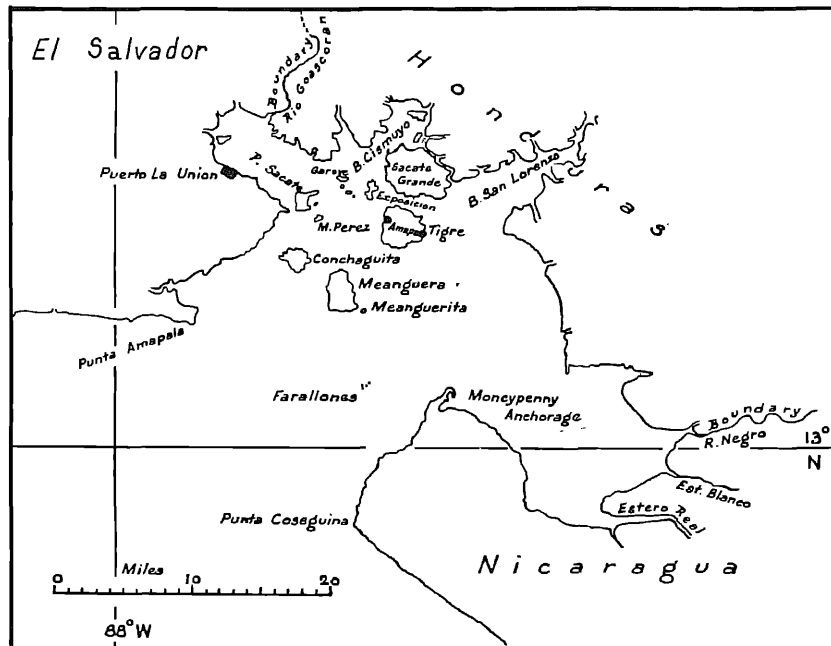
MAP NO. 10
Passamaquoddy Bay



MAP NO. 11
Gulf of Honduras

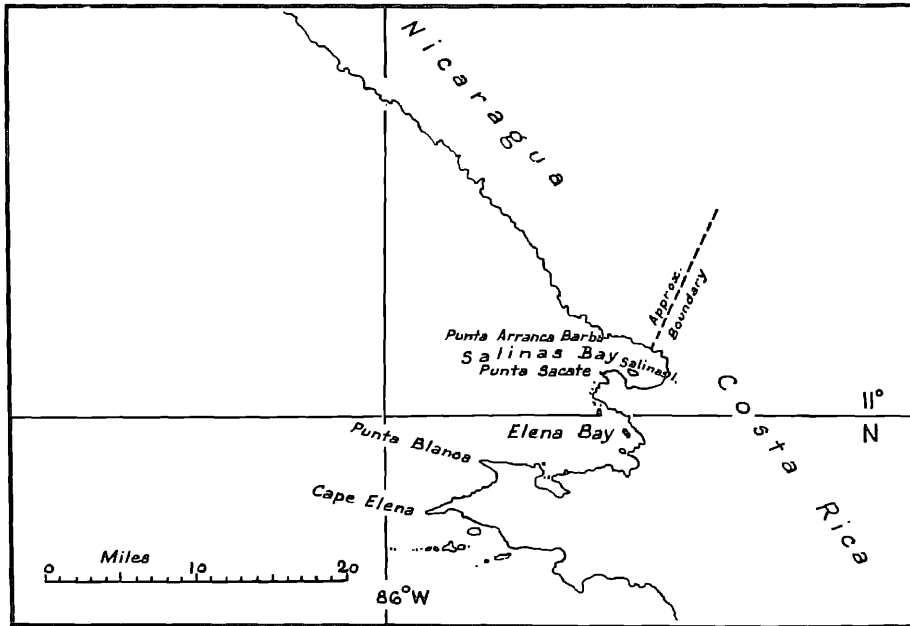


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Gulf of Fonseca



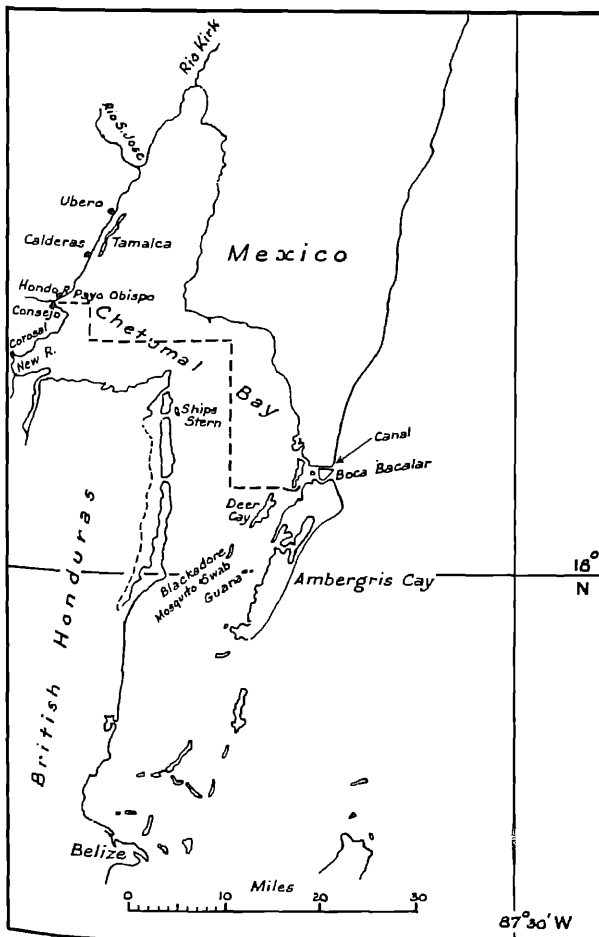
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Salinas Bay



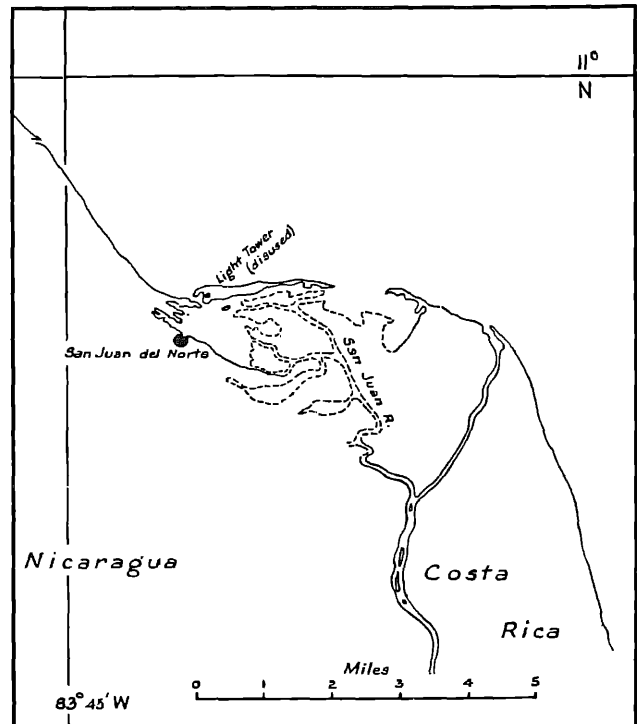
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Chetumal Bay



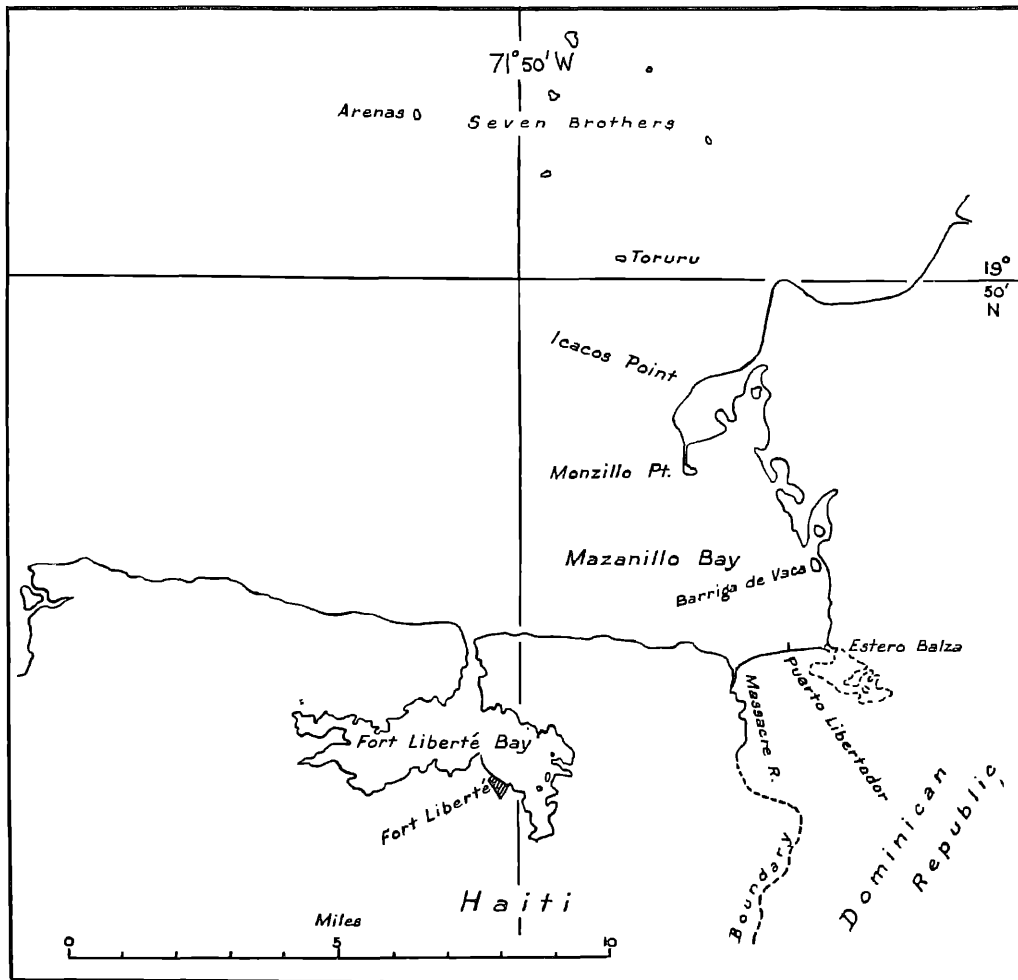
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San Juan River



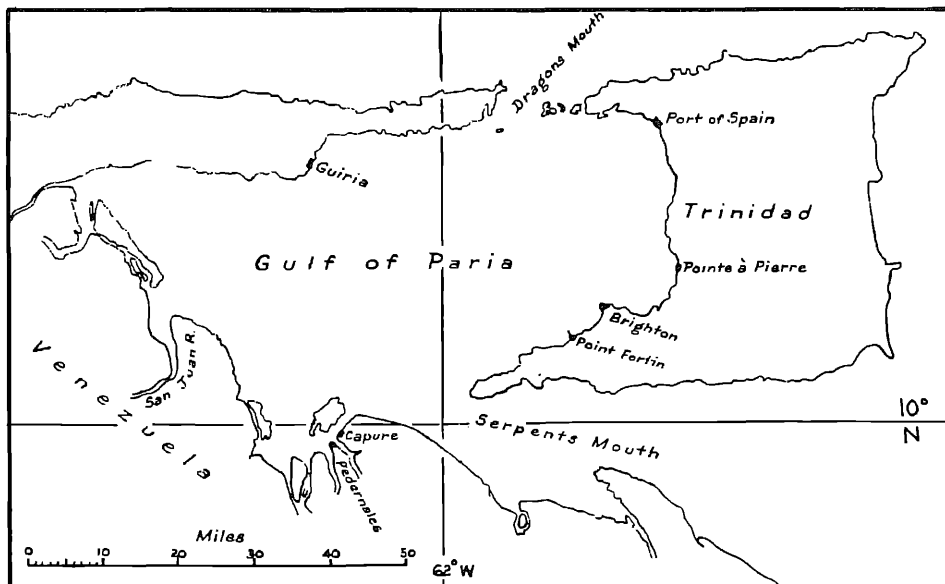
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Mazanillo Bay

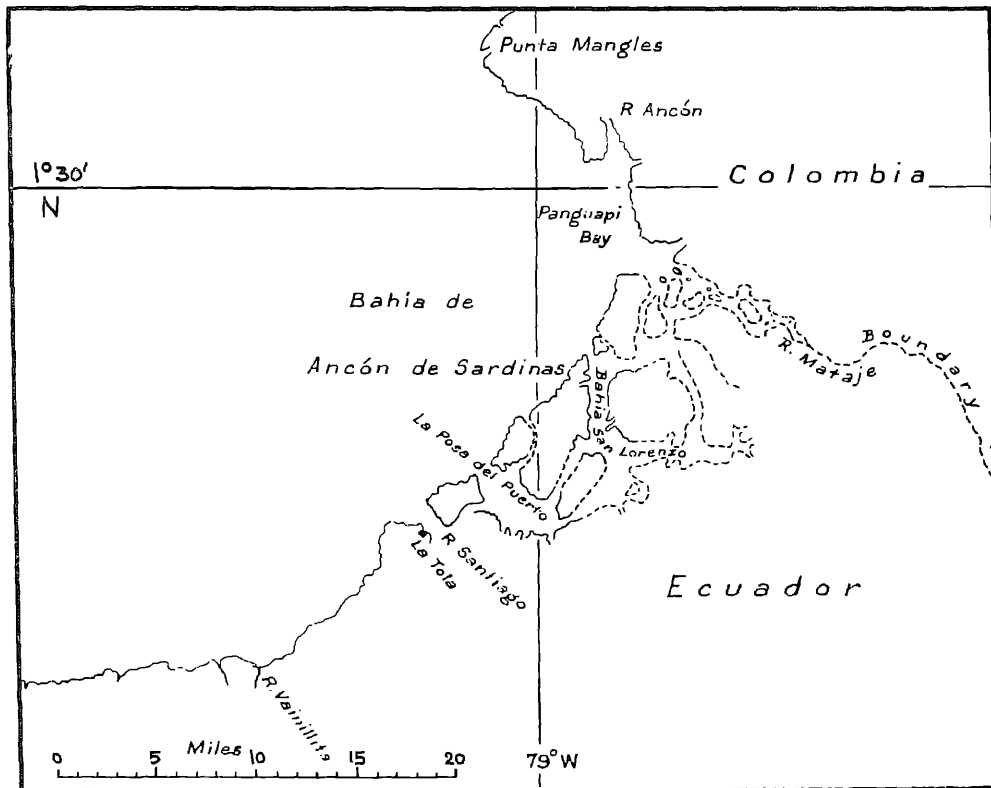


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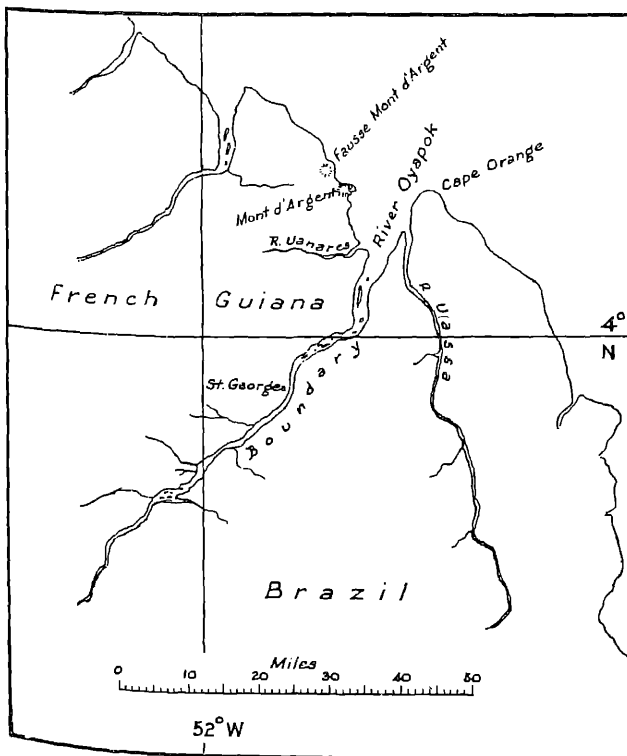
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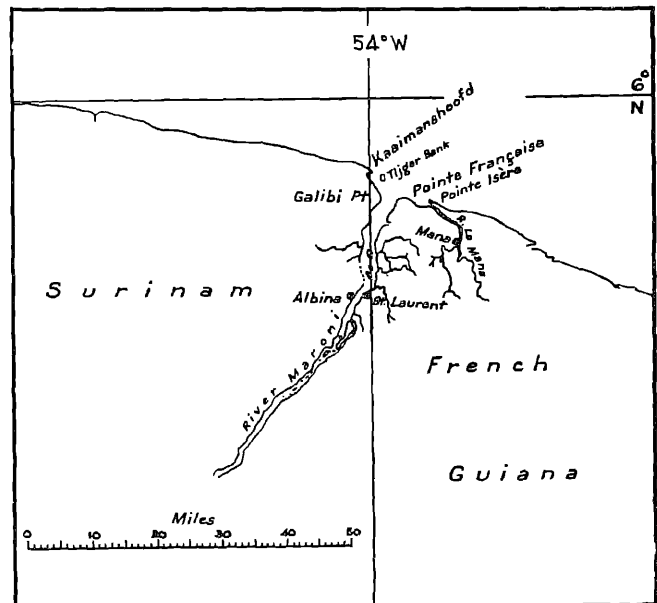
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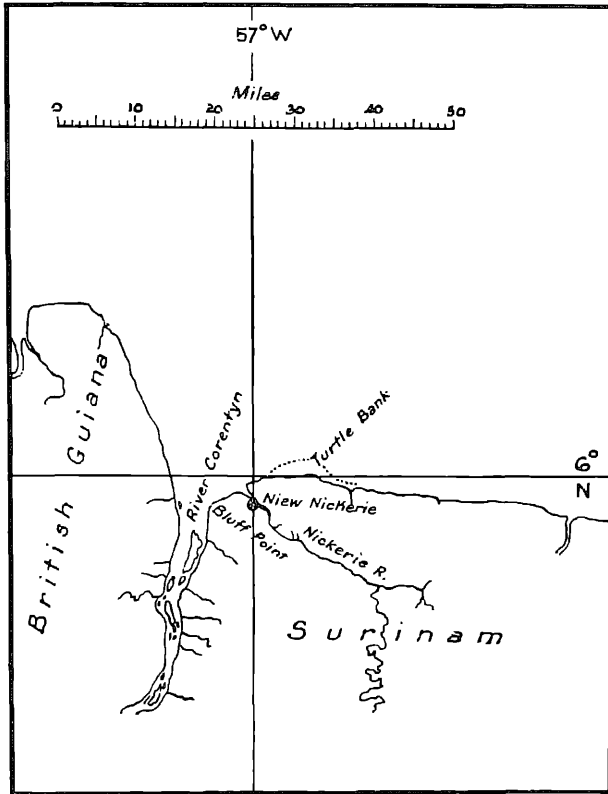
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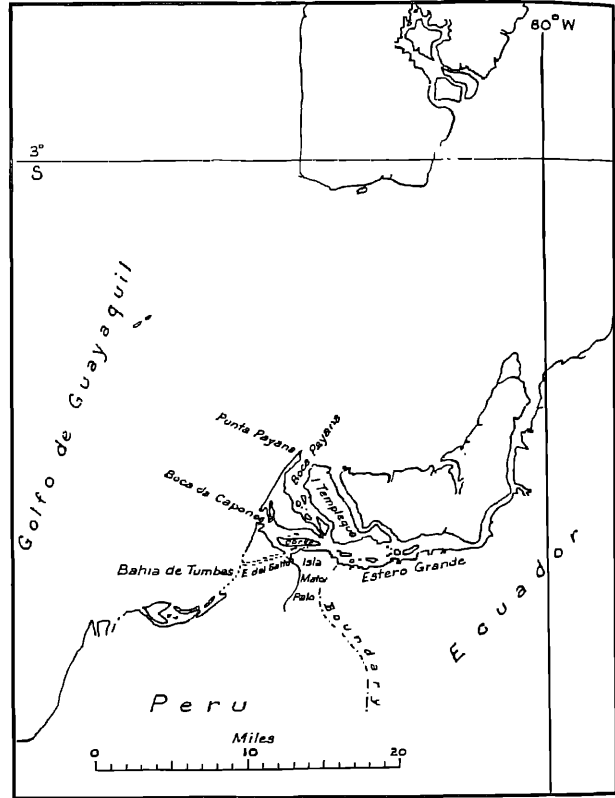
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Estuary of Maroni



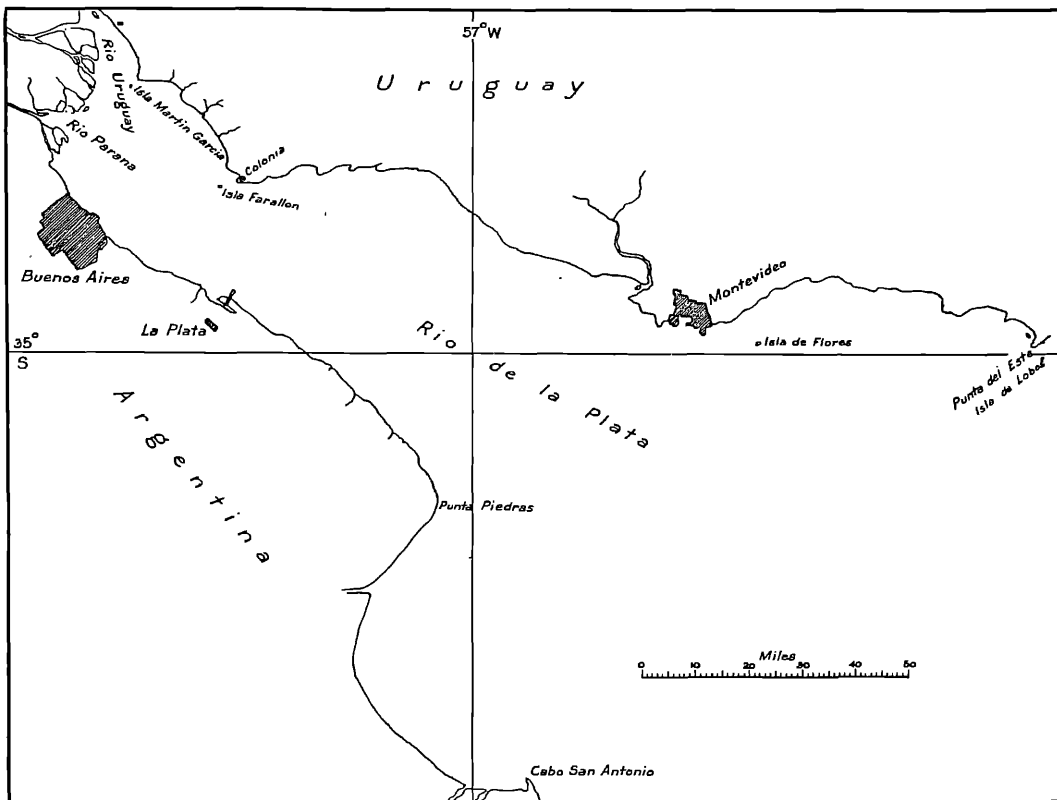
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Corentyn River



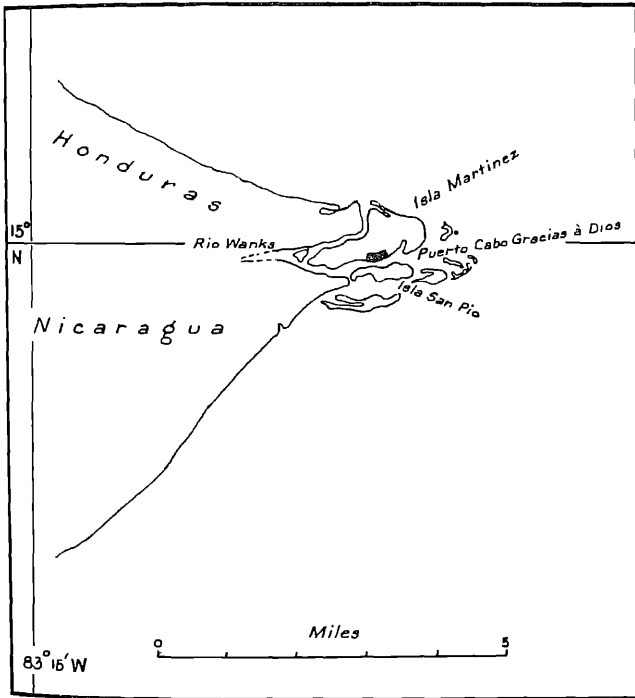
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Boca de Capones



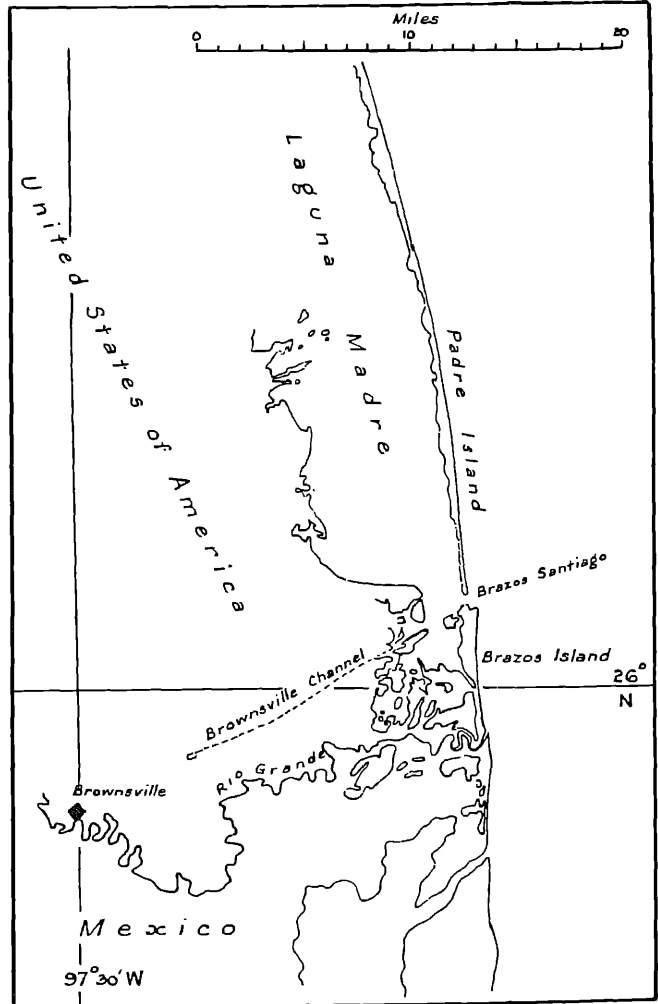
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Rio de la Plata



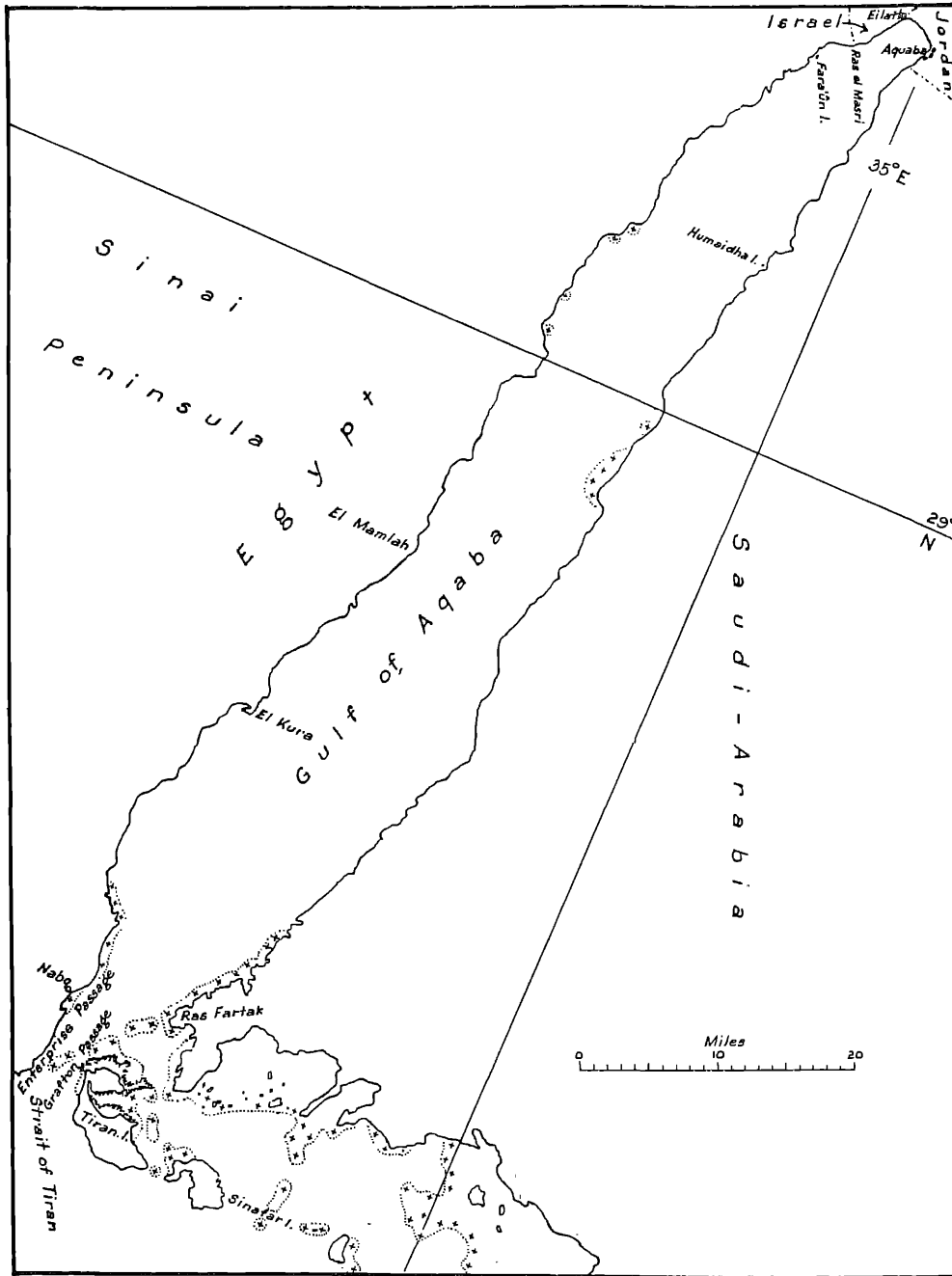
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Estuary of Coco (Wanks) River



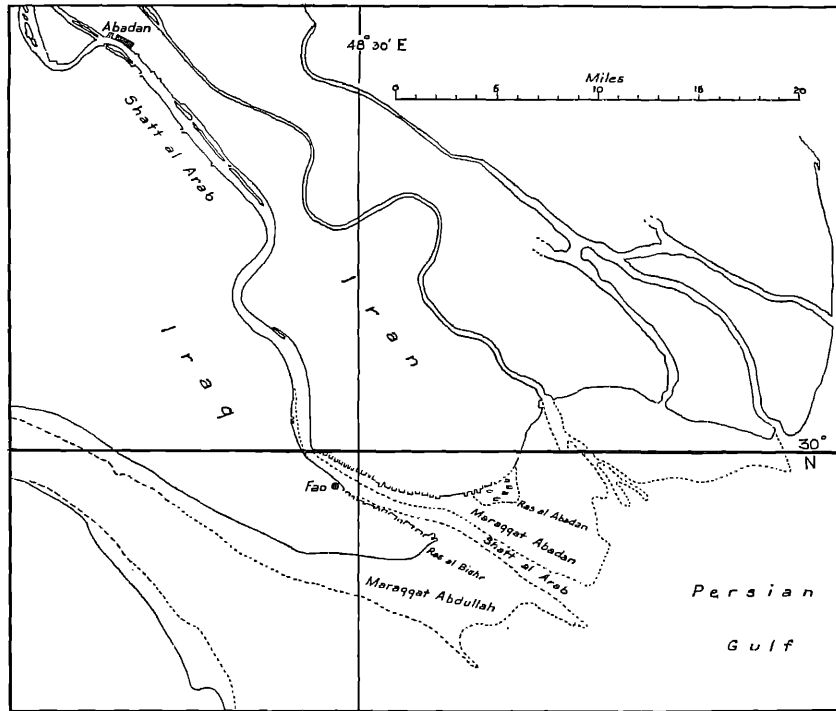
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Rio Grande



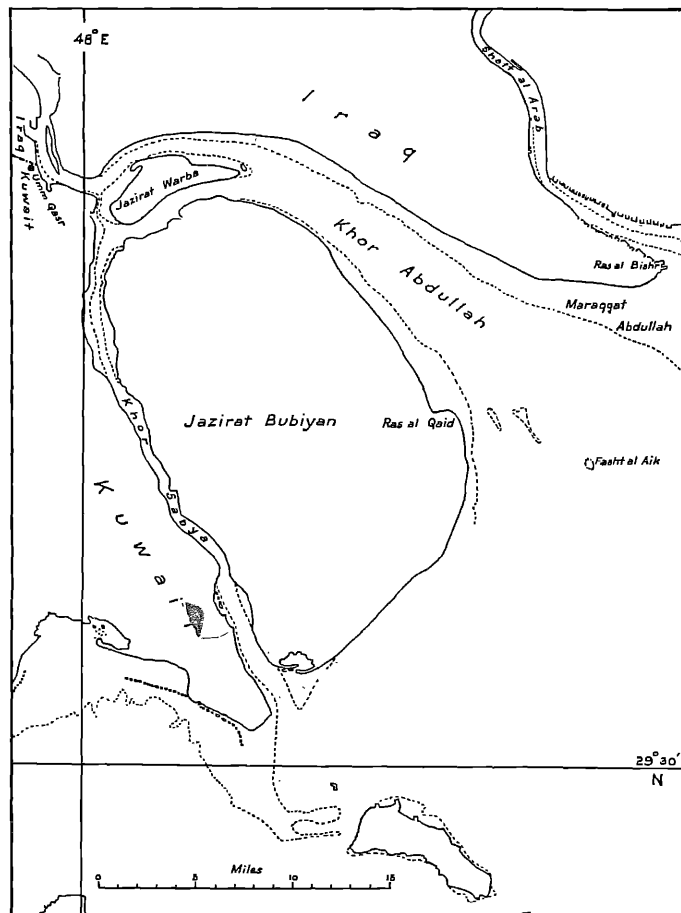
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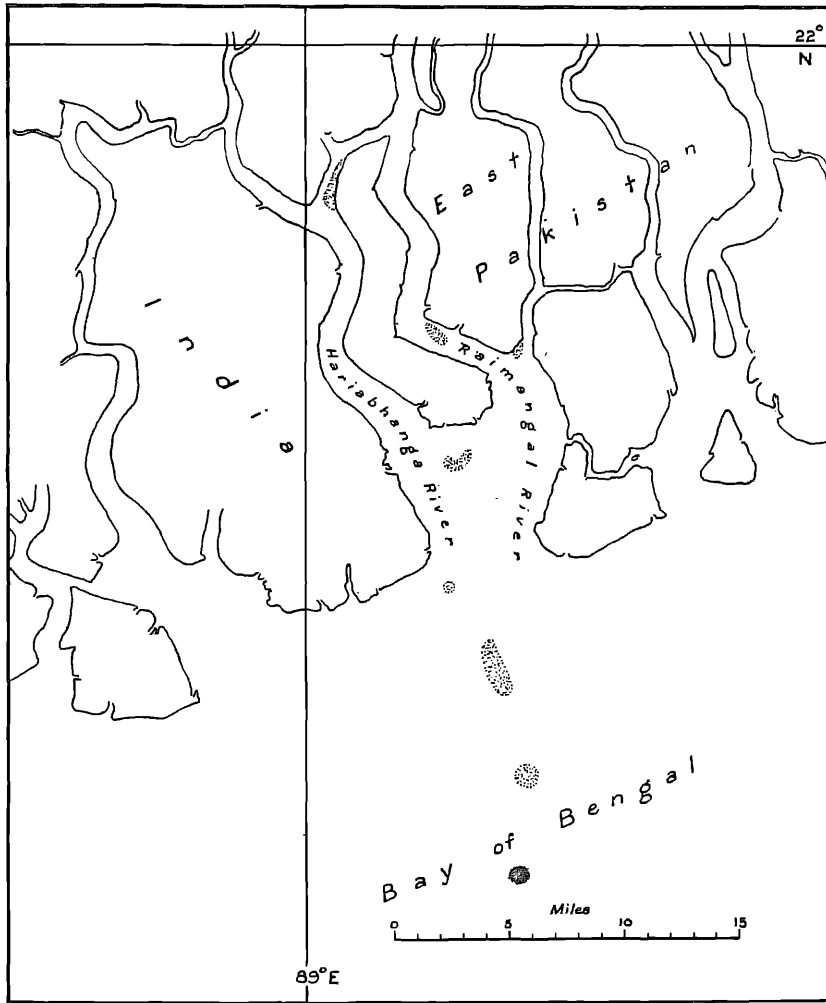
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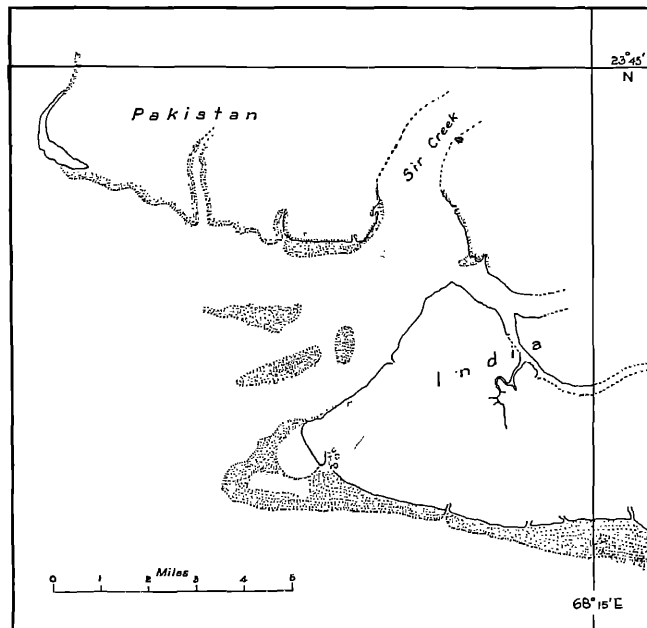
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MAP NO. 29
The Sundarbans (Hariabhanga and Raimangal Rivers)



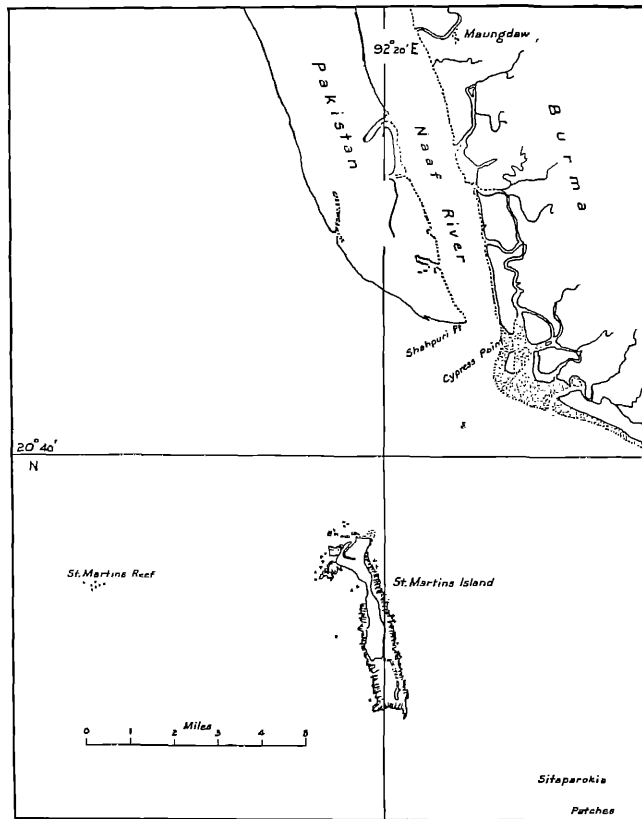
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Sir Creek



Silt and sand banks covered at high tide

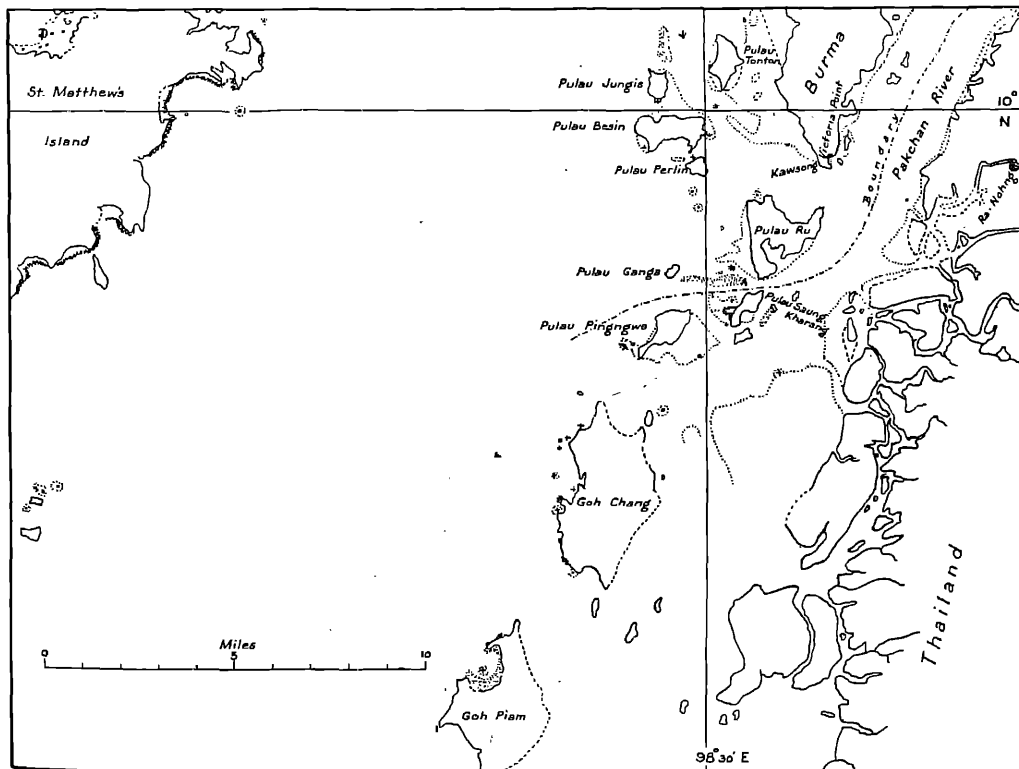
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Naaf River



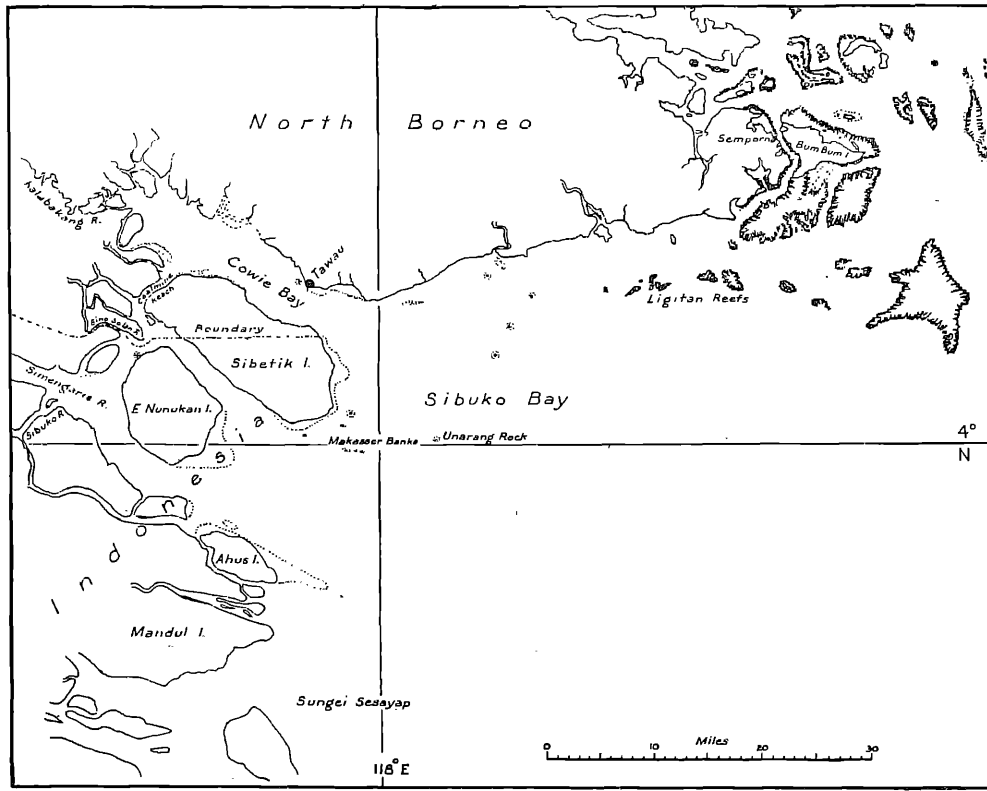
MAP NO. 32

Estuary of Pakchan River



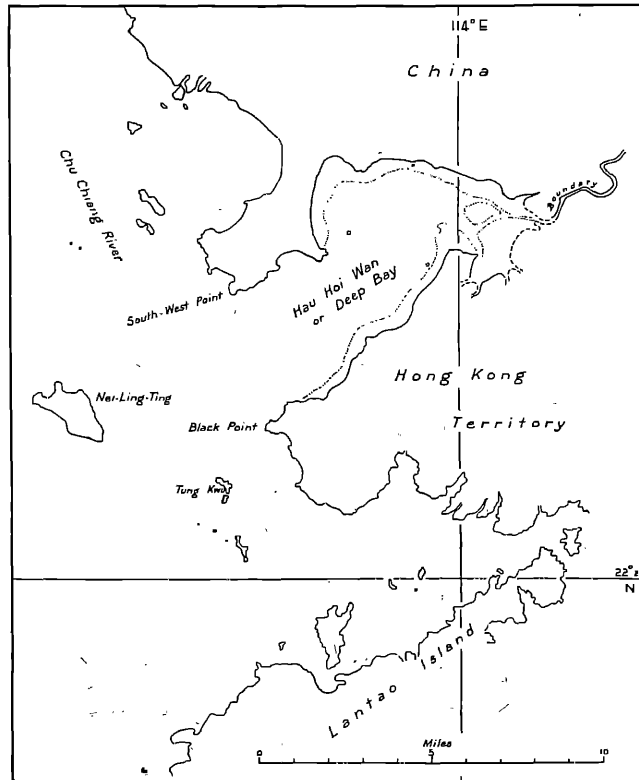
MAP NO. 33

Sibuko Bay

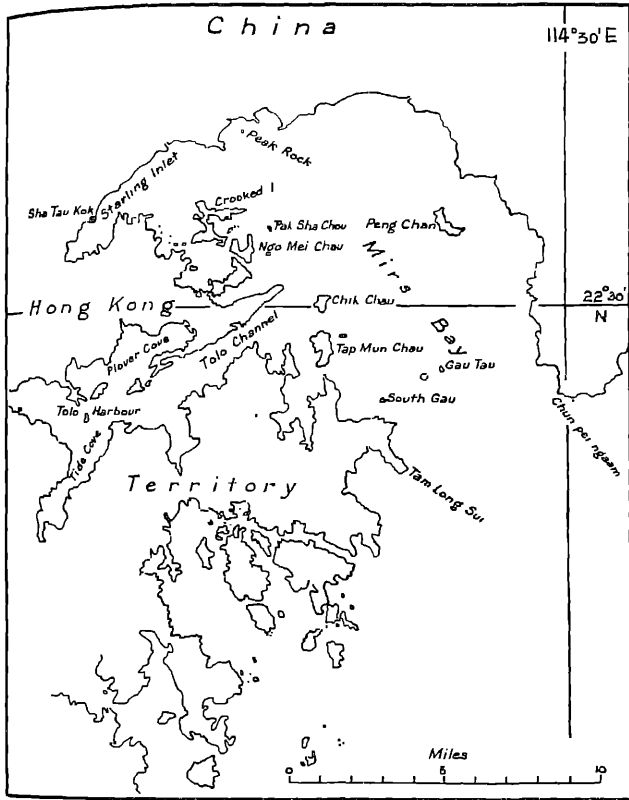


MAP NO. 34

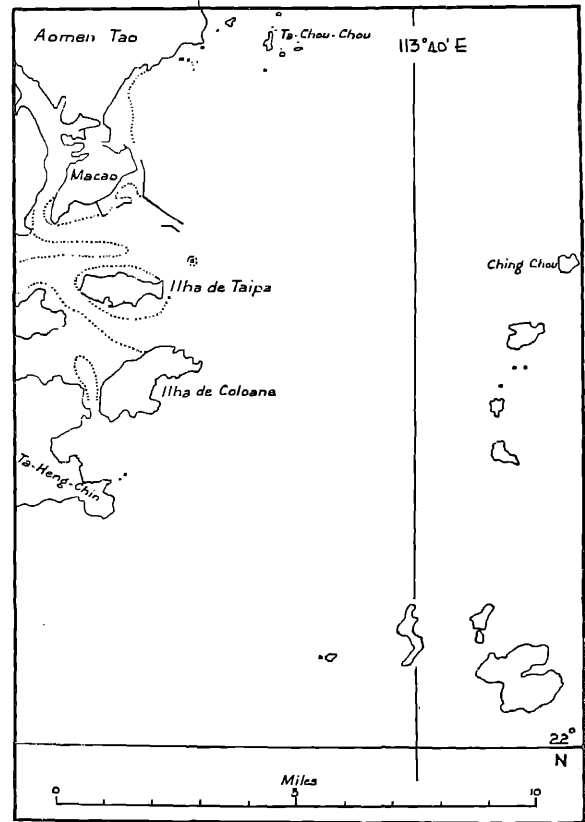
Hong Kong - Deep Bay



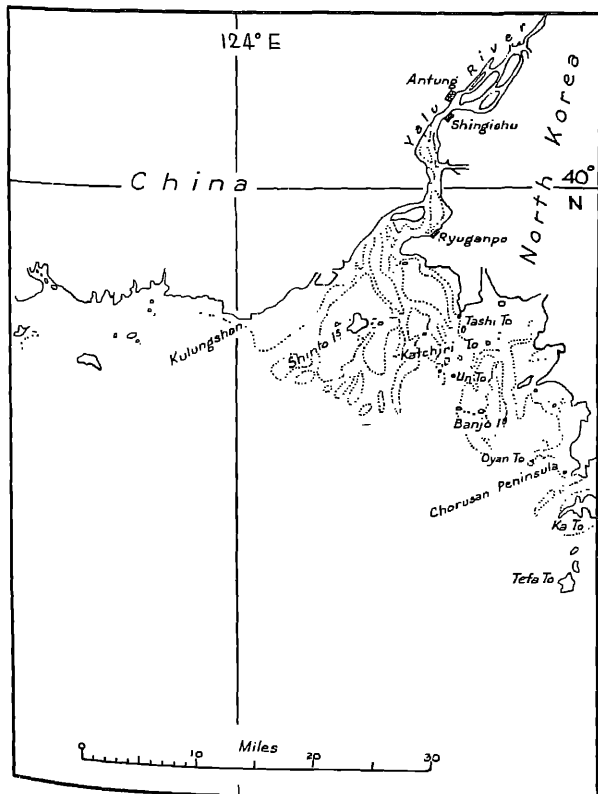
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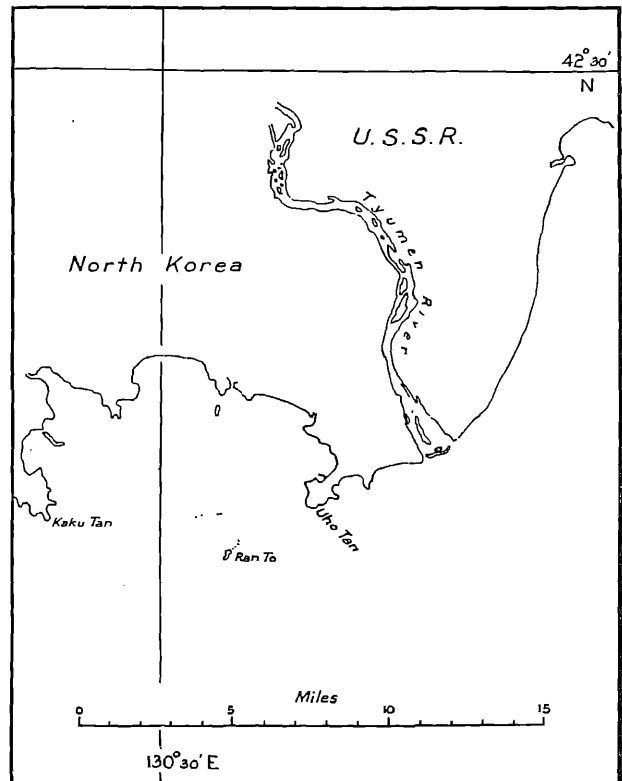
MAP NO. 36
Macao Area



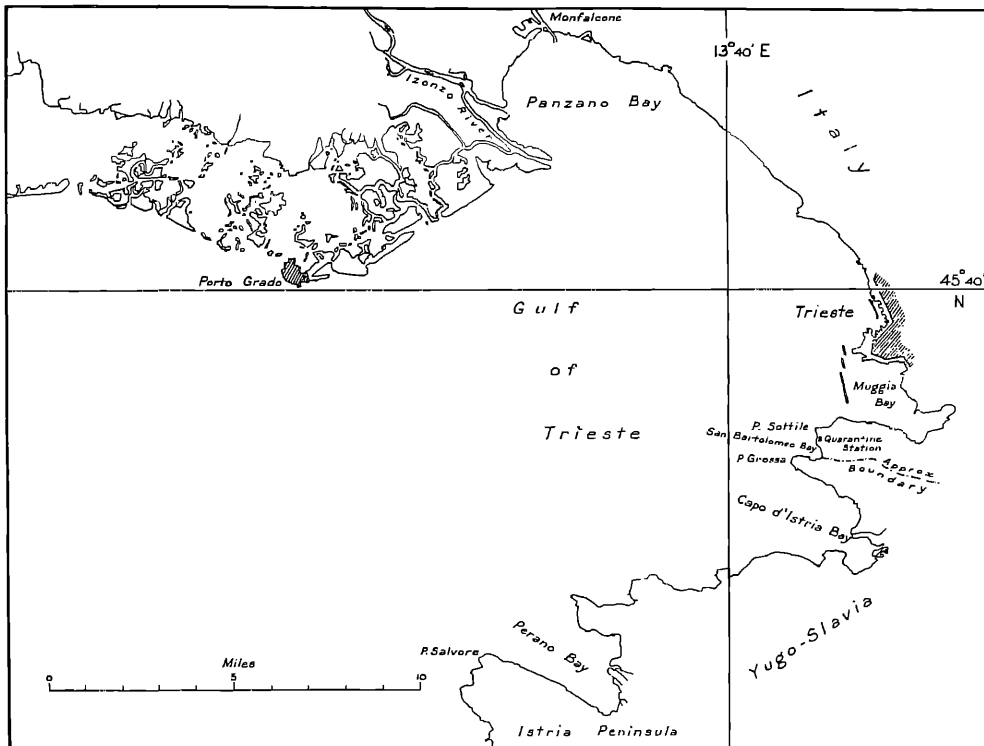
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Yalu River



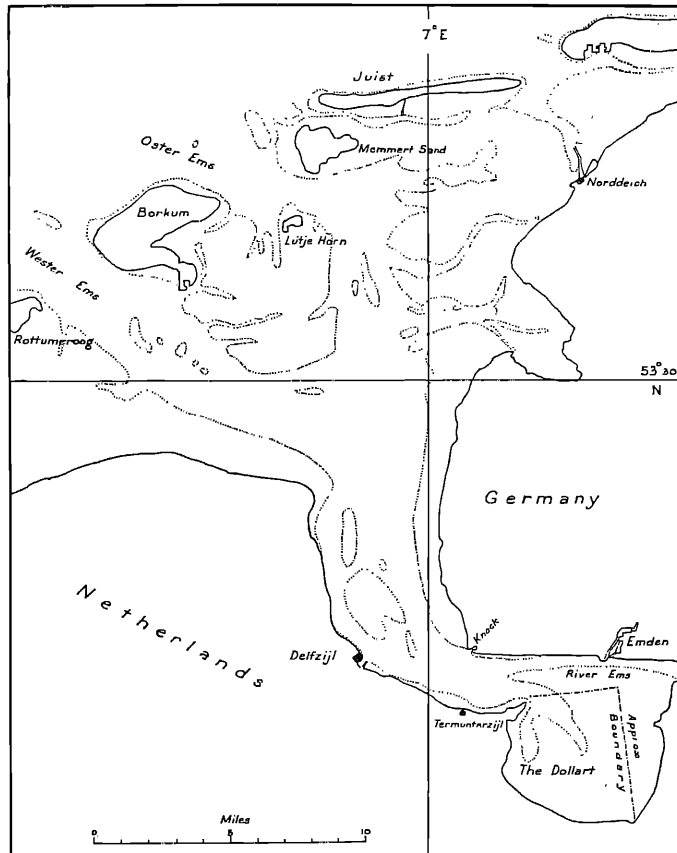
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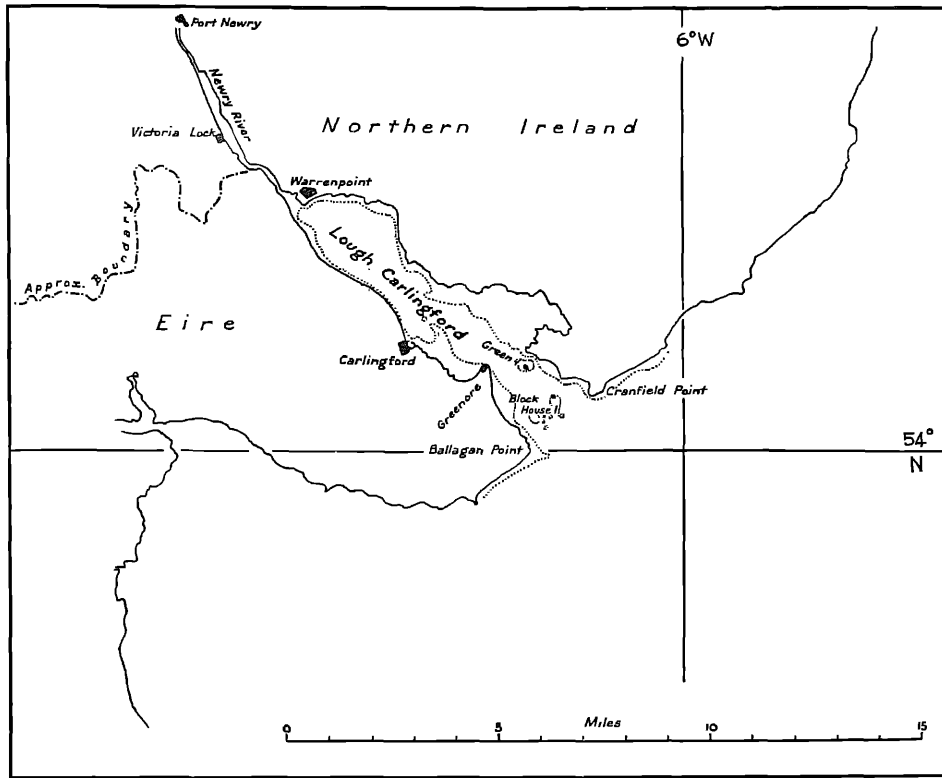
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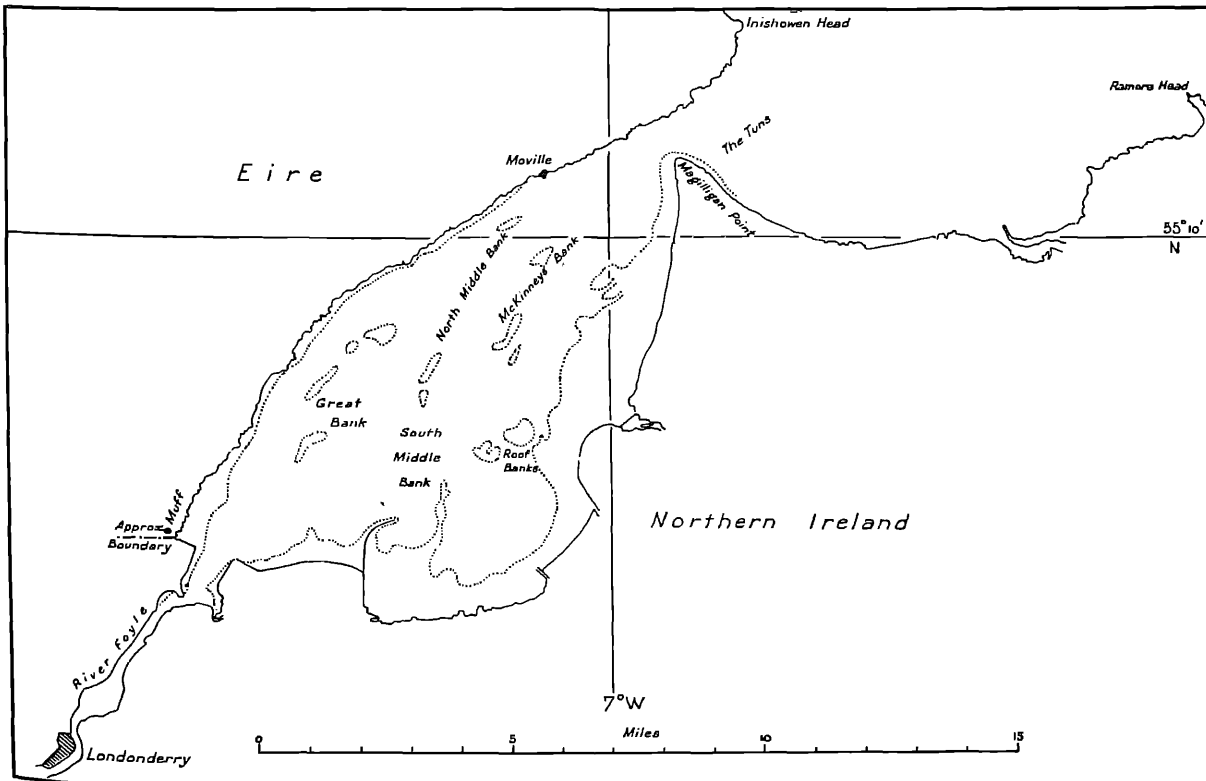
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Ems and Dollart



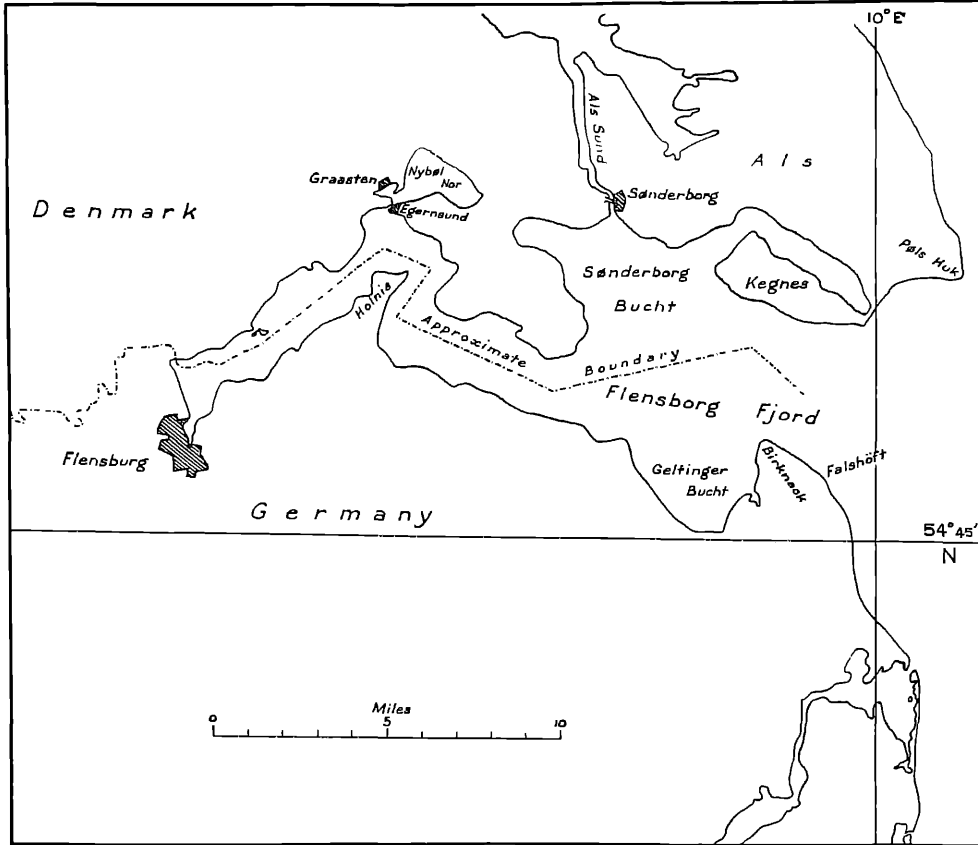
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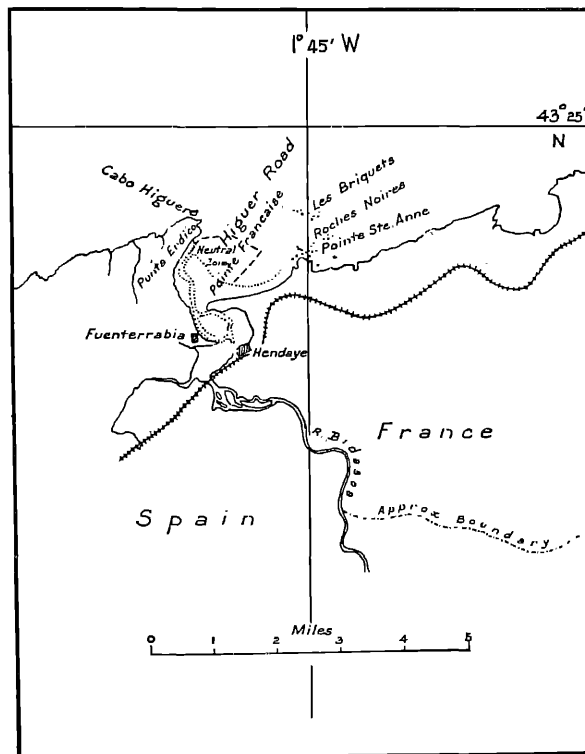
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Lough Foyle



MAP NO. 43
Flensburg Fjord

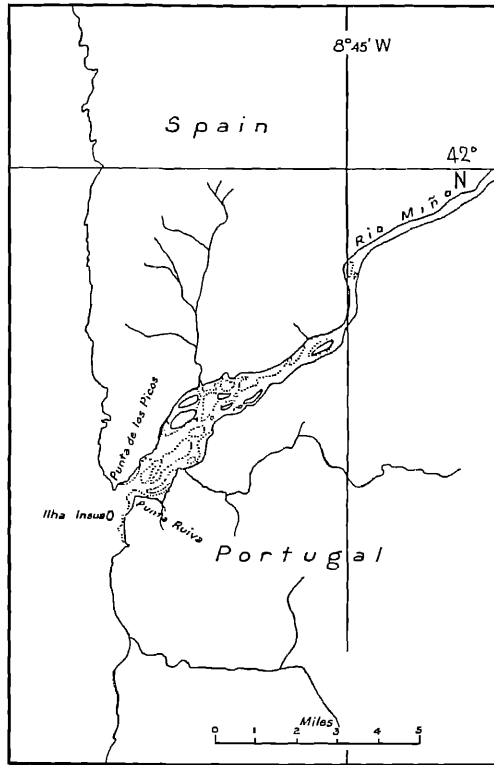


MAP NO. 44
Bidasoa River



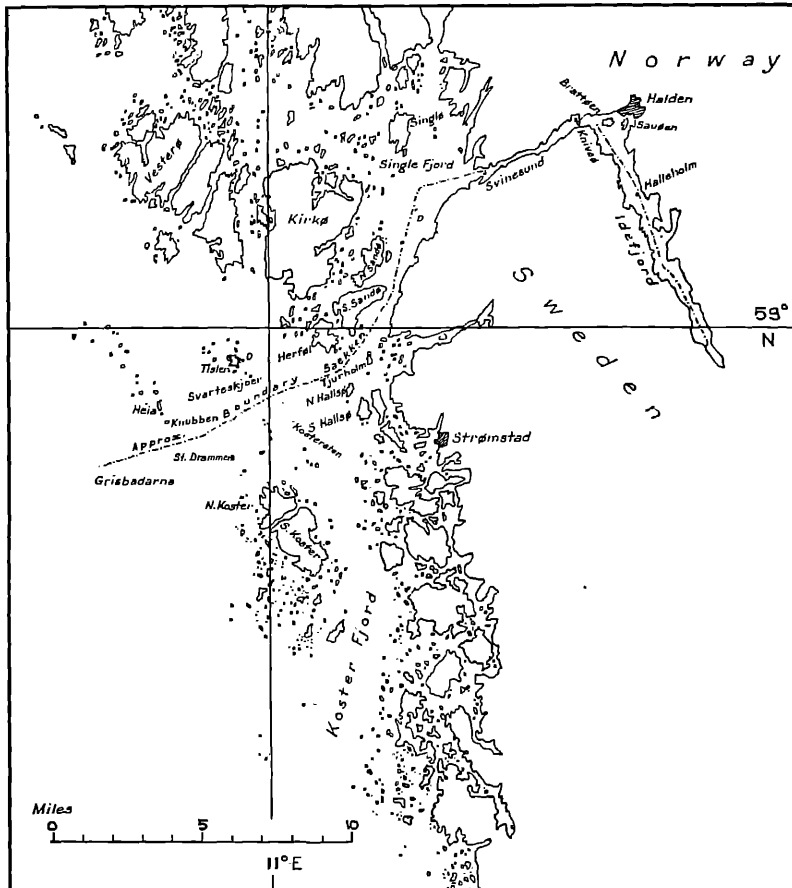
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River Miño

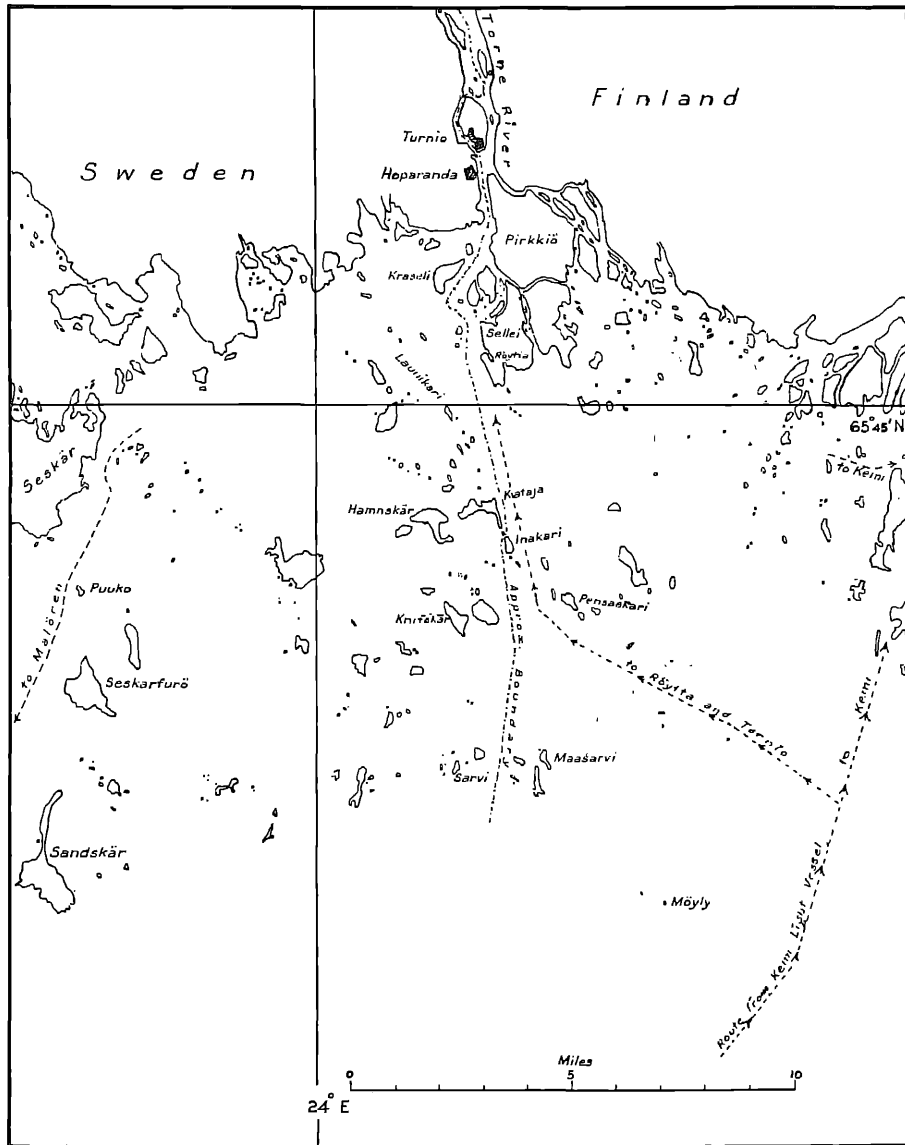


MAP No. 46

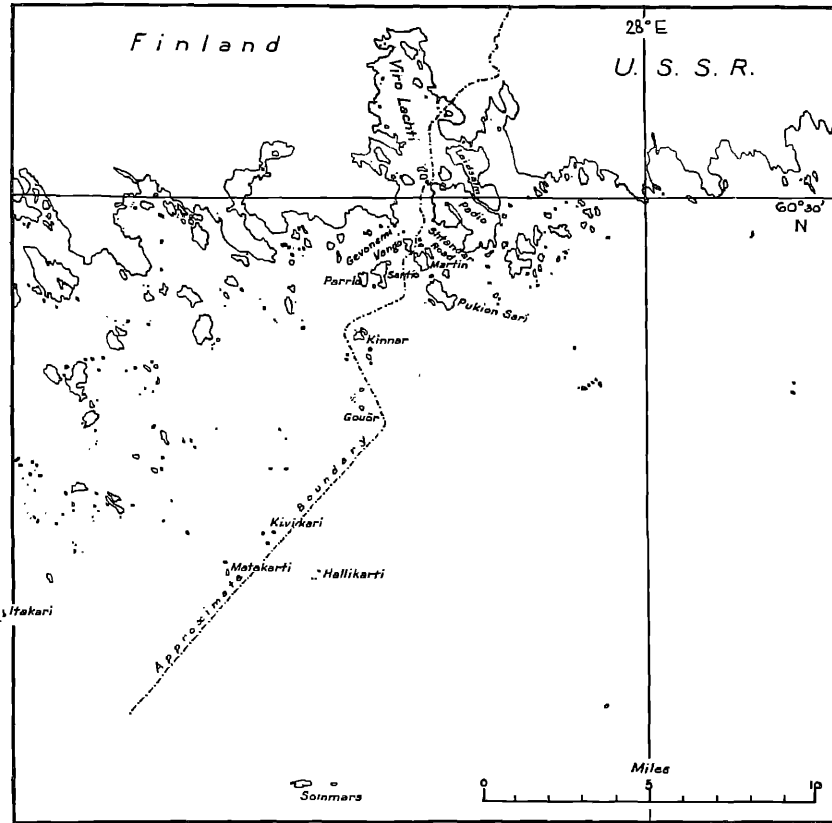
Idefjord



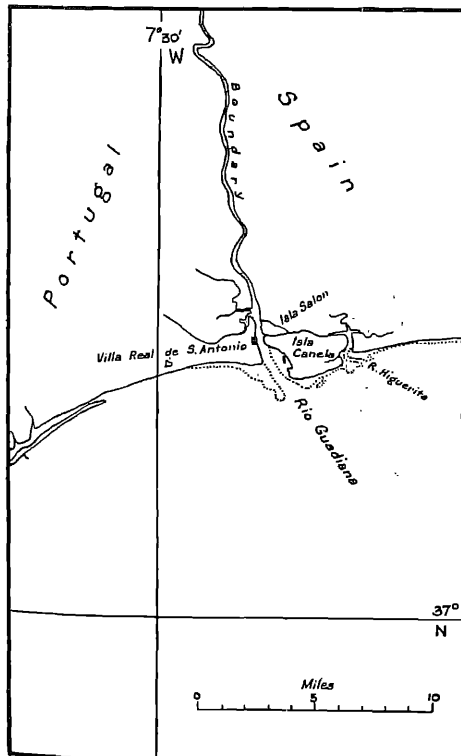
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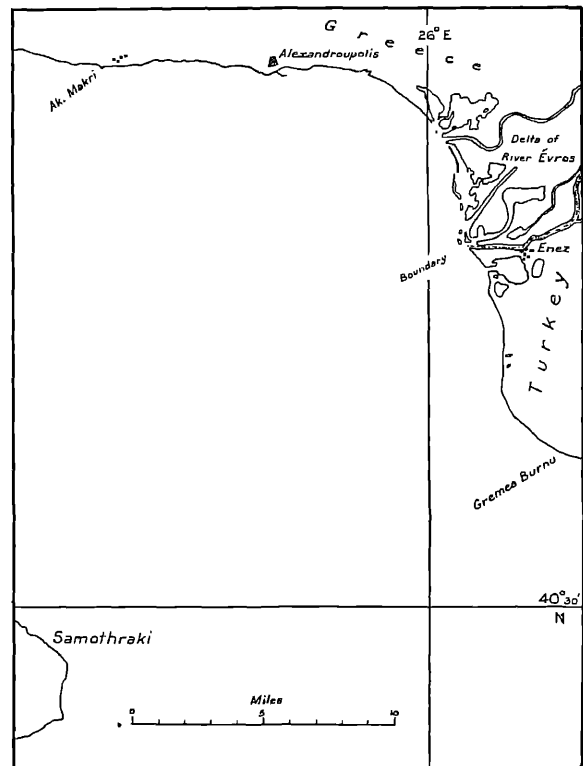
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Viro Lachti Area



MAP NO. 49
River Guadiana



MAP NO. 50
River Evros



**THE ECONOMIC IMPORTANCE OF THE SEA FISHERIES
IN DIFFERENT COUNTRIES**

MEMORANDUM BY THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

(Preparatory document No. 13)

[Original text: English]
[20 November 1957]

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PART I

**The economic importance of the sea fisheries
in different countries**

1. In preparation for the United Nations Conference on the Law of the Sea, the Secretary-General of the United Nations has requested the Food and Agriculture Organization (FAO) to prepare a working document for

a statistical examination of the economic importance of fisheries in the different countries. It has not been possible for FAO to undertake a special study for this purpose, but a group of tables has been compiled on the basis of readily available data and is here presented along with some remarks and explanations which may be of assistance in the proposed examination. As far as possible the statistical data relate to the sea fisheries only since it is these that come within the terms of reference of the Conference.

2. The importance of sea fisheries in the economy of a country may be judged in a variety of ways. The most general statistical indicator of this importance is the proportion of the national income derived from the fisheries. It is calculated by relating the gain from the productive activity of the sea fishing sector of the economy to that arising out of all the productive activities of a country or its nationals. The gain referred to includes operating profits, interest and rent earned by enterprises as well as compensation to employees. There are several variants of this indicator, but the differences between them are unlikely to affect substantially the classification of countries shown in section 1 of table 1. Only a few countries report their national income statistics in sufficient detail to permit calculation of one or more of these variants, but the ratio of the value of fish landings to the gross domestic product (which can be calculated for many more) is in most cases a sufficient approximation, though it somewhat overstates the importance of the sea fisheries.

3. Section 1 of table 1 presents the results of the calculations for nearly 40 countries to the nearest full per cent and is summarized below. The percentages are intended to reflect approximately the contribution made by the sea fisheries to the national income of each of the countries shown. It will be seen that in the majority of cases the reported income from the sea fisheries is less than one per cent of the total income of the country. Five countries report about one per cent, four (Hong Kong, Japan, Malaya and Portugal) two per cent and four (China (Taiwan), the Philippines, Norway and Thailand) three per cent. Only Iceland reports fishing income well in excess of three per cent of the total. It should be noted, however, that the section does not show values for some other countries, such as the Faeroe Islands and Greenland, known to be heavily dependent on the sea fisheries for their national income.

Summary Extract from Table 1, Section 1: Product of the Sea Fisheries as Percentage of Aggregate Domestic Product in Selected Countries

Percentage	Countries	(Number)
Less than ½%	Various	(25)
1%	Tunisia; Korea (South); Denmark; Greece; Spain	(5)
2%	Hong Kong; Japan; Malaya; Portugal	(4)
3%	China (Taiwan); Philippines; Thailand; Norway	(4)
Over 3%	Iceland	(1)

4. In order to obtain some idea of the role played by the sea fisheries in the economy of the many countries that could not be included in section 1 because of lack of data, recourse must be had to other more readily and widely available statistical information which may be expected to bear some relationship to the percentage in section 1 of table 1. In this connexion, it is helpful to regard this percentage as the resultant of the factors shown in sections 2 and 3 of tables 1 and 2. They are, on the one hand, the quantity of sea fishery landings per head of the population and the unit value of landings, which may be combined as value of landings per head and, on the other, the national income per head.

5. Where statistics of all these factors are available, the importance of the sea fisheries can be indicated as in section 1 of table 1, but even incomplete information may be of help to users of the tables in making some assessment of the importance of the sea fisheries in the many countries not included in section 1 of table 1 because of lack of data, but for which some of the factors are given in sections 2 and 3 of table 2. If, for instance, the sea fishery landings per head of the population are high, this may be taken as a *prima facie* indication of economically important sea fisheries, though this first estimate may have to be modified in the light of what is known or surmised about the price or unit value of the fish landed, and about the general level of the national economy as indicated by national income per head. The economic importance of the fisheries will clearly be greater if the fish landed is high priced than if it is of low value. Again, fish landings of a given value per head will mean more to the national economy in a poor country than in one with high average incomes.

6. Before such assessments for the majority of the countries listed in table 2 are attempted, it may be helpful to refer to sections 2 and 3 in table 1 and to see how the factors shown there determine the indicator of importance in section 1. In doing so, it should be noted that the dollar values in section 2 are computed on the basis of official rates of exchange. These rates are sometimes applicable only to a limited range of foreign exchange transactions and may not give a true picture when used to convert values of domestic fish products. The dollar values in section 3 also are to be used with caution and reference should be made to the sources of the computations.

In section 2 (a) it will be found that fish landings per head in Iceland are, as one would expect, exceptionally high and, although the unit value is only in the \$100-per-ton class and the general level of incomes is high,

the result is an exceptionally high contribution by the fisheries to the national income. Norway's landings per head, though much less than Iceland's, are still very high compared with those of other countries shown in the table. Again the unit value is comparatively low and average incomes high and the fishery contribution to the national income is about three per cent. It is interesting to compare these characteristics with those of the other countries in the three per cent class. They are the three Eastern countries, China (Taiwan), the Philippines and Thailand. The fish they land per head of their population is a mere fraction of the Norwegian per caput production, but the unit value is high — a general characteristic of countries with comparatively primitive production methods — and the level of incomes is characteristically low so that these comparatively small per capita landings are relatively as important to their national economies as the many times greater landings in Norway are to that country's income. Japan, on the other hand, lands much more sea fish per head than the three Eastern countries just mentioned, but the unit value is much lower and, with an average national income of the same order, Japan ends up somewhat lower in the scale, in the two per cent class. Canada with landings per head and unit values very similar to those of Japan comes out in the lowest class (below one per cent of the national income), because of its much higher average incomes.

The general conclusions one may read from an examination of the table are as follows: Countries with highly developed production methods producing fish cheaply and having income levels normally need to land about ten tons of sea fish or more per 100 inhabitants to come into the class with three per cent or more of the national income contributed by the fisheries. Countries of this type are likely to derive substantially more than three per cent of their national income from the sea fisheries only if they have exceptionally high catch figures of the order of 100 tons per 100 people or more. Countries with comparatively primitive production methods, high fish prices and low average incomes are likely to fall into the two or three per cent classes if their sea fishery landings are well over one ton per 100 inhabitants. The application of these conclusions in the interpretation of sections 2 and 3 of table 2 requires some individual judgments and must be left to users of the tables. The summary table below may be of assistance in this connexion.

7. Only the primary phase of the sea fisheries has been considered in the sections so far discussed. Ideally, the income from processing and perhaps also from transporting and distributing sea fishery products should also be considered when the economic importance of the sea fisheries is being examined. However, statistical data are very scarce and often these activities involve fish along with other foods so that the relevant income figures cannot easily be segregated. It is clear, nevertheless, that where most or all of the sea fish is marketed at once in the form in which it is landed, little or no allowance need be made for income from processing, whereas in cases where the bulk of the catch is frozen, canned, dried or reduced, e.g., for export, the value added in processing is likely to be very considerable. In Iceland, which is a good example of the latter case, it is estimated that processing adds about 90 per cent to the value of

Summary extract from table 2, sections 2 and 3: sea fishery landings per 100 inhabitants and national income per head for selected countries

Landings (landed weight) per 100 inhabitants	National income per head			
	\$1,000 or more	\$500-\$900	Under \$500	
Up to 1 ton	Australia	Argentina Venezuela Israel Belgium France	Belgian Congo Egypt Ghana Kenya Mauritius Morocco (A) Tunisia Cuba Mexico Panama Puerto Rico	Brazil Colombia Ecuador Burma Ceylon India Lebanon Pakistan Syria Thailand Turkey Greece Ireland, Republic of Italy
Over 1 ton but under 10 tons ...	Canada (incl. Newfoundland) United States (incl. Alaska) Sweden New Zealand	Denmark Finland Germany, Federal Republic of Netherlands United Kingdom	Union of South Africa Chile Peru	China (Taiwan) Japan Korea (South) Malaya, Federation of Philippines Hong Kong Portugal Spain
10 tons - 99 tons		Norway		
100 tons or more		Iceland		

Summary extract from table 2, section 2: sea fishery landings per 100 inhabitants: countries for which no national income figures are available

Landings (landed weight) per 100 inhabitants	Countries		
Up to 1 ton	Algeria British Somaliland Cameroons (Br. Adm.) Cameroons (Fr. Adm.) Cape Verde Islands Ethiopia and Eritrea, Fed. of French Equatorial Africa French West Africa Gambia Liberia Libya Madagascar Mozambique Nigeria Portuguese Guinea Reunion São Tomé and Príncipe Sierra Leone Somalia (Ital. Adm.) Spanish Guinea Sudan Tanganyika Togoland (Fr. Adm.)	British Honduras Costa Rica Dominican Republic El Salvador Guadeloupe Guatemala Haiti Honduras Netherlands Antilles Nicaragua Panama (Canal Zone) Jamaica Trinidad and Tobago British Guiana Surinam Uruguay China (mainland) Cyprus Indonesia Iran Iraq Jordan	Portuguese Timor Saudi Arabia Singapore Viet-Nam West New Guinea Yemen Albania Bulgaria Germany (Eastern) Malta and Gozo Poland Romania Yugoslavia Guam New Guinea (Austr. Adm.) USSR
Over 1 ton but under 10 tons ...	Angola French Somaliland Morocco (B) Morocco (C) St. Helena Seychelles Spanish West Africa Zanzibar and Pemba	Bahama Islands Barbados Bermuda Leeward Islands Martinique Virgin Islands (UK) Virgin Islands (US) Windward Islands Falkland Islands French Guiana	Aden Brunei Cambodia Korea (North) Macau North Borneo Ryukyu Islands Cook Islands French Oceania Hawaii New Caledonia
10-99 tons	South West Africa Greenland	Maldivé Islands	American Samoa
100 tons or more	Tristan da Cunha	St. Pierre and Miquelon	Faeroe Islands

the fish as landed. Table 3 gives available information on the disposition of the catch in various countries and may be helpful in estimating approximately the value added in processing. As with the estimates called for at the end of the preceding section, the necessary judgment must be left to the users of the tables.

8. The economic importance of the fisheries may also be considered in respect of the external trade of a country. Section 4 of Table 2 shows for over 100 countries, for which data are available, the percentage of the total value of imports and of exports contributed by fishery products. It has not been possible to separate sea products from those of the fresh-water fisheries, but the overstatement of the importance of the sea fisheries in external trade, which might have resulted in a few cases, is likely to be too small to show in the rounded percentages given in the table. The situation is summarized below. On the import side, only two small island groups have more than five per cent fish, by value, in their total merchandise purchases from abroad. Over 60 countries show fish valued at between one and five per cent of total import trade and the remaining 40 report less than one half of one per cent. On the export side, the picture is more diversified. The exports of six countries consist to the extent of more than one-fifth of fishery products. The Faeroes and Iceland export very little else and the small island groups of St. Pierre et Miquelon and the Falklands have, respectively, 77 and 63 per cent fish exports. Greenland has 33 per cent and Norway 24 per cent. Eight other countries report over five per cent fishery products in their export totals: Angola, the Bahama Islands, Iran, Japan, Morocco, Panama, Portugal and South West Africa. There are 32 countries with fishery products contributing between one and five per cent of export trade and 57 with still smaller fish exports, or none at all.

In interpreting these results, it should be borne in mind that some countries include landings by their fishing vessels in foreign countries in their export statistics, while others do not. Similar differences occur in the treatment of landings by foreign vessels whether for domestic consumption or for export.

Summary extract from table 2, section 4: external trade in fishery products as percentage of total merchandise trade, 1953

Percentage	Countries (Number)	
	Imports	Exports
Less than $\frac{1}{2}$ % .	Various (41)	Various (57)
1% to 5% ...	Various (61)	Various (32)
6% to 20% ..	São Tomé (1)	Angola Bahama Islands Iran Japan Morocco (A and B) Panama Portugal South West Africa (8)
Over 20%	Falkland Islands (1)	Falkland Islands Faeroe Islands Greenland Iceland Norway St. Pierre and Miquelon (6)

9. The retention of fishery products in a country, which is largely a function of domestic production and external trade, may also be of interest in an examination of the economic importance of its fisheries. The statistics and estimates, as available, are rather rough and considerable refinements would be necessary to make exact comparisons between countries possible. However, most of the countries listed in Table 2 can with some degree of confidence be placed in one of the classes shown in section 5. Some twenty countries and territories — many of them very small — retain 20 or more kilogrammes of fish (landed weight) per head of the population. They include a group of countries in the Far East consisting of Japan, China (Taiwan), Korea (North), Hong Kong and Macau, and, in Europe, Iceland, Norway, Portugal, Sweden and the United Kingdom. Approximately the same number of countries are found in the next class, retaining 10 or more, but less than 20, kilogrammes of fish. Here are found some more Eastern countries, e.g., Indonesia, Korea (South), Malaya, the Philippines, and North Borneo and Sarawak and, in the European region, Denmark, Germany (Federal Republic), the Netherlands, Spain and the USSR. Also in this class are many territories in the Caribbean area. The rest of the countries for which an estimate could be made have been allocated to the two lowest classes with retention of less than 10 kilogrammes per head.

10. As background material for reference purposes, some maps, graphs and tables taken from the *FAO Yearbook of Fishery Statistics 1955-56* have also been included with the statistical material attached to this document. Figures are given and illustrated for the world catch and landings of fish and other aquatic animals (except baleen and sperm whales) by continents, regions, countries, groups of species and major fishing areas.

11. In conclusion, attention may be drawn to limitations in the usefulness of the statistical material presented. Some of these limitations have already been mentioned. Both national income statistics and fishery statistics are as yet very far from perfect even in those countries where considerable efforts have been made to improve them. In many cases the figures are only very rough estimates that may well be seriously off the mark. It is for this reason that the tables give ratios in preference to absolute values and that the figures have been rounded and presented in broad classes. This procedure eliminates some of the inaccuracies, but others undoubtedly remain. The precision of the data is, in any event, too low to permit more detailed computation and analysis that otherwise would be desirable. Additional statistical information, at present not internationally available, would also be highly desirable, e.g., the amount of capital invested and labour employed in a fishing industry in relation to the rest of the economy.

Apart from these and other limitations of the statistical material, there are conceptual limitations in regard to the subject matter of the Conference. When the economic effect on a country of changes in its sea fisheries is to be considered, the importance of the sea fisheries in the national economy at the time of the change is not as significant as the sensitiveness or vulnerability of the fishing industry to such changes. Measures or indicators of the economic importance of the whole of the sea fisheries in relation to the whole of the economy are

really helpful only when the changes envisaged are drastic and sudden contractions. The impact of a sudden complete destruction of the fish stocks within reach of the fishing fleet of a country, for instance, would be close to a loss of the total income derived from these fisheries and, from the point of view of the national economy, would be commensurate with the importance of the total income from the fisheries in the national income as a whole, since such complete and sudden destruction would leave the capital and labour engaged in the sea fisheries idle and without income. But complete and sudden destruction is only a remote possibility and the changes which are of practical importance are more partial and gradual. The economic effect of such changes is only indirectly related to the importance, within the national economy, of the fishery in question. It will primarily depend on the difficulty in the way of shifting capital and labour into and out of the fishery and on the demand for its product. A scarcity of fish on the grounds may lead to heavy loss of income in one case where there is very little alternative employment for boats, gear, plants and men in a highly specialized fishing area selling its catch in a competitive, unprotected market and where the industry is therefore vulnerable. The same kind of scarcity might have very much less effect on incomes in another case where there are alternative uses for some equipment, some labour can find employment easily outside the fisheries and the reduced production can be sold at a better price, for instance, by curtailing only the least remunerative use of the fish. It may well be that even though the importance of the fishery in the national economy may have been less in the first case mentioned above than in the second, nevertheless the economic effect of the scarcity of fish would be greater not only for the area directly affected but even for the country as a whole.

A drastic and sudden increase in the fish stocks within reach of a fishing fleet, for instance through discovery of important new fishing grounds, is less exceptional than sudden destruction of stocks. But neither it, nor the more common case of greater stocks gradually becoming

available to the fishing fleet is likely to produce income changes that are at all closely related to the importance of the fisheries in the national economy before the change. Rather, the factors mentioned before, the demand for the product and the availability of capital and labour will be the determining ones. Where, for instance, demand is not favourable, newly discovered catchable fish stocks may not be utilized and may have no effect at all, no matter how important the sea fishery happens to be in the national economy. Unfished stocks and schemes to limit catching in order to maintain prices exist in many places.

It is clear from these examples alone that in order to assess the effect on national economies of most of the changes likely to occur in a fishery, one would need information on what is technically known as the mobility of factors, i.e., the costs involved in diverting capital, labour and other factors of production to other uses (and vice versa) and on the elasticity of demand. Hardly any such information is available and it is certain that much research would be needed to obtain it. If economic considerations were to be taken into account objectively in determining legal questions connected with the sea fisheries or in regulating these fisheries, there would be need for much greater knowledge of the relevant economic factors and consequently for a very great deal of economic investigations. This conclusion is perhaps not surprising in view of the great effort that has been expended over many years now in biological investigations with the purpose of obtaining adequate and reliable information on the biological factors affecting the fisheries.

As indicated at the beginning, this working paper is concerned only with the economic importance of the fisheries in different countries, which is measured in terms of income. Other measurements, for instance in terms of capital investment and of employment, are not at present available. It may also be noted that if the general importance of the fisheries were to be discussed, aspects, other than economic, e.g., social, nutritional and strategic importance, would have to be taken into account.

PART II

Tables

SOURCES FOR TABLES 1 TO 3

- United Nations, Statistical Office: *Statistics of national income and expenditure*, Statistical Papers, Series H, No. 10, New York, January 1957.
- United Nations, Statistical Office: *Per capita national product of fifty-five countries: 1952-54*, Statistical Papers, Series E, No. 4, New York, 1957.
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- Food and Agriculture Organization: *Yearbook of fishery statistics: 1955-56*, Vol. VI — Production and Fishing Craft, Rome, 1957.
- Food and Agriculture Organization: *Yearbook of fishery statistics: 1952-53*, Vol. IV, Part 2 — International Trade, Rome, 1955.

TABLE 1. Product of the sea fisheries as percentage of aggregate domestic product and other indicators of the economic importance of the sea fisheries in selected countries¹

Countries	Section 1 Product of the sea fisheries 1953-1955					Section 2 Sea fishery landings 1955															Section 3 National income 1952-54		
	Per cent of aggregate domestic product					(a) Metric tons (landed weight) per 100 inhabitants					(b) 100 U.S. dollars per ton (landed weight)					(c) U.S. dollars per inhabitant					Notes 3	Thousand U.S. \$ per inhabitant	Notes 4
	0	1%	2%	3% & over	Notes 3	0	1	2	5	10 & over	0	1	2	3	4 & over	0	1	2	3	4 & over			
Africa																							
Angola	6.8	.	0.2	.	.	.	.	.	1.4	.	.	.	b	...	
Morocco (A)	×				B	.	1.0	.	.	.	.	0.9	.	.	.	.	0.9	.	.	.	b	0.2	5
Morocco (B)	1.2	.	.	.	.	0.7	.	.	.	.	0.8	.	.	.	b	...	
Tunisia		×			B	0.3	.	.	.	.	.	.	.	2.9	.	.	0.9	.	.	.	c ⁶	0.1	7
Union of South Africa ..	×				B	.	.	.	2.6	.	0.3	.	.	.	.	.	0.8	.	.	.	b	0.3	
Zanzibar and Pemba	3.2	.	.	.	2.0	.	.	.	.	.	.	6.4	b	—	
America, North																							
Canada	×				A	.	.	.	5.4	.	.	1.0	.	.	.	.	.	.	.	5.4	a	1.3	
United States	×				A	.	.	1.6	.	.	.	1.2	.	.	.	.	1.9	.	.	.	a	1.9	
America, South																							
Argentina	×				A	0.4	.	.	.	.	.	.	2.4	.	.	.	0.9	.	.	.	a	0.5	8
Brazil	×				A	0.3	.	.	.	.	.	0.9	.	.	.	0.3	.	.	.	.	c ⁹	0.2	8
Chile	×				A	.	.	.	3.2	.	0.3	.	.	.	.	.	1.0	.	.	.	b	0.4	8
Colombia	×				F	0.	.	.	.	.	.	.	.	4.0	0.1	.	.	.	.	.	c ¹⁰	0.3	8
Venezuela	×				A	.	1.0	.	.	.	.	.	1.8	.	.	.	1.8	.	.	.	a	0.5	8
Asia																							
China (Taiwan)				×	B	.	.	1.9	.	.	.	.	.	2.8	.	.	.	.	.	5.3	a ¹¹	0.1	5
Hong Kong			×		B	.	.	1.8	.	.	.	.	1.5	.	.	.	.	.	2.7	.	a ¹²	0.2	13
India	×				F	0.2	.	.	.	.	...	...	...	...	...	...	...	...	...	...	a	0.1	
Israel	×				A	0.1	.	.	.	.	.	.	.	4.5	.	0.5	.	.	.	.	a	0.5	
Japan			×		A	.	.	.	5.5	.	.	1.1	.	.	.	.	.	.	6.1	.	a	0.2	
Korea (South)		×			F	.	1.2	.	.	.	.	.	.	.	.	.	.	.	.	.

TABLE 2. Indicators of the economic importance of the sea fisheries in different countries ¹

Countries	Section 2 Sea fishery landings 1955 ²					Notes ³	Section 3 National income 1952-54		Section 4 External trade in fishery products as percentage of total merchandise trade, 1953			Section 5 Retention of sea fishery products, 1955			
	(a) Metric tons (landed weight) per 100 inhabitants						Thousand U.S. \$ per inhabitant	Notes ⁴	Imports %	Exports %	Notes	Kg. — (landed weight) per inhabitant			
	0	1	2	5	10 & over							< 5	< 10	< 20	above 20
Africa															
Algeria	0.3					b	...		1	2			×		
Angola				6.8		b	...		1	9			×		
Basutoland .....	—	—	—	—	—		...		...	...			×
Bechuanaland .....	—	—	—	—	—		...		...	...			×
Belgian Congo	0					a	0.1		2	0	5		×		
British Somaliland	0.2					c	...		—	1			×		
Cameroons (British Adm.)	0.2					c	...		...	...			×
Cameroons (French Adm.)	0.2					a	...		3	1			×		
Cape Verde Islands		0.9				b	...		—	2			×		
Egypt	0.1					a	0.1	6	1	0			×		
Ethiopia and Eritrea, Fed. of	0.1					b	...		...	...			×
French Equatorial Africa	0.1					a	...		2	0			×		
French Somaliland		1.3				b	...		...	...			×
French West Africa	0.4					c	...		1	1			×		
Gambia	0.4					c	...		0	0			×		
Ghana	0.4					1	0.1	7	3	—			×		
Kenya	0.1					a	0.1		0	0	8		×		
Liberia	0.1					b	...		...	...			×
Libya	0.2					c	...		...	...			×
Madagascar	0.1					c	...		0	...			×		
Mauritius	0.4					b	0.2	9	1	—			×		
Morocco (A)		1.0				b	0.2	9	0	11			×		
Morocco (B)		1.2				b	...		0	6			×		
Morocco (C)		1.1				c	...		...	...			×
Mozambique	0.1					b	...		1	0			×		
Nigeria	0.1					c	...		4	—			×		
Portuguese Guinea	0.1					c	...		...	...			×
Réunion	0.3					b	...		2	—			×		
Rhodesia and Nyasaland, Fed. of	—	—	—	—	—		0.1		0	—			×		
Ruanda-Urundi .....	—	—	—	—	—		...		...	...	5		×	
Sierra Leone	0.2					b	...		1	—			×		
Seychelles .....							...		...	...			×
Sierra Leone	0.2	0.7				b	...		0	3			×		
Somalia (Italian Adm.) .....							...		...	...			×
South West Africa				52.3		b	...		0	13			×		

Réunion	0.3					b	...	2	—											
Rhodesia and Nyasaland, Fed. of	—	—	—	—	—		0.1	0	—				x	x						
Ruanda-Urundi .....	—	—	—	—	—		...	...	...				x	x						
Seychelles																				
Sierra Leone	0.2					b	...	1	—				x	x						
Somalia (Italian Adm.)		0.7				b	...	0	3				x	x						
South West Africa					52.3	b	...	0	13				x	x						
Spanish Guinea	0					b	...	...	...				x	x						
Spanish West Africa				5.4		b	...	...	...				x	x						x
Sudan	0					a	...	0	1				x	x						
Swaziland .....	—	—	—	—	—		...	...	...				x	x						
Tanganyika	0.1					a	...	0	1				x	x						
Togoland (French Adm.)	0.2					a	...	0	2				x	x						
Tristan da Cunha					266.0	b	...	...	...				x	x						x
Tunisia	0.3					c	0.1	10	0	3			x	x						
Uganda .....	—	—	—	—	—		...	...	...	...			x	x						
Union of South Africa				2.6		b	0.3		0	3			x	x						
Zanzibar and Pemba				3.2		b	...		2	0			x	x						x
America, North																				
Bahama Islands			1.8			b	...		0	11			x	x						
Bermuda			1.7			b	...		1	—			x	x					x	
British Honduras		0.6				c	...		0	1			x	x						
Canada (incl. Newfoundland)				5.4		a	1.3		0	3			x	x						
Costa Rica	0.1					b	...		1	...			x	x						
Cuba	0.2					b	0.3		2	0			x	x						
Dominican Republic	0					c	...		2	—			x	x						
El Salvador	0					c	...		1	0			x	x						
Greenland					99.2	b	...		—	33			x	x						x
Guadeloupe		0.8				b	...		0	—			x	x						x
Guatemala	0					b	...		...	...			x	x						
Haiti	0.1					c	...		3	0			x	x						
Honduras	0.2					b	...		...	...			x	x						
Martinique		1.4				b	...		...	...			x	x						x
Mexico	0.3					c	0.2		0	7			x	x						
Netherlands Antilles	0.4					b	...		0	0			x	x						x
Nicaragua	0					c	...		0	0			x	x						
Panama	0.3					b	0.3		...	12			x	x						
Panama (Canal Zone)	0.2					c	...		...	...			x	x						
Puerto Rico	0.1					a	0.4		...	...			x	x						x
St. Pierre and Miquelon					136.0	b	...		1	77			x	x						x
Swan Islands .....	...	...	...	...	...	c	...		...	...			...	...						...
United States (incl. Alaska)			1.6			a	1.9		2	0			x	x						...
Virgin Islands (U.K.)				3.0		a	...		...	...			x	x						x
Virgin Islands (U.S.)		2.0				c	...		...	...			x	x						x

For footnotes, see end of table.

TABLE 2. Indicators of the economic importance of the sea fisheries in different countries ¹ (continued)

Countries	Section 2 Sea fishery landings 1955 ²					Notes ³	Section 3 National income 1952-54		Section 4 External trade in fishery products as percentage of total merchandise trade, 1953			Section 5 Retention of sea fishery products, 1955				
	(a) Metric tons (landed weight) per 100 inhabitants						Notes ³	Thousand U.S. \$ per inhabitant	Notes ⁴	Imports %	Exports %	Notes	Kg. — (landed weight) per inhabitant			
	0	1	2	5	10 & over								< 5	< 10	< 20	above 20
America North (continued)																
West Indies																
Barbados		1.2				b	...		...					x
Jamaica	0.3					c	...		4					x		
Leeward Islands		1.2				b	...		...					x
Trinidad and Tobago		0.5				b	...		1		0		x			
Windward Islands		1.1				b	...		...		...			x
America, South																
Argentina	0.4					a	0.5	6	—		—		x			
Bolivia	—	—	—	—	—		...		2		—		x			
Brazil	0.2					c	0.2	6	0		—	11	x			
British Guiana		0.7				b	...		3		0			x		
Chile				3.2		b	0.4	6	0		0		x			
Colombia	0					c	0.3	6	0		0		x			
Ecuador	0.4					b	0.2		1		—		x			
Falkland Islands				5.0		c	...		21		63			x		
French Guiana				7.1		b	...		...		...
Paraguay	—	—	—	—	—		0.1	6	...		...		x	
Peru			2.0			b	0.1		0		4			x		
Surinam		1.0				c	...		2		—			x		
Uruguay	0.2					b	...		...		...		x	
Venezuela		1.0				a	0.5		...		...		x	
Asia																
Aden				4.4		b	...		...		...			x
Afghanistan .....	—	—	—	—	—		...		...		...		x	
Bahrain Islands .....	...	...	...	...	...		...		...		...		...	...
Bhutan .....	...	...	...	...	...		...		...		...		...	...
Bonin Islands .....	...	...	...	...	...		...		...		...		...	...
Cambodia	0.4			2.8		b	0.1		4		0		x			
Ceylon	0.3					a	...		...		...		x	
China (Mainland) .....							...		...		...		...	...
China (Taiwan)			1.9			a	0.1	0	4		0		x			
						r			1		1			x		

Cambodia	0.4			2.8		b	0.1		4	0									
Ceylon	0.3					a	0.1		4	0									
China (Mainland)																			
China (Taiwan)			1.9			a	0.1	9	4	0									x
Cyprus	0.1					b	0.1		1	1									
Hong Kong			1.8			a	0.2	11	2	1									x
India	0.2					a	0.1		0	1									
Indonesia		0.5				a	0.1		1	0									x
Iran	0.1					b	0.1		0	6									x
Iraq	0.1					b	0.1		—	—									x
Israel	0.1					a	0.5		2	—									x
Japan				5.5		a	0.2		0	6									x
Jordan	0					b	0.1		0	6									x
Korea (North)				3.7		b	0.1		0	6									x
Korea (South)		1.2				b	0.1		0	6									x
Kuwait	...	...	...	...	...		0.1		0	6									x
Laos	...	...	...	...	...		0.1		0	6									x
Lebanon	0.1					c	0.3		1	0									x
Macau				2.8		b	0.3		1	0									x
Malaya, Fed. of			1.8			a	0.3		2	1									x
Maldiv Islands					22.5	c	0.3		2	1									x
Mongolian People's Republic	—	—	—	—	—		0.3		...	...									x
Muscat and Oman	...	...	...	...	...		0.3		...	...									x
Nepal	—	—	—	—	—		0.3		...	...									x
North Borneo			1.6			c	0.1		1	2									x
Pakistan	0.1					a	0.1		—	0									x
Philippines			1.7			a	0.2		2	0									x
Portuguese India	...	...	...	...	...		0.2		...	...									x
Portuguese Timor	0.1					c	0.2		...	...									x
Qatar	...	...	...	...	...		0.2		...	...									x
Ryukyu Islands			1.7			b	0.2		...	...									x
Sarawak	...	...	...	...	...		0.2		2	0									x
Saudi Arabia	0.1					c	0.2		...	...									x
Singapore		0.5				b	0.2		...	...									x
Syria	0					c	0.2		0	0									x
Thailand		0.8				a	0.1		1	1									x
Trucial Oman	...	...	...	...	...		0.1		...	...									x
Turkey	0.4					a	0.2		0	0									x
Viet-Nam		0.5				b	0.2		...	...									x
West New Guinea		0.5				b	0.2		...	...									x
Yemen	0					c	0.2		...	...									x

For footnotes, see end of table.

Sweden			2.7		a	1.0	1	1					x
Switzerland						1.0	1	1					
Yugoslavia	0.1					1.0	1	1		x			
Oceania													
American Samoa				21.4	b	...	...	...					x
Australia		0.6			a	1.0	1	1		x			
Cook Islands			5.0		b	...	...	...					x
French Oceania			2.6		b	...	1	0					x
Guam		0.6			b	...	...	...		x			
Hawaii		1.3			b	...	...	...		...		...	...
New Caledonia		1.1			b	...	1	1				x	
New Guinea (Australian Adm.)	0.1				b	...	1	0		x			
New Zealand			1.7		b	1.0	...	1			x		
U.S.S.R.		0.9			a	...	...	...				x	

Notes:

- 0 = above zero, but negligible.
 1 For section 1 (Product of the Sea Fisheries as Percentage of Aggregate Domestic Product) see table 1 (selected countries).
 2 For sections 2 (b) and 2 (c) see table 1 (selected countries).
 3 a — Sea fishery landings as reported by the countries.
 b — Total landings as reported by the countries, assumed equal to sea fishery landings.
 c — FAO estimate.
 4 National income: 1952-54 average; population: mid-year 1953. Exceptions are footnoted.
 5 Ruanda-Urundi is included with Belgian Congo.

6 Conversion by the method described in "Per Capita National Product of Fifty-five Countries: 1952-1954", Statistical Papers series E, No. 4, United Nations, New York, pp. 10-12.

- 7 Refers to 1955.
 8 Uganda is included with Kenya.
 9 Refers to 1954.
 10 Refers to 1953.
 11 Refers to 1952.
 12 Including Algeria.
 13 Refers to 1951.

TABLE 3. Disposition of catch by countries, 1955

(A = thousand metric tons. B = percentages)

Countries	Total catch		Marketing fresh		Freezing		Curing		Canning		Reduction		Miscellaneous purposes	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Africa														
Union of South Africa	378.2	100	71.7	19	17.3	5	54.0	14	44.6	12	189.9	50	0.7	0
America, North														
Canada (excl. Newfoundland)	654.3	100	150.5	23	148.3	23	119.8	18	67.1	10	148.1	23	20.5	3
Canada (Newfoundland only)	290.2	100	6.9	2	99.4	34	155.5	54	0.3	0	—	—	28.1	10
United States (incl. Alaska)	2 738.9	100	856.7	31	269.8	10	33.0	1	611.4	22	942.5	35	25.5	1
America, South														
Argentina	78.9	100	42.2	54	0.7	1	1.4	2	29.3	37	3.5	4	1.8	2
Chile	208.6	100	95.9	46	0.3	0	1.5	1	27.5	13	83.4	40	—	—
Colombia	18.0	100	8.4	47	—	—	8.2	45	—	—	—	—	1.4	8
Venezuela	69.9	100	25.0	36	—	—	27.5	39	17.4	25	—	—	—	—
Asia														
India	839.0	100	358.3	43	—	—	425.4	51	—	—	55.3	6	—	—
Japan °	4 762.6	100	1 441.9	31	391.4	8	2 241.6	47	378.7	8	251.5	5	57.5	1
Korea (South)	259.2	100	209.4	81	0.3	0	36.5	14	9.2	4	—	—	3.8	1
Philippines	384.7	100	241.7	63	—	—	143.0	37	—	—	—	—	—	—
Turkey	111.5	100	72.1	65	4.2	4	25.0	22	1.2	1	8.5	8	0.5	0
Europe														
Belgium	76.7	100	57.7	75	6.0	8	9.6	12	2.2	3	1.2	2	—	—
Denmark	425.3	100	99.6	23	44.6	11	11.6	3	17.9	4	207.6	49	44.0	10
Faeroe Islands	105.6	100	7.5	7	2.1	2	95.9	91	0	0	0.1	0	—	—
Finland	63.3	100	43.9	69	2.5	4	8.6	14	0.8	1	7.5	12	—	—
France (incl. Algeria)	524.2	100	312.8 ²	60 ²	... ²	... ²	153.9	29	57.5	11	—	—	—	—
Greece	60.0	100	56.0	93	1.0	2	2.5	4	0.5	1	—	—	0	0
Iceland	480.3	100	15.1	3	223.8	47	232.4	48	0.4	0	8.6	2	—	—
Ireland, Rep. of	23.6	100	18.9	80	0.3	1	2.3	10	0.1	0	0.7	3	1.3	6
Italy	218.0	100	186.5	85	2.1	1	21.3	10	8.1	4	—	—	—	—
Netherlands	219.5	100	126.0	40	7.6	2	115.2	36	24.8	8	22.1	7	23.8	7
Norway	1 813.4	100	222.0	12	139.7	8	465.0	26	54.2	3	915.2	50	17.3	1
Spain	760.1	100	457.9	60	—	—	218.0	29	78.8	10	5.4	1	—	—
United Kingdom	1 225.2	100	945.4	77	80.2	7	47.3	4	16.3	1	110.4	9	25.6	2
Oceania														
Australia °	47.3	100	35.8	76	7.2	15	0	0	3.6	8	—	—	0.7	1

0 = above zero, but negligible. 1 Data refer to 1956. 2 "Marketing fresh" includes "Freezing".

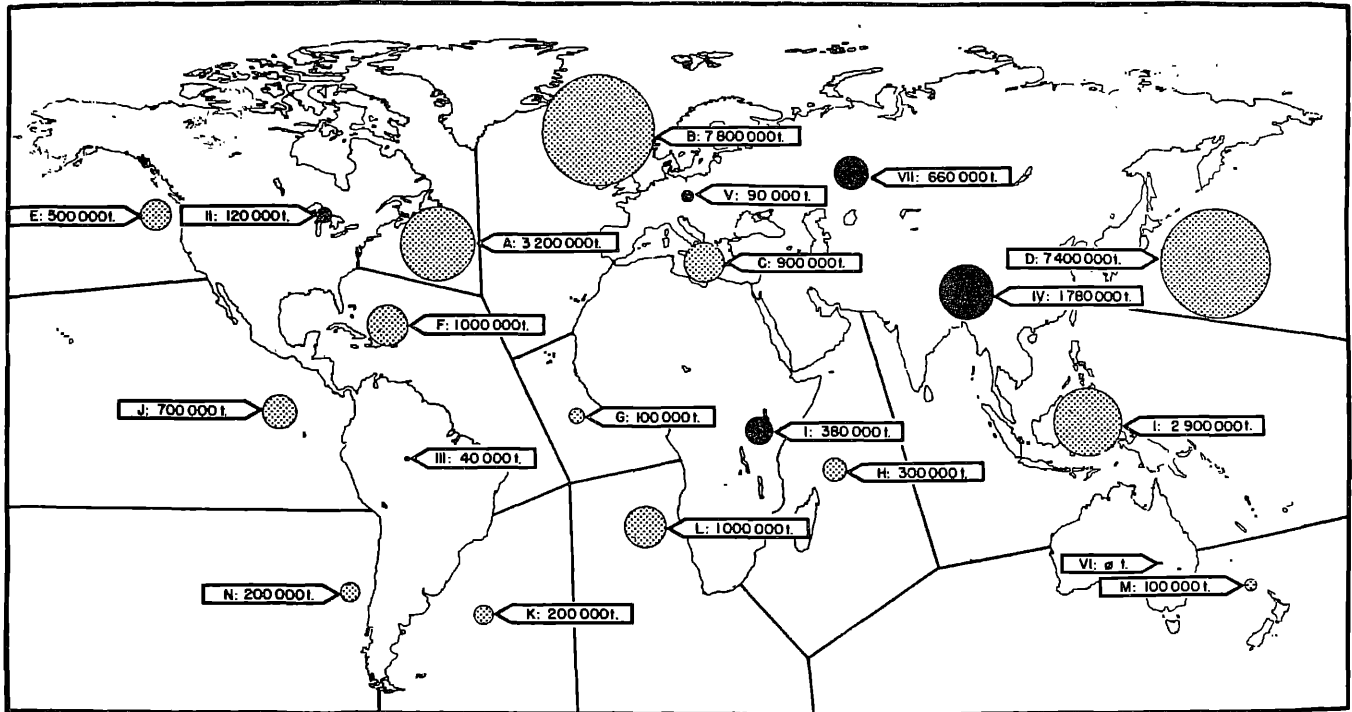
Document A/CONF.13/16 (continued)

PART III

Maps and Graphs

I
World Catch:
 By major fishing areas, 1956

I
Quantités pêchées dans le monde:
 par principales zones de pêche, 1956



MARINE AREAS	ZONES MARITIMES	FRESHWATER AREAS	ZONES D'EAU DOUCE
ATLANTIC, NORTHWESTERN	A	AFRICA	I
ATLANTIC, NORTHEASTERN	B	AMERICA, NORTH	II
MEDITERRANEAN AND BLACK SEA	C	AMERICA, SOUTH	III
PACIFIC, NORTHWESTERN	D	ASIA	IV
PACIFIC, NORTHEASTERN	E	EUROPE	V
ATLANTIC, WESTERN-CENTRAL	F	OCEANIA	VI
ATLANTIC, EASTERN-CENTRAL	G	U.S.S.R.	VII
INDIAN OCEAN, WESTERN	H		
INDO-PACIFIC AREA	I		
PACIFIC, EASTERN-CENTRAL	J		
ATLANTIC, SOUTHWESTERN	K		
ATLANTIC, SOUTHEASTERN	L		
PACIFIC, SOUTHWESTERN	M		
PACIFIC, SOUTHEASTERN	N		

II

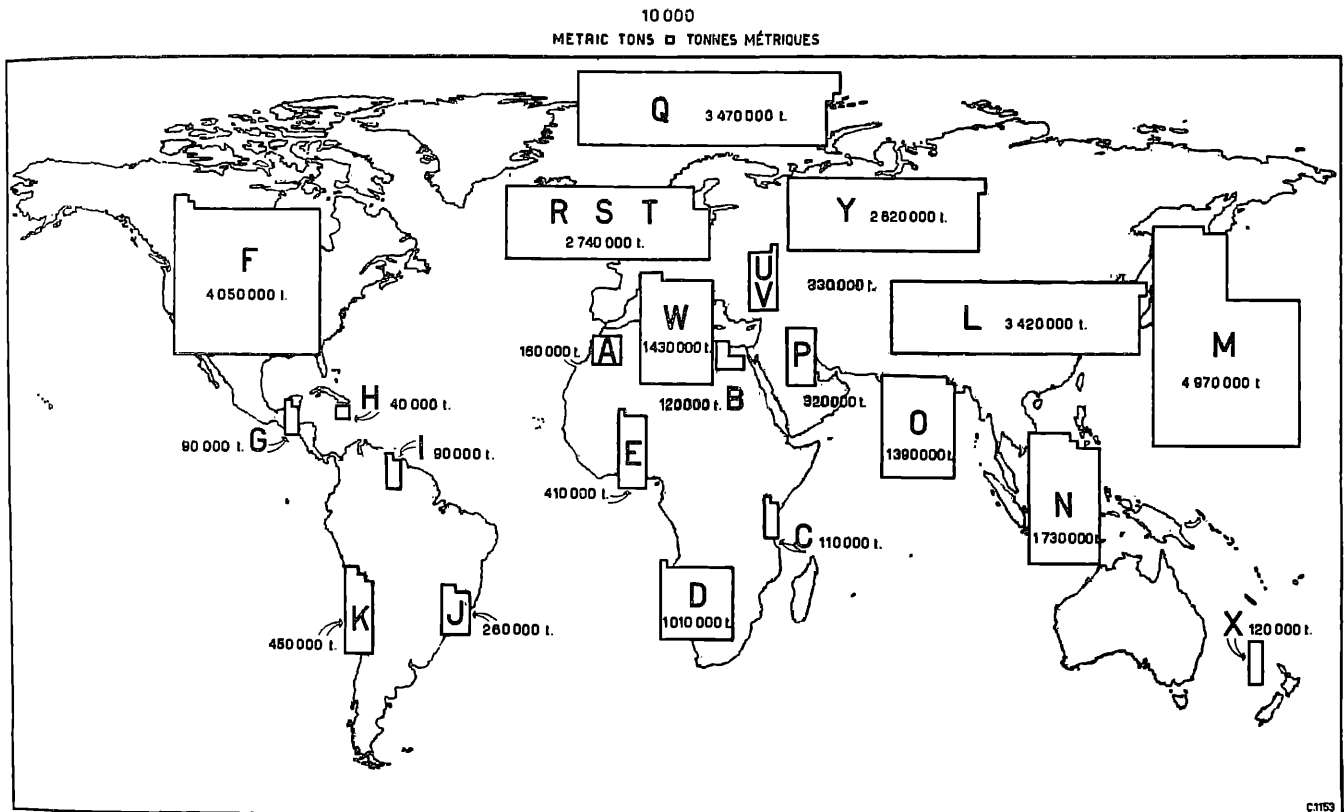
II

Catch of fish, crustaceans, molluscs, etc.:

Quantités pêchées de poissons, crustacés, mollusques, etc.:

Regional totals, 1956
Live weight

Totaux régionaux, 1956
Poids vif

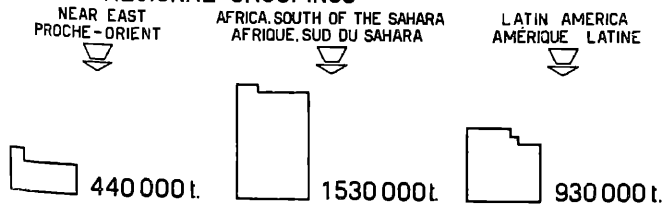


AFRICA	AFRIQUE
NORTHWESTERN	A NORD OCCIDENTALE
NORTHEASTERN	B NORD ORIENTALE
EASTERN, CENTRAL	C EST CENTRALE
SOUTHERN	D SUD
WESTERN, CENTRAL	E OUEST CENTRALE
AMERICA, NORTH	AMÉRIQUE DU NORD
NORTHERN	F NORD
CENTRAL, MAINLAND	G CENTRALE, CONTINENT
CENTRAL, CARIBBEAN ISLANDS	H CENTRALE, ÎLES CARAIBES

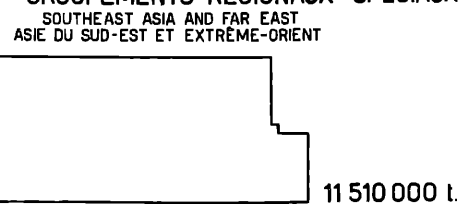
AMERICA, SOUTH	AMÉRIQUE DU SUD
NORTHERN	I NORD
EASTERN	J ORIENTALE
WESTERN	K OCCIDENTALE
ASIA	ASIE
EASTERN, MAINLAND	L ORIENTALE, CONTINENT
EASTERN, ISLANDS	M ORIENTALE, ÎLES
SOUTHEASTERN	N SUD ORIENTALE
SOUTHERN, CENTRAL	O SUD CENTRALE
SOUTHWESTERN	P SUD OCCIDENTALE

EUROPE	EUROPE
NORTHERN	Q NORD
WESTERN, ISLANDS	R OCCIDENTALE, ÎLES
WESTERN, MAINLAND	S OCCIDENTALE, CONTINENT
WESTERN, CENTRAL	T OUEST CENTRALE
EASTERN, CENTRAL	U EST CENTRALE
SOUTHEASTERN	V SUD ORIENTALE
SOUTHERN	W SUD
OCEANIA	Océanie
U. S. S. R.	X U. R. S. S.
	Y U. R. S. S.

SPECIAL REGIONAL GROUPINGS



GROUPEMENTS REGIONAUX SPÉCIAUX



III

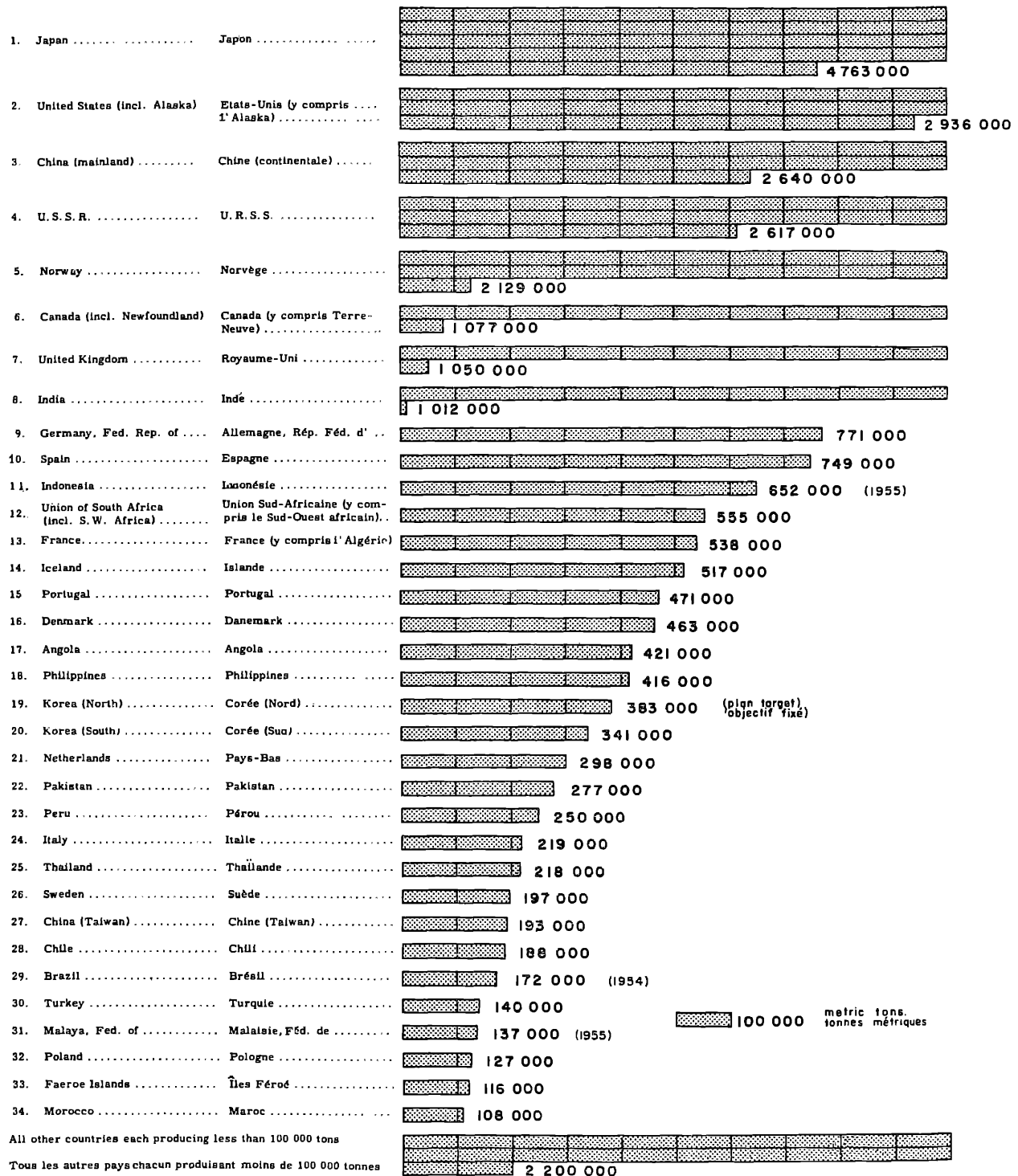
Catch of fish, crustaceans, molluscs, etc.:

For the 34 largest producing countries, 1956
Live weight

III

Quantités pêchées de poissons, crustacés, mollusques, etc.:

Pour les 34 plus importants pays producteurs, 1956
Poids vif



1 2 3 4 5 6 7 8 9 10

IV

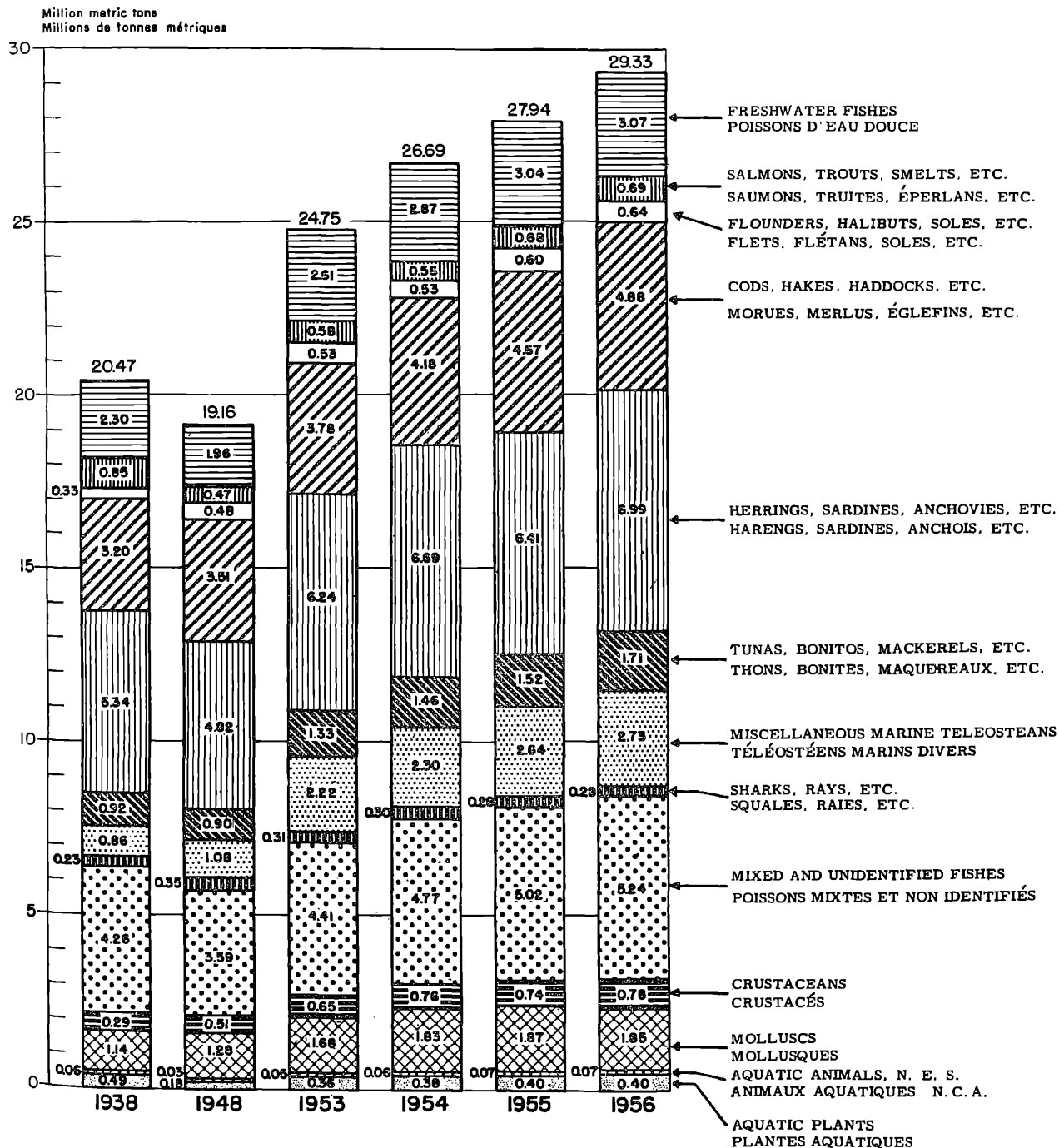
World catch

By groups of species, 1938, 1948, 1953-56
Live weight

IV

Quantités pêchées dans le monde

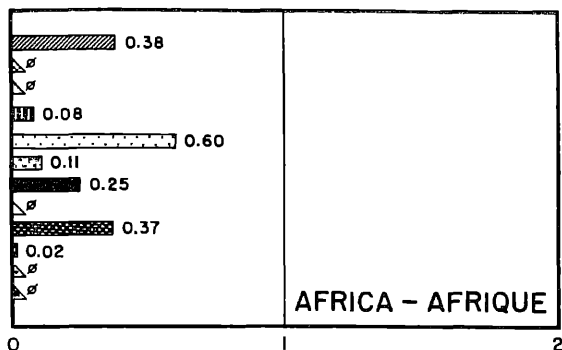
Par groupes d'espèces, 1938, 1948, 1953-56
Poids vif



V

Catch of fish, crustaceans, molluscs, etc.:

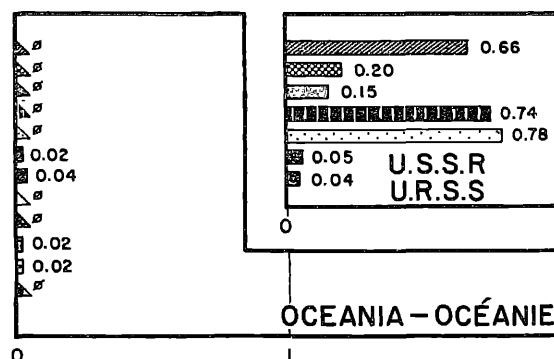
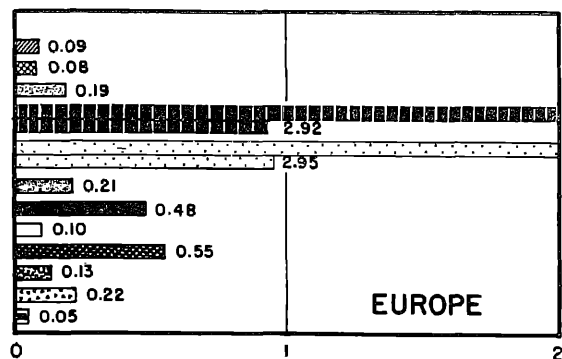
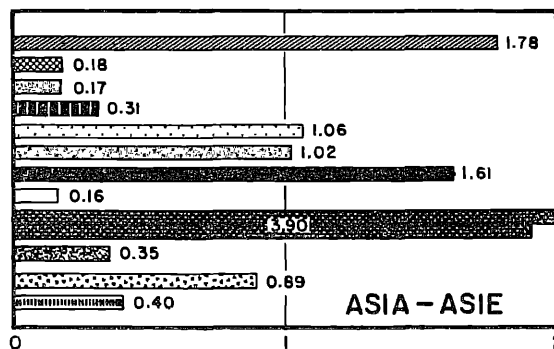
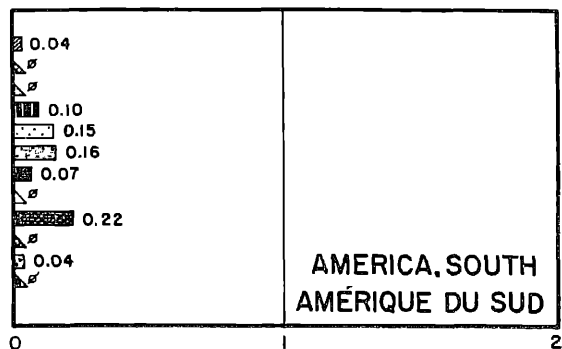
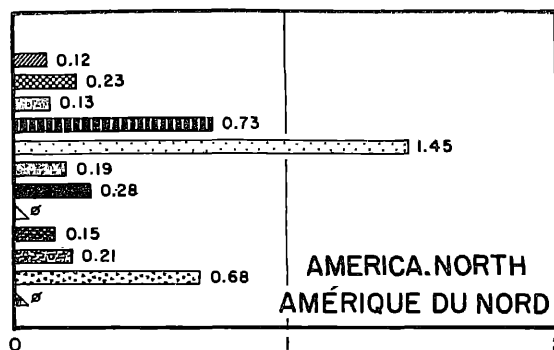
By continents and groups of species, 1956 (live weight)
Million metric tons



V

Quantités pêchées de poissons, crustacés, mollusques, etc.:

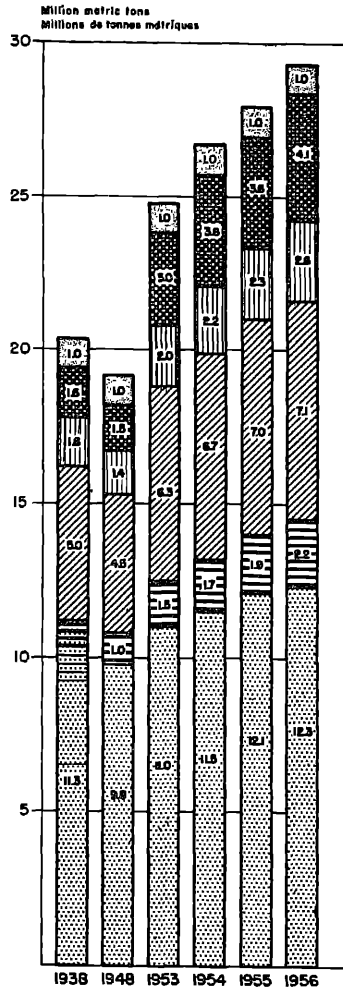
Par continents et groupes d'espèces, 1956 (poids vif)
Millions de tonnes métriques



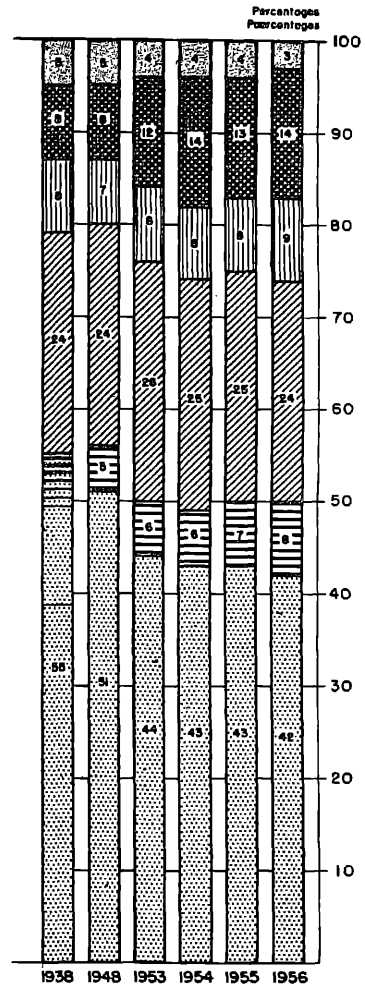
LEGEND - LÉGENDE

- | | |
|---------------------------------------|---------------------------------------------------|
| FRESHWATER FISHES | POISSONS D'EAU DOUCE |
| SALMONS, TROUTS, SMELTS, ETC. | SAUMONS, TRUITES, ÉPERLANS, ETC. |
| FLOUNDERS, HALIBUTS, SOLES, ETC. | FLETS, FLÉTANS, SOLES, ETC. |
| CODS, HAKES, HADDOCKS, ETC. | MORUES, MERLUS, ÉOLEFINS, ETC. |
| HERRINGS, SARDINES, ANCHOVIES, ETC. | HARENGS, BARDINES, ANCHOIS, ETC. |
| TUNAS, BONTOS, MACKERELS, ETC. | THONS, BONITES, MAQUEREAUX, ETC. |
| MISCELLANEOUS MARINE TELEOSTEANS | TÉLÉOSTÉENS MARINS DIVERS |
| SHARKS, RAYS, ETC. | SQUALES, RAIES, ETC. |
| MIXED AND UNIDENTIFIED FISHES | POISSONS MIXTES ET NON IDENTIFIÉS |
| CRUSTACEANS | CRUSTACÉS |
| MOLLUSCS | MOLLUSQUES |
| AQUATIC ANIMALS, N. E. S., AND PLANTS | ANIMAUX AQUATIQUES N. E. S. ET PLANTES AQUATIQUES |
| NEGLECTIBLE QUANTITIES | QUANTITÉS NÉGLIGEABLES |

VI
Disposition of world catch
Live weight



VI
Utilisation des quantités pêchées dans le monde
Poids vif



LEGEND - LÉGENDE

- | | |
|------------------------------|------------------------------------|
| MARKETING FRESH | MARÉE FRAÎCHE |
| FREEZING | CONGÉLATION |
| CURING | SÉCHAGE, FUMAGE, SALAISSON, ETC. |
| CANNING | CONSERVES |
| REDUCTION TO MEAL, OIL, ETC. | FABRICATION DE FARINE, HUILE, ETC. |
| MISCELLANEOUS | UTILISATIONS DIVERSES |

VII

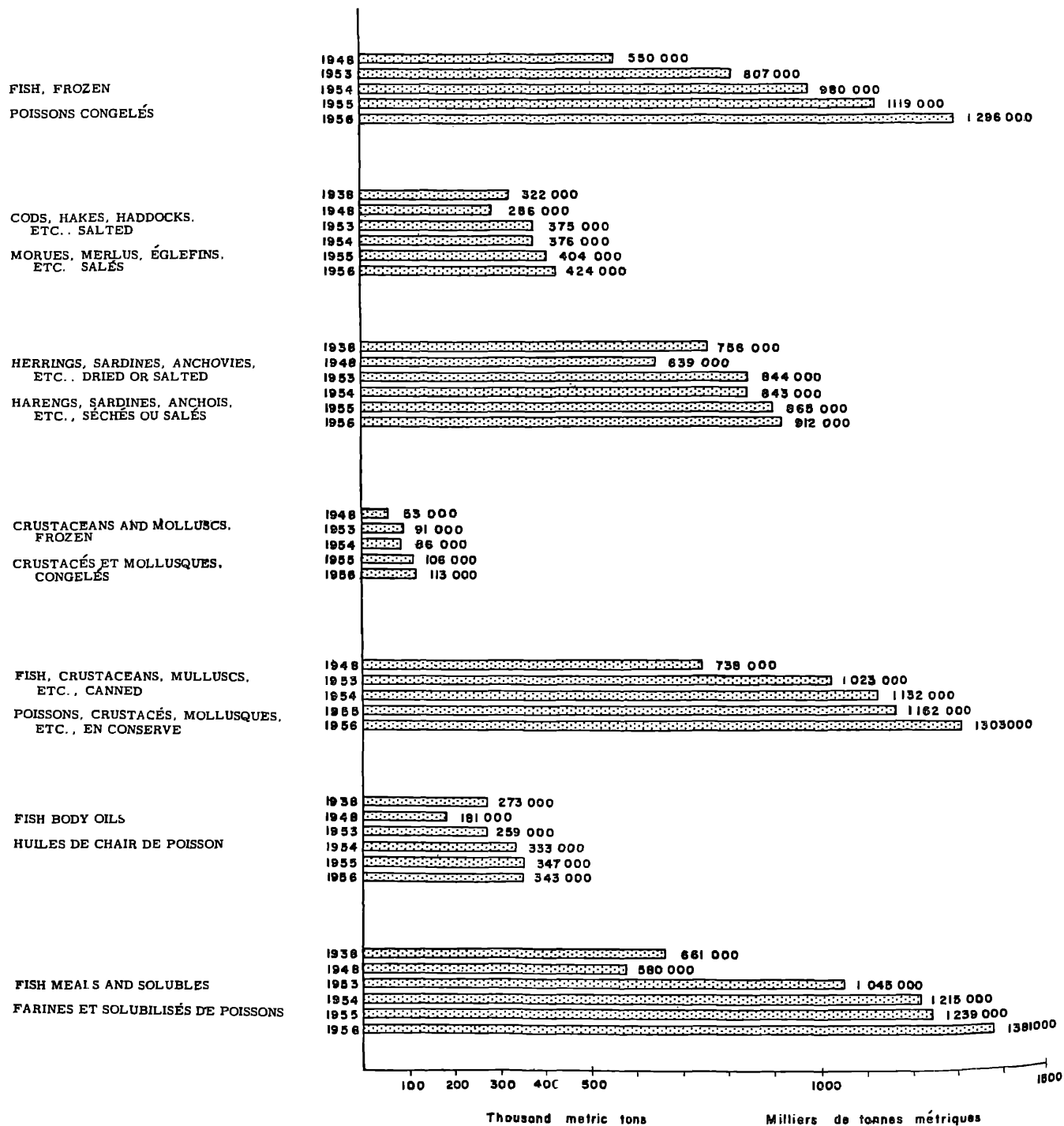
Selected processed and preserved fishery commodities

Net product weight

VII

Certains produits de la pêche conservés et traités

Poids net du produit



Document A/CONF. 13/16 (concluded)

PART IV

Summaries of catch and landings : world

GENERAL NOTES ON TABLES A-1 TO A-5

The figures are intended to refer to either catches or landings of all aquatic animals (*except* baleen and sperm whales), plants and residues from both commercial and subsistence fishing.

Country data are given to the nearest hundred metric tons and aggregates to the nearest ten thousand metric tons.

For a number of countries, the national statistics do not allow substantial quantities to be broken down by groups of species. These quantities are shown as "Mixed and unidentified fishes". If these quantities could be distributed according to groups of species most of the group totals would probably be significantly higher than shown.

TABLE A-1

WORLD CATCH:
By continents and by regions
Live weight, i.e., whole fresh weight

TABLEAU A-1

QUANTITÉS PÊCHÉS DANS LE MONDE:
par continents et par régions
Poids vif: poids brut du poisson frais

Continent, region	1938	1948	1953	1954	1955	195	Continent, région
	<i>Million metric tons — Millions de tonnes métriques</i>						
World grand total	20.47	19.16	24.75	26.69	27.94	29.33	Total général mondial
<i>Africa</i>	<i>0.54</i>	<i>0.82</i>	<i>1.61</i>	<i>1.62</i>	<i>1.67</i>	<i>1.81</i>	<i>Afrique</i>
Northwestern	0.10	0.13	0.19	0.15	0.15	0.16	Nord-occidentale
Northeastern	0.06	0.07	0.09	0.10	0.11	0.12	Nord-orientale
Eastern, central	0.05	0.06	0.10	0.10	0.10	0.11	Est-centrale
Southern	0.12	0.31	0.88	0.90	0.92	1.01	Sud
Western, central	0.21	0.25	0.35	0.37	0.39	0.41	Ouest-centrale
<i>America, North</i>	<i>3.15</i>	<i>3.59</i>	<i>3.51</i>	<i>3.88</i>	<i>3.85</i>	<i>4.18</i>	<i>Amérique du Nord</i>
Northern	3.10	3.49	3.40	3.76	3.73	4.05	Nord
Central, mainland	0.02	0.07	0.07	0.08	0.08	0.09	Centrale, continent
Central, Caribbean Islands	0.03	0.03	0.04	0.04	0.04	0.04	Centrale, îles Caraïbes
<i>America, South</i>	<i>0.24</i>	<i>0.45</i>	<i>0.56</i>	<i>0.64</i>	<i>0.77</i>	<i>0.80</i>	<i>Amérique du Sud</i>
Northern	0.04	0.11	0.09	0.08	0.10	0.09	Nord
Eastern	0.16	0.22	0.24	0.26	0.26	0.26	Orientale
Western	0.04	0.12	0.23	0.30	0.41	0.45	Occidentale
<i>Asia</i>	<i>9.35</i>	<i>6.58</i>	<i>10.00</i>	<i>10.70</i>	<i>11.45</i>	<i>11.83</i>	<i>Asie</i>
Eastern, mainland	3.28	1.60	2.31	2.83	3.14	3.42	Orientale, continent
Eastern, islands	3.67	2.53	4.66	4.71	5.11	4.97	Orientale, îles
Southeastern	1.21	1.17	1.54	1.65	1.69	1.73	Sud-orientale
Southern, central	0.93	0.98	1.15	1.18	1.20	1.39	Sud-centrale
Southwestern	0.26	0.30	0.34	0.33	0.31	0.32	Sud-occidentale
<i>Europe</i>	<i>5.55</i>	<i>6.14</i>	<i>6.98</i>	<i>7.48</i>	<i>7.59</i>	<i>7.97</i>	<i>Europe</i>
Northern	1.76	2.54	2.67	3.23	3.10	3.47	Nord
Western, islands	1.21	1.23	1.14	1.09	1.12	1.08	Occidentale, îles
Western, mainland	0.81	0.80	0.92	0.89	0.90	0.88	Occidentale, continent
Western, central	0.78	0.41	0.73	0.68	0.78	0.78	Ouest-centrale
Eastern, central	0.07	0.09	0.14	0.16	0.17	0.19	Est-centrale
Southeastern	0.08	0.09	0.12	0.13	0.13	0.14	Sud-orientale
Southern	0.84	0.98	1.26	1.30	1.39	1.43	Sud
<i>Oceania</i>	<i>0.09</i>	<i>0.09</i>	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	<i>0.12</i>	<i>Océanie</i>
<i>U.S.S.R.</i>	<i>1.55</i>	<i>1.49</i>	<i>1.98</i>	<i>2.26</i>	<i>2.50</i>	<i>2.62</i>	<i>U.R.S.S.</i>
SPECIAL REGIONAL GROUPINGS							GROUPEMENTS RÉGIONAUX SPÉCIAUX
Near East ^a	0.32	0.37	0.43	0.43	0.42	0.44	Proche-Orient ^a
Africa, south of the Sahara ^b	0.38	0.62	1.33	1.37	1.41	1.53	Afrique, sud du Sahara ^b
Latin America ^c	0.29	0.55	0.67	0.76	0.89	0.93	Amérique latine ^c
Southeast Asia and Far East ^d	9.09	6.28	9.66	10.37	11.14	11.51	Asie du Sud-Est et Extrême-Orient ^d

TABLE A-1 (concluded)

WORLD CATCH:
 By continents and by regions

Live weight, i.e., whole fresh weight

TABLEAU A-1 (fin)

QUANTITÉS PÊCHÉS DANS LE MONDE:
 par continents et par régions

Poids vif: poids brut du poisson frais

Continent, region	1938	1948	1953	1954	1955	1956	Continent, région
	<i>Percentages * — Pourcentages *</i>						
	A	B	A	B	A	B	
World grand total	100	107	100	100	100	107	Total général mondial
<i>Africa</i>	3	66	4	100	7	196	<i>Afrique</i>
Northwestern	1	77	1	100	1	146	Nord-occidentale
Northeastern	0	86	0	100	0	129	Nord-orientale
Eastern, central	0	83	0	100	0	167	Est-centrale
Southern	1	39	2	100	4	284	Sud
Western, central	1	84	1	100	1	140	Ouest-centrale
<i>America, North</i>	15	88	19	100	14	98	<i>Amérique du Nord</i>
Northern	15	89	18	100	14	97	Nord
Central, mainland	0	29	0	100	0	144	Centrale, continent
Central, Caribbean Islands	0	100	0	100	0	133	Centrale, îles Caraïbes
<i>America, South</i>	1	53	2	100	2	124	<i>Amérique du Sud</i>
Northern	0	36	0	100	0	82	Nord
Eastern	1	73	1	100	1	109	Orientale
Western	0	33	1	100	1	192	Occidentale
<i>Asia</i>	46	142	34	100	40	152	<i>Asie</i>
Eastern, mainland	16	205	8	100	9	144	Orientale, continent
Eastern, islands	18	145	13	100	19	184	Orientale, îles
Southeastern	6	103	6	100	6	132	Sud-orientale
Southern, central	5	95	5	100	5	117	Sud-centrale
Southwestern	1	87	2	100	1	113	Sud-occidentale
<i>Europe</i>	27	90	32	100	28	114	<i>Europe</i>
Northern	9	69	13	100	11	105	Nord
Western, islands	6	98	6	100	5	93	Occidentale, îles
Western, mainland	4	101	4	100	4	115	Occidentale, continent
Western, central	4	190	2	100	3	178	Ouest-centrale
Eastern, central	0	78	1	100	0	156	Est-centrale
Southeastern	0	89	1	100	0	133	Sud-orientale
Southern	4	86	5	100	5	129	Sud
<i>Oceania</i>	0	100	1	100	1	122	<i>Océanie</i>
<i>U.S.S.R.</i>	8	104	8	100	8	133	<i>U.R.S.S.</i>
SPECIAL REGIONAL GROUPINGS							GROUPEMENTS RÉGIONAUX SPÉCIAUX
Near East ^a	2	86	2	100	2	116	Proche-Orient ^a
Africa, south of the Sahara ^b	2	61	3	100	5	215	Afrique, sud du Sahara ^b
Latin America ^c	1	53	3	100	3	122	Amérique latine ^c
Southeast Asia and Far East ^d	44	145	33	100	39	154	Asie du Sud-Est et Extrême-Orient ^d

Source: Table A-5.

* Percentages in the columns marked "A" based on World Grand Total = 100 in each year. Percentages (in italics) in the columns marked "B" based on 1948 figures = 100.

^a Northeastern Africa and Southwestern Asia.^b Eastern, central; Southern; and Western, central.^c South American regions and Central regions (mainland and Caribbean Islands) of North America.^d All the Asian regions except the Southwestern.

Source: Le tableau A-5.

* Les pourcentages dans les colonnes «A» sont basés sur le total général mondial = 100 pour chaque année. Les pourcentages (en italiques) dans les colonnes «B» sont basés sur les chiffres de 1948 = 100.

^a Afrique nord-occidentale et Asie sud-occidentale.^b Est, centrale; Sud; Ouest, centrale.^c Régions de l'Amérique du Sud et régions centrales de l'Amérique du Nord (continent et îles Caraïbes).^d Toutes les régions de l'Asie à l'exception de la région sud-occidentale.

TABLE A-2

WORLD CATCH:
 By groups of species

Live weight, i.e., whole fresh weight

TABLEAU A-2

QUANTITÉS PÊCHÉES DANS LE MONDE:
 par groupes d'espèces

Poids vif: poids brut du poisson frais

Group of species	1938	1948	1953	1954	1955	1956	Groupe d'espèces
	<i>Million metric tons — Millions de tonnes métriques</i>						
World grand total	20.47	19.16	24.75	26.69	27.94	29.33	Total général mondial
Freshwater fishes	2.30	1.96	2.61	2.87	3.04	3.07	Poissons d'eau douce
Salmons, trouts, smelts, etc.	0.85	0.47	0.58	0.56	0.68	0.69	Saumons, truites, éperlans, etc.
Flounders, halibuts, soles, etc.	0.33	0.48	0.53	0.53	0.60	0.64	Flets, flétans, soles, etc.
Cods, hakes, haddocks, etc.	3.20	3.51	3.78	4.18	4.67	4.88	Morues, merlus, aiglefin, etc.
Herrings, sardines, anchovies, etc.	5.34	4.82	6.24	6.69	6.41	6.99	Harengs, sardines, anchois, etc.
Tunas, bonitos, mackerels, etc.	0.92	0.90	1.33	1.46	1.52	1.71	Thons, bonites, maquereaux, etc.
Miscellaneous marine teleosteans	0.86	1.08	2.22	2.30	2.64	2.73	Téléostéens marins divers
Sharks, rays, etc.	0.23	0.35	0.31	0.30	0.28	0.28	Squales, raies, etc.
Mixed and unidentified fishes	4.26	3.59	4.41	4.77	5.02	5.24	Poissons mixtes et non identifiés
Crustaceans	0.49	0.51	0.65	0.76	0.74	0.78	Crustacés
Molluscs	1.14	1.28	1.68	1.83	1.87	1.85	Mollusques
Aquatic animals, n.e.s.	0.06	0.03	0.05	0.06	0.07	0.07	Animaux aquatiques n.c.a.
Aquatic plants	0.49	0.18	0.36	0.38	0.40	0.40	Plantes aquatiques
	<i>A — Percentages (Totals = 100) — Pourcentages (Totaux = 100)</i>						
World grand total	100	100	100	100	100	100	Total général mondial
Freshwater fishes	11	10	11	11	11	11	Poissons d'eau douce
Salmons, trouts, smelts, etc.	4	2	2	2	2	2	Saumons, truites, éperlans, etc.
Flounders, halibuts, soles, etc.	2	2	2	2	2	2	Flets, flétans, soles, etc.
Cods, hakes, haddocks, etc.	16	18	15	16	17	17	Morues, merlus, aiglefin, etc.
Herrings, sardines, anchovies, etc.	26	25	25	25	23	24	Harengs, sardines, anchois, etc.
Tunas, bonitos, mackerels, etc.	5	5	5	5	6	6	Thons, bonites, maquereaux, etc.
Miscellaneous marine teleosteans	4	6	9	9	9	9	Téléostéens marins divers
Sharks, rays, etc.	1	2	1	1	1	1	Squales, raies, etc.
Mixed and unidentified fishes	21	19	18	18	18	18	Poissons mixtes et non identifiés
Crustaceans	2	3	3	3	3	3	Crustacés
Molluscs	6	7	7	7	7	6	Mollusques
Aquatic animals, n.e.s.	0	0	0	0	0	0	Animaux aquatiques n.c.a.
Aquatic plants	2	1	2	1	1	1	Plantes aquatiques
	<i>B — Percentages — Pourcentages (1948 = 100)</i>						
World grand total	107	100	129	139	146	153	Total général mondial
Freshwater fishes	117	100	133	146	155	157	Poissons d'eau douce
Salmons, trouts, smelts, etc.	181	100	123	119	145	147	Saumons, truites, éperlans, etc.
Flounders, halibuts, soles, etc.	69	100	110	110	125	133	Flets, flétans, soles, etc.
Cods, hakes, haddocks, etc.	91	100	108	119	133	139	Morues, merlus, aiglefin, etc.
Herrings, sardines, anchovies, etc.	111	100	129	139	133	145	Harengs, sardines, anchois, etc.
Tunas, bonitos, mackerels, etc.	102	100	148	162	169	190	Thons, bonites, maquereaux, etc.
Miscellaneous marine teleosteans	80	100	206	213	244	253	Téléostéens marins divers
Sharks, rays, etc.	66	100	89	86	80	80	Squales, raies, etc.
Mixed and unidentified fishes	119	100	123	133	140	146	Poissons mixtes et non identifiés
Crustaceans	96	100	127	149	145	153	Crustacés
Molluscs	89	100	131	143	146	145	Mollusques
Aquatic animals, n.e.s.	200	100	167	200	233	233	Animaux aquatiques n.c.a.
Aquatic plants	272	100	200	211	222	222	Plantes aquatiques

Source: Table A-7; see also table A-6.

Source: Le tableau A-7; voir également le tableau A-6.

TABLE A-3

WORLD CATCH:
By major fishing areas
Live weight, i.e., whole fresh weight

TABLEAU A-3

QUANTITÉS PÊCHÉES DANS LE MONDE:
par principales zones de pêche
Poids vif: poids brut du poisson frais

Fishing area	1938	1948	1953	1954	1955	1956	Zone de pêche
	<i>Million metric tons — Millions de tonnes métriques</i>						
World grand total	20.47	19.16	24.75	26.69	27.94	29.33	Total général mondial
FRESHWATER AREAS	2.30	1.96	2.61	2.87	3.04	3.07	ZONES D'EAU DOUCE
Africa	0.18	0.21	0.33	0.34	0.36	0.38	Afrique
America, North	0.07	0.07	0.11	0.11	0.12	0.12	Amérique du Nord
America, South	0.04	0.05	0.04	0.03	0.04	0.04	Amérique du Sud
Asia	1.27	0.91	1.47	1.61	1.72	1.78	Asie
Europe	0.13	0.08	0.09	0.10	0.09	0.09	Europe
Oceania	∅	∅	∅	∅	∅	∅	Océanie
U.S.S.R.	0.61	0.64	0.57	0.68	0.71	0.66	U.R.S.S.
MARINE AREAS	18.17	17.20	22.14	23.82	24.90	26.26	ZONES MARITIMES
<i>Northern Hemisphere areas</i> ^a	<i>14.6</i>	<i>13.1</i>	<i>16.8</i>	<i>18.0</i>	<i>18.9</i>	<i>19.8</i>	<i>Zones de l'Hémisphère nord</i> ^a
Atlantic, northwestern	2.2	2.6	2.8	3.0	3.0	3.2	Atlantique, nord-ouest
Atlantic, northeastern ^b	4.9	5.5	6.5	7.2	7.3	7.8	Atlantique, nord-est ^b
Mediterranean and Black Sea ..	0.6	0.6	0.8	0.8	0.8	0.9	Méditerranée et mer Noire
Pacific, northwestern	6.3	3.9	6.3	6.6	7.4	7.4	Pacifique, nord-ouest
Pacific, northeastern	0.6	0.5	0.4	0.4	0.4	0.5	Pacifique, nord-est
<i>Tropical areas</i>	<i>3.3</i>	<i>3.4</i>	<i>4.1</i>	<i>4.5</i>	<i>4.6</i>	<i>5.0</i>	<i>Zones des Tropiques</i>
Atlantic, western-central ^c	0.5	0.7	0.8	0.9	0.9	1.0	Atlantique, ouest-central ^c
Atlantic, eastern-central	0.1	0.1	0.1	0.1	0.1	0.1	Atlantique, est-central
Indian Ocean, western ^d	0.2	0.2	0.3	0.3	0.3	0.3	Océan Indien, ouest ^d
Indo-Pacific area	1.8	1.8	2.4	2.6	2.7	2.9	Zone indo-pacifique
Pacific, eastern-central	0.7	0.6	0.5	0.6	0.6	0.7	Pacifique, est-central
<i>Southern Hemisphere areas</i> ^e	<i>0.3</i>	<i>0.7</i>	<i>1.2</i>	<i>1.3</i>	<i>1.4</i>	<i>1.5</i>	<i>Zones de l'Hémisphère sud</i> ^e
Atlantic, southwestern	0.1	0.2	0.2	0.2	0.2	0.2	Atlantique, sud-ouest
Atlantic, southeastern	0.1	0.3	0.8	0.9	0.9	1.0	Atlantique, sud-est
Pacific, southwestern ^f	0.1	0.1	0.1	0.1	0.1	0.1	Pacifique, sud-ouest ^f
Pacific, southeastern	∅	0.1	0.1	0.1	0.2	0.2	Pacifique, sud-est

TABLE A-3 (concluded)

WORLD CATCH:
By major fishing areas

Live weight, i.e., whole fresh weight

TABLEAU A-3 (fin)

QUANTITÉS PÊCHÉES DANS LE MONDE:
par principales zones de pêche

Poids vif: poids brut du poisson frais

Fishing area	1938	1948	1953	1954	1955	1956	Zone de pêche
	Percentages * — Pourcentages *						
	A	B	A	B	A	B	
World grand total . . . . .	... 107	... 100	... 129	... 139	... 146	... 153	Total mondial général
FRESHWATER AREAS	100 117	100 100	100 133	100 146	100 155	100 157	ZONES D'EAU DOUCE
Africa	8 86	11 100	13 157	12 162	12 171	12 181	Afrique
America, North	3 100	4 100	4 157	4 157	4 171	4 171	Amérique du Nord
America, South	2 80	2 100	2 80	1 60	1 80	1 80	Amérique du Sud
Asia	55 140	46 100	56 162	56 177	57 189	58 196	Asie
Europe	6 163	4 100	3 113	3 125	3 113	3 113	Europe
Oceania	ø ø	ø 100	ø ø	ø ø	ø ø	ø ø	Océanie
U.S.S.R.	26 95	33 100	22 89	24 106	23 111	22 103	U.R.S.S.
MARINE AREAS	100 106	100 100	100 129	100 138	100 145	100 153	ZONES MARITIMES
Northern Hemisphere areas ^a	80 111	76 100	76 128	76 137	76 144	75 151	Zones de l'Hémisphère nord ^a
Atlantic, northwestern	12 85	15 100	13 108	13 115	12 115	12 123	Atlantique, nord-ouest
Atlantic, northeastern ^b	27 89	32 100	29 118	30 131	29 133	30 142	Atlantique, nord-est ^b
Mediterranean and Black Sea	3 100	3 100	4 133	3 133	3 133	3 150	Méditerranée et mer Noire
Pacific, northwestern	35 162	23 100	28 162	28 169	30 190	28 190	Pacifique, nord-ouest
Pacific, northeastern	3 120	3 100	2 80	2 80	2 80	2 100	Pacifique, nord-est
Tropical areas	18 97	20 100	19 121	19 132	18 135	19 147	Zones des Tropiques
Atlantic, western-central ^c	3 71	4 100	4 114	4 129	4 129	4 143	Atlantique, ouest-central ^c
Atlantic, eastern-central	ø 100	1 100	1 100	ø 100	ø 100	ø 100	Atlantique, est-central
Indian Ocean, western ^d	1 100	1 100	1 150	1 150	1 150	1 150	Océan Indien, ouest ^d
Indo-Pacific area	10 100	11 100	11 133	11 144	11 150	11 161	Zone indo-pacifique
Pacific, eastern-central	4 117	3 100	2 83	3 100	2 100	3 117	Pacifique, est-central
Southern Hemisphere areas ^e	2 43	4 100	5 171	5 186	6 200	6 214	Zones de l'Hémisphère sud ^e
Atlantic, southwestern	1 50	1 100	1 100	1 100	1 100	1 100	Atlantique, sud-ouest
Atlantic, southeastern	1 33	2 100	4 267	4 300	4 300	4 333	Atlantique, sud-est
Pacific, southwestern ^f	ø 100	1 100	ø 100	ø 100	ø 100	ø 100	Pacifique, sud-ouest ^f
Pacific, southeastern	ø ø	ø 100	ø 100	ø 100	1 200	1 200	Pacifique, sud-est

Source: Tables A-5, A-6, and B-2 supplemented by FAO estimates.

Note: Quantities under "Freshwater areas" identical with catches of freshwater fishes (see tables A-2, A-6 and A-7). Some freshwater or anadromous fishes included in other species groups shown under "Marine areas".

ø = above zero, but negligible.

* Percentages in the columns marked "A" are based on the two subtotals (one for "Freshwater areas" and one for "Marine areas"); each of these two subtotals = 100 in each year. Percentages (in italics) in the columns "B" based on 1948 figures = 100.

^a Arctic waters included in adjacent areas.^b Includes the North Sea and the Baltic.^c Includes the Caribbean area.^d Includes the Red Sea and the Arabian Sea.^e Antarctic waters included in adjacent areas.^f Includes the southeastern Indian Ocean.

Source: Les tableaux A-5, A-6, B-2 et estimations de la FAO.

Note: Les quantités figurant sous « Zones d'eau douce » sont identiques aux quantités pêchées de poissons d'eau douce (voir les tableaux A-2, A-6 et A-7). Certaines quantités de poissons d'eau douce ou de poissons anadromes comprises avec d'autres groupes d'espèces figurent sous « Zones maritimes ».

ø = supérieur à zéro, mais négligeable.

* Les pourcentages dans les colonnes « A » sont basés sur les deux sous-totaux (l'un pour « Zones d'eau douce » et l'autre pour « Zones maritimes »); chacun de ces deux sous-totaux = 100 pour chaque année. Les pourcentages (en italiques) dans les colonnes « B » sont basés sur les chiffres de 1948 = 100.

^a Les zones de l'Arctique sont comprises avec les territoires limitrophes.^b Y compris la mer du Nord et la Baltique.^c Y compris la zone des Caraïbes.^d Y compris la mer Rouge et le golfe Arabique.^e Les zones de l'Antarctique sont comprises avec les territoires limitrophes.^f Y compris l'océan Indien du Sud-Est.

TABLE A-4

TABLEAU A-4

WORLD CATCH AND LANDINGS:
By countries arranged by continents
QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
par pays classés par continents

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, country		1938	1948	1953	1954	1955	1956	Continent, pays
<i>Thousand metric tons — Milliers de tonnes métriques</i>								
World grand total	C	20 470.0	19 160.0	24 750.0	26 690.0	27 940.0	29 330.0	Total général mondial
Africa	C	540.0	820.0	1 610.0	1 620.0	1 670.0	1 810.0	Afrique
Algeria ^a	CL	(21.1)	(30.0)	(23.1)	(21.1)	(26.2)	(22.3)	Algérie ^a
Angola	CL	26.2	113.2	220.4	261.2	290.4	420.5	Angola
Basutoland	CL	...	...	...	...	...	...	Basutoland
Bechuanaland	CL	...	...	...	...	...	...	Bechuanaland
Belgian Congo ^b	CL	0.9	17.5	66.6	65.7	80.6	...	Congo belge ^b
British Somaliland ^c	CL	...	...	1.0	...	...	...	Somalie britannique ^c
Cameroons (British Adm.) ^d	CL	...	...	...	...	...	...	Cameroon (adm. britannique) ^d
Cameroons (French Adm.)	C	18.0	22.0	30.3	37.2	42.0	43.5	Cameroon (adm. française)
	L	18.0	22.0	30.3	36.8	41.5	42.9	
Cape Verde Islands	CL	0.4	0.6	1.4	1.7	1.6	...	Iles du Cap-Vert
Ceuta ^e	CL	...	(5.1)	(3.2)	(4.2)	(5.3)	(4.5)	Ceuta ^e
Comoro Islands	CL	...	...	...	...	11.1	...	Comores
Egypt	CL	38.1	42.8	52.1	56.7	63.4	70.3	Egypte
Ethiopia and Eritrea, Fed. of	CL	...	...	20.5	25.2	18.1	...	Ethiopie et Erythrée, Féd. d'
French Equatorial Africa ..	CL	...	...	100.0	100.0	100.0	100.0	Afrique-Equatoriale française
French Somaliland	CL	...	...	0.5	0.9	0.8	0.5	Somalie française
French West Africa	CL	...	...	70.0	...	...	...	Afrique-Occidentale française
Gambia ^e	CL	...	...	1.0	...	...	...	Gambie ^e
Ghana ^f	CL	...	20.0	20.0	20.0	20.0	20.0	Ghana ^f
Kenya	CL	...	...	18.7	17.6	12.7	12.7	Kenya
Liberia ^e	CL	...	...	0.3	...	0.6	1.0	Libéria ^e
Libya	CL	2.0	2.2	2.5	...	...	...	Libye
Madagascar ^g	CL	...	...	2.6	...	...	...	Madagascar ^g
Mauritius	CL	2.0	2.0	2.2	2.1	2.2	2.2	Ile Maurice
Melilla ^e	CL	...	(9.2)	(6.3)	(6.8)	(7.4)	(8.4)	Melilla ^e
Morocco (A)	CL	30.7	55.7	128.0	93.1	81.7	99.1	Maroc (A)
Morocco (B)	CL	...	10.9	10.8	10.4	12.6	9.1	Maroc (B)
Morocco (C)	CL	...	...	...	...	...	...	Maroc (C)
Mozambique	CL	2.0	3.9	3.8	3.7	3.3	...	Mozambique
Nigeria ^d	CL	...	...	42.0	...	...	...	Nigeria ^d
Portuguese Guinea	CL	...	0.3	...	...	...	...	Guinée portugaise
Réunion	C	...	...	1.2	1.6	1.5	1.8	Réunion
	L	...	...	0.5	0.7	0.7	0.9	
Rhodesia and Nyasaland, Fed. of	CL	...	2.0	4.6	6.9	8.8	9.7	Rhodésie et Nyassaland, Féd. de
Ruanda-Urundi	CL	...	2.3	4.2	5.6	5.6	...	Ruanda-Urundi
St. Helena ^h	CL	...	...	...	...	...	0.1	Sainte-Hélène ^h
São Tomé and Príncipe ...	CL	...	0.2	0.3	...	...	...	Saint-Thomas et Prince
Seychelles ⁱ	CL	...	...	1.5	1.5	1.5	...	Seychelles ⁱ
Sierra Leone	CL	...	3.0	5.0	5.0	5.0	...	Sierra Leone
Somalia (Italian Adm.)	CL	...	...	7.4	5.3	9.5	17.1	Somalie (adm. italienne)
South West Africa ^j	C	4.0	9.8	275.4	263.5	240.5	268.0	Sud-Ouest africain ^j
	L	3.4	8.3	274.5	262.7	239.4	266.7	
Spanish Guinea	CL	ø	ø	ø	ø	ø	...	Guinée espagnole
Spanish West Africa	CL	...	6.0	3.6	4.0	4.5	...	Afrique-Occidentale espagnole
Sudan	CL	8.8	11.4	12.1	12.9	13.6	13.5	Soudan

TABLE A-4 (continued)

TABLEAU A-4 (suite)

WORLD CATCH AND LANDINGS:
 By countries arranged by continents

QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
 par pays classés par continents

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, country		1938	1948	1953	1954	1955	1956	Continent, pays	
		<i>Thousand metric tons — Milliers de tonnes métriques</i>							
Africa (continued)								Afrique (suite)	
Swaziland	CL	...	...	...	...	...	...	Swaziland
Tanganyika	CL	16.0	22.0	50.0	50.0	52.4	55.0	Tanganyika	
Togoland (French Adm.)	CL	3.0	3.1	3.3	3.2	3.5	3.6	Togo (adm. française)	
Tristan da Cunha	CL	...	...	0.6	0.7	0.8	...	Tristan da Cunha
Tunisia	CL	9.6	12.2	11.5	...	...	...	Tunisie
Uganda	CL	...	11.0	23.4	24.4	25.0	34.3	Ouganda	
Union of South Africa	C	61.9	170.1	358.1	353.6	361.5	287.2	Union Sud-Africaine	
	L	55.3	160.6	352.6	346.8	355.3	283.2		
Zanzibar and Pemba	CL	7.5	7.7	8.8	8.7	8.8	8.8	Zanzibar et Pemba	
America, North		C	3 150.0	3 590.0	3 510.0	3 880.0	3 350.0	4 180.0	Amérique du Nord
Bahama Islands	CL	...	...	1.1	1.7	1.5	1.6	Iles Bahama
Bermuda ^k	CL	...	0.5	0.6	0.6	0.7	0.7	Iles Bermudes ^k	
British Honduras	CL	0.3	...	0.5	...	...	...	Honduras britannique
Canada (excl. Newfoundland)	C	518.5	717.7	661.5	705.2	663.9	778.9	Canada (non compris Terre-Neuve)	
	L	489.1	666.0	622.8	665.1	622.1	728.2		
Canada (Newfoundland only)	C	318.3	335.2	263.6	320.6	290.2	298.0	Canada (Terre-Neuve seulement)	
	L	271.4	293.5	228.3	290.8	262.3	269.1		
Costa Rica ¹	CL	1.0	1.0	1.0	1.0	1.0	1.3	Costa-Rica ¹	
Cuba	CL	10.0	8.3	10.2	11.5	12.8	15.6	Cuba	
Dominican Republic	CL	0.3	0.5	0.7	...	...	...	République Dominicaine
El Salvador	CL	0.1	0.4	0.4	...	...	...	Salvador
Greenland ^m	CL	4.7	21.0	25.0	24.9	25.8	27.4	Groenland ^m	
Guadeloupe	CL	0.4	0.9	1.7	1.8	1.9	1.7	Guadeloupe	
Guatemala	CL	0.4	0.6	0.7	0.7	0.7	0.7	Guatemala	
Haiti	CL	1.5	1.6	...	...	...	...	Haïti
Honduras	CL	...	...	2.6	2.6	2.6	2.4	Honduras
Martinique	CL	2.5	2.5	2.5	2.6	3.4	3.8	Martinique	
Mexico ⁿ	CL	17.1	68.4	67.3	...	...	...	Mexique ⁿ
Netherlands Antilles	CL	0.1	0.1	0.2	0.8	0.8	0.6	Antilles néerlandaises	
Nicaragua	CL	0.1	0.1	...	...	...	...	Nicaragua
Panama	CL	0.7	0.7	1.0	2.0	2.8	3.6	Panama	
Panama (Canal Zone)	CL	...	...	...	...	...	...	Panama (Zone du Canal)
Puerto Rico	CL	1.4	2.3	2.4	2.5	2.6	2.7	Porto-Rico	
St. Pierre and Miquelon	CL	1.9	2.2	5.9	6.8	6.8	9.3	Saint-Pierre-et-Miquelon	
Swan Islands	CL	...	...	...	...	...	...	Iles Swan
United States (incl. Alaska)	CL	2 253.1	2 409.9	2 437.5	2 706.4	2 738.9	2 935.9	Etats-Unis (y compris l'Alaska)	
Virgin Islands (U.K.)	CL	0.2	0.3	0.3	0.3	0.2	0.2	Iles Vierges (R.-U.)	
Virgin Islands (U.S.)	CL	0.3	...	1.0	...	...	0.3	Iles Vierges (E.-U.)
West Indies								Indes occidentales	
Barbados	CL	0.5	1.0	3.7	2.8	2.8	3.2	Barbade	
Jamaica ^o	CL	4.5	...	...	...	...	5.3	Jamaïque ^o
Leeward Islands								Iles sous le Vent	
Anguilla	CL	0.1	0.1	0.1	0.1	0.1	0.1	Anguilla	
Antigua	CL	0.3	...	...	...	0.9	0.9	Antigua
Montserrat	CL	0.1	...	...	...	...	...	Montserrat
St. Kitts-Nevis	CL	0.2	...	...	...	0.4	0.1	Saint-Christophe-Nevis
Trinidad and Tobago	CL	2.7	...	3.0	5.1	3.9	3.6	Trinité et Tobago	
Windward Islands								Iles du Vent	
Dominica	CL	1.2	0.9	0.8	0.8	0.6	0.4	Dominique	
Grenada	CL	0.3	...	0.4	0.4	0.4	0.5	Grenade	
St. Lucia	CL	0.2	...	3.0	2.1	2.0	0.5	Sainte-Lucie	
St. Vincent	CL	0.4	...	0.3	0.4	0.5	0.6	Saint-Vincent	

TABLE A-4 (continued)

WORLD CATCH AND LANDINGS:
By countries arranged by continents

C — Catch (live weight, i.e., whole fresh weight)
L — Landings (landed weight)
CL — Catch and landings identical

TABLEAU A-4 (suite)

QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
par pays classés par continents

C — Quantités pêchées (poids vif: poids brut du poisson frais)
L — Quantités débarquées (poids débarqué)
CL — Quantités pêchées et débarquées sont identiques

Continent, country		1938	1948	1953	1954	1955	1956	Continent, pays
		<i>Thousand metric tons — Milliers de tonnes métriques</i>						
America, South	C	240.0	450.0	560.0	640.0	770.0	800.0	Amérique du Sud
Argentina	CL	55.3	71.2	77.2	78.1	78.9	75.1	Argentine
Bolivia	CL	0.7	0.8	0.9	0.9	...	...	Bolivie
Brazil ^p	CL	103.3	144.8	160.7	172.0	...	...	Brésil ^p
British Guiana	CL	...	...	2.9	2.7	3.6	3.6	Guyane britannique
Chile	C	32.2	64.6	107.2	143.5	214.3	188.3	Chili
	L	30.1	64.4	106.8	143.5	214.3	188.3	
Colombia	CL	10.0	15.0	16.0	16.0	18.0	21.2	Colombie
Ecuador ^q	CL	1.8	3.4	9.1	12.5	15.0	...	Equateur ^q
Falkland Islands	CL	0.1	0.1	...	...	...	...	Iles Falkland
French Guiana	CL	...	...	2.0	2.0	2.0	2.4	Guyane française
Paraguay	CL	0.3	0.4	0.4	0.4	...	...	Paraguay
Peru	CL	...	47.7	117.8	146.1	183.3	250.0	Pérou
Surinam	CL	0.4	0.5	1.6	1.9	2.5	3.3	Surinam
Uruguay	CL	3.6	3.5	3.4	4.0	4.9	5.4	Uruguay
Venezuela ^p	CL	21.7	92.3	63.3	51.8	69.6	61.3	Venezuela ^p
Asia	C	9 350.0	6 580.0	10 000.0	10 700.0	11 450.0	11 830.0	Asie
Aden	CL	...	...	75.8	51.9	34.8	21.8	Aden
Afghanistan	CL	...	...	...	...	...	...	Afghanistan
Bahrain Islands	CL	...	...	...	...	...	...	Iles Bahrein
Bhutan	CL	...	...	...	...	...	...	Bhoutan
Bonin Islands	CL	...	...	...	...	...	...	Iles Bonin
Brunei	CL	...	...	...	0.5	0.7	1.3	Brunéi
Burma ^c	CL	...	...	100.0	100.0	100.0	100.0	Birmanie ^c
Cambodia ^r	CL	...	...	...	61.0	28.2	30.0	Cambodge ^r
Ceylon	CL	...	24.0	25.5	29.7	31.3	40.3	Ceylan
China (mainland) ^s	CL	(1 500.0)	(448.0)	1 890.0	2 294.0	2 518.0	2 640.0	Chine (continentale) ^s
China (Taiwan)	CL	89.5	83.5	130.4	152.2	180.3	193.2	Chine (Taiwan)
Cyprus	CL	...	0.6	0.4	0.5	0.6	0.5	Chypre
Hong Kong	C	...	34.3	39.6	46.7	45.9	...	Hong-Kong
	L	...	24.7	35.4	43.0	42.6	...	
India	CL	...	...	819.0	828.5	839.0	1 012.3	Inde
Indonesia ^t	CL	472.0	...	616.9	628.5	651.5	...	Indonésie ^t
Iran ^e	CL	...	25.0	25.0	25.0	25.0	25.0	Iran ^e
Iraq	CL	3.5	4.0	5.5	5.4	5.4	8.5	Irak
Israel	CL	1.7	2.5	7.7	9.2	10.3	10.3	Israël
Japan	CL	3 562.0	2 431.4	4 521.6	4 544.6	4 912.8	4 762.6	Japon
Jordan	CL	...	...	0.5	0.3	0.5	0.4	Jordanie
Korea (North) ^{ee}	CL	925.2	(275.0)	122.0	235.0	312.0	(383.0)	Corée (Nord) ^{ee}
Korea (South)	CL	832.0	284.6	257.3	247.2	259.3	340.9	Corée (Sud)
Kuwait	CL	...	...	...	...	...	...	Koweït
Laos	CL	...	...	...	...	...	...	Laos
Lebanon	CL	...	1.9	...	...	...	...	Liban
Macau	CL	...	7.2	4.1	4.9	5.5	...	Macao
Malaya, Fed. of	CL	...	139.0	147.0	137.3	136.8	...	Malaisie, Féd. de
Maldivé Islands	CL	...	...	20.0	...	...	...	Iles Maldives
Mongolian People's Repub.	CL	...	...	...	...	...	...	République populaire mongole
Muscat and Oman	CL	...	...	...	...	...	...	Mascate et Oman

TABLE A-4 (concluded)

**WORLD CATCH AND LANDINGS:
By countries arranged by continents**

C — Catch (live weight, i.e., whole fresh weight)
L — Landings (landed weight)
CL — Catch and landings identical

TABLEAU A-4 (fin)

**QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
par pays classés par continents**

C — Quantités pêchées (poids vif: poids brut du poisson frais)
L — Quantités débarquées (poids débarqué)
CL — Quantités pêchées et débarquées sont identiques

Continent, country		1938	1948	1953	1954	1955	1956	Continent, pays
		<i>Thousand metric tons — Milliers de tonnes métriques</i>						
Oceania (continued)							Océanie (continued)	
Tokelau Islands	CL	...	...	...	...	...	...	Iles Tokelaou
Tonga	CL	...	...	...	...	...	...	Tonga
Wake Island	CL	...	...	...	...	...	...	Ile Wake
Western Samoa	CL	...	...	...	...	...	...	Samoa occidentale
U.S.S.R. ^{dd}	C	1 550.0	1 490.0	1 980.0	2 260.0	2 500.0	2 620.0	U.R.S.S. ^{dd}
U.S.S.R.	CL	1 523.0	1 486.0	1 983.0	2 258.0	2 498.0	2 617.0	U.R.S.S.:

Source: Tables B-1, B-2, and C-1 through C-13. See also table A-5 for a different arrangement of these country totals.

Note: In the computation of aggregates the data shown have been supplemented by FAO estimates where (...) indicate that no official figures are available for particular years or countries.

ø = above zero, but negligible.

^a Also included with France.

^b Excludes Ruanda-Urundi.

^c FAO estimate.

^d Nigeria includes Camerouns (British Adm.).

^e Also included with Spain.

^f Before 6 March 1957, data refer to the Gold Coast and Togoland under British administration.

^g Excludes Comoro Islands.

^h Includes Ascension.

ⁱ Includes dependencies. FAO estimate.

^j Includes Walvis Bay area.

^k Marine fisheries only. All figures are estimated and are considered to be within 10% of the actual catch.

^l FAO estimate. Excludes tuna caught by foreign boats, landed in Costa Rica and shown by Costa Rica as exports.

^m Data do not include quantities landed by foreign fishing craft in Greenland ports, which in 1955 amounted to about 33,000 metric tons. Greenland fishing craft do not land fish in foreign ports.

ⁿ Figures for Mexico exclude "via la pesca", i.e., quantities caught by foreign fishermen (usually from the United States) under Mexican permits. These quantities are included in the United States landings statistics; Mexico includes them in its export statistics, but they are excluded from the United States import statistics.

^o Includes Cayman Islands and Turks and Caicos Islands.

^p Data shown under 1938 refer to 1939.

^q Includes Galapagos Islands. Excludes catch by foreign craft (which fish tuna in this area).

^r Freshwater fish only. Total catch estimated at 150,000 metric tons.

^s Data shown under 1938 refer to 1936. Data shown under 1948 refer to 1949.

^t 1938, Netherlands East Indies. 1948, 1953-56, excludes West New Guinea.

^u Exclude molluscs used for duck feed: 750,700 metric tons in 1953, 821,300 in 1954, 876,000 in 1955, and 1,068,000 in 1956.

^v Excludes Faeroe Islands and Greenland.

^w 1938 data for Germany, Fed. Rep. of, include Germany (Eastern) and other areas according to prewar boundaries.

^x Data shown under 1938 refer to 1934.

^y Catch and landings data do not include an estimated 14,000 metric tons of fish caught annually in rivers and lakes.

^z 1938, prewar territory.

^{aa} Data shown under 1948 refer to 1949.

^{bb} Export data.

^{cc} Data shown under 1948 refer to 1949. Data shown under 1956 refer to plan target.

^{dd} The 1938 "continental" figure for the U.S.S.R. includes the catches of Estonia (15,400 tons), Latvia 13,900 tons, and Lithuania (1,700 tons).

Source: Les tableaux B-1, B-2 et C-1 à C-13. Voir également le tableau A-5 où ces totaux nationaux sont présentés différemment.

Note: Les totaux comprennent des estimations de la FAO lorsque les chiffres officiels manquaient, ce qui est indiqué dans la colonne par le signe (...).

ø = supérieur à zéro, mais négligeable.

^a Compris également avec la France.

^b Non compris le Ruanda-Urundi.

^c Estimation de la FAO.

^d La Nigeria comprend le Cameroun (Adm. britannique).

^e Compris également avec l'Espagne.

^f Avant le 6 mars 1957 les données se réfèrent à la Côte-de-l'Or et au Togo sous administration britannique.

^g Non compris les Comores.

^h Y compris Ascension.

ⁱ Comprend les dépendances. Estimation de la FAO.

^j Comprend la région de Walvis Bay.

^k Pêche maritime seulement. Tous les chiffres sont des estimations correspondant à 10% près à la vérité.

^l Estimation de la FAO. Ne comprend pas le thon pêché par des bateaux étrangers, débarqué à Costa Rica et apparaissant dans les exportations de Costa Rica.

^m Les données ne comprennent pas les quantités débarquées par les bateaux étrangers dans les ports groenlandais, qui en 1955 ont atteint à peu près 33,000 tonnes métriques. Les bateaux de pêche groenlandais ne débarquent pas de poissons dans les ports étrangers.

ⁿ Les chiffres pour le Mexique ne comprennent pas « via la pesca », c'est-à-dire les quantités pêchées par des pêcheurs étrangers (généralement des Etats-Unis) avec l'autorisation mexicaine. Ces quantités sont comprises dans les statistiques des Etats-Unis relatives aux quantités débarquées; le Mexique les comprend dans ses statistiques d'exportation, mais elles ne sont pas comprises dans les statistiques d'importation des Etats-Unis.

^o Y compris les îles Cayman et les îles Turques et Caïques.

^p Les données pour 1938 se réfèrent à 1939.

^q Y compris les îles Galapagos. Les quantités pêchées par les bateaux étrangers ne sont pas comprises (ces tableaux pêchent du thon dans cette zone).

^r Poissons d'eau douce seulement. La quantité totale pêchée est estimée à 150,000 tonnes métriques.

^s Les données pour 1938 se réfèrent à 1936. Les données pour 1948 se réfèrent à 1949.

^t 1938, Indes orientales néerlandaises. 1948, 1953-56, non compris la Nouvelle-Guinée occidentale.

^u Non compris les mollusques utilisés pour l'alimentation des canards: 750,700 tonnes métriques en 1953, 821,300 en 1954, 786,000 en 1955 et 1,068,000 en 1956.

^v Non compris les îles Féroé et le Groenland.

^w Les données pour 1938 de l'Allemagne, Rép. Féd. d', comprennent l'Allemagne (orientale) et d'autres régions selon les frontières d'avant guerre.

^x Les données pour 1938 se réfèrent à 1934.

^y Les quantités pêchées et les quantités débarquées ne comprennent pas une quantité estimée à 14,000 tonnes métriques de poisson, pêchée annuellement dans les rivières et les lacs.

^z 1938, territoire d'avant guerre.

^{aa} Les données pour 1948 se réfèrent à 1949.

^{bb} Données d'exportation.

^{cc} Les données pour 1948 se réfèrent à 1949. Les données pour 1956 se réfèrent à l'objectif fixé.

^{dd} Le chiffre « continental » pour 1938 pour l'U.R.S.S. comprend les quantités pêchées par l'Estonie (15.400 tonnes), la Lettonie (13.900 tonnes) et la Lituanie (1.700 tonnes).

TABLE A-5

WORLD CATCH AND LANDINGS:
 By countries arranged by regions

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

TABLEAU A-5

QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
 par pays classés par régions

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, region, country		1938	1948	1953	1954	1955	1956	Continent, région, pays
<i>Thousand metric tons — Milliers de tonnes métriques</i>								
World grand total	C	20 470.0	19 160.0	24 750.0	26 690.0	27 940.0	29 330.0	Total général mondial
Africa	C	540.0	820.0	1 610.0	1 620.0	1 670.0	1 810.0	Afrique
<i>Northwestern</i>	C	100.0	130.0	190.0	150.0	150.0	160.0	<i>Nord-occidentale</i>
Algeria ^a	CL	21.1	30.0	23.1	21.1	26.2	22.3	Algérie ^a
Ceuta ^b	CL	...	5.1	3.2	4.2	5.3	4.5	Ceuta ^b
Melilla ^b	CL	...	9.2	6.3	6.8	7.4	8.4	Melilla ^b
Morocco (A)	CL	30.7	55.7	128.0	93.1	81.7	99.1	Maroc (A)
Morocco (B)	CL	...	10.9	10.8	10.4	12.6	9.1	Maroc (B)
Morocco (C)	CL	...	...	...	...	...	...	Maroc (C)
Spanish West Africa	CL	...	6.0	3.6	4.0	4.5	...	Afrique-Occident. espagnole
Tunisia	CL	9.6	12.2	11.5	...	...	...	Tunisie
<i>Northeastern</i>	C	60.0	70.0	90.0	100.0	110.0	20.0	<i>Nord-orientale</i>
British Somaliland ^c	CL	...	...	1.0	...	...	...	Somalie britannique ^c
Egypt	CL	38.1	42.8	52.1	56.7	63.4	70.3	Egypte
Ethiopia and Eritrea, Federation of	CL	...	...	20.5	25.2	18.1	...	Ethiopie et Erythrée, Fédé- ration d'
French Somaliland	CL	...	...	0.5	0.9	0.8	0.5	Somalie française
Libya	CL	2.0	2.5	2.5	...	...	...	Libye
Somalia (Italian Adm.) . .	CL	...	...	7.4	5.3	9.5	17.1	Somalie (adm. italienne)
Sudan	CL	8.8	11.4	12.1	12.9	13.6	13.5	Soudan
<i>Eastern, central</i>	C	50.0	60.0	100.0	100.0	100.0	110.0	<i>Est-centrale</i>
Kenya	CL	...	...	18.7	17.6	12.7	12.7	Kenya
Mauritius	CL	2.0	2.0	2.2	2.1	2.2	2.2	Ile Maurice
Seychelles ^d	CL	...	...	1.5	1.5	1.5	...	Seychelles ^d
Tanganyika	CL	16.0	22.0	50.0	50.0	52.4	55.0	Tanganyika
Uganda	CL	...	11.0	23.4	24.4	25.0	34.3	Ouganda
Zanzibar and Pemba	CL	7.5	7.7	8.8	8.7	8.8	8.8	Zanzibar et Pemba
<i>Southern</i>	C	120.0	310.0	880.0	900.0	920.0	1 010.0	<i>Sud</i>
Angola	CL	26.2	113.2	220.4	261.2	290.4	420.5	Angola
Basutoland	CL	...	...	...	...	...	...	Basutoland
Bechuanaland	CL	...	...	...	...	...	...	Bechuanaland
Comoro Islands	CL	...	...	...	...	11.1	...	Comores
Madagascar ^e	CL	...	...	2.6	...	...	...	Madagascar ^e
Mozambique	CL	2.0	3.9	3.8	3.7	3.3	...	Mozambique
Réunion	C	...	...	1.2	1.6	1.5	1.8	Réunion
	L	...	...	0.5	0.7	0.7	0.9	
Rhodesia and Nyasaland ^f	CL	...	2.0	4.6	6.9	8.8	9.7	Rhodésie et Nyassaland ^f
St. Elena ^g	CL	...	...	...	...	...	0.1	Sainte-Hélène ^g
South West Africa ^h	C	4.0	9.8	275.4	263.5	240.5	268.0	Sud-Ouest africain ^h
	L	3.4	8.3	274.5	262.7	239.4	266.7	
Swaziland	CL	...	...	...	...	...	...	Swaziland
Tristan da Cunha	CL	...	...	0.6	0.7	0.8	...	Tristan da Cunha
Union of South Africa . . .	C	61.9	170.1	358.1	353.6	361.5	287.2	Union Sud-Africaine
	L	55.3	160.6	352.6	346.8	355.3	283.2	
<i>Western, central</i>	C	210.0	250.0	350.0	370.0	390.0	410.0	<i>Ouest-centrale</i>
Belgian Congo ⁱ	CL	0.9	17.5	66.6	65.7	80.6	...	Congo belge ⁱ
Cameroons (British Admi- nistration) ^j	CL	...	...	...	...	...	...	Cameroun (administration britannique) ^j

TABLE A-5 (continued)

TABLEAU A-5 (suite)

WORLD CATCH AND LANDINGS:
By countries arranged by regions
QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
par pays classés par régions

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

C — Quantités pêchées (poids vif; poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, region, country		1938	1948	1953	1954	1955	1956	Continent, région, pays
		<i>Thousand metric tons — Milliers de tonnes métriques</i>						
Africa (concluded)								Afrique (fin)
<i>Western, central (concluded)</i>								<i>Ouest-centrale (fin)</i>
Cameroons (French Adm.)	C	18.0	22.0	30.3	37.2	42.0	43.5	Cameroun (adm. française)
	L	18.0	22.0	30.3	36.8	41.5	42.9	
Cape Verde Islands	CL	0.4	0.6	1.4	1.7	1.6	...	Iles du Cap-Vert
French Equatorial Africa	CL	...	...	100.0	100.0	100.0	100.0	Afrique-Equatoriale franç.
French West Africa	CL	...	...	70.0	...	...	...	Afrique-Occidentale franç.
Gambia ^c	CL	...	...	1.0	...	...	...	Gambie ^c
Ghana ^k	CL	...	20.0	20.0	20.0	20.0	20.0	Ghana ^k
Liberia ^c	CL	...	...	0.3	...	0.6	1.0	Libéria ^c
Nigeria ^j	CL	...	...	42.0	...	...	...	Nigeria ^j
Portuguese Guinea	CL	...	0.3	...	...	...	...	Guinée portugaise
Ruanda-Urundi	CL	...	2.3	4.2	5.6	5.6	...	Ruanda-Urundi
Sao Tomé and Principe	CL	...	0.2	0.3	...	...	...	Saint-Thomas et Prince
Sierra Leone	CL	...	3.0	5.0	5.0	5.0	...	Sierra Leone
Spanish Guinea	CL	0	0	0	0	0	...	Guinée espagnole
Togoland (French Adm.)	CL	3.0	3.1	3.3	3.2	3.5	3.6	Togo (adm. française)
America, North		3 150.0	3 590.0	3 510.0	3 880.0	3 850.0	4 180.0	Amérique du Nord
<i>Northern</i>		<i>3 100.0</i>	<i>3 490.0</i>	<i>3 400.0</i>	<i>3 760.0</i>	<i>3 730.0</i>	<i>4 050.0</i>	<i>Nord</i>
Bermuda ^l	CL	...	0.5	0.6	0.6	0.7	0.7	Iles Bermudes ^l
Canada	C	518.5	717.7	661.5	705.2	663.9	778.9	Canada (non compris Terre-Neuve)
(excl. Newfoundland)	L	489.1	666.0	622.8	665.1	622.1	728.2	
Canada (Newfoundland only)	C	318.3	335.2	263.6	320.6	290.2	298.0	Canada (Terre-Neuve seulement)
	L	271.4	293.5	228.3	290.8	262.3	269.1	
Greenland ^m	CL	4.7	21.0	25.0	24.9	25.8	27.4	Groenland ^m
St. Pierre and Miquelon	CL	1.9	2.2	5.9	6.8	6.8	9.3	Saint-Pierre-et-Miquelon
United States (incl. Alaska)	CL	2 253.1	2 409.9	2 437.5	2 706.4	2 738.9	2 935.9	Etats-Unis (y compris l'Alaska)
<i>Central, mainland</i>		<i>20.0</i>	<i>70.0</i>	<i>70.0</i>	<i>80.0</i>	<i>80.0</i>	<i>90.0</i>	<i>Centrale, continent</i>
British Honduras	CL	0.3	...	0.5	...	...	...	Honduras britannique
Costa Rica ⁿ	CL	1.0	1.0	1.0	1.0	1.0	1.3	Costa-Rica ⁿ
El Salvador	CL	0.1	0.4	0.4	...	...	...	Salvador
Guatemala	CL	0.4	0.6	0.7	0.7	0.7	0.7	Guatemala
Honduras	CL	...	...	2.6	2.6	2.6	2.4	Honduras
Mexico ^o	CL	17.1	68.4	67.3	...	...	...	Mexique ^o
Nicaragua	CL	0.1	0.1	...	...	...	...	Nicaragua
Panama	CL	0.7	0.7	1.0	2.0	2.8	3.6	Panama
Panama (Canal Zone)	CL	...	...	...	...	...	...	Panama (Zone du Canal)
<i>Central, Caribbean Islands</i>		<i>30.0</i>	<i>30.0</i>	<i>40.0</i>	<i>40.0</i>	<i>40.0</i>	<i>40.0</i>	<i>Centrale, îles Caraïbes</i>
Bahama Islands	CL	...	...	1.1	1.5	1.7	1.6	Iles Bahamas
Cuba	CL	10.0	8.3	10.2	11.5	12.8	15.6	Cuba
Dominican Republic	CL	0.3	0.5	0.7	...	...	...	République Dominicaine
Guadeloupe	CL	0.4	0.9	1.7	1.8	1.9	1.7	Guadeloupe
Haiti	CL	1.5	1.6	...	...	...	...	Haïti
Martinique	CL	2.5	2.5	2.5	2.6	3.4	3.8	Martinique
Netherlands Antilles	CL	0.1	0.1	0.2	0.8	0.8	0.6	Antilles néerlandaises
Puerto Rico	CL	1.4	2.3	2.4	2.5	2.6	2.7	Porto-Rico
Swan Islands	CL	...	...	...	...	...	...	Iles Swan
Virgin Islands (U.K.)	CL	0.2	0.3	0.3	0.3	0.2	0.2	Iles Vierges (R.-U.)
Virgin Islands (U.S.)	CL	0.3	...	1.0	...	...	0.3	Iles Vierges (E.-U.)
West Indies								Indes occidentales
Barbados	CL	0.5	1.0	3.7	2.8	2.8	3.2	Barbade
Jamaica ^p	CL	4.5	...	...	...	...	5.3	Jamaïque ^p

TABLE A-5 (continued)

TABLEAU A-5 (suite)

WORLD CATCH AND LANDINGS:
By countries arranged by regions
QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
par pays classés par régions

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, region, country		1938	1948	1953	1954	1955	1956	Continent, région, pays
		<i>Thousand metric tons — Milliers de tonnes métriques</i>						
America. North (concluded)								Amérique du Nord (fin)
<i>Central, Caribbean Islands (concluded)</i>								<i>Centrale, îles Caraïbes (fin)</i>
<i>Leeward Islands</i>								<i>Îles sous le Vent</i>
Anguilla	CL	0.1	0.1	0.1	0.1	0.1	0.1	Anguilla
Antigua	CL	0.3	...	...	...	0.9	0.9	Antigua
Montserrat	CL	0.1	...	...	...	...	...	Montserrat
St. Kitts-Nevis	CL	0.2	...	...	...	0.4	0.1	Saint-Christophe-Nevis
Trinidad and Tobago ...	CL	2.7	...	3.0	5.1	3.9	3.6	Trinité et Tobago
<i>Windward Islands</i>								<i>Îles du Vent</i>
Dominica	CL	1.2	0.9	0.8	0.8	0.6	0.4	Dominique
Grenada	CL	0.3	...	0.4	0.4	0.4	0.5	Grenade
St. Lucia	CL	0.2	...	3.0	2.1	2.0	0.5	Sainte-Lucie
St. Vincent	CL	0.4	...	0.3	0.4	0.5	0.6	Saint-Vincent
America, South	C	240.0	450.0	560.0	640.0	770.0	800.0	Amérique du Sud
<i>Northern</i>	C	40.0	110.0	90.0	80.0	100.0	90.0	<i>Nord</i>
British Guiana	CL	...	...	2.9	2.7	3.6	3.6	Guyane britannique
Colombia	CL	10.0	15.0	16.0	16.0	18.0	21.2	Colombie
French Guiana	CL	...	...	2.0	2.0	2.0	2.4	Guyane française
Surinam	CL	0.4	0.5	1.6	1.9	2.5	3.3	Surinam
Venezuela ^a	CL	21.7	92.3	63.3	51.8	69.6	61.3	Venezuela ^a
<i>Eastern</i>	C	160.0	220.0	240.0	260.0	260.0	260.0	<i>Orientale</i>
Argentina	CL	55.3	71.2	77.2	78.1	78.9	75.1	Argentine
Bolivia	CL	0.7	0.8	0.9	0.9	...	...	Bolivie
Brazil ^a	CL	103.3	144.8	160.7	172.0	...	...	Brésil ^a
Falkland Islands	CL	0.1	0.1	...	...	...	...	Îles Falkland
Paraguay	CL	0.3	0.4	0.4	0.4	...	...	Paraguay
Uruguay	CL	3.6	3.5	3.4	4.0	4.9	5.4	Uruguay
<i>Western</i>	C	40.0	120.0	230.0	300.0	410.0	450.0	<i>Occidentale</i>
Chile	C	32.2	64.6	107.2	143.5	214.3	188.3	Chili
	L	30.1	64.4	106.8	143.5	214.3	188.3	
Ecuador ^r	CL	1.8	3.4	9.1	12.5	15.0	...	Equateur ^r
Peru	CL	...	47.7	117.8	146.1	183.3	250.0	Pérou
Asia	C	9 350.0	6 580.0	10 000.0	10 700.0	11 450.0	11 830.0	Asie
<i>Eastern, mainland</i>	C	3 280.0	1 600.0	2 310.0	2 830.0	3 140.0	3 420.0	<i>Orientale, continent</i>
China (mainland) ^b	CL	(1 500.0)	(448.0)	1 890.0	2 294.0	2 518.0	2 640.0	Chine (continentale) ^b
Hong Kong	C	...	34.3	39.6	46.7	45.9	...	Hong-Kong
	L	...	24.7	35.4	43.0	42.6	...	
Korea (North) ^t	CL	925.2	(275.0)	122.0	235.0	312.0	(383.0)	Corée (Nord) ^t
Korea (South)	CL	832.0	284.6	257.3	247.2	259.3	340.9	Corée (Sud)
Macau	CL	...	7.2	4.1	4.9	5.5	...	Macao
Mongolian People's Rep.	CL	...	...	...	...	...	...	Répub. populaire mongole
<i>Eastern, islands</i>	C	3 670.0	2 530.0	4 660.0	4 710.0	5 110.0	4 970.0	<i>Orientale, îles</i>
Bonin Islands	CL	...	...	...	...	...	...	Îles Bonin
China (Taiwan)	CL	89.5	83.5	130.4	152.2	180.3	193.2	Chine (Taiwan)
Japan	CL	3 562.0	2 431.4	4 521.6	4 544.6	4 912.8	4 762.6	Japon
Ryukyu Islands	CL	12.0	7.7	8.8	15.1	13.6	13.7	Îles Ryû-Kyû
<i>Southeastern</i>	C	1 210.0	1 170.0	1 540.0	1 650.0	1 690.0	1 730.0	<i>Sud-orientale</i>
Brunei	CL	...	...	...	0.5	0.7	1.3	Brunéi

TABLE A-5 (continued)

TABLEAU A-5 (suite)

WORLD CATCH AND LANDINGS:
 By countries arranged by regions

QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
 par pays classés par régions

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, region, country		1938	1948	1953	1954	1955	1956	Continent, région, pays	
		<i>Thousand metric tons — Milliers de tonnes métriques</i>							
Asia (concluded)								Asie (fin)	
<i>Southeastern (concluded)</i>								<i>Sud orientale (fin)</i>	
Burma ^e	CL	...	...	100.0	100.0	100.0	100.0	Birmanie ^e
Cambodia ^u	CL	...	...	...	61.0	28.2	30.0	Cambodge ^u
Indonesia ^v	CL	472.0	...	616.9	628.5	651.5	...	Indonésie ^v	
Laos	CL	...	...	...	...	...	...	Laos
Malaya, Fed. of	CL	...	139.0	147.0	137.3	136.8	...	Malaisie, Féd. de	
North Borneo	CL	...	5.9	...	...	...	...	Bornéo du Nord
Philippines ^w	CL	80.9	195.1	311.9	364.6	385.2	416.0	Philippines ^w	
Portuguese Timor	CL	...	0.4	...	...	...	...	Timor portugais
Sarawak	CL	...	...	...	...	...	...	Sarawak
Singapore	CL	...	2.3	5.7	6.3	6.2	...	Singapour	
Thailand	CL	161.0	161.0	205.0	229.8	213.0	217.9	Thaïlande	
Viet-Nam	CL	180.0	...	...	...	130.0	...	Viet-Nam
West New Guinea	CL	3.5	2.5	3.5	3.5	3.6	3.2	Nouvelle-Guinée occidentale	
<i>Southern, central</i>	C	930.0	980.0	1 150.0	1 180.0	1 200.0	1 390.0	<i>Sud centrale</i>	
Bhutan	CL	...	...	...	...	...	...	Bhoutan
Ceylon	CL	...	24.0	25.5	29.7	31.3	40.3	Ceylan	
India	CL	...	...	819.0	828.5	839.0	1 012.3	Inde
Maldive Islands	CL	...	...	20.0	...	...	...	Iles Maldives
Nepal	CL	...	...	...	...	...	...	Népal
Pakistan	CL	...	...	249.0	259.7	270.9	277.0	Pakistan
Portuguese India	CL	...	...	...	...	...	...	Inde portugaise
<i>Southwestern</i>	C	260.0	300.0	340.0	330.0	310.0	320.0	<i>Sud occidentale</i>	
Aden	CL	...	...	75.8	51.9	34.8	21.8	Aden
Afghanistan	CL	...	...	...	...	...	...	Afghanistan
Bahrain Islands	CL	...	...	...	...	...	...	Iles Bahreïn
Cyprus	CL	...	0.6	0.4	0.5	0.6	0.5	Chypre	
Iran ^e	CL	...	25.0	25.0	25.0	25.0	25.0	Iran ^e	
Iraq	CL	3.5	4.0	5.5	5.4	5.4	8.5	Irak	
Israel	CL	1.7	2.5	7.7	9.2	10.7	10.3	Israël	
Jordan	CL	...	...	0.5	0.3	0.5	0.4	Jordanie
Kuwait	CL	...	...	...	...	...	...	Koweït
Lebanon	CL	...	1.9	...	...	...	...	Liban
Muscat and Oman	CL	...	...	...	...	...	...	Mascate et Oman
Qatar	CL	...	...	...	...	...	...	Katar
Saudi Arabia ^e	CL	...	...	4.0	...	...	...	Arabie saoudite ^e
Syria	CL	...	1.0	...	...	...	...	Syrie
Trucial Oman	CL	...	...	...	...	...	...	Oman sous régime de traité
Turkey	CL	76.0	...	102.5	119.4	111.5	139.5	Turquie	
Yemen	CL	...	...	...	...	...	...	Yémen
Europe	C	5 550.0	6 140.0	6 980.0	7 480.0	7 590.0	7 970.0	Europe	
<i>Northern</i>	C	1 760.0	2 540.0	2 670.0	3 230.0	3 100.0	3 470.0	<i>Nord</i>	
Denmark ^x	C	97.1	225.9	342.8	359.4	425.3	463.0	Danemark ^x	
	L	89.0	217.0	331.3	352.5	417.9	455.8		
Faeroe Islands	C	63.0	92.3	88.8	89.4	105.6	116.3	Iles Féroé	
	L	28.6	53.9	48.7	54.7	49.9	64.6		
Finland	CL	44.4	46.1	62.1	65.5	63.3	60.2	Finlande	
Iceland	C	274.3	478.1	424.7	455.4	480.3	517.3	Islande	
	L	...	413.5	360.8	384.2	407.2	443.7		
Norway	C	1 152.5	1 504.0	1 557.1	2 068.2	1 813.4	2 128.9	Norvège	
	L	1 017.1	1 317.8	1 398.5	1 904.9	1 646.9	1 959.7		

TABLE A-5 (continued)

TABLEAU A-5 (suite)

WORLD CATCH AND LANDINGS:
 By countries arranged by regions

QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
 par pays classés par régions

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, region, country		1938	1948	1953	1954	1955	1956	Continent, région, pays
		<i>Thousand metric tons — Milliers de tonnes métriques</i>						
Europe (concluded)								Europe (fin)
<i>Northern (concluded)</i>								<i>Nord (fin)</i>
Sweden ^y	C	129.2	193.9	197.3	193.3	209.4	...	Suède ^y
	L	124.2	184.4	187.0	184.1	199.9	165.2	
<i>Western, islands</i>	C	1 210.0	1 230.0	1 140.0	1 090.0	1 120.0	1 080.0	<i>Occidentale, îles</i>
Ireland, Republic of	C	12.8	25.8	19.0	21.5	23.6	30.5	Irlande, République d'
	L	12.1	24.5	17.7	20.4	22.4	29.1	
United Kingdom	C	1 198.1	1 206.1	1 122.0	1 070.2	1 100.4	1 050.4	Royaume-Uni
	L	1 098.1	1 098.0	1 030.3	980.5	1 004.5	974.8	
<i>Western, mainland</i>	C	810.0	800.0	920.0	890.0	900.0	880.0	<i>Occidentale, continent</i>
Belgium	C	42.8	70.8	74.4	72.0	80.0	69.1	Belgique
	L	40.9	65.8	68.5	65.7	73.0	62.2	
France (excl. Algeria) ...	C	509.2	437.5	497.2	479.1	496.5	515.6	France (non compris l'Algérie)
	L	442.0	391.9	436.0	423.8	432.9	456.3	
Luxembourg	CL	0.5	0.5	0.5	0.5	0.3	0.3	Luxembourg
Monaco	CL	...	...	...	...	...	...	Monaco
Netherlands	C	256.2	294.1	343.3	339.2	319.5	298.1	Pays-Bas
	L	227.3	260.5	310.1	300.7	276.3	263.7	
<i>Western, central</i>	C	780.0	410.0	730.0	680.0	780.0	780.0	<i>Ouest-centrale</i>
Austria	CL	2.0	0.3	1.8	2.0	2.3	2.8	Autriche
Germany, Fed. Rep. of ^z	C	776.5	408.7	730.4	678.0	776.9	770.8	Allemagne, Rép. Féd. d' ^z
	L	714.3	368.2	693.2	641.9	734.1	676.4	
Liechtenstein	CL	...	...	...	...	...	...	Liechtenstein
Switzerland	CL	2.0	2.0	2.0	2.0	...	...	Suisse
<i>Eastern, central</i>	C	70.0	90.0	140.0	160.0	170.0	190.0	<i>Est-centrale</i>
Czechoslovakia	CL	3.0	3.5	7.1	6.1	6.4	...	Tchécoslovaquie
Germany (Eastern)	CL	...	...	...	...	...	...	Allemagne (orientale)
Hungary	CL	7.0	4.0	4.0	...	...	...	Hongrie
Poland	CL	...	...	94.4	106.4	113.0	127.4	Pologne
<i>Southeastern</i>	C	80.0	90.0	120.0	130.0	130.0	140.0	<i>Sud-orientale</i>
Albania	CL	3.3	2.5	3.0	...	...	...	Albanie
Bulgaria	CL	5.6	6.4	5.6	9.1	6.8	...	Bulgarie
Greece	CL	25.0	33.6	46.0	52.5	60.0	65.0	Grèce
Romania	CL	30.0	...	...	...	...	...	Roumanie
Yugoslavia ^{aa}	CL	16.8	21.2	25.7	23.0	22.6	28.4	Yougoslavie ^{aa}
<i>Southern</i>	C	840.0	980.0	1 260.0	1 300.0	1 390.0	1 430.0	<i>Sud</i>
Andorra	CL	...	...	...	...	...	...	Andorre
Gibraltar	CL	...	...	...	...	...	...	Gibraltar
Italy	CL	181.2	156.6	208.4	217.6	218.0	218.6	Italie
Malta and Gozo	CL	1.1	1.5	1.0	0.8	0.8	0.8	Malte et Gozo
Portugal	C	247.2	292.1	425.2	438.7	424.7	471.3	Portugal
	L	217.6	220.7	293.2	307.4	286.9	320.7	
San Marino	CL	...	...	...	...	...	...	Saint-Marin
Spain (excl. Ceuta and Melilla) ^{bb}	C	408.5	532.9	625.6	639.2	747.4	736.2	Espagne (non compris Ceuta et Melilla) ^{bb}
	L	387.8	489.5	559.2	566.8	663.5	655.2	

TABLE A-5 (concluded)

WORLD CATCH AND LANDINGS:
 By countries arranged by regions

C — Catch (live weight, i.e., whole fresh weight)
 L — Landings (landed weight)
 CL — Catch and landings identical

TABLEAU A-5 (fin)

QUANTITÉS PÊCHÉES ET DÉBARQUÉES DANS LE MONDE:
 par pays classés par régions

C — Quantités pêchées (poids vif: poids brut du poisson frais)
 L — Quantités débarquées (poids débarqué)
 CL — Quantités pêchées et débarquées sont identiques

Continent, region, country		1938	1948	1953	1954	1955	1956	Continent, région, pays
<i>Thousand metric tons — Milliers de tonnes métriques</i>								
Oceania	C	90.0	90.0	110.0	110.0	110.0	120.0	Océanie
American Samoa	CL	...	...	...	1.6	4.5	6.1	Samoa américain
Australia	CL	33.5	38.9	52.0	53.7	52.2	49.9	Australie
British Solomon Islands .	CL	...	...	...	...	...	...	Iles Salomon britanniques
Cocos (Keeling) Islands .	CL	...	...	...	...	...	...	Iles Cocos (Keeling)
Cook Islands	CL	0.5	0.7	0.9	0.8	0.8	0.7	Iles Cook
Fidji Islands	CL	...	...	...	...	...	...	Iles Fidji
French Oceania	CL	...	...	1.8	2.5	1.8	2.2	Océanie française
Gilbert and Ellice Islands	CL	...	...	...	...	...	...	Iles Gilbert et Ellice
Guam ^{cc}	CL	...	0.2	0.2	0.2	0.2	0.2	Guam ^{cc}
Hawaii	CL	7.0	6.4	8.6	9.3	7.0	7.5	Hawaï
Johnston Island	CL	...	...	...	...	...	...	Ile Johnston
Midway Islands	CL	...	...	...	...	...	...	Iles Midway
Nauru	CL	...	...	...	...	...	...	Nauru
New Caledonia ^{dd}	CL	0.6	0.5	0.5	0.8	0.7	0.4	Nouvelle-Calédonie ^{dd}
New Guinea (Australian Administ.) ^{dd}	CL	0.2	0.4	0.6	0.8	0.7	0.7	Nouvelle-Guinée (administ. australienne) ^{dd}
New Hebrides	CL	...	...	...	...	...	...	Nouvelles-Hébrides
New Zealand	C	27.0	35.7	36.6	36.9	39.2	...	Nouvelle-Zélande
	L	25.0	32.9	33.5	33.8	36.1	38.3	
Niue	CL	...	...	...	...	...	...	Niue
Norfolk Island	CL	...	...	...	...	...	...	Ile Norfolk
Pacific Islands (U.S. Administration)	CL	...	...	0	0	0	0	Iles du Pacifique (admin. E.-U.)
Papua ^{dd}	CL	0.1	0.1	0.2	0.2	0.3	0.3	Papua ^{dd}
Pitcairn	CL	...	...	...	...	...	...	Pitcairn
Tokelau Islands	CL	...	...	...	...	...	...	Iles Tokelau
Tonga	CL	...	...	...	...	...	...	Tonga
Wake Island	CL	...	...	...	...	...	...	Ile Wake
Western Samoa	CL	...	...	...	...	...	...	Samoa occidental
U.S.S.R. ^{ee}	C	1 550.0	1 490.0	1 980.0	2 260.0	2 500.0	2 620.0	U.R.S.S. ^{ee}
U.S.S.R.	CL	1 523.0	1 486.0	1 983.0	2 258.0	2 498.0	2 617.0	U.R.S.S.

Source: Tables B-1, B-2, and C-1 through C-13. See also table A-4 for a different arrangement of these country tables.

Note: In the computation of aggregates the data shown have been supplemented by FAO estimates where (...) indicates that no official figures are available for particular years or countries.

ø = above zero, but negligible.

^a Also included with France.

^b Also included with Spain.

^c FAO estimates.

^d Includes dependencies. FAO estimate.

^e Excludes Comoro Islands.

^f Federation of.

^g Includes Ascension.

^h Includes Walvis Bay area.

ⁱ Excludes Ruanda-Urundi.

^j Nigeria includes Camerouns (British Adm.).

^k Before 6 March 1957, data refer to the Gold Coast and Togoland under British Administration.

^l Marine fisheries only. All figures are estimated and are considered to be within 10% of the actual catch.

^m Data do not include quantities landed by foreign fishing craft in Greenland ports, which in 1955 amounted to about 33,000 metric tons, Greenland fishing craft do not land fish in foreign ports.

ⁿ FAO estimate. Excludes tuna caught by foreign boats, landed in Costa Rica and shown by Costa Rica as exports.

Source: Les tableaux B-1, B-2 et C-1 à C-13. Voir également le tableau A-4 pour une ventilation différente des totaux pour ces pays.

Note: Dans le calcul des totaux généraux, on a introduit des estimations de la FAO lorsque les chiffres officiels manquaient, ce qui est indiqué dans la colonne par le signe (...).

ø = supérieur à zéro, mais négligeable.

^a Compris également avec la France.

^b Compris également avec l'Espagne.

^c Estimation de la FAO.

^d Comprend les dépendances. Estimation de la FAO.

^e Non compris les Comores.

^f Fédération de.

^g Y compris Ascension.

^h Comprend la région de Walvis Bay.

ⁱ Non compris le Ruanda-Urundi.

^j La Nigeria comprend le Cameroun (Adm. britannique).

^k Avant le 6 mars 1957 les données se réfèrent à la Côte-de-l'Or et au Togo sous administration britannique.

^l Pêche maritime seulement. Tous les chiffres sont des estimations correspondant à 10% près à la vérité.

^m Les données ne comprennent pas les quantités débarquées par les bateaux étrangers dans les ports groenlandais, qui en 1955 ont atteint à peu près 33,000 tonnes métriques. Les bateaux de pêche groenlandais ne débarquent pas de poisson dans les ports étrangers.

ⁿ Estimation de la FAO. Ne comprend pas le thon pêché par des bateaux étrangers, débarqué à Costa Rica et apparaissant dans les exportations de Costa Rica.

° Figures for Mexico exclude "via la pesca", i.e., quantities caught by foreign fishermen (usually from the United States) under Mexican permits. These quantities are included in the United States landings statistics; Mexico includes them in its export statistics, but they are excluded from the United States import statistics.

° Include Cayman Islands and Turks and Caicos Islands.

° Data shown under 1938 refer to 1939.

° Includes Galapagos Islands. Excludes catch by foreign craft (which fish tuna in this area).

° Data shown under 1938 refer to 1936. Data shown under 1948 refer to 1949.

° Data shown under 1948 refer to 1949. Data shown under 1956 refer to plan target.

° Freshwater fish only. Total catch estimated at 150,000 metric tons.

° 1938, Netherlands East Indies. 1948, 1953-56, excludes West New Guinea.

° Excludes molluscs used for duck feed: 750,700 metric tons in 1953, 821,300 in 1954, 876,000 in 1955, and 1,068,000 in 1956.

° Excludes Faeroe Islands and Greenland.

° Catch and landings data do not include an estimated 14,000 metric tons of fish caught annually in rivers and lakes.

° 1938 data include Eastern Germany and other areas according to prewar boundaries.

°° 1938, prewar territory.

°° Data shown under 1938 refer to 1934.

°° Data shown under 1948 refer to 1949.

°° Export data.

°° The 1938 "continental" figure for the U.S.S.R. includes the catches of Estonia (15,400 tons), Latvia (13,900 tons), and Lithuania (1,700 tons).

° Les chiffres pour le Mexique ne comprennent pas « via la pesca », c'est-à-dire les quantités pêchées par des pêcheurs étrangers (généralement des Etats-Unis) avec l'autorisation mexicaine. Ces quantités sont comprises dans les statistiques des Etats-Unis relatives aux quantités débarquées; le Mexique les comprend dans ses statistiques d'exportation; mais elles ne sont pas comprises dans les statistiques d'importation des Etats-Unis.

° Y compris les îles Cayman et les îles Turques et Caïques.

° Les données pour 1938 se réfèrent à 1939.

° Y compris les îles Galapagos. Les quantités pêchées par les bateaux étrangers ne sont pas comprises (ces bateaux pêchent du thon dans cette zone).

° Les données pour 1938 se réfèrent à 1936. Les données pour 1948 se réfèrent à 1949.

° Les données pour 1948 se réfèrent à 1949. Les données pour 1956 se réfèrent à l'objectif fixé.

° Poissons d'eau douce seulement. La quantité totale pêchée est estimée à 150.000 tonnes métriques.

° 1938, Indes orientales néerlandaises. 1948, 1953-56, non compris la Nouvelle-Guinée occidentale.

° Non compris les mollusques utilisés pour l'alimentation des canards: 750.700 tonnes métriques en 1953, 821.300 en 1954, 876.000 en 1955 et 1.068.000 en 1956.

° Non compris les îles Féroé et le Groenland.

° Les quantités pêchées et les quantités débarquées ne comprennent pas une quantité estimée à 14.000 tonnes métriques de poisson, pêchée annuellement dans les rivières et les lacs.

° Les données pour 1938 comprennent l'Allemagne orientale et d'autres régions selon les frontières d'avant guerre.

°° 1938, territoire d'avant guerre.

°° Les données pour 1938 se réfèrent à 1934.

°° Les données pour 1948 se réfèrent à 1949.

°° Données d'exportation.

°° Le chiffre « continental » pour 1938 pour l'U.R.S.S. comprend les quantités pêchées par l'Estonie (15.400 tonnes), la Lettonie (13.900 tonnes) et la Lituanie (1.700 tonnes).

CERTAIN LEGAL ASPECTS CONCERNING THE DELIMITATION
OF THE TERRITORIAL WATERS OF ARCHIPELAGOS

BY JENS EVENSEN, ADVOCATE AT THE SUPREME COURT OF NORWAY

(Preparatory document No. 15) *

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Introduction

A. For the purpose of this paper the term "internal waters" means sea areas which are sufficiently closely linked to the land domain to be subject to the regime of internal waters.¹ The waters between and inside the islands and islets of an archipelago may be subject to this regime.

The term "marginal seas" means the belt of water X miles in width outside and parallel to the coastline or outside and parallel to the outer limits of the internal waters where such internal waters exist.

The term "territorial waters" is applied as a term inclusive of both the internal waters and the marginal seas of a State.

B. The very excellent research carried on by the International Law Commission and its Special Rapport-

teur on the various aspects of the extent and delimitation of territorial waters has clearly demonstrated the complexity of the problems involved. The practices of and views advocated by coastal States vary infinitely, as do the views held by various international authorities and international law publicists.

The legal aspects of the problem are mingled with and dependent upon various factors of a geographical, economical, historical and political nature. Such factors have lately been increasingly invoked by coastal States for the concrete delimitation of their territorial waters and for the solution of the various other problems concerning the seas adjacent to their coasts. And, though the broad principles expressed by the International Court of Justice in the Anglo-Norwegian Fisheries Case² to the effect that:

"The delimitation of sea areas has always an international law aspect: it cannot be dependent merely upon the law of the

* This paper was prepared at the request of the Secretariat of the United Nations but should not be considered as a statement of the views of the Secretariat.

¹ Judgement rendered on 18 December 1951, by the International Court of Justice. *I.C.J. Reports, 1951*, p. 133.

² *Ibid.*, p. 132.

coastal State as expressed in its municipal law. Although it is true that the act of delimitation is necessarily a unilateral act, because only the coastal State is competent to undertake it, the validity of the delimitation with regard to other States depends upon international law."

unquestionably give a valid and accurate description of governing legal principles, one must bear in mind that the various factors just mentioned may play an important role in determining the legality under international law of concrete acts of delimitation of territorial waters.

The difficulties in trying to establish a single formula of fixed rules are especially evident where the complex problems concerning the delimitation of the territorial waters of archipelagos are concerned.

C. As a starting point the following definition of the term archipelago may be laid down: an archipelago is a formation of two or more islands (islets or rocks) which geographically may be considered as a whole.

One glance at the map is sufficient to show that the geographical characteristics of archipelagos vary widely. They vary as to the number and size of the islands and islets as well as with regard to the size, shape and position of the archipelagos. In some archipelagos the islands and islets are clustered together in a compact group while others are spread out over great areas of water. Sometimes they consist of a string of islands, islets and rocks forming a fence or rampart for the mainland against the ocean. In other cases they protrude from the mainland out into the sea like a peninsula or a cape, like the Cuban Cays or the Keys of Florida.

Geographically these many variations may be termed archipelagos. Quite another question is whether the same rules of international law will apply to these highly different geographical formations where the question of the delimitations of their territorial waters is concerned. For the problems here involved it may prove helpful to distinguish between two basic types of archipelagos, namely:

1. Coastal archipelagos
2. Outlying (or mid-ocean) archipelagos

Coastal archipelagos are those situated so close to a mainland that they may reasonably be considered part and parcel thereof, forming more or less an outer coastline from which it is natural to measure the marginal seas. The most typical example of such coastal archipelagos is the Norwegian "Skjaergard" stretching out almost all along the coast of Norway forming a fence—a marked outer coastline—toward the sea. Other typical examples of such coastal archipelagos are offered by the coasts of Finland, Greenland, Iceland, Sweden, Yugoslavia, and certain stretches on the coasts of Alaska and Canada, just to mention a few of many examples.

Outlying (mid-ocean) archipelagos are groups of islands situated out in the ocean at such a distance from the coasts of firm land as to be considered as an independent whole rather than forming part of or outer coastline of the mainland. A few examples suffice in this connexion: the Faeroes, Fiji Islands, Galapagos,

Hawaiian Islands, Indonesia, Japan, Philippines, Solomon Islands, the Svalbard archipelago.

D. In addition to the difficulties arising out of the wide variety of the geographical characteristics and the specific economic, historical and political factors involved in each case, the legal approach to the questions involved is further complicated by the fact that such a host of different legal principles—sometimes conflicting—may be invoked for the concrete delimitation of territorial waters. The rules of international law governing bays and fjords, the straight baseline system governing heavily indented coastlines, the rules governing international straits, the rules governing the territorial waters of isolated islands, the principle of the freedom of the seas; these and other principles must constantly be borne in mind in answering the question as to what rules of international law govern the concrete delimitation of the territorial waters of an archipelago.

I

STUDIES OF INTERNATIONAL BODIES AND VIEWS OF INTERNATIONAL LAW PUBLICISTS

1. *Institut de droit international*

At its Lausanne session in 1888, the Institut de droit international placed on its agenda the question of the extent and delimitation of territorial waters. The problems concerning the delimitation of the territorial waters of coastal archipelagos were brought to the attention of the Institut, at its Hamburg session in 1889, by the Norwegian jurist Mr. Aubert (*Annuaire de L'Institut*, vol. 11, pp. 136, 139, *et seq.*). However, neither in the reports of 1892 or 1894 presented by Sir Thomas Barclay as Rapporteur, nor in the resolutions adopted by the Institut at the Paris conference of 1894, was any consideration given to these special questions (See *ibid.*, vol. 12, p. 104, *et seq.* and vol. 13, p. 328, *et seq.*).

Article 2 of the resolutions of the Institut of 1894 merely proposed that the extent of marginal seas should be fixed at six nautical miles from "low-water marks all along the coast" (*ibid.*, vol. 13, p. 329). For bays it was provided in article 3 that the marginal sea should follow the sinuosities of the coast, with the exception that straight baselines could be drawn across the mouth of a bay where the width thereof did not exceed twelve nautical miles. The article provided, however, that historic title might justify wider baselines. Articles 10 and 11 of the resolutions laid down the rules governing straits.

It was not until 1927 that the question of the régime of the territorial waters of archipelagos was seriously discussed in the Institute.³ Thus the 5th Committee of the Institut with Sir Thomas Barclay and Professor Alvarez as Rapporteurs, proposed an article 5 to the following effect:

³ The reports by Sir Thomas Barclay in the *Annuaire* of 1912, vol. 25, p. 375, *et seq.*; 1919, vol. 27, p. 62, *et seq.*; 1925, vol. 32, p. 146, *et seq.*, did not take these questions up for discussion. Nor did Professor Oppenheim do so in his report of 1913, *ibid.*, vol. 26, p. 403 *et seq.*

"Where a group of islands belongs to one coastal State and where the islands of the periphery of the group are not further apart from each other than the double breadth of the marginal sea, this group shall be considered a whole and the extent of the marginal sea shall be measured from a line drawn between the uttermost parts of the islands." (*Ibid.*, vol. 33, part 1, 1927, p. 81) (*unofficial translation*).

As the extent of marginal sea proposed by the Committee was six nautical miles, it follows that a twelve-mile maximum was provided for baselines drawn between the outermost points of an archipelago.

During the Stockholm Conference of 1928, an amendment was proposed to article 5 by the Swedish jurist Reuterskiöld with special relevance to coastal archipelagos, as follows:

"In case an archipelago is situated along the coast of a country the extent of the marginal seas shall be measured from the outermost islands and rocks, provided that the distance of the islands and islets situated nearest to the coast does not exceed the double breadth of the marginal seas." (*unofficial translation*).

This proposal did not contain any maximum distance between the islands and islets of an archipelago, but proposed a distance of twice the breadth of the marginal sea between the nearest island or islets of the archipelago and the mainland. However, the final resolution of the Institut contained the following proposal in article 5, paragraph 2:

"Where archipelagos are concerned, the extent of the marginal sea shall be measured from the outermost islands or islets provided that the archipelago is composed of islands and islets not further apart from each other than twice the breadth of the marginal sea and also provided that the islands and islets nearest to the coast of the mainland are not situated further out than twice the breadth of the marginal sea." (*Ibid.*, vol. 34, p. 673) (*unofficial translation*).

It must be borne in mind in this connexion that, by a small majority (23-21), the Institut at the Stockholm meeting substituted three nautical miles for the six miles previously proposed by the Institut as the extent of the marginal sea.

2. International Law Association

At its 15th conference at Genoa in 1892, the report of Sir Thomas Barclay to the *Institut de droit international* was submitted to the International Law Association for discussion. At the Brussels Conference of the Association in 1895, the reports and resolutions of the Institut were likewise discussed (see *Report of the 15th Conference of the International Law Association*, 1892, pp. 182 *et seq.*, *Report of the 17th Conference* in 1895, pp. 102 *et seq.* See also *Report of the 27th Conference*, Paris, 1912). In 1924 the International Law Association appointed a "Neutrality Committee", with Professor Alvarez as Chairman, to consider the question concerning territorial waters. At the Association meeting in Stockholm in 1924, the Committee presented a report and draft convention on "The Laws of Maritime Jurisdiction in Time of Peace". Professor Alvarez submitted a special draft convention differing in certain respects from the Committee's proposal (*Report of 33rd Conference*, Stockholm, 1924, pp. 259 *et seq.*)

The draft of the Committee contained no specific provisions concerning the territorial waters of archipelagos (*ibid.*, pp. 262 *et seq.*), but it provided, in article 2, that "States shall exercise jurisdiction over their territorial waters to the extent of three marine miles from low water mark at spring tide along their coasts". Article 3 provided that, in case of islands situated outside "the territorial limit of a State, a zone of territorial waters shall be measured round each of the said islands". In article 4, a twelve-mile maximum was proposed for baselines across the mouths of bays. Articles 13 to 16 contained proposals as to straits.

Professor Alvarez, however, in article 5 of his draft, included the following proposals concerning islands and archipelagos:

"As to islands situated outside or at the outer limit of a State's territorial waters, a special zone of territorial waters shall be drawn around such islands according to the rules contained in article 4.

"Where there are archipelagos the islands thereof shall be considered a whole, and the extent of the territorial waters laid down in article 4 shall be measured from the islands situated most distant from the centre of the archipelago." (*Report of the 33rd Conference* in 1924, p. 266 *et seq.*) (*unofficial translation*)

In article 4 of his draft, Professor Alvarez proposed a zone of marginal seas of six nautical miles from low-water marks. Though Professor Alvarez also proposed a twelve-mile maximum for baselines across the mouths of bays (article 5), no maximum was suggested regarding the distance between the islands of an archipelago.

At the 34th Conference of the Association at Vienna in 1926, the question of the territorial waters of archipelagos was discussed. The draft convention as amended by the Conference contained no reference to archipelagos. (*Report of 34th Conference*, Vienna, 1926, pp. 40 *et seq.*)

3. American Institute of International Law

The American Institute of International Law proposed in Article 7 of its project No. 10 (National Domain) the following:

"In case of an archipelago, the islands and keys composing it shall be considered as forming a unit and the extent of territorial waters referred to in article 5 shall be measured from the islands farthest from the center of the Archipelago." (*American Journal of International Law, Spec. Suppl. 20*, 1926, pp. 318, 319.)

This formula corresponded closely to the one suggested by Professor Alvarez to the International Law Association in 1924. As we have seen, it did not provide for any maximum distance between the islands of an archipelago.

4. Harvard Research in International Law

The Harvard Research in International Law (1929) had in its draft convention on territorial waters no provisions concerning archipelagos. Article 7 thereof contained certain provisions as to isolated islands to the effect that "the marginal sea around an island or

around land exposed only at some stage of the tide is measured outward three miles therefrom in the same manner as from the mainland”.

In the comments to this article it was stated, *inter alia*:

“In any situation where islands are within six miles of each other the marginal sea will form one extended zone. No different rule should be established for groups of islands or archipelagos except if the outer fringe of islands is sufficiently close to form one complete belt of marginal seas.” (*American Journal of International Law, Spec. Suppl. 23, 1929, pp. 241, 276.*)

5. The Hague Codification Conference of 1930

In the amended draft convention prepared by the German jurist Schücking for the Committee of Experts,⁴ the following provisions as to archipelagos were included in article 5, paragraph 2:

“In the case of archipelagos, the constituent islands are considered as forming a whole and the width of the territorial sea shall be measured from the islands most distant from the center of the archipelago.” (League of Nations document C-196, M-70, 1927, V., p. 72. See also *American Journal of International Law, Spec. Suppl. 20, 1926, p. 142.*)

These provisions contained no maximum as to the distance between the islands of an archipelago, while in the case of bays the draft (article 4) suggested a maximum length of ten nautical miles for baselines.

Article 5 of the draft was applicable to outlying archipelagos as well as to coastal archipelagos. Where coastal archipelagos were concerned, article 5, paragraph 1, containing the following provisions, was also applicable:

“If there are natural islands... situated off the coast, the inner zone of the sea shall be measured from these islands, except in the event of their being so far distant from the mainland that they would not come within the zone of territorial sea if such zone were measured from the mainland...”

As set forth in the Basis of Discussion No. 12, on Territorial Waters (Ser. L.o.N.P. 1929. V.2, pp. 50 *et seq.*) the replies of the various Governments to the proposals quoted above show a great diversity of views.

Certain Governments rejected the idea that archipelagos should be considered as a single unit. According to their view each island has its own territorial waters. That the territorial waters of two islands might overlap, when they are situated near to each other, had, in their opinion, no legal bearing whatsoever. Other Governments held the view that a single belt of territorial waters could be drawn around archipelagos provided that the islands and islets of the archipelago were not further apart than a certain maximum. The suggestions as to such a maximum varied in different replies.

Finally, certain Governments were of the opinion that archipelagos must be regarded as a whole where the geographical peculiarities warranted such treatment. They advocated no particular maximum distance, but held that the geographical facts of each concrete case must be taken into account.

Another question discussed in this same connexion was whether the waters enclosed within the archipelago should be regarded as internal waters or as marginal seas.

As “a possible basis of discussion which would be a compromise” the Preparatory Committee proposed the following as Basis of Discussion No. 13:

“In the case of a group of islands which belong to a single State and at the circumference of the group are not separated from one another by more than twice the breadth of territorial waters, the belt of territorial waters shall be measured from the outermost islands of the group. Waters included within the group shall also be territorial waters.

“The same rule shall apply as regards islands which lie at a distance from the mainland not greater than twice the breadth of territorial waters.” (*Ibid.*, p. 51; also *American Journal of International Law, Spec. Suppl. 24, 1930, p. 34.*)

The compromise thus suggested by the Preparatory Committee proposed to consider the archipelagos as a unit but laid down a distance of twice the breadth of marginal seas as the maximum distance between the islands and islets of an archipelago. The Committee further proposed that the waters enclosed within the islands and islets of the group should not be considered internal waters but marginal seas. (The Committee used the term “territorial waters”.)

The success of the Codification Conference on this topic was not spectacular. The question of the territorial waters of archipelagos, together with certain other of the more controversial problems pertaining to the delimitation of territorial waters, was referred to the Second Sub-Committee of the Second Committee of the Conference for further consideration. The Second Sub-Committee, however, was unable to reach an agreement on this point and consequently abandoned “the idea of drafting a definite text on this subject”. It merely stated as its “observation” that:

“With regard to a group of islands (archipelago) and islands situated along the coast, the majority of the Sub-Committee was of the opinion that a distance of ten miles should be adopted as a basis for measuring the territorial sea outward in the direction of the high sea... The Sub-Committee did not express any opinion with regard to the nature of the waters included within the group. (Report of the Second Commission, Ser. L.o.N.P. 1930.V.16, p. 219.)

Thereafter the problems of the territorial waters of archipelagos were not taken up for discussion in the plenary meetings of the Conference.

6. International Law Commission

In his first report on “The Régime of the Territorial Sea” (A/CN.4/53) the Special Rapporteur, Professor J. P. A. François, included certain proposals on coastal archipelagos in article 10 and article 5, paragraph 2. In article 10 it was provided:

“With regard to a group of islands (archipelago) and islands situated along the coast, the ten-mile line shall be adopted as the baseline for measuring the territorial sea outward in the direction of the high sea. The waters included within the group shall constitute inland waters.”

The proposed article 5 concerning “baselines” stated in paragraph 2, *inter alia*:

⁴ Appointed by the League of Nations in 1924 to prepare a conference for the codification of international law.

“Nevertheless where a coast is deeply indented or cut into, or where it is bordered by an archipelago, the baseline becomes independent of the low water mark and the method of baselines joining appropriate points on the coasts must be employed. . . .”

In his second report (A/CN.4/61), Professor François, as Special Rapporteur, made certain amendments to these articles.

In article 5, paragraph 2, he made the following amendment, *inter alia*:

“As an exception where circumstances necessitate a special régime because the coast is deeply indented or cut into, or because there are islands in its immediate vicinity, the baseline may be independent of the low water mark. . . .”

He advocated a ten-mile maximum both for baselines drawn across the mouths of bays (article 6) and for baselines drawn between islands and islets of an archipelago (article 10). Thus his amended article 10 stated:

“With regard to a group of islands (archipelago) and islands situated along the coast the ten-mile line shall be adopted as to baselines.”

The above-quoted proposal was at variance with the governing principles of international law as expressed by the International Court of Justice in the above-cited Judgement of 18 December 1951 in the Anglo-Norwegian Fisheries Case. The Rapporteur stressed in his first as well as in his second report that he had “inserted article 10 not as expressing the law at present in force, but as a basis of discussion should the Commission wish to study a text envisaging the progressive development of international law on this subject”.

With regard to isolated islands, the reports of the Special Rapporteur contained in article 9 the following proposal:

“Every island has its own territorial sea. An island is an area of land surrounded by water, which is permanently above high-water mark.” (A/CN.4/61)

In his third report (A/CN.4/77), Professor François maintained his views as to straight baselines for deeply indented coastlines including coastal archipelagos. However, with regard to the more specific principles concerning archipelagos the Rapporteur advanced, in article 12, an entirely new set of rules, thus illustrating in an interesting way the complexity and uncertainty involved in regard to rules governing archipelagos. Article 12 of the new draft provided:

“1. The term ‘groups of islands’, in the juridical sense, shall be determined to mean three or more islands enclosing a portion of the sea when joined by straight lines not exceeding five miles in length, except that one such line may extend to a maximum of ten miles.

“2. The straight lines specified in the preceding paragraph shall be the baselines for measuring the territorial sea. Waters lying within the area bounded by such lines and the islands themselves shall be considered as inland waters.

“3. A group of islands may likewise be formed by a string of islands taken together with a portion of the mainland coastline. The rules set forth in paragraphs 1 and 2 of this article shall apply *pari passu*.”

No indication was given in the report as to how the proposed maximum length of five miles for the straight

baselines of archipelagos was arrived at; nor were the reasons given for the proposal that one straight baseline, and one only, could be ten miles in length. The proposed article applied to coastal as well as to outlying archipelagos. The rules here proposed seem to be rather strict, especially in view of the wide variety of geographical differences and peculiarities where archipelagos are concerned.

In its first draft of “Provisional Articles concerning the Régime of the Territorial Sea” adopted in 1954,⁵ the International Law Commission proposed—in article 5 concerning straight baselines—provisions more or less similar to those suggested by the Rapporteur. It provided for straight baselines where a coast was deeply indented or cut into, or where islands were situated in its immediate vicinity. The Commission also maintained in its first draft the ten-mile distance as the maximum permissible length for straight baselines. Article 10 of the draft concerning isolated islands contained provisions similar to those proposed by the Rapporteur. But the Commission refrained from making any specific proposals as far as groups of islands were concerned.

In its amended draft articles as set forth in the report on the seventh session (1955) of the International Law Commission,⁶ the Commission likewise refrained from drafting any special provisions on groups of islands. Article 10 contained rules concerning isolated islands, while article 5 admitted the use of straight baselines, *inter alia*, “where circumstances necessitate a special régime because the coast is deeply indented or cut into, or because there are islands in its immediate vicinity. . . .” Article 5 was thus applicable to coastal archipelagos, and in its second draft the Commission did not provide for any fixed maximum as to the length of such baselines. Article 5 implicitly assumed that the waters inside the baselines should be considered internal waters. As far as bays were concerned, article 6 of the 1955 draft contained maximum lengths for straight baselines across the mouths of such bays of twenty-five nautical miles except in the case of historic bays.

In its final draft “Articles concerning the law of the sea” adopted in 1956,⁷ the Commission also refrained from presenting any specific provisions concerning archipelagos.

Article 10 contains certain provisions concerning isolated islands to the effect that:

“Every island has its own territorial sea. An island is an area of land, surrounded by water, which in normal circumstances is permanently above high-water mark.”

In its comments on this article, the Commission made the following observations as to archipelagos:

“The Commission had intended to follow up this article with a provision concerning groups of islands. Like The Hague Conference for the Codification of International Law of 1930, the Commission was unable to overcome the difficulties involved. The problem is similarly complicated by the different

⁵ *Official Records of the General Assembly, Ninth Session, Supplement No. 9 (A/2693)*.

⁶ *Ibid.*, *Tenth Session, Supplement No. 9 (A/2934)*.

⁷ *Ibid.*, *Eleventh Session, Supplement No. 9 (A/3159)*.

forms it takes in different archipelagos. The Commission was also prevented from stating an opinion, not only by disagreement on the breadth of the territorial sea, but also by lack of technical information on the subject...

"The Commission points out for purposes of information that Article 5 may be applicable to groups of islands lying off the coast."⁸

In article 5 the drawing of straight baselines was provided for, *inter alia*: "where circumstances necessitate a special régime because the coast is deeply indented or cut into, or because there are islands in its immediate vicinity".

In this final draft, the Commission proposes a maximum of fifteen miles for straight baselines drawn across the mouths of bays except in the case of historic bays.

As shown in the foregoing, and as especially shown by the various comments made by Governments on the proposals of the Special Rapporteur and the International Law Commission, the wide variety of rules and of state practice prevented the Commission from drafting specific articles concerning the extent and delimitation of the territorial waters of archipelagos. As far as coastal archipelagos are concerned, article 5 of the draft endeavours to embody the principles laid down by the International Court of Justice in its 1951 Judgement in the Anglo-Norwegian Fisheries Case. Where outlying (mid-ocean) archipelagos are concerned, the draft articles of the International Law Commission do not give any specific guidance as to the governing principles of international law.

7. Views expressed by international law publicists

The views expressed by international law publicists concerning the territorial waters of archipelagos are mostly brief statements made more or less incidentally in connexion with general observations on the extent and delimitation of territorial waters.⁹

⁸ *Ibid.*, p. 17.

⁹ See *inter alia*, the statements made by W. E. Hall in *A Treatise on International Law*, para. 38:

"Certain physical peculiarities of coasts in various parts of the world, where land impinges on the sea in an unusual manner, require to be noticed as affecting the territorial boundaries."

As examples are mentioned the Florida Keys, the Bahamas and the Cuban Cays.

H. Wheaton in *Elements of International Law*, 1866, para. 178, expresses himself in a similar manner as follows:

"The term 'coasts' includes the natural appendages of the territory which rise out of waters, although these islands are not of sufficient firmness to be inhabited or fortified."

See also Halleck in *International Law*, 4th Edition, London, 1908, vol. I, p. 147:

"The term 'coasts' does not properly comprehend all the shoals which form sunken conditions of the land perpetually covered by waters, but it includes all the natural appendages of the territory which rise out of waters."

The German author Münch in *Die Technischen Fragen des Küstenmeers* (The Technical Questions regarding Territorial Waters) (Kiel, 1934) also proceeded to regard archipelagos as units. At page 108, *et seq.*, he made various suggestions as to a possible approach to the concrete delimitations of such archipelagos, with geometric constructions and formulas, proposals which at present seem to be mostly of theoretical interest.

Where the authors have taken up the problems of archipelagos for special discussion they mostly tend to look upon such formations as units with the ensuing legal implications as far as the delimitation of territorial waters is concerned.

Thus Jessup, in his book *The Law of Territorial Waters and Maritime Jurisdiction* (New York, 1927), adopted the following rule (p. 457, see also p. 477):

"In the case of archipelagos the constituent islands are considered as forming a unit and the extent of territorial waters is measured from the islands farthest from the center of the archipelagos."

No maximum is proposed as to the distance between the islands and islets of such archipelagos.

Hyde, in his book *International Law*, 2nd ed., vol. I (Boston, 1947), also seems to advocate in a cautious way the view that archipelagos may juridically be considered a unit. He states (p. 485) *inter alia*:

"Where, however, a group of islands forms a fringe or cluster around the ocean front of a maritime State it may be doubted whether there is evidence of any rule of international law that obliges such State invariably to limit or measure its claims to the waters around them by the exact distance which separates the several units."

In *International Law of the Sea* (3rd Edition), Colombos states as follows (pp. 90-91):

"The generally recognized rule appears to be that a group of islands forming part of an archipelago shall be considered as a unit and the extent of territorial waters measured from the centre of the archipelago. In the case of isolated or widely scattered groups of islands, not constituting an archipelago, each island will have its own territorial waters, thus excluding a single belt for the whole group. Whether a group of islands forms or not an archipelago is determined by geographical conditions but it also depends in some cases on historic and prescriptive grounds."¹⁰

Schwarzenberger's *International Law*, Vol. I (1949), p. 156, likewise states that "if islands form an archipelago they may in certain circumstances be regarded as a unit in law".

The French jurist Gidel, in his well-known work *Le Droit International Public de la Mer* (The Public International Law of the Sea), has given the most detailed examination of the problems here involved (vol. III, Paris, 1934, p. 706-727).

As far as coastal archipelagos are concerned, Gidel accepted the rule that such archipelagos shall be treated as a unit. (See pages 718-726.) Gidel, however, favoured a maximum of ten nautical miles for the baselines between the islands and islets of the group or between the mainland and the nearest island of the group. Longer baselines could be justified on "the theory of historic waters". As to the status of the waters lying between the individual islands of a coastal archipelago, or between the archipelago and the mainland, Gidel

¹⁰ The statement that the extent of territorial waters shall be "measured from the centre of the archipelago" is not entirely clear. The meaning, however, must obviously be that a line shall be drawn around the islands and islets of the archipelago so as to measure the belt of marginal sea from this line enveloping the group.

suggested that they be considered not as internal waters but as waters subject to the rules governing marginal seas (*ibid.*, p. 724).

As to outlying (mid-ocean) archipelagos, the views expressed by Gidel were somewhat more ambiguous (*Ibid.*, p. 718):

“In the case of an archipelago situated far from land (mid-ocean archipelago) the measuring of territorial waters must be made in conformity with the ordinary rules, individually around each island; exceptions to these rules may follow from the theory of historic waters. However, pockets of high seas inside the archipelago may be eliminated by the analogous application of the ten mile rule applicable to bays.” (*unofficial translation*)

With this latter addition, *viz.* the analogous application of straight lines of ten miles, there does not seem to be much difference between the suggestions made by the author as to the rules of law applicable to coastal archipelagos and outlying archipelagos respectively.

II

STATE PRACTICE

The practices of the various coastal States in delimiting the territorial waters of their archipelagos may have considerable bearing on the establishment of principles of international law in this field.

The following survey does not purport to be exhaustive but it endeavours to give a representative account of the views held, and methods applied, by different States.

1. State practice concerning coastal archipelagos

Norway

Due to the special geographical peculiarities of the Norwegian coastline and also to the fact that the International Court of Justice, in its Judgement of 18 December 1951, expressed its opinion on the legality of Norwegian enactments, the state practice of Norway concerning the delimitation of territorial waters outside its coastal archipelagos offers particular interest.

The special features of the Norwegian coastline are—aside from its profusion of fjords and bays—the Norwegian coastal archipelago called the “Skjaergaard”. It consists of some 120,000 islands, islets and rocks, and extends along most of the coast. The so-called Norwegian system or Scandinavian system for the delimitation of territorial waters consists in regarding the coastal archipelago as the real outer coastline. The main features of this system—the straight baseline system—are the following:

(a) A continuous line of straight baselines is drawn all along the coast. The outermost points of the coastal archipelago, including drying rocks, are used as base-points.

(b) There are no maximum lengths for such baselines. Each of them is dependent upon the geographical configuration of the coastline.

(c) The baselines follow the general direction of the coast.

(d) There is no connexion between the length of the baselines and the breadth of the marginal sea.

(e) The waters inside the baselines are considered internal waters. Thus, the waters of fjords and bays and the waters between and inside the islands, islets and rocks of the “Skjaergaard” are internal waters.

(f) The outer limits of the marginal sea are drawn outside and parallel to such baselines at the distance of four nautical miles.

By Royal Decrees of 12 July 1935 and 18 July 1952 the base points and baselines have been fixed in detail all along the Norwegian coasts. All in all, 123 continuous baselines are drawn. The longest lines are 45.5 nautical miles, 44 nautical miles, 40 nautical miles and 38.8 nautical miles. Fifty more baselines are ten nautical miles or more in length.

By a Judgement rendered on 18 December 1951, the International Court of Justice held that the Norwegian system laid down in Royal Decree of 12 July 1935 drawing baselines along the outer points of the Norwegian coastal archipelago was not contrary to international law.

Iceland

Iceland has likewise applied the straight baseline system for delimiting its waters. By Fisheries Regulations of 19 March 1952, forty-seven consecutive baselines are drawn around the coasts of Iceland, enclosing the waters of its coastal archipelagos, islands and rocks within these lines. No maximum is stipulated for the lengths of baselines. They vary in length according to the particular geographic features. The longest baselines are 66 and 41 nautical miles (those across the Faxa Bay and Breidi fjords respectively). Fifteen more lines measure 20 nautical miles or more.

A four-mile zone of marginal seas is drawn outside and parallel to the baselines. The waters inside the baselines, including the waters inside or between the islands and islets of coastal archipelagos, are considered internal waters.

Denmark

By various Danish regulations and decrees, the waters between and inside the Danish coastal archipelagos are considered Danish internal waters (see, e.g., Neutrality Decrees of 27 January 1927 and 11 September 1938, and enactments concerning Fishing and Hunting in Greenland Waters of 1 April 1925, 27 May 1950, 7 June 1951 and 11 November 1953). Denmark seems to apply straight baselines for such delimitation and a ten-mile maximum for baselines is provided for in certain of these enactments.¹¹ The three main passages to the Baltic formed in part or in whole by the Danish archipelagos, namely, the Sound formed by the Swedish coast and the Danish island of Sjaeland, the Great Belt

¹¹ It should be borne in mind in this connexion that Denmark—but not Norway, Sweden, Iceland or Finland—is a party to the North Sea Fisheries Convention of 1882 providing for a ten-mile maximum for baselines drawn across the mouths of bays and fjords.

formed by Danish islands and the Little Belt formed by islands and Jutland, are held to be international straits. They are thus open to navigation though these waters are situated between and inside the Danish archipelagos.

Sweden

Sweden applies the straight baseline system for the delimitation of its territorial waters, enclosing within the baselines the waters between the islands of a coastal archipelago and between the islands and the mainland. Customs regulations of 7 October 1927, together with Royal Letter of 4 May 1934, laid down the concrete baselines—these baselines probably prevail also for purposes other than customs. No maximum has been fixed for the length of such baselines: thus various lines exceed ten nautical miles. However, none of these baselines are comparable in length to some of the longest lines in force along the coastal archipelago of Norway or Iceland. A four-mile limit of marginal seas is drawn outside and parallel to the baselines. The waters inside the baselines are internal waters.

Finland

Finland also applies a straight baseline system enclosing the waters of its numerous islands and coastal archipelagos, such as the Aaland archipelago and the Torneaa archipelago, within these lines.

By Act of 18 August 1956, and by Presidential Decree of the same date, baselines were fixed for the whole of the Finnish coast. The act provides for a maximum length of baselines of "twice the breadth of the marginal seas", corresponding to eight nautical miles since the breadth of Finland's marginal seas is four nautical miles. The Act further provides that archipelagos situated too far out at sea to be included in the outer coastline shall have their own territorial waters. Such outlying archipelagos are also considered as a whole. Baselines in length twice the breadth of the marginal seas shall be drawn around such archipelago. However, according to article 6 of the Act, the breadth of marginal seas for such outlying archipelagos is three nautical miles. Consequently the maximum length of baselines in these cases is six miles. The waters between and inside the islands or islets of Finnish archipelagos are considered as internal waters.

Yugoslavia

Yugoslavia is also among the nations which include the coastal archipelagos situated almost all along its coast within its outer coastline by the drawing of straight baselines.

By enactment of 1 December (28 November) 1948, baselines have been drawn along the outer fringes of these archipelagos (article 3). The belt of marginal seas of six nautical miles is drawn outside and parallel to these baselines. No express maximum is given or is indicated in the Act as to the length of the baselines, while in certain circumstances a maximum of twelve nautical miles is given as the length of baselines across the mouths of bays and estuaries (article 3, para. 6). The waters between the islands of a Yugoslav coastal archipelago and between the islands and the mainland are considered internal waters.

It may be of interest in this connexion to draw attention to the proposals concerning archipelagos made by the Yugoslav Government in its comments of 20 March 1956 on the draft articles of the International Law Commission. In its comments on article 5 it proposed the following additions concerning archipelagos:

"If a group of islands (archipelago) is situated along the coast the method of straight baselines joining appropriate points on the islands facing the high sea will be applied. The parts of the sea closed in by these lines, islands and coast of the mainland will be considered as internal waters.

"3. If the provision of paragraph 2 of this article cannot be applied to the group of islands (archipelago) due to a great distance from the mainland, the method of baselines will be applied which join appropriate points of the coast towards the high seas. Parts of the sea enclosed by these lines and islands will be considered as internal waters of the archipelago."¹²

The proposal referred to outlying as well as coastal archipelagos. It purports to regard such archipelagos as units and to apply straight baselines "joining the appropriate points" of the several islands and islets of such an archipelago. The waters between and inside the islands and islets of such an archipelago are considered internal waters according to the proposal.

Saudi Arabia

Under articles 4 and 6 of Royal Decree of 28 May 1949, islands and coastal archipelagos are made part of the outer coastline of Saudi Arabia by drawing straight baselines. The maximum length of such baselines is twelve nautical miles. The waters lying between islands, islets and the mainland are internal waters.

Egypt

Article 4 of Royal Decree of 18 January 1951 provides that straight baselines of a maximum length of twelve nautical miles shall be drawn between the mainland and islands and from island to island, thus including coastal archipelagos within the outer coastline. The waters inside such archipelagos are internal waters.

Cuba

The Cuban Cays (string of islands, islets and reefs) extending out into the ocean along the Cuban mainland are likewise by established practice, as expressed in various legislative enactments, regarded as Cuba's outer coastline. Thus article 6, paragraph 2, of the Decree of 8 January 1934, provides:

"The waters situated between the islands, islets or cays and the mainland of Cuba are internal waters."

The examples given above refer to countries that regard coastal archipelagos as a unit forming an outer coastline from which to measure the marginal sea. They

¹² *Yearbook of the International Law Commission, 1956*, vol. II, p. 100. See also observations made by the Yugoslav Government in its comments dated 15 March 1955, printed in the report of the International Law Commission its seventh session, 1955 (*Official Records of the General Assembly, Tenth Session, Supplement No. 9*), pp. 46 *et seq.*

all seem to apply straight baselines for such delimitation, though some of them lay down a certain maximum for the length of such baselines. The waters inside such baselines are considered internal waters, thus presumably giving the coastal State the right to close such waters for navigation by foreign vessels unless the passage concerned is an international strait.

There are, however, a number of States that apply other and different methods for the delimitation of their territorial waters where coastal archipelagos are concerned.

United Kingdom

The stand taken by the United Kingdom as to the archipelagos has traditionally been a very strict one. In the Anglo-Norwegian Fisheries Case, it did not recognize the Norwegian claims to measure Norway's marginal seas from straight baselines drawn along the outermost points of coastal archipelagos. The United Kingdom, on the contrary, advocated the arcs of circles method, measuring the territorial waters from low water marks by a consecutive line of intersecting arcs of circles. Each island had, according to the English view, its own territorial waters. But where two islands were not further apart than twice the breadth of the marginal seas the arcs of circles would intersect. In its last written pleadings the United Kingdom somewhat changed its stand. It stated that if, contrary to its belief, customary rules of straight baselines had developed for archipelagos, such rules must be "subject to an absolute limit of ten miles of the length of the baselines". *I.C.J., Pleadings, Oral Arguments, Documents, Fisheries Case, Judgement of 18 December 1951*, vol. II, p. 361). After the Judgement of 18 December 1951 by the International Court of Justice, the United Kingdom has somewhat modified its original views (see for example its comments of 1 February 1955, on draft article 5 in the report of the International Law Commission on its seventh session¹³). In this connexion, mention may also be made of the comments of the United Kingdom dated 15 March 1956, where in connexion with draft article 10 (the régime of the territorial sea) concerning isolated islands it states as follows :

"The United Kingdom Government approve this article. They do not consider that there is any need to make special provisions for groups of islands as such, and agree in principle with the last sentence of the Commission's comment upon this article. They consider that the ordinary rules, in conjunction with the Judgement of the International Court of Justice in the Anglo-Norwegian Case, are adequate to cover this case."¹⁴

In a few exceptional cases the United Kingdom has, in dealing with overseas territories, treated groups of islands as a unit. Thus, in connexion with the delimitation of the territorial waters of Jamaica, the Law Officers of the Crown maintained in 1864 that "in places where the possession of particular rocks, reefs or banks, naturally connected with the mainland of any

part of Her Majesty's territory is necessary for the safe occupation and defense of such mainland, Her Majesty's Government also claim the waters enclosed between the mainland and those rocks, reefs or banks; whatever may be the distance between them and the nearest headland". (*I.C.J., Pleadings, Oral Arguments, Documents, Fisheries Case, Judgement of 18 December 1951*, vol. II, p. 533)

On the other hand the United Kingdom has not made claims to the waters situated between the coastal islands, islets and archipelagos lying off the coast of British Honduras and the mainland. (*Ibid.*, pp. 524-525)

Australia

During the Anglo-Norwegian Fisheries Case the United Kingdom, with the consent of Australia, asserted as to the Barrier Reef—a coastal archipelago situated off Queensland—that, "Queensland has no legislative authority over the sea beyond the distance of three marine miles from low water mark of the mainland and the islands respectively" (*ibid.*, p. 523). Thus, the waters situated between these reefs and the mainland outside the three-mile limit are considered high seas.

United States of America

This country has been one of the staunchest advocates of the view that archipelagos, including coastal archipelagos, cannot be treated in any different way from isolated islands where the delimitation of territorial waters is concerned. Thus, according to information received, the practice of the United States in delimiting, for example, the waters of the archipelagos situated outside the coasts of Alaska is that each island of such archipelagos has its own marginal sea of three nautical miles. Where islands are six miles or less apart the marginal seas of such islands will intersect. But not even in this case are straight baselines applied for such delimitation.

That the Florida Keys have been considered a unit is actually no exception to this practice. The several islands of the Keys are situated so close together and the waters in between are so shallow that they must naturally be considered as a continuous whole.

2. State practice concerning outlying (mid-ocean) archipelagos

The highly varied practices of States where outlying archipelagos are concerned clearly illustrate the confusion reigning in this field of international law. The following examples are indicative of the profusion of different views and approaches with regard to the delimitation of the territorial waters of outlying archipelagos.

The Faeroes

This archipelago, consisting of eighteen inhabited islands and numerous islets, skerries and rocks, is situated in the North Atlantic, north of the British Isles. By agreement of 22 April 1955 between Denmark and the United Kingdom, the exclusive fishery zones of this mid-ocean archipelago were drawn up in a very

¹³ *Official Records of the General Assembly, Tenth Session, Supplement No. 9*, p. 41 *et seq.*

¹⁴ *Yearbook of the International Law Commission, 1956*, vol. II, p. 85.

interesting way. The Faeroes are treated as a unit and the outer limit of territorial waters is drawn by means of a mixed system of arcs and straight lines. Straight lines are used to a great extent for the delimitation of the outer limits of the fishery zones, but arcs of circles have been applied to round off the limits where two straight lines meet. Though the straight baseline system is not expressly applied, it seems apparent that the agreement of 22 April 1955, viewed as a whole is an interesting application of the rule laid down by the International Court of Justice in its Judgement of 18 December 1951, namely, that with heavily indented coastlines the outer limits of territorial waters need not necessarily follow all the sinuosities of the coast, but can be drawn in such a manner as to follow the general direction thereof.

The Svalbard Archipelago

This archipelago situated between 74° 8' N. Lat. and 10° 35' E. Long. consists of numerous islands, islets and rocks. The coastline of the archipelago is heavily indented by fjords, bays and sounds. By the Spitzbergen Treaty of 9 February 1920, the Contracting Parties recognized "the full and absolute sovereignty of Norway" to the archipelago. Under the treaty the ships and nationals of the Contracting Parties shall enjoy equal rights of fishing and hunting and have equal liberty of access and entry to the territorial waters of the archipelago.

Norway has not yet laid down the limits of the territorial waters of Svalbard. But it seems reasonable to assume that the Norwegian Government considers the archipelago as a unit and will apply its straight baseline system around the archipelago for such delimitation.

Iceland

Iceland, together with its coastal islands, islets and skerries, may properly be regarded as a mid-ocean archipelago. As previously mentioned, the Icelandic authorities have drawn a consecutive line of straight baselines all along the coast from the outermost points thereof, including the outermost points of islands and islets. However, the Icelandic Government has not applied this approach to the extreme. It has not included in this line islands lying far out at sea, such as the islands of Grimsey, Kolbeinsey, Hvalsbakur and Geirfugladrangur. Each of these islands has been considered to have its own territorial waters.

Mention may further be made of a *note verbale* dated 25 March 1955, from the Icelandic Government, commenting on the draft articles of the International Law Commission. As to outlying archipelagos, the Icelandic Government stated that such groups "would have an independent baselines system" in conformity with the "general criteria formulated by the International Court of Justice" in the Anglo-Norwegian Fisheries Case.¹⁵

The Bermudas

This archipelago, situated in the North Atlantic

between 32° 14' - 32° 25' N. Lat. and 64° 38' - 64° 52' W. Long., consist of some 365 islands and islets of coral formation. According to statements presented by the United Kingdom during the Anglo-Norwegian Fisheries Case, it has asserted its authority over the coastal waters within this archipelago "up to a distance of three nautical miles from the outer ledges" (*I.C.J., Pleadings, Oral Arguments, Documents, Fisheries Case, Judgement of 18 December 1951*, vol. II, p. 532).

The Galapagos

This archipelago (also called the Colon archipelago) is situated some 600 miles out in the Pacific west of the mainland of Ecuador and between 1° 42' N. Lat. - 1° 25' S. Lat. and 92° - 89° 16' W. Long. It comprises some fifteen larger islands and a series of smaller islands and islets. According to Presidential Decrees concerning Fisheries of 2 February 1938 and of 22 February 1951, the Government of Ecuador considers this archipelago as a unit, and delimits its territorial waters by drawing straight baselines between "the most salient points of the outermost islands forming the contour of the archipelago of Galapagos" (See the Decree of 1951, article 2, para. 2).

Accordingly, the lengths of the baselines thus drawn around the archipelago are the following:

(a) The baseline from the island of Espanola to the island of Santa Maria is some 48 nautical miles.

(b) The baseline from Santa Maria to Isabella is some 62 nautical miles.

(c) The baseline from Isabella to Darwin is some 32 nautical miles.

(d) The baseline from Fernandina to Darwin is some 124 nautical miles.

(e) The baseline from Darwin to Genovesa is some 147 miles.

(f) The baseline from Genovesa to San Cristobal is some 76 nautical miles.

(g) The baseline from San Cristobal to Espanola is some 47 nautical miles.

According to article 2 of the 1951 Decree, the outer limits of marginal seas are drawn at a distance of 12 nautical miles outside and parallel to the above-mentioned baselines. Inside these limits fishing is reserved for nationals and domiciliaries of Ecuador.¹⁶

Whether the waters lying between and inside the archipelagos (that is inside the above-mentioned baselines) are considered internal waters or marginal seas is not known.

The Philippines

This archipelago, situated in the Pacific between about 116° - 127° E. Long. and about 5° - 20° N. Lat., is a group of some 7,100 islands scattered over a large expanse of water. According to the *notes verbales* presented by the Philippine authorities commenting on

¹⁵ Official Records of the General Assembly, Tenth Session, Supplement No. 9, p. 29.

¹⁶ Lately even more extensive claims have been made by Ecuador (a limit of 200 nautical miles as the limit of Ecuador's marginal seas).

the draft articles of the International Law Commission, the Philippine Government seems to delimit the territorial waters of the country in a somewhat unique manner (see *note verbale*, dated 7 March 1955,¹⁷ and *note verbale* dated 20 January 1956¹⁸).

In these notes it is stated, *inter alia* :

"All waters around, between and connecting different islands belonging to the Philippine Archipelago, irrespective of their width or dimension, are necessary appurtenances of its land territory, forming an integral part of the national or inland waters, subject to the exclusive sovereignty of the Philippines."¹⁹

It is not clear from the above-quoted statement whether the large expanse of water called the Zulu Sea bordered in the east, west and north by the Philippine Archipelago and in the south by North Borneo, and covering tens of thousands of square miles of seas, is claimed as internal waters by the Philippine authorities.

In addition to the "national or inland waters", the Philippine authorities, according to the above cited statements, further claim that :

"All other water areas embraced within the lines described in the Treaty of Paris of 10 December 1898, the Treaty concluded at Washington, D.C., between the United States and Spain on 7 November 1900, the Agreement between the United States and the United Kingdom of 2 January 1930, and the Convention of 6 July 1932 between the United States and Great Britain, as reproduced in section 6 of Commonwealth Act No. 4003 and article 1... of the Philippine Constitution, are considered as maritime territorial waters of the Philippines for purposes of protection of its fishing rights, conservation of its fishery resources, enforcement of its revenue and anti-smuggling laws, defence and security, and protection of such other interests as the Philippines may deem vital to its national welfare and security, without prejudice to the exercise by friendly foreign vessels of the right of innocent passage over those waters."²⁰

The lines here referred to are the boundaries of the Commonwealth of the Philippines as laid down in the various conventions mentioned above. They are drawn along certain degrees longitude east and latitude north. The present stand of the Philippine Government seems to be that all the waters situated inside these international treaty limits are to be considered as the marginal seas of the Philippines.

It is not known to what extent the Philippine authorities recognize that the numerous passages between the islands and islets of the Philippine archipelago form international straits which under international law are open to navigation for foreign ships.

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The examples given above show that a number of outlying archipelagos are treated by the respective national authorities concerned as units with regard to the delimitation of their territorial waters.

¹⁷ *Official Records of the General Assembly, Tenth Session, Supplement No. 9*, pp. 36-37.

¹⁸ *Yearbook of the International Law Commission, 1956*, vol. II, pp. 69-70.

¹⁹ *Ibid.*, p. 70.

²⁰ *Ibid.*

There are, however, on the other hand, a host of cases where outlying archipelagos have not been treated in such a manner by the competent authorities.

Thus, it is clear that usually neither the United Kingdom Government nor the United States Government have proceeded to consider their various insular possessions, for example in the Pacific, as units where the delimitation of territorial waters is concerned. The practice generally followed by these States has been to draw a separate belt of territorial waters around each individual island of an archipelago, thus leaving stretches of high seas in between, provided that the distance between the various islands of the group is wider than twice the breadth of the marginal seas. A few examples suffice in this connexion.

The Fiji Islands

This group of islands, situated in the Pacific between 16° - 19° 20' S. Lat. and 178° W. Long - 177° E. Long., contains some 250 islands and islets. According to statements made by the United Kingdom Government in the Anglo-Norwegian Fisheries Case, this archipelago is not treated as a whole for the delimitation of territorial waters. A separate belt of territorial waters has been drawn around each individual island (*I.C.J., Pleadings, Oral Arguments, Documents, Fisheries Case, Judgement of 18 December 1956*, vol. II, p. 524). According to information received, the Solomon Archipelago has been treated in a like manner.

Cook Islands

According to statements made by the United Kingdom in the Anglo-Norwegian Fisheries Case, the New Zealand Government has not drawn a continuous belt of territorial waters around each separate island thereof (*Ibid.*, pp. 523,524).

Hawaiian Islands

It seems that the Hawaiian Islands were formerly considered as a whole where the delimitation of territorial waters was concerned. Thus, by a Neutrality Proclamation of 16 May 1854, the "King of the Hawaiian Islands" proclaimed that "our neutrality is to be respected... to the full extent of our jurisdiction", and further proclaimed that this included "all the channels passing between and dividing said islands from island to island". Similarly, in a Neutrality Proclamation of 29 May 1877, it was provided that no hostile acts could be committed within the Kingdom including "all its ports, harbours, bays, gulfs, skerries and islands of the seas cut off by lines drawn from one headland to another".²¹ However, it seems clear that the present practice of the Government of the United States is not to draw a continuous belt of territorial seas around the archipelago, but to give each island its own belt of territorial waters so as to leave stretches of high seas in the middle of the numerous channels and waterways separating the islands of this archipelago.

²¹ See Crocker, *The Extent of the Marginal Sea*, pp. 595-596.

III

JUDGEMENT OF 18 DECEMBER 1951 BY THE INTERNATIONAL COURT OF JUSTICE AND THE LEGAL IMPLICATIONS THEREOF

As shown above, little or no guidance as to the governing principles of international law can be drawn either from the practice of the various States or from the views expressed by various international bodies and international law publicists. The results to be derived therefrom, if any, are—in the writer's opinion—that no hard and fast rules seem to exist as to the delimitation of the territorial waters of archipelagos.

The question arises as to whether this implies that we are left without guidance with regard to the governing principles of international law in this respect. The answer is, as was stressed by various Governments in their comments to the draft articles of the International Law Commission, that the rules and principles laid down by the International Court of Justice in its Judgement of 18 December 1951 in the Anglo-Norwegian Fisheries Case may prove to be of far-reaching importance. Admitting that the Court's decisions are not binding for States other than the two parties to the case and, further, that the specific elements of the particular case before the Court will always weigh heavily in deciding the case, it is equally true, however, that in the above-mentioned Judgement the Court expressed clearly and repeatedly its opinion on broad principles of international law, principles also applicable to the problems here discussed.

One of the main questions before the Court was the status of the waters of the coastal archipelagos of Norway, called the "Skjaergaard". These problems were argued before the Court and were decided upon in its Judgement. Though the opinions expressed by the Court in this respect dealt with a special type of coastal archipelago, it would—in the writer's opinion—be erroneous to assume that the principles there laid down were devoid of importance for the delimitation of the territorial waters of other coastal archipelagos and of outlying (mid-ocean) archipelagos.

Thus, the Court's rejection of the British contention regarding the strict coastline rule "requiring the coastline to be followed in all its sinuosities" and the further emphatic statement by the Court that the so-called "arcs of circles method" advocated by the United Kingdom "is not obligatory by law" are obviously also applicable to outlying archipelagos (*I.C.J. Reports 1951*, p. 129).

Likewise the main principle adopted by the Court, a principle that may perhaps be properly designated as "the general direction of the coast rule", seems applicable to coastal and outlying archipelagos alike. The court stated in this connexion:

"The principle that the belt of territorial waters must follow the general direction of the coast makes it possible to fix certain criteria *valid for any delimitation of the territorial sea*; these criteria will be elucidated later. The Court will confine itself at this stage to noting that, in order to apply this principle, several States have deemed it necessary to follow the straight base lines method and that they have not encountered objections of principle by other States." (*italics supplied*) (*Ibid.*, p. 129)

The principle of the general direction of the coast was reverted to later in the Judgement. Thus on page 133 the Court, in connexion with the straight baseline system, stated that "the drawing of baselines must not depart to any appreciable extent from the general direction of the coast". And, along the same lines, it further stated (pp. 141-142) with regard to a baseline forty-four miles long that:

"The baseline has been challenged on the ground that it does not respect the general direction of the coast. It should be observed that, however justified the rule in question may be, it is devoid of any mathematical precision. In order properly to apply the rule, regard must be had for the relation between the deviation complained of and what, according to the terms of the rule, must be regarded as the *general* direction of the coast. Therefore, one cannot confine oneself to examining one sector of the coast alone, except in a case of manifest abuse."

Among the general criteria stressed by the Court for a State's delimitation of its territorial waters the following may be noted: the Court emphasized that there existed "certain basic considerations inherent in the nature of the territorial sea"; that the criteria were not "entirely precise" but would provide "courts with an adequate basis for their decisions, which can be adapted to the diverse facts in question" (*Ibid.*, p. 133). Among these considerations, the Court mentioned "the close dependence of the territorial sea upon the land domain. It is the land which confers upon the coastal state a right to the waters off its coasts" (*Ibid.*, p. 133).

Among the criteria given by the Court for deciding whether an area of water may be considered internal waters or not the Court stressed as follows:

"Another fundamental consideration, of particular importance in this case, is the more or less close relationship existing between certain sea areas and the land formations which divide or surround them. The real question raised in the choice of baselines is in effect whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters." (*Ibid.*, p. 133)

The criteria here laid down by the Court are equally applicable to outlying archipelagos and coastal archipelagos and the statements thus made are couched in general terms expressing basic principles of international law in this field.

Another principle emphasized by the Court was that:

"A State must be allowed the latitude necessary in order to be able to adapt its delimitation to practical needs and local requirements." (*Ibid.*, p. 133)

With a special view to the delimitation of the Norwegian coastal archipelagos, the Court stressed the "geographical realities" which forced it to consider such archipelagos as "a whole with the mainland" to the end that "it is the outer line of the 'skjaergaard' which must be taken into account in delimiting the belt of Norwegian territorial waters" (*Ibid.*, p. 128). As a consequence thereof, the Court stated:

"If the belt of territorial waters must follow the outer line of the 'skjaergaard', and if the method of straight baselines be admitted in certain cases, there is no valid reason to draw them only across bays . . . and not also to draw them between islands, islets and rocks, across the sea areas separating them, even when such areas do not fall within the conception of a bay. It is sufficient that they should be situated between the island

formations of the 'skjaergaard', *inter fauces terrarum*." (*Ibid.*, p. 130)

In connexion with such baselines, as well as with baselines in general, the Court expressly rejected the British contention to the effect that under international law there existed a principle limiting the length of baselines to ten nautical miles. The Court emphasized that "the ten-mile rule has not acquired the authority of a general rule of international law" (*Ibid.*, p. 131).

And, with a special view to baselines drawn between the islands, islets and rocks of coastal archipelagos, the Court stated along the same lines as follows:

"The Court now comes to the question of the length of the baselines drawn across the waters lying between the various formations of the 'skjaergaard'. Basing itself on the analogy with the alleged general rule of ten miles relating to bays, the United Kingdom Government still maintains on this point that the length of straight lines must not exceed ten miles.

"In this connexion, the practice of States does not justify the formulation of any general rule of law. The attempts that have been made to subject groups of islands or coastal archipelagos to conditions analogous to the limitations concerning bays (distance between the islands not exceeding twice the breadth of the territorial waters, or ten or twelve sea miles), have not got beyond the stage of proposals." (*Ibid.*, p. 131)

Though the statement here made by the Court was mainly directed at coastal archipelagos it seems equally applicable to outlying archipelagos.

The court further held that the waters lying between and inside the coastal archipelagos in question, that is inside the straight baselines, must be regarded as internal waters (*Ibid.*, p. 132). In this connexion, however, it must be noted that the result would probably have been a different one if the passage between the islands of the "skjaergaard" had formed a "strait". The question was raised before the Court in regard to the inland water route called "Indreleia", a sheltered waterway lying between the "skjaergaard" and the mainland of Norway. The British contention was that the waters of this inland waterway could not have the status of internal waters, but rather should be looked upon as marginal seas.

The Court's answer to these contentions was as follows:

"The Court is bound to observe that the Indreleia is not a strait at all, but rather a navigational route prepared as such by means of artificial aids to navigation provided by Norway. In these circumstances the Court is unable to accept the view that the Indreleia, for the purposes of the present case, has a status different from that of the other waters included in the 'skjaergaard'." (*Ibid.*, p. 132)

Though couched in rather broad terms this statement obviously implies that the result might have been a different one had the "Indreleia" passage been a "strait".

IV

CONCLUSIONS

The conclusions which may reasonably be drawn from the foregoing—in the writer's opinion—that no hard and fast rules exist as to the delimitation of the

territorial waters of archipelagos. In view of the great variety of geographical, historical and economical factors involved, it would hardly be feasible, or even desirable, to try to lay down such hard-and-fast rules in an international convention; rules which might easily prove to be too inelastic to give reasonable weight to the many differences and peculiarities of each individual case. However, this does not mean that rules and principles do not exist, or should not be established, but that such rules ought to have a certain flexibility. With such considerations in mind, the writer ventures to set forth the following suggestions as to the principles of international law which govern this question.

A. Coastal archipelagos

Article 5 of the draft articles concerning the law of the sea by the International Law Commission seems reasonably to embody the governing rules and principles laid down by the International Court of Justice in its 1951 Judgement, and also seems to give reasonable weight to the special problems arising out of the delimitation of territorial waters of coastal archipelagos.

However, in view of the special problems involved, the following changes in article 5 may perhaps prove desirable.

According to draft article 5, paragraph 1, first sentence, straight baselines may be used where a coastline is "deeply indented or cut into or because there are islands in its immediate vicinity". If the word "islands" was interpreted strictly, it would prevent the drawing of straight baselines in many cases where such a method seems called for; for example where a string of islets, skerries and rocks (but not islands) is situated in the immediate vicinity of the coast or where a coastal archipelago consisting of islets, skerries and rocks as well as islands is situated along the coast of the mainland. Therefore, the writer ventures to suggest changes in the first sentence of article 5, paragraph 1, so that it will provide as follows:

"Where circumstances necessitate a special régime because the coast is deeply indented or cut into or because there are archipelagos, *islands or islets* in its immediate vicinity, the baseline may be independent of the low water mark."²²

B. Outlying archipelagos

Where outlying (mid-ocean) archipelagos are concerned, the following principles may be set forth—in the writer's opinion—as the governing principles of international law.

No hard-and-fast rules exist whereby a State is compelled to disregard the geographical, historical (and economical) peculiarities of outlying archipelagos.

²² Furthermore the writer would suggest an additional change in article 5, paragraph 1. The last sentence of paragraph 1 should be deleted. The Court in its 1951 judgement did not find it contrary to international law to use drying rocks or drying shoals as base points for straight baselines. No valid reason seems to exist for a deviation from the judgement in this respect especially as, in article 11 of the draft, drying rocks and drying shoals may be taken as points of departure for measuring territorial waters where methods other than straight baselines are applied.

Frequently the only natural and practical solution is to treat such outlying archipelagos as a whole for the delimitation of territorial waters by drawing straight baselines from the outermost points of the archipelago—that is from the outermost points of the constituent islands, islets and rocks—and by drawing the seaward limit of the belt of marginal seas at a distance of X nautical miles outside and parallel to such baselines. Thus the archipelago viewed as a unit has a continuous area of territorial water. Whether or not an outlying archipelago should be treated in such a manner will, to a large extent, depend on the geographical features of the archipelago. The following criteria may be of importance for the delimitation of territorial waters in any particular case:

(a) Though a State in delimiting the territorial waters of its outlying archipelagos must be allowed the latitude necessary in order to be able to adapt its delimitation to practical needs and local requirements, it is equally clear that such delimitation has international law aspects and such aspects may be especially delicate where outlying archipelagos are concerned.

(b) In any given case, the more or less close dependence of the territorial sea upon the land domain of the archipelago will always be of paramount importance.

(c) The drawing of the baselines must not depart to any appreciable extent from the general direction of the coast of the archipelago viewed as a whole.

(d) While the distance between the various islands, islets and rocks of an archipelago obviously may play an important role in the question of whether the drawing of straight baselines is appropriate, no fixed maximum exists as to the length of such baselines. On the other hand it is also obvious that exorbitantly long baselines, closing vast areas of sea to free navigation and fishing, are contrary to international law. In such instances there will not be a sufficiently close dependence between the land domain and the water areas concerned.

(e) The question as to whether the waters situated between and inside the islands and islets of an archipelago may be considered as internal waters depends upon whether such water areas are so closely linked to the surrounding land domain of the archipelago as to be treated in much the same manner as the surrounding land. Each case must be treated on its individual merits in this respect. The geographical configuration of the archipelago concerned will be of primary importance for such determination, though other factors—such as historical and economical factors—may play a role.

(f) Even where the waters between and inside the constituent parts of an archipelago are sufficiently closely linked to the land domain to be considered as internal waters, such waters may form a “strait” and consequently be subject to the rules of international law governing “straits” established for the benefit of free navigation and innocent passage of foreign ships. In view of the foregoing, the writer ventures to propose the following additional article on outlying archipelagos:

“1. In the case of an archipelago which belongs to a single State and which may reasonably be considered as a whole, the extent of the territorial sea shall be measured from the outermost points of the outermost islands and islets of the archipelago. Straight baselines as provided for under article 5 may be applied for such delimitation.

“2. The waters situated between and inside the constituent islands and islets of the archipelago shall be considered as internal waters with the exceptions set forth under paragraph 3 of this article.

“3. Where the waters between and inside the islands and islets of an archipelago form a strait, such waters cannot be closed to the innocent passage of foreign ships.”

According to this proposal, straight baselines may be used for delimiting the territorial waters of an archipelago which may be looked upon as a whole. However, it is possible to apply other methods: for example, a mixture of straight baselines and arcs of circles.

In the writer's opinion, the waters between and inside the islands and islets of the above-mentioned type of archipelago must be considered as internal waters. But, where the waters of such an archipelago form a strait, it is in conformity with the prevailing rules of international law that such a strait cannot be closed to traffic. Whether a water passage is to be considered a strait or not, must be decided in each specific case. Though no definition is universally accepted,²³ a strait is usually defined as a water passage connecting two stretches of open sea with the territorial waters of a State.

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The writer has refrained from taking up for discussion the question concerning the breadth of the marginal sea. This highly controversial topic is not a problem peculiar to archipelagos and consequently—in the writer's opinion—it does not belong in the present paper.

²³ But see the criteria applied by the International Court of Justice in the Corfu Channel Case, *I.C.J. Reports 1949*, p. 28 *et seq.*

PREPARATION OF THE CONFERENCE: REPORT OF THE SECRETARY-GENERAL

[Original text: English]
[30 January 1958]

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1. This report is an account of the preparation for the United Nations Conference on the Law of the Sea in implementation of resolution 1105 (XI), adopted by the General Assembly on 21 February 1957.

I. INVITATIONS TO GOVERNMENTS, SPECIALIZED AGENCIES AND INTER-GOVERNMENTAL BODIES

2. Paragraphs 5 and 6 of resolution 1105 (XI) read as follows:

“[The General Assembly]

...

“5. *Invites* all States Members of the United Nations and States members of the specialized agencies to participate in the conference and to include among their representatives experts competent in the fields to be considered;

“6. *Invites* the interested specialized agencies and inter-governmental bodies to send observers to the conference;”

In accordance with paragraph 5, notification of the conference was sent on 25 March 1957 to all Members of the United Nations, as well as to the following States members of specialized agencies: Federal Republic of Germany, Republic of Korea, San Marino, Monaco, Switzerland, Viet-Nam and Vatican City. Similarly, in order to implement paragraph 6, notification of the forthcoming conference was sent on 25/26 March 1957 to all the specialized agencies (including the Contracting Parties to the General Agreement on Tariffs and Trade and the Interim Commission for the International Trade Organization, and the Inter-Governmental Maritime Consultative Organization), as well as to the following inter-governmental organizations:

- Organization of American States;
- Indo-Pacific Fisheries Council;
- Inter-American Tropical Tuna Commission;

International Commission for the Northwest Atlantic Fisheries;

International Council for the Exploration of the Sea;
International Pacific Halibut Commission;

International Pacific Salmon Fisheries Commission;

International North Pacific Fisheries Commission;

International Whaling Commission;

International Commission for the Exploitation and Conservation of the Maritime Resources of the South Pacific;

Permanent Commission under the International Overfishing Convention of 1946;

Institut international pour l'unification du droit privé;

Conseil général des pêches pour la Méditerranée;

Commission internationale pour l'exploration scientifique de la mer Méditerranée;

Bureau hydrographique international;

Asian Legal Consultative Committee¹

II. DATE AND SITE OF THE CONFERENCE

3. In paragraph 4 of resolution 1105 (XI), the Secretary-General was requested to convoke the conference early in March 1958. The question of a precise date and place for the conference was not, therefore, settled by the resolution itself. Before voting on the resolution, the General Assembly approved the suggestion of the President that this question, involving a decision between Rome and Geneva, should be left to the Secretary-General. After careful consideration of the financial and administrative problems involved, the Secretary-General decided to convene the conference at the European Office of the United Nations in Geneva on Monday, 24 February 1958, at 3 p.m. This decision was communicated to Governments, specialized Agencies and inter-governmental bodies invited to the conference by a letter dated 26 August 1957.

III. CONSULTATION WITH EXPERTS AND PREPARATORY DOCUMENTATION

4. Paragraph 7 of resolution 1105 (XI) reads as follows:

“[The General Assembly]

“... ”

¹ The invitation to the Asian Legal Consultative Committee was sent on 22 April 1957.

"Requests the Secretary-General to invite appropriate experts to advise and assist the Secretariat in preparing the conference, with the following terms of reference :

"(a) To obtain, in the manner which they think most appropriate, from the Governments invited to the conference any further provisional comments the Governments may wish to make on the Commission's report and related matters, and to present to the conference in systematic form any comments made by the Governments, as well as the relevant statements made in the Sixth Committee at the eleventh and previous sessions of the General Assembly ;

"(b) To present to the conference recommendations concerning its method of work and procedures, and other questions of an administrative nature ;

"(c) To prepare, or arrange for the preparation of, working documents of a legal, technical, scientific or economic nature in order to facilitate the work of the conference ;"

5. The terms of paragraph 7 envisaged the invitation, by the Secretary-General, of a group of experts to advise and assist the Secretariat in preparing the conference. Before dealing with the preparatory work which developed from the consultation between this group of experts and the Secretariat, mention should be made of certain aspects of the normal work of the Secretariat which constitute an important part of the background documentation of the conference.

6. This work has included the publication of the summary records of the International Law Commission during its eighth session² and of the documents of the eighth session, including the report of the Commission to the Assembly,³ in English, French and Spanish. The work of the Secretariat has also included the publication of a new volume on "Laws and Regulations of the Régime of the Territorial Sea" in the *United Nations Legislative Series* (ST/LEG/SER.B/6) and of a supplement (A/CONF.13/27) to three existing volumes in that series, namely "Laws and Regulations on the Régime of the High Seas", volumes I- and II- (ST/LEG/SER.B/1 and 2) and "Laws concerning the Nationality of Ships" (ST/LEG/SER.B./5). A bibliography on the law of the sea has been prepared (A/CONF.13/17) and also a reference guide to decisions of international tribunals relating to the law of the sea (A/CONF.13/22).

7. Apart from the preparation undertaken by the Secretariat in the normal course of its work, much of the preparation for the conference was the outcome of consultation between the Secretariat and the experts whom the Secretary-General was requested to invite by paragraph 7 of resolution 1105 (XI).

8. The persons invited by the Secretary-General to advise and assist the Secretariat were the following :

<i>Name</i>	<i>Nationality</i>
Mr. Kenneth H. Bailey	Australia
Mr. Jorge Castañeda	Mexico
Mr. B. N. Chopra	India
Mr. W. V. J. Evans	United Kingdom of Great Britain and Northern Ireland

² Yearbook of the International Law Commission, 1956, Vol. I.

³ *Ibid.*, 1956, Vol. II.

Mr. J. P. A. François	Netherlands
Mr. F. V. García Amador	Cuba
Mr. Hamed Abdul Fattar Gohar	Egypt
Mr. Luis Melo Lecaros	Chile
Mr. Karel Petrzelka	Czechoslovakia
Mr. William Sanders	United States of America

9. Ten meetings between these experts and the Secretariat were held between 25 February and 6 March 1957 and a further eight between 7 October and 16 October 1957. During the course of these meetings, the terms of reference set out in paragraph 7 of resolution 1105 (XI) were adopted as items of the agenda for the meetings, and the following is an account of the work done under each head of paragraph 7.

(a) In consultation with the experts, a letter was sent on 25 March 1957 on behalf of the Secretary-General to the Governments invited to the conference, requesting them to send to him before 31 July 1957 any further provisional comments they might wish to make on the International Law Commission's report and related matters. Further provisional comments were received from nineteen Governments and these are to be found in documents A/CONF.13/5 and Add.1-2.⁴ In order that this and other relevant material should be available in systematic form a further document (A/CONF.13/30) contains a complete reference guide to these and earlier comments as well as to the statements made by Governments in the Sixth Committee at the eleventh and previous sessions of the General Assembly. Both documents were prepared by the Secretariat of the United Nations.

(b) The outcome of the work of the Secretariat in consultation with the experts on the method of work and procedures of the conference, and other questions of an administrative nature, is to be found in the provisional agenda of the conference (A/CONF.13/9), the provisional rules of procedure (A/CONF.13/10), and the memorandum concerning the method of work and procedure of the Conference (A/CONF.13/11). This memorandum contains certain general observations and recommendations, and explanatory notes on the provisional Agenda and the provisional rules of procedure. These three documents embody, in most cases, the consensus of views of the experts ; but the final decision as to both the form and substance of these documents was the Secretary-General's.

(c) In the course of the first series of meetings between the experts and the Secretariat agreement was reached on a list of suggested titles for working documents which might be prepared by experts and presented to the conference.

10. In some cases the Secretariat of the United Nations was itself able to undertake the preparation of working documents ; in other cases arrangement was made for their preparation by independent experts on the recommendation of the experts in consultation with the Secretariat. The aim has been to provide documents in the nature of factual studies. In all cases where the documents have been prepared by independent experts,

⁴ Further comments were later received from two other Governments (A/CONF.13/5/Add.3 and 4).

the views therein contained must be regarded as those of the experts concerned and not necessarily of the Secretary-General.

11. Two other paragraphs, 9 and 10, of resolution 1105 (XI) call for mention here. Though distinct from paragraph 7, they do, in fact, relate to the preparatory documentation of the conference.

Paragraph 9

"Refers to the conference the report of the International Law Commission as the basis for its consideration of the various problems involved in the development and codification of the law of the sea, and also the verbatim records of the relevant debates in the General Assembly, for consideration by the conference in conjunction with the Commission's report ;"

12. The report of the Commission⁵ has been regarded, throughout the preparatory work of the Secretariat and the experts in consultation with the Secretariat, as the basis of the work of the forthcoming conference. The articles concerning the law of the sea contained in that report have been presented in a reference guide (A/C.6/L.378)⁶ which explains the development of each of the articles through successive stages of the Commission's work and which also gives the comparable articles in the 1930 draft of The Hague Conference. The memorandum concerning the method of work and procedures of the Conference (A/CONF.13/11) contains recommendations which are expressly based on the assumption that the articles concerning the law of the sea will constitute the basis of the work of the Conference.

13. The verbatim records of the relevant debate in the plenary meeting of the General Assembly are to be found in the *Official Records of the General Assembly, Eleventh Session, Plenary Meetings, 658th meeting*. The relevant verbatim records of the Sixth Committee have been published in two volumes as A/CONF.13/19.⁷

Paragraph 10

"Requests the Secretary-General to transmit to the conference all such records of world-wide or regional international meetings as may serve as official background material for its work ;"

14. These records are before the Conference in A/CONF.13/21, which gives the actual texts of records which are not easily available, and references to the records of meetings which are generally available for consultation. A separate document has been submitted by the Organization of American States, entitled "Background Material on the Activities in the Organization of American States relating to the Law of the Sea".

⁵ *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159)*.

⁶ *Ibid.*, *Eleventh Session, Annexes*, agenda item 53.

⁷ The official summary records are contained in the *Official Records of the General Assembly, Eleventh Session, Sixth Committee*, 485th to 500th meetings.

15. A complete list of all the documents prepared for the Conference has been prepared as A/CONF.13/33.

IV. STAFF AND FACILITIES

16. Paragraph 8 of resolution 1105(XI) reads :

"Requests the Secretary-General to arrange also for the necessary staff and facilities which would be required for the conference, it being understood that the technical services of such experts as are needed will be utilized ;"

Suitable arrangements have been made to provide the necessary staff and facilities. In addition, three expert advisers, each having long experience in their respective fields, have been invited to assist the Secretariat with their technical services ; they are : Professor J. P. A. François (Netherlands), Dr. B. N. Chopra (India) and Mr. Milner B. Schaefer (United States of America).

V. THE QUESTION OF LAND-LOCKED COUNTRIES

17. Paragraph 3 of resolution 1105 (XI) states that the General Assembly :

"Recommends that the conference should study the question of free access to the sea of land-locked countries, as established by international practice or treaties ;"

This particular question was not covered by the articles concerning the law of the sea contained in the International Law Commission's report. One of the preparatory documents by the Secretariat entitled "The question of free access to the sea of land-locked countries" (A/CONF.13/29) has been prepared with a view to placing certain basic facts regarding this question before the Conference.

VI. ATTENDANCE AND OFFICE SPACE AT THE CONFERENCE

18. In paragraph 12 of resolution 1105 (XI) the General Assembly expressed the hope that the conference would be fully attended. A letter, dated 6 December 1957, was sent to all Governments invited to the conference which had not, prior to that date, indicated their acceptance of the invitation, asking them to inform the Secretary-General of their decision not later than 31 December 1957. That letter drew attention to the importance of an accurate estimate of the number of attendances in view of the need to provide adequate facilities. By a further letter, dated 16 December 1957, a circular was sent to all Governments invited to the conference requesting them to communicate their requests for office space to the Office of Conference Services at the European Office of the United Nations, not later than 10 January 1958.

19. A list of attendances at the Conference by Governments and specialized agencies will be published at the beginning of the conference.

QUESTION OF FREE ACCESS TO THE SEA OF LAND-LOCKED COUNTRIES

MEMORANDUM BY THE SECRETARIAT OF THE UNITED NATIONS

(Preparatory document No. 23)

[Original text: French]
[14 January 1958]

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Introduction

1. By resolution 1028 (XI) concerning land-locked countries and the expansion of international trade, adopted on 20 February 1957, the General Assembly invited Member States to recognize the needs of land-locked countries in the matter of transit trade. In resolution 1105 (XI) on the international conference of plenipotentiaries to examine the law of the sea,

adopted on 21 February 1957, it included the specific recommendation that the conference should study the question of free access to the sea of land-locked countries, as established by international practice or treaties.

2. Chapter I of this study contains a summary of the discussions held on the subject in certain United Nations bodies. Chapter II consists of an analysis of a few theoretical aspects of the problem, while chapter III discusses certain bilateral agreements, some of which

were concluded before and some after the World War of 1939-1945.

3. The free access of land-locked countries to the sea is inseparably linked with the more general question of transit, as persons and goods proceeding from those countries to the coast must pass through interjacent States. It is for this reason that chapter IV gives an account of the work done in this field by the League of Nations and refers to the multilateral agreements concluded under its auspices, especially the Barcelona Convention.

4. The sole object of this memorandum is to indicate the present position of the problem of free access of land-locked countries to the sea and to describe past efforts to solve the problem.

CHAPTER I

The question of free access of land-locked countries to the sea: discussions in United Nations bodies

1. DISCUSSIONS IN THE SIXTH COMMITTEE OF THE GENERAL ASSEMBLY (ELEVENTH SESSION)

5. In chapter II of its report on the work of its eighth session¹ (23 April to 4 July 1956), the International Law Commission submitted draft articles on the law of the sea and, being of the opinion that its work had sufficiently prepared the ground, recommended that the General Assembly should summon an international conference of plenipotentiaries to examine the law of the sea. The draft articles did not, however, contain any provision regarding land-locked countries.

6. The Commission's report was considered by the Sixth Committee of the General Assembly at its 481st meeting on 21 November 1956 and from its 485th to 505th meetings (28 November to 20 December 1956).

7. A draft resolution (A/C.6/L.385 and Add. 1 to 3) submitted by twenty-two Powers endorsed the Commission's recommendation and proposed, *inter alia*, the calling of a conference of plenipotentiaries.

8. An amendment submitted by Afghanistan, Austria, Bolivia, Czechoslovakia, Nepal and Paraguay (A/C.6/L.393) proposed the addition of a new paragraph as follows:

"9. *Recommends* that the conference of plenipotentiaries study the problem of free access to the sea of land-locked countries as established by international practice or bilateral treaties."

This text now appears, with only slight amendments, as operative paragraph 3 of resolution 1105 (XI) adopted by the Assembly on 21 February 1957. The paragraph now reads as follows:

"3. *Recommends* that the conference should study the question of free access to the sea of land-locked countries, as established by international practice or treaties."

9. During the debate several references were made, particularly by representatives of land-locked States, to the need for giving express recognition in any future convention to the rights of such countries, including not only the right of navigation on the high seas, but also

"a right of free passage without restrictions in the territorial sea" and "the related right of free passage over land".²

10. During the discussion on the draft resolution and the various amendments, many representatives expressed sympathy with the object of the amendment submitted by certain land-locked States. The importance of the problem was duly stressed and attention was drawn to the fact that one-sixth of all the States in the world have no sea coast. The Committee generally agreed that it would be only just to recognize the rights of those States in any codification of the law of the sea and that the solution of the problem should not present any insurmountable difficulties, because "the rights of these States were already recognized in international practice and in international treaties, and it would largely be a question of confirming these rights".³

11. The principal arguments advanced during the debate in the Sixth Committee by the advocates of the right of free access to the sea are summarized below:

(a) The representative of Paraguay stated that "all States, including those with no coasts of their own, were entitled freely to engage in trade and to have access to the world's markets and to the raw materials necessary for their economic prosperity".⁴ He added: "...the security of a land-locked country was inevitably connected with that of its maritime neighbours..."

(b) At the 497th meeting, the representative of Czechoslovakia,⁵ recalling that merchant ships flying the Czechoslovak flag were taking part in maritime traffic, stressed that:

(i) Any universal agreement on those questions would have a favourable influence on the further development of international relations;

(ii) Increasing economic co-operation tended to reduce the importance of the distinction between maritime States and land-locked States;

(iii) A code of rules governing the law of the sea should therefore confirm the right of land-locked States to utilize the sea, in common with the maritime States, as a means of communication and as a source of natural wealth;

(iv) The most important problem in such a code was

² *Ibid.*, Annexes, agenda item 53, document A/3520, para. 56.

³ *Ibid.*, A/3520, para. 79.

⁴ *Official Records of the General Assembly, Eleventh Session, Sixth Committee*, 491st meeting, para. 32. At the twelfth session of the General Assembly (681st plenary meeting) the Paraguayan representative referred to the problem of land-locked countries in the following words:

"The country's most serious problem, from its earliest days as an independent nation, has been the fact that it is land-locked. My Government feels that it is entitled to raise the problem in the United Nations and to request the latter's assistance in solving it."

At the same time, the same representative stressed that the Brazilian Government had financed the construction of international highways giving Paraguay access to the sea, provided Paraguay with free port facilities on the Atlantic and built an international bridge over the Paraná which would make available to Paraguay the benefits of Brazil's sea coast.

⁵ *Ibid.*, 497th meeting, paras. 31, 32 and 38.

¹ *Official Records of the General Assembly, Eleventh Session, Supplement No. 9 (A/3159)*.

how to reconcile the sovereignty of the coastal State with the interests of other States using the high seas ;

(v) Under international law, inland States had the right to sail ships under their flags on the high seas.

(c) At the 499th meeting, the representative of Afghanistan contended⁶ that no convention on the law of the sea would be complete unless it guaranteed the right of States which had no sea coasts ; indeed, he said, without such a guarantee it would be valueless, because :

(i) No State could survive without an outlet to the sea ;

(ii) Maritime communications were indispensable to all States ;

(iii) The right of innocent passage had been recognized for centuries and the Treaty of Versailles, like other bilateral agreements in force, had established the rights of States which had no sea coast ;

(iv) No country could claim absolute sovereignty over historic sea lanes.

(d) At the same meeting, the representative of Bolivia⁷ emphasized that the rights of access of land-locked States to the sea included the right of free transit over land and that the right of free passage should apply without restrictions in the territorial sea, in channels open to trade and in the approaches to the sea itself.

(e) Also at the 499th meeting, the representative of Nepal⁸ associated himself with those who had demanded guarantees of the rights of land-locked States.

(f) At the 502nd meeting, the representative of Chile said that, under the terms of the Treaty of 1904, Chile's neighbour Bolivia enjoyed "the fullest rights of passage through Chilean territory, both for merchandise and persons, and both upon entry and exit".⁹

(g) The representative of Argentina¹⁰ supported the draft resolution on the rights of land-locked States (A/C.6/L.393), saying that it was in conformity with the principles applied by Argentina in its relations with Bolivia and Paraguay.

(b) The representative of Bolivia,¹¹ amplifying his earlier statement, said that, as juridical equals, all States had the right to free access to the sea. He added : "It would be the conference's responsibility to define that right, which should be complete and attended by the necessary guarantees."

(i) Similarly, the representative of Czechoslovakia¹² stated that :

"Under international law, all States enjoyed freedom of navigation on the high seas and the right of innocent passage in the territorial sea. It was a condition of the effective exercise of those rights by land-locked countries that their right of free access to the sea should be recognized."

⁶ *Ibid.*, 499th meeting, para. 9.

⁷ *Ibid.*, para. 15.

⁸ *Ibid.*, para. 25.

⁹ *Ibid.*, 502nd meeting, para. 7.

¹⁰ *Ibid.*, para. 15.

¹¹ *Ibid.*, para. 19.

¹² *Ibid.*, para. 23.

(j) Lastly, the representative of Peru¹³ recalled that, under a treaty between Peru and Bolivia, the latter had the right of free transit through Peruvian territory.

2. DISCUSSIONS IN THE SECOND COMMITTEE OF THE GENERAL ASSEMBLY (ELEVENTH SESSION)

12. The problem was discussed in the Second Committee (443rd, 444th and 445th meetings), in connexion with the report of the Economic and Social Council. The principal points raised by representatives are briefly summarized below.

13. At the 443rd meeting of the Second Committee Afghanistan, Bolivia, Laos and Nepal presented a draft resolution (A/C.2/L.332) proposing that the General Assembly should recognize "... the need of land-locked States and States having no access to the sea for adequate transit facilities..." by urging Governments to give full recognition to the needs of land-locked Member States and Members having no access to the sea in the matter of transit trade and recommending "... that adequate facilities therefore be accorded in terms of international law and practice in this regard".

14. In the light of the discussion which took place during the 444th meeting, a revised text of the draft resolution, of which Paraguay became a fifth sponsor, was approved by the Committee at its 445th meeting. The text was finally adopted by the General Assembly on 20 February 1957.

15. Under the terms of that resolution (1028 (XI)), the General Assembly recognized :

"... the need of land-locked countries for adequate transit facilities in promoting international trade..."

and invited the Governments of Member States

"... to give full recognition to the needs of land-locked Member States in the matter of transit trade and, therefore, to accord them adequate facilities in terms of international law and practice in this regard, bearing in mind the future requirements resulting from the economic development of the land-locked countries."

16. In introducing the draft resolution, the representative of Afghanistan emphasized :¹⁵

(i) That the economic development of land-locked countries depended on their ability to export agricultural products and to import essential equipment and manufactured goods ;

(ii) That an increase in the transit facilities available to them would help them to expand their foreign trade and would thus contribute to the growth of world trade as a whole ;

(iii) That a resolution on the same subject had already been adopted in 1956 by the Economic Commission for Asia and the Far East.

17. The representative of Laos¹⁶ stated that, despite the excellent relations between his country and its neighbours, "Laos' foreign trade was considerably

¹³ *Ibid.*, para. 53.

¹⁴ *Official Records of the General Assembly, Eleventh Session, Annexes*, agenda item 12, document A/3545, para. 16.

¹⁵ *Ibid.*, *Second Committee*, 443rd meeting, paras. 62 and 63.

¹⁶ *Ibid.*, para. 65.

handicapped by the natural obstacles which made it geographically dependent on its neighbours....”

At the same meeting, the Peruvian representative pointed out that the problem was both economic and juridical in nature.¹⁷

18. At the 444th meeting, the representative of Paraguay,¹⁸ another land-locked country, recalled that Argentina had made available bonded warehouse facilities at Rosario and Buenos Aires, and that Brazil had provided technical and financial assistance for the construction of a first-class road linking Paraguay with an Atlantic port to be built shortly.

19. The representative of China¹⁹ expressed the view that there were no established principles of international law in the matter. Land-locked countries were entitled to claim access to the sea and surrounding countries were under a duty to accord them adequate facilities, but (he said) bilateral agreement seemed to be the solution most frequently adopted.

3. DISCUSSIONS IN OTHER UNITED NATIONS BODIES

20. The question has also been discussed from time to time in other United Nations bodies, either in the more general context of transit or as a specific problem confronting land-locked countries. Some of the relevant documents are summarized below.

(a) *General Agreement on Tariffs and Trade (GATT)*²⁰

21. Although the relevant provisions of the General Agreement refer to transit, without any specific reference to land-locked countries, they are of sufficient importance to warrant summarizing at this point. The Agreement entered provisionally into force on 1 January 1948,²¹ and was, according to the Final Act, "... directed to the substantial reduction of tariffs and other trade barriers and to the elimination of preferences, on a reciprocal and mutually advantageous basis."²²

22. The provisions which have most bearing on the subject under discussion are contained in article V of the General Agreement; this article provides:

(i) Goods, including baggage, and also vessels and other means of transport, shall be deemed to be in transit when the passage across the territory of a contracting party is only a portion of a complete journey beginning and terminating beyond the frontier of that contracting party;

(ii) There shall be freedom of transit through the territory of each contracting party for traffic in transit to or from the territory of other contracting parties. The principle of non-discrimination must be observed;

¹⁷ *Ibid.*, para. 68.

¹⁸ *Ibid.*, 444th meeting, para. 9.

¹⁹ *Ibid.*, para. 22.

²⁰ *United Nations Treaty Series*, vol. 55, 1950, No. 814, I (b), pp. 194 *et seq.*

²¹ See Protocol of Provisional Application of the General Agreement on Tariffs and Trade, signed at Geneva on 30 October 1947. *Ibid.*, No. 814, I (c), p. 308.

²² *Ibid.*, No. 814, I (a), p. 188.

(iii) Although any contracting party may require that traffic in transit through its territory be entered at a custom house, such traffic shall be exempt from customs duties and from all transit duties or other charges imposed in respect of transit, except charges for transportation or those commensurate with administrative expenses entailed by transit or with the cost of services rendered;

(iv) All charges and regulations imposed on traffic in transit shall be reasonable;

(v) As far as traffic in transit and the applicable rates are concerned, each contracting party shall accord to every other contracting party most-favoured-nation treatment;

(vi) The foregoing provisions, while not applicable to the operation of aircraft in transit, are to apply to the air transit of goods, including baggage.

23. Article V of the General Agreement restates to a large extent the principles adopted at the Barcelona Conference (1921) and incorporated in the Barcelona Convention.²³ The point to be noted here, however, is that both the General Agreement and the Barcelona Convention and Statute on Freedom of Transit prescribe favourable treatment only for traffic proceeding to or from a contracting party. This seems to show that the signatories regarded freedom of transit less as a rule of the law of nations than as a right to be affirmed in multilateral or bilateral treaties.

(b) *The Havana Charter*

24. Article 33 of the Havana Charter for an International Trade Organization establishes under the title "Freedom of Transit", some principles very similar to those contained in the General Agreement. It is worth noting, however, that paragraph 6 of this article authorizes the Organization to:

"... make recommendations and promote international agreement relating to the simplification of customs regulations concerning traffic in transit, the equitable use of facilities required for such transit and other measures designed to promote the objective of this article."²⁴

Annex P of the Havana Charter, entitled "Interpretative Notes", makes an express reference to the land-locked countries in the commentary to article 33, paragraph 6. It states, among other things, that:

"If, as a result of negotiations in accordance with paragraph 6, a Member grants to a country which has no direct access to the sea more ample facilities than those already provided for in other paragraphs of article 33, such special facilities may be limited to the land-locked country concerned..."²⁵

25. By admitting this principle, the Havana Charter clearly intended to facilitate the conclusion of agreements favourable to land-locked countries.

²³ See chapter IV, *infra*.

²⁴ See *United Nations Conference on Trade and Employment, Final Act and Related Documents*, Havana, March 1948, p. 27.

²⁵ *Ibid.*, p. 64.

26. Despite the similarity between GATT and the Havana Charter, there are also certain differences between them which should be briefly mentioned:

(i) The interpretative note on article V of GATT is less general in scope than that on article 33 of the Havana Charter, especially on the point of special facilities for land-locked countries;

(ii) The paragraph from the Havana Charter cited above regarding the right of the Organization to undertake studies, make recommendations, and so forth, does not appear in GATT in any form whatsoever.²⁶

(c) *The Economic Commission for Asia and the Far East and the question of land-locked countries*

27. At its eighth session (24 to 31 January 1956) the Committee on Industry and Trade of the Economic Commission for Asia and the Far East (ECAFE) approved a resolution in which it recommended:

"...that the needs of land-locked Member States and Members having no easy access to the sea in the matter of transit trade be given full recognition by all Member States and that adequate facilities therefor be accorded in terms of international law and practice in this regard."²⁷

28. At its twelfth session (2 to 14 February 1956) ECAFE approved the Committee's resolution.²⁸

29. The secretariat of the Commission then prepared a report entitled "Problems of trade of land-locked countries in Asia and the Far East".²⁹

After tracing the history of the question and referring the relevant multilateral and bilateral treaties,³⁰ the report makes certain recommendations which can be summarized as follows:

(i) That countries which have not so far acceded to the Barcelona Statute on Freedom of Transit be urged to do so;

(ii) That countries be urged to negotiate and conclude bilateral agreements in conformity with the principles of the Barcelona Statute, the Havana Charter and GATT as a means of facilitating the implementation of the basic principles of freedom of transit;

(iii) That the officials and personnel handling or dealing with the various phases of transit trade should receive proper training, not only in the principles of transit trade but also in the relevant administrative aspects.

30. The secretariat's report was considered at the ninth session of ECAFE's Committee on Industry and Trade (Bangkok, 7 to 15 March 1957).

²⁶ For a more detailed discussion of the differences between GATT and the Havana Charter see ECAFE/I and T/Sub.4/2, paras. 6-16. See also the *List of Multilateral Conventions, Agreements, etc. on Communications and Transport*, published by the League of Nations (Geneva, 1945).

²⁷ E/CN.11/425, para. 103

²⁸ *Official Records of the Economic and Social Council, Twenty-second Session, Supplement No. 2*, para. 271.

²⁹ ECAFE/I and T/Sub.4/2.

³⁰ The bilateral treaties in question relate to Asian countries. They will be briefly considered in chapter III.

31. At that session, this Committee received a report³¹ from its Sub-Committee on Trade, in which the latter expressed general agreement with the secretariat's suggestions.

32. In its report to the Commission itself,³² the Committee on Industry and Trade recommended that land-locked countries should be given transit facilities in accordance with the provisions of the Barcelona Statute and GATT, irrespective of membership.

33. In its annual report, ECAFE³³

"...endorsed the recommendation of the Committee [on Industry and Trade] that land-locked countries should be given transit facilities in accordance with the Barcelona Convention and GATT, irrespective of membership, and recognized that this was a constructive step forward."

The Commission also took note of General Assembly resolution 1028(XI), cited in paragraph 1 of the present memorandum.

34. In its report covering the period from 10 August 1956 to 2 August 1957, the Economic and Social Council³⁴ notes, without elaborating, that the Committee on Industry and Trade of ECAFE "...also considered questions of shipping facilities and freight rates and transit problems of land-locked countries".

CHAPTER II

The right of access to the sea: theoretical solutions

35. Although the access of land-locked countries to the sea is essentially a practical problem, it appears worth while to devote a few pages to a review of the theoretical foundations on which various writers have based their proposed solutions.

1. THEORIES BASED ON NATURAL LAW

36. Charles De Visscher, in his important work on the international law of communications,³⁵ states that the problem of free access to the sea is created by the clash of two great ideas which have always conflicted, that of "... freedom of communications, the expression of a universal community of interests..." and that of territorial sovereignty which, for its part, "...opposes by its particularism the indefinite extension of international regulation...". The function of international law is, accordingly, to strike "... a balance, reconciling these naturally opposing principles". The sea, says De Visscher, has at all times been regarded as a *res communis* of mankind, and this is the origin of the idea—which underlies the rules governing the right of riparian States to navigate on rivers passing through more than one State—that

³¹ E/CN.11/I and T/129, paras. 82 *et seq.*

³² See *Official Records of the Economic and Social Council, Twenty-fourth Session, Supplement No. 2* (E/2959), para. 72.

³³ *Ibid.*, para. 240.

³⁴ *Official Records of the General Assembly, Twelfth Session, Supplement No. 3* (A/3613), para. 328.

³⁵ Charles De Visscher, *Le droit international des communications*, 1924, Ghent and Paris, pp. 6 *et seq.*

"... simple passage through one of the lower reaches of a waterway is a natural right which an enclosed country cannot legitimately be denied. This is the idea inherent in the statutory right of way, exercisable by reason of enclosure, which is known to the *jus civile*. In this respect, the river participates of the status of the sea to which it provides sole access..."

37. This view of free access to the sea as a natural right has been sustained by many jurists, Grotius first and foremost, and by such statesmen as Thomas Jefferson, who relied on it in 1792 when stating the claims of the United States with regard to free navigation at the mouths of the Mississippi. The French Revolutionary Convention likewise expressed it, in eloquent terms, in the famous Decree of 20 September 1792 concerning freedom of navigation on the Scheldt and the Meuse.

2. THEORIES BASED ON THE PRINCIPLE OF THE FREEDOM OF THE SEA

38. Sibert defends the right of access of land-locked countries to the sea as a logical consequence of the freedom of the seas:

"Since the high seas form an asset the use of which is common to all, it would appear that the right to navigate freely on the high seas should be enjoyed by all members of the international community, including those which have no coastline."³⁶

In his view, the right is a consequence of the "higher right" of every State to preserve itself and to develop, and hence it is in the interest of international peace itself that "... the forms of economic friction to which the position of an enclosed State may give rise should be removed."³⁷

39. The view stated above is shared by Georges Scelle. Regarding the sea as the international public domain *par excellence*, he affirms that it should be accessible for navigation even to the nationals of a land-locked State. "A rule to the contrary", he observes, "under which the use of the sea would be denied to peoples having no maritime frontiers would plainly conflict with the nature of an international public domain..."³⁸ and the principle thus laid down applies *mutatis mutandis* to ports, roadsteads and places of shelter, which should be open to ships of all countries without discrimination.

40. Similarly, Hyde³⁹ seems to agree with the writers cited above, for he holds that:

"... the principle which the international society invokes in its demand that the territory of each of its members be accessible to and from the sea is broad enough to affect the use of any appropriate channel of communication, and is not incapable of practical application to modes of transit by land as well as water".

He emphasizes elsewhere⁴⁰ that no State, however remote from the sea, should be isolated from it by the

³⁶ Marcel Sibert, *Traité de droit international public*, vol. I, Paris, 1951, p. 660, paragraph 397.

³⁷ *Ibid.*, p. 660, paragraph 399.

³⁸ Georges Scelle, *Manuel de droit international public*, 1941, part I, p. 389.

³⁹ Charles Cheney Hyde, *International law, chiefly as interpreted and applied by the United States*, 1947, vol. I, p. 618.

⁴⁰ *Ibid.*, p. 512.

will of the riparian State; but these, according to Hyde, are not principles recognized by international law but arrangements made by agreement.

3. THEORY OF PUBLIC LAW SERVITUDE

41. Lastly, many writers liken the right of transit of land-locked States to an easement or right of way under public law. Scelle for example says:⁴¹

"Under French municipal law, enclosed properties have by statute access to means of communication... the same rule was necessary, *mutatis mutandis*, in international law as regards the access of peoples to the sea, with the corollary that land-locked States may, consequently, have a maritime flag."

Scelle claims for this thesis the merit that it makes the right of passage of land-locked States over territories separating them from the sea independent of any treaty and, in theory, even of an international agreement. The right of transit belongs to the "dominant tenement" by virtue of its geographical position in relation to the "servient tenement"; the right will disappear if a union is formed between the two countries concerned, and will revive in the event of secession.

42. Some of the writers who have supported this doctrine and others who have questioned its validity are cited below.⁴²

43. The "international servitude" is defined by one of its principal supporters⁴³ in these terms:

"An international servitude is a real right, based on an agreement between two or more States under which the territory of one State is subjected to the permanent use of another State for a specified purpose. The servitude may be permissive or restrictive, but it never creates a positive obligation to do something... It establishes between one territory and another a permanent relationship in law which cannot be affected by the transfer of sovereignty over either territory to other States. It cannot be terminated except by agreement, by renunciation on the part of the dominant State, or by the consolidation of the territories concerned under a single sovereign."

⁴¹ Scelle, *op cit.*, p. 389.

⁴² (a) Geouffre de Lapradelle, "Le droit de l'Etat sur la mer territoriale", *Revue générale de droit international public*, vol. V, 1898, pp. 264 *et seq.*

(b) Pitman B. Potter, "The Doctrine of Servitude in International Law", *American Journal of International Law*, vol. 9, 1915, p. 627.

(c) Hall, *International Law*, p. 43.

(d) G. Crusen, "Les servitudes internationales", *Académie de droit international, Recueil des Cours*, 1928, II, pp. 5-74.

(e) Helen Dwight Reid, "Les servitudes internationales", *Académie de droit international, Recueil des Cours*, 1933, III, pp. 5-68.

(f) F. A. Vali, *Servitudes of International Law*, London, 1933.

(g) Claude Mercier, *Les servitudes internationales*, Doctoral thesis, Lausanne, 1939.

(h) Fauchille, *Traité de droit international public*, vol. I, part I, 1922 edition, pp. 668 *et seq.*

(i) McNair, "So-called State Servitude", *The British Year Book of International Law*, 1925, pp. 111 *et seq.*

(j) H. Lauterpacht, *Private Law Sources and Analogies of International Law*.

⁴³ Helen Dwight Reid, *op. cit.*, p. 15.

McNair,⁴⁴ who opposes this theory, asserts that its object is to bind in advance third States into whose hands the territories concerned may come. This object, however, will not be achieved (he says), for to enumerate a list of restrictions on territorial sovereignty and to call them servitudes proves nothing at all; and he draws the following conclusions:⁴⁵

“(a) International law recognizes the existence of conventional restrictions upon territory which differ in juridical nature from the obligations *in personam* normally created by a treaty.

“(b) The main guide as to the juridical nature of any particular obligation must be the intention of the parties to the instrument creating it. Did they intend it to be permanent, objective, and irrespective of changes of sovereignty...?”

“(c) When the treaty creating the restriction is of the nature of an international settlement or of a dedication *urbi et orbi* of some natural advantage or facility, the presumption is that the territorial restrictions created by it are intended to form part of the body of public international law... .

“(d) The attempt to apply to these restrictions the terminology and conceptions of the Roman law of servitudes is a legacy of a states system that has passed away and will probably do more harm than good.”

44. It should be noted, lastly, that the theory has been mentioned in several cases in which the parties pleaded the existence of international servitudes.⁴⁶ In all these cases, with the exception of the Netherlands coal mines case, the adjudicating bodies did not rule specifically on the question whether servitudes in fact existed under international law.

CHAPTER III

The problems of transit and access to the sea: solutions offered by bilateral agreements

1. PROVISIONS FROM SOME OLDER TREATIES

45. Among the older bilateral treaties designed to facilitate transit the first noteworthy one is that of 16 March 1816⁴⁷ between Sardinia, the Swiss Confederation and the Canton of Geneva, which contains some provisions concerning the transit of Savoyard goods through the territory of the Canton in consignment to

⁴⁴ McNair, *op. cit.*, p. 123.

⁴⁵ *Ibid.*, p. 126.

⁴⁶ For example:

(a) The North Atlantic Coast Fisheries case. References: *Revue générale de droit international public*, vol. XIX, 1912, pp. 421 *et seq.*; and *Fisheries Arbitration Argument of Elihu Root*, ed. J. B. Scott, World Peace Foundation, 1912, pp. 239-288;

(b) The case of the Netherlands coal mines in Prussian territory. References: *American Journal of International Law*, 1914, vol. VIII, p. 858, and *Zeitschrift für Völkerrecht*, vol. VIII, 1914, p. 433;

(c) The Aaland Islands Question. References: *League of Nations, Report of the International Commission of Jurists entrusted by the Council of the League of Nations with the Task of giving an Advisory Opinion upon the Legal Aspects of the Aaland Islands Question*, Council Document 69, 20/4/238;

(d) The case of the S.S. “Wimbledon”. References: *Publications of the Permanent Court of International Justice, Series A, No. 1.*

⁴⁷ De Martens, *Nouveaux Suppléments au Recueil de traités*, vol. I, 1761-1829, No. 69, p. 473.

the city of Geneva. Article V exempts from all transit duties goods and produce from the free port of Genoa carried over the Simplon route, through the Canton of Valais and the State of Geneva. Article VI provides that customs duty is chargeable on these goods but that if, on entering Swiss territory, they are declared to be in transit, the duty is reimbursable at the point of departure from Swiss territory. Lastly, article VIII safeguarded the freedom of trade communications between the provinces of Savoy through the State of Geneva.

46. Under article V of a treaty⁴⁸ between Great Britain and Ethiopia signed at Addis Ababa on 15 May 1902 relative to the frontiers between the latter country and the Sudan, His Britannic Majesty's Government was granted the right to construct a railway through Abyssinian territory to connect the Sudan with Uganda.

47. A Convention of 24 July 1890⁴⁹ between Great Britain and the South African Republic for the Settlement of the Affairs of Swaziland recognized, in article 7, the right of the South African Republic to construct railways in Swaziland and to navigate and make waterways. Under article 8 the South African Republic was permitted to acquire the ownership of land for the purpose of construction of a railway across Swaziland, while Her Majesty's Government retained the right of passage across the land so acquired and the railway constructed by the South African Republic.

48. An Agreement concluded between Great Britain and Portugal⁵⁰ on 14 November 1890 related to the freedom of navigation of the Zambesi. Under article II, the King of Portugal engaged to permit and facilitate transit over the waterways of the Zambesi, the Shiré and the Pungué, and also over the land-ways where those rivers are not navigable. Under article III, the King of Portugal further engaged to facilitate communications between Portuguese ports and the territories included in the sphere of action of Great Britain, especially as regards the transport service and postal and telegraphic communications.

49. On 2 August 1929, a Convention was concluded between Italy and Ethiopia⁵¹ concerning, firstly, the construction of a motor road from Assab to Dessie and, secondly, the grant to the Ethiopian Government of a free zone in the port of Assab. Since at the time Ethiopia had no direct access to the sea this Convention is of some interest.

50. The Ethiopian Government undertook to build the sector of the motor road running from Dessie to its frontier and the Italian Government that from the frontier to Assab (article 2). An Italo-Ethiopian company was formed which was to have the monopoly of the carriage of goods and passengers (article 31). In addition, the Italian Government ceded to the Ethiopian Government, for a term of 130 years, a zone in the port of Assab suitable as an anchorage and undertook to give sympathetic consideration to any request addressed to

⁴⁸ De Martens, *Nouveau Recueil général de traités, troisième série*, vol. II, p. 826.

⁴⁹ *Ibid.*, deuxième série, vol. XVI, pp. 905 *et seq.*

⁵⁰ *Ibid.*, p. 942.

⁵¹ *Ibid.*, troisième série, vol. XXX, pp. 335 *et seq.*

it by the Ethiopian Government in the future for the enlargement of that zone. The Ethiopian Government was permitted to build a warehouse in the zone, and goods stored therein were to be exempt from all customs duties.

2. SOME CONVENTIONS CONCLUDED IN CONSEQUENCE OF THE TREATY OF VERSAILLES AND OF THE CONFERENCES OF BARCELONA AND GENEVA

51. One of the first of these conventions was that concluded on 21 April 1921 between Germany, Poland and the Free City of Danzig concerning freedom of transit between East Prussia and the rest of Germany.⁵² East Prussia had been separated from the rest of the *Reich* by the "Polish corridor", which gave Poland free access to Danzig and to the sea but which made East Prussia a German enclave in foreign territory. The Convention's eleven chapters deal with the following subjects:

- General clauses (chapter I)
- Railways (chapter II)
- Military transit (chapter III)
- Posts, telegraphs and telephone (chapter IV)
- Navigation (chapter V)
- Motor cars and motor cycles (chapter VI)
- Customs (chapter VII)
- Passports (chapter VIII)
- Supplementary clauses (chapter IX)
- Rules for the application of the Convention (chapter X)
- Final provisions (chapter XI).

52. Inasmuch as only the principles adopted by the parties are relevant to the purpose of this memorandum, the passages which follow will do no more than summarize succinctly the principles embodied in this long Convention.

53. Article 1 laid down the guiding principle of the Convention, *viz.* Poland accorded to Germany freedom of transit over the territory (including territorial waters) ceded by Germany in virtue of the Treaty of Versailles; it was provided that this freedom of transit was to extend "...to all ways of communication and all means and methods of transport by land or by water. Among other matters it shall extend to the postal, telegraph and telephone services."

The same obligation was laid on the Free City of Danzig, while Germany promised Poland and Danzig the same freedom of transit over German territory situated on the right bank of the Vistula. Goods in transit were to be "exempt from all customs or other similar dues" (article 2) and, subject to special provisions, no discrimination was to be exercised in respect of the nationality of individuals and goods, the origin of goods or their destination (article 3). The same privilege was guaranteed to travellers, who were to enjoy in addition

the special protection of the local authorities concerned (article 6). It was stipulated that the provisions of the Convention were not *ipso facto* to be rendered invalid in the event of war (article 9), and disputes arising out of the interpretation and application of the Convention were to be referred to a Tribunal of Arbitration sitting in Danzig (article 11).

54. With regard to railways, Poland undertook to forward by its own means traffic proceeding through the territory from one part of Germany to the other (article 22), and the parties undertook to maintain in good condition the railway lines employed for transit (article 25). Poland further undertook to develop the capacity of its railways so as to enable it to comply with the obligations it had assumed. The transit of soldiers was regulated in detail in the rules for the application of the Convention and in articles 44 to 49. In this context it is sufficient to say that under article 44, paragraph 6, one military goods train per week was permitted to run in each direction.

55. Germany had the right to use the railway lines appointed for transit in accordance with the requirements of its postal traffic (articles 50 and 51), and telegraphic and telephonic communication in transit was to be effected by means of the appropriate direct lines (article 62).

56. With regard to navigation the Convention provided:

"There shall be free transit between East Prussia and the rest of Germany by water on all waterways suitable for navigation or rafting in the territory ceded by Germany..." (article 67)

No dues were to be collected on the voyage (article 68).

57. Motor cars and motor cycles in transit were to use such roads as were appointed for the purpose by the authorities of the country through which they passed (article 75).

58. With regard to customs, it was provided that goods trains would travel under the seals of the parties (article 79); passengers in transit and their luggage were exempt from all customs duties or other similar duties (article 81). Such passengers did not require either passports or identification papers (article 97).⁵³

59. On 9 November 1920 Poland also concluded a Treaty concerning its relations with the Free City of Danzig⁵⁴ articles 8, 10, 18, 24 and 26 of which contain provisions pertinent to the subject of this memorandum. Under article 8 Poland was permitted to establish at Danzig "the necessary Polish administrative organisation... for the registration and for the inspection of the seaworthiness of Polish ships, and for the engagement of crews." Under article 10, the Free City of Danzig agreed to grant to Polish ships the same treatment in the port as that given to ships flying the flag of Danzig. Under article 18, an existing free zone in the port of

⁵³ Cf. also Polish-German Agreement of 24 June 1922 regarding Privileged Transit Traffic between Polish Upper Silesia and the Remainder of Poland through German Upper Silesia (text in *League of Nations Treaty Series*, vol. XXVI, 1-4, 1924, No. 653, pp. 313 *et seq.*).

⁵⁴ De Martens, *Nouveau Recueil général de traités, troisième série*, vol. XIV, pp. 45 *et seq.*

⁵² *League of Nations Treaty Series*, vol. XII, 1922, No. 308, pp. 63 *et seq.*

Danzig was to be maintained and placed under the administration of a "Danzig Port and Waterways Board" composed of an equal number of Polish and Danzig representatives (article 19). One of the Board's functions was to assure the free passage of immigrants and emigrants from or to Poland (article 24); in addition, the Board was to guarantee to Poland "the free use and service of the port and the means of communication referred to in article 20,⁵⁵ without any restriction and in so far as may be necessary for Polish imports and exports...."

60. Another convention of interest in this context is that of 28 October 1922 between Finland and the Soviet Union concerning free transit through the territory of Petsamo.⁵⁶

61. Under article 1, Finland granted to the Russian authorities and to Russian nationals free passage through the said territory from Russia to Norway and *vice versa*. The same principle was applicable to goods. Goods and cattle in transit were free of customs duties and transit or other dues (article 3) and persons and consignments of goods were not to break their journey unless it was necessary for them to do so in the ordinary course of travel. Unarmed Russian aircraft were granted the right to carry on air traffic between Russia and Norway over the said territory (article 9).

62. Of particular interest is the Convention between Greece and the Kingdom of the Serbs, Croats and Slovenes for the regulation of transit via Salonika, signed at Belgrade on 10 May 1923.⁵⁷

63. Under article 1 of this Convention, the Greek Government ceded to the Yugoslav Government⁵⁸ for a period of fifty years "... a site in the port of Salonika, which shall be set apart for the use and placed under the customs administration of (Yugoslavia)". While remaining an integral part of Greece and subject to Greek laws, the said zone was to be administered by the Yugoslav customs authorities (article 2), which were to appoint all the officials and staff of the zone (article 4). In addition,

"the berthing of vessels, the supervision of all loading and unloading operations, and, speaking generally, all harbour-master's duties, shall be carried out by an official who shall be a Serbian subject, but under the control of the Governor of the port of Salonika." (*Ibid.*)

Only the Governor of the port was allowed to enter the zone in order to ensure the carrying out of the police and judicial services (*Ibid.*).

64. All goods dispatched from the Yugoslav frontier to the zone and *vice versa* were regarded, from the Greek point of view, as goods in transit (article 5) and nothing could be done to hamper this passage.

⁵⁵ Under this article, the Board was entrusted with the administration and exploitation of the port and waterways and the whole railway system specially serving the port.

⁵⁶ *League of Nations Treaty Series*, vol. XIX, 1923, No. 493, pp. 208 *et seq.*

⁵⁷ *Ibid.*, vol. XXV, pp. 442 *et seq.*

⁵⁸ For the sake of convenience, the expression "Yugoslav" is used instead of "Kingdom of the Serbs, Croats and Slovenes", which was the official name of Yugoslavia at the time of the Convention.

65. The cost of the operations and construction to be carried out in the zone were to be borne by the Yugoslav Government, the existing installations being ceded to that Government (article 6).

66. In addition to these benefits, it was provided by article 8 that the Yugoslav Government was to be granted most-favoured-nation status in the case of any other free zones which might be created.

67. Article 12 vested in the Permanent Court of International Justice competence to settle any dispute arising in regard to the application of the agreement.

68. A "Protocol A" regulated railway traffic between the two countries, which was to be governed by the International Convention of Berne, 1890, the International Convention signed at Stresa in 1921 and the Barcelona Convention on Freedom of Transit (article 3).

69. A "Protocol A.2" regulated postal, telegraph and telephone communications in a very liberal spirit, and "Protocol C" dealt with customs formalities: in the zone, the customs service was to be operated by Yugoslav officials (article 1) who were to affix customs seals to the wagons at the dispatching station (article 3). No customs examination by Greek customs offices was permitted (article 4) but the Greek officials were, without charge, to affix customs seals at the exit or entrance stations besides the seals affixed by the Yugoslav customs officials (article 6). Vessels calling at the zone were entitled to do so without previous notification to the Greek authorities and without undergoing any control or supervision on the part of these authorities (article 8).

70. These, in outline, are the provisions of this famous Convention, which has been the subject of much comment. It was supplemented, over the years, by several protocols which interpreted and regulated the application of a number of clauses. It seems unnecessary to discuss them more fully in this memorandum.⁵⁹

71. An important convention relating to ports is that between Italy and Czechoslovakia of 23 March 1921 regarding concessions and facilities to be granted to Czechoslovakia in the port of Trieste.⁶⁰

72. By virtue of this Convention Czechoslovakia obtained the use of a shed to be utilized for the loading of goods to be exported immediately and for the unloading of goods to be forwarded immediately by rail; the Italian Government ceded the shed to Czechoslovakia to be administered by the latter for a rental which was calculated in accordance with the provisions of article 8 of the Agreement. Under article 11, the Italian Government guaranteed to Czechoslovak nationals equality of treatment with Italian citizens; the same article contains a most-favoured-nation clause. Czechoslovakia installed its own customs office in the warehouses in question and the Italian administration permitted the use of a Czechoslovak transit customs seal

⁵⁹ The text of these instruments is reproduced in De Martens, *Nouveau Recueil général de traités, troisième série*, vol. XXI, pp. 708 *et seq.*

⁶⁰ *League of Nations Treaty Series*, vol. XXXII, 1925, pp. 250 *et seq.*

affixed to vehicles coming from the port and crossing Italian territory.

73. Another pertinent convention is that of 8 March 1923 between Hungary and Czechoslovakia concerning the passage of Czechoslovak trains over the Hungarian section of the Cata-Lucenec line.⁶¹

74. Under article 1, passage over the said line was guaranteed to passengers and goods of all kinds proceeding from Czechoslovakia. These consignments enjoyed

“... treatment at least as favourable, in all respects, as that enjoyed by consignments which are Hungarian as regards origin, country of export, ownership or dispatching station.”

This free passage was granted, under article 2, “...irrespective of the nationality of travellers, the origin or destination of goods, or the nationality of the sender or addressee”.

The goods remained exempt from all duty and taxes on Hungarian territory (article 3). The passengers and luggage in transit were to be under the “special protection” of the country crossed in transit (article 9), but military transports could be made only with the consent of, and subject to the conditions laid down by, the Hungarian Government.

75. Many of the provisions of the Convention were purely technical and hence will not be commented on here; reference should, however, be made to the arbitration clause (article 15) under which each of the Contracting Parties could refer disputes concerning the interpretation or carrying into effect of the Convention to a court of arbitration empowered to decide the issue “...in accordance with the provisions of the present Convention and general principles of law and equity”.

3. EXAMPLES OF LATIN AMERICAN TREATIES *

76. In Latin America, Bolivia, a land-locked country, has concluded a number of treaties with its neighbours assuring it of free communication with the sea. Some pertinent clauses extracted from these instruments are reproduced below.

Treaties between Bolivia and Argentina

77. Article 3 of the Convention concerning the transport of petroleum provides:⁶²

“No transit dues or charges of any kind, whether national, provincial or municipal, shall be levied on petroleum, or on any petroleum product, which originates in Bolivia and passes through Argentine territory. The petroleum and petroleum products in question shall be loaded in tank-cars or drums and transported to the territory of Bolivia solely by the State Railways. Rail charges for this transport shall not be greater than those paid in Argentina by *Yacimientos Petrolíferos Fiscales* under similar conditions.”

⁶¹ *League of Nations Treaty Series*, vol. XLVIII, 1926, No. 1167, pp. 258 *et seq.*

* For paragraphs 77 to 81, see also the additional information supplied by the delegation of Bolivia and contained in the addendum to this document.

⁶² Dated 19 November 1937; text in *Colección de tratados vigentes de la República de Bolivia*, vol. 4, p. 121.

The Treaty of Friendship, Commerce and Navigation of 9 July 1868 contains some clauses which are of interest in this context:⁶³

“*Article 11.* The two Contracting Parties declare and recognize the free transit of home and foreign articles of commerce which exists and may exist by the sea and river ports of the one and the other Republic, by road, and by the railways which may be established, without further charges than the very moderate charges of storage, and bridge and road tolls which, on their creation, shall be respectively communicated by the Governments, in order that they may be subject to the strictest reciprocity. For this purpose the two Governments will, in due course, designate in a special Agreement the sea and river ports and depots, and the overland places of entry and depots on which they may agree, stipulating at the same time the formalities of transit, and all other conditions which may be necessary, with a view to the most ample privileges.”

“*Article 12.* The Contracting Parties concede mutually to one another the free navigation of the river Plata and its respective tributaries, in accordance with arrangements to be agreed on in a special Convention.”

“There will not be imposed on Bolivian ships in Argentine ports, nor on Argentine ships in Bolivian ports, other or higher dues for tonnage, lightage, anchorage or other dues, affecting the hull of the ship, than those which, in the same circumstances, are recoverable from ships of the nation to which the port belongs.”

“The importation or exportation of merchandise or effects which it is or may be lawful to import or export from either of the territories of the Contracting Parties will pay the same duties, whether made in Bolivian or Argentine ships; and the rebates and exemptions to which merchandise or effects imported or exported in ships of the country may be entitled, will be extended to those imported or exported in ships of each of the contracting countries respectively.”

“No prohibition, restriction or charge may be imposed on the reciprocal commerce of both countries, unless in virtue of a general arrangement applicable to the commerce of all other nations. If this prohibition, restriction or charge should devolve on importation or exportation, the ships of the respective countries will not be subject to it unless it is also applicable to importation or exportation in ships of the country itself.”

“Bolivian and Argentine ships respectively will be permitted to enter all ports of each other’s territory to which entry is permitted to ships of that country.”

Treaties between Bolivia and Brazil

78. For some time now Brazil and Bolivia have regulated by contractual provisions the transit rights granted to Bolivia in Brazilian territory. Mention should be made firstly of articles 6 to 9 of the Treaty of Friendship, Commerce, Navigation and Extradition of 27 March 1867, which read as follows:⁶⁴

“*Article 6.* The Republic of Bolivia and His Majesty the Emperor of Brazil agree in declaring the communication between the two countries to be free over the common frontier; and the transit of passengers and of luggage over the same exempt from every national or municipal impost, and only subject to the police and fiscal regulations which each of the two Governments will establish in its territories.”

“*Article 7.* His Majesty the Emperor of Brazil permits, as a special favour, the waters of the navigable rivers running through Brazilian territory, to the ocean, to be free to the commercial navigation of the Republic of Bolivia.”

⁶³ *Ibid.*, p. 35.

⁶⁴ *Ibid.*, p. 175.

"The Republic of Bolivia also reciprocally permits the navigable waters of its rivers to be free to the trade and commercial navigation of Brazil.

"It is, however, understood and declared that this navigation does not include that from port to port of the same nation, or the river coasting trade, which the High Contracting Parties reserve for their subjects and citizens.

"Article 8. The navigation of the river Madeira, from the waterfall of Santo Antonio upwards, shall only be permitted to the two High Contracting Parties, even should Brazil open the said river up to that point to third nations. Nevertheless, the subjects of these other nations shall enjoy the privilege of loading merchandise in Brazilian or Bolivian vessels employed in that trade.

"Article 9. Brazil undertakes to grant at once to Bolivia, under the same police and excise conditions as those imposed on its own subjects, saving the fiscal dues, the use of any road which it may hereafter open from the first waterfall, on the right bank of the river Mamoré, to that of Santo Antonio on the river Madeira, in order that the citizens of the Republic may avail themselves of the means which Brazilian navigation may afford, below the said waterfall of Santo Antonio, for the passage of persons and carriage of merchandise."

Article 7 of the Treaty of Petropolis, which deals with the construction on Brazilian territory of a railway usable by Bolivia for its communications with the port of Santo Antonio, is also relevant. It reads as follows:⁶⁵

"Article 7. The United States of Brazil undertakes to construct on Brazilian territory, either as a public or a private undertaking, a railway from the port of Santo Antonio on the river Madeira to Guajará-Mirim, on the Mamoré, with a branch which, passing through Villa-Murtinho or some spot near (State of Matto-Grosso), shall reach Villa-Bella (Bolivia) at the confluence of the Beni and the Mamoré. Both countries shall make use of this railway, which Brazil shall endeavour to finish within four years, with equal rights as to tariffs and privileges."

The question of river navigation is dealt with in some important clauses of the Bolivian-Brazilian Treaty of Commerce and River Navigation of 12 August 1910:⁶⁶

"Article 1. The Republic of Bolivia and the United States of Brazil, persevering in the sincere desire to provide all possible facilities and guarantees for the most complete freedom of land and river transit for each of the two nations in the territory of the other, this being the right of free transit which the High Contracting Parties recognized reciprocally in perpetuity in article 5 of the Treaty of 17 November 1903, agree to declare the transit of passengers, baggage and merchandise exempt from any national, state or municipal charges, subject to observance of the fiscal and police regulations now or hereafter in force, such regulations not to conflict, however, with the generality of the rights reciprocally recognized.

"Article 2. As a consequence of the principle laid down in article 5 of the Treaty of 17 November 1903, merchant vessels of all nations may freely navigate not only, as at present, the Paraguay river, between the Bolivian-Brazilian frontier south of Combra and the Brazilian port of Corumbá, but the Tamengo canal and Lake Cáceres between Corumbá and the Bolivian port of Guachalla, on the said lake.

"Article 3. By virtue of the same principle, Bolivian and Brazilian vessels may freely navigate the rivers, lakes and canals recognized as common to Bolivia and Brazil under the aforesaid Treaty of 17 November 1903; and Bolivian vessels shall have

free access to the ports of Bolivia and free exit from them to the ocean through the river waters which are under the exclusive sovereignty of Brazil.

"Article 4. In the exercise of the right affirmed in the preceding articles, Brazilian merchant vessels may proceed freely through the Brazilian waters of the Paraguay river from Corumbá to the Mandioré, Gahyba and Uberaba lakes, as soon as Bolivia has established, after six months' prior notice, customs posts on any of these lakes for which corresponding Brazilian fiscal stations shall be established.

"Article 8. No charge shall be levied on the merchandise in transit carried on the Amazon, Madeira and Paraguay rivers from or to Bolivia in vessels of any nationality, or carried in transit on the other rivers to which this Treaty refers in Bolivian or Brazilian vessels, even if it is necessary to transship such merchandise from one vessel to another in the customs ports of the two countries or it is necessary for them to pass through and wait at intermediate ports or river and land depots whence they are to be forwarded by another vessel.

"In the latter case, warehousing and labour charges shall be levied in accordance with the legislation of each country.

"Article 14. With the exception of labour and warehousing charges (article 8) and the document or stamp duties referred to in article 10, no charge of any kind, either direct or indirect and regardless of its name or purpose, shall be levied in respect of either land or river transit."

Treaties between Bolivia and Chile

79. Bolivia has also entered into some important treaties with Chile. The first of these is the Treaty of Peace and Friendship of 20 October 1904⁶⁷ which contains the following provisions:

"Article 3. With the object of strengthening the political and commercial relations of both Republics, the High Contracting Parties engage to unite the port of Arica with the Alto de la Paz by a railway the construction of which will be contracted by the Chilean Government at its own cost within the term of one year to be reckoned from the ratification of the present Treaty.

"The property of the Bolivian section of this railway shall be vested in Bolivia at the expiration of fifteen years to be reckoned from the day of its completion.

"For the same purpose Chile engages to pay the obligations that might be incurred by Bolivia for guaranteeing up to 5 per cent on the capital invested in the following railways, the construction of which may be undertaken within a term of thirty years: Uyuni to Potosí; Oruro to La Paz; Oruro, via Cochabamba, to Santa Cruz; from La Paz to the Beni region; and from Potosí, via Sucre and Lagunillas to Santa Cruz.

"This obligation cannot bind Chile to an outlay larger than £100,000 sterling annually nor exceed the sum of £1,700,000 sterling, which is fixed as the maximum amount that Chile shall assign to the construction of the Bolivian section of the railway from Arica to the Alto de La Paz, and to the guarantees above referred to, and shall be null and void at the end of the said thirty years.

"The construction of the Bolivian section of the railway from Arica to the Alto de La Paz, as well as that of the other railways that may be constructed with the guarantee of the Chilean Government, shall be made the subject of special Agreements between the two Governments, and therein shall be taken into consideration the facilities that should be given to the commercial intercourse between the two countries.

"The cost of the said section shall be regulated by the

⁶⁵ Treaty dated 17 November 1903, *Ibid.*, p. 198.

⁶⁶ *Ibid.*, p. 226.

⁶⁷ *Ibid.*, p. 394.

amount of the tender which may be accepted in the respective contract for construction.

"Article 6. The Republic of Chile recognizes in favour of that of Bolivia, and in perpetuity, the fullest and most unrestricted right of commercial transit through its territory and ports on the Pacific.

"Both Governments will make, by special Agreements, the necessary regulations to insure, without prejudice to their respective fiscal interests, the purpose above referred to.

"Article 7. The Republic of Bolivia shall have the right to establish custom-house agencies at such ports as it may select for carrying on its trade. For the present it selects as such ports for its trade Antofagasta and Arica.

"The agencies shall take care that the goods intended for transit are sent direct from the pier to the railway station, and that they are conveyed to the Bolivian custom-houses in closed and sealed wagons, and accompanied by way-bills indicating the number of packages, weight and mark, number and contents, which shall be delivered against exchange way-bills.

"Article 8. Until the High Contracting Parties shall have concluded a special Commercial Treaty, the commercial intercourse between the two Republics shall be regulated by rules of the strictest equality with those applied to other nations, and under no consideration shall the products of either of the two Parties be placed in conditions of inferiority to those of a third. In consequence, the raw and manufactured products of Bolivia, as well as those of Chile, shall be subject, on being imported and consumed in one or the other country, to the payment of the same dues as those levied on those of other countries, and any favours, exemptions and privileges that either of the two Parties may grant to a third may, the conditions being the same, be claimed by the other.

"The High Contracting Parties mutually agree to apply to the national products of one or the other country carried over all the railways crossing their respective territories the same tariff that they may resolve to apply to the most favoured nation."

Further provisions relating to the subject of transit are contained in the Bolivian-Chilean Treaty of Commerce of 6 August 1912,⁶⁸ article 1 of which refers to the Treaty of Peace (see above). Articles 1 and 14 of the Treaty of 1912 provide :

"Article 1. The Government of Chile, in conformity with article 6 of the Treaty of Peace of 1904, guarantees free transit through its territory of foreign merchandise which is disembarked therein with destination for Bolivia, or which, proceeding from Bolivia, is embarked at any of the principal ports of the Republic of Chile with destination for foreign countries.

"Article 14. The exportation of Bolivian products from Chilean ports shall be made without any other formality than that of exhibiting to the Chilean customs authorities on the wharf the marks, numbering and quantity of packages, together with the manifest for the goods in bulk or the certificate of carriage by the railway which shall be viséd beforehand by the Bolivian customs agency. If the goods are not to be embarked immediately they shall be deposited in the warehouses for goods in transit, the exhibition of their markings, etc., being made when the goods are unloaded."

Similarly, article 1 of the Convention concerning transit⁶⁹ reaffirms a principle which is laid in several of the bilateral treaties cited above. This article reads as follows :

⁶⁸ *Ibid.*, p. 463.

⁶⁹ Dated 16 August 1937 ; text *ibid.*, p. 499.

"Article 1. The Government of Chile, in conformity with article 6 of the Treaty of Peace and Friendship of 1904, recognizes and guarantees the fullest and most unrestricted right of transit through its territory and major ports for passengers and freight crossing its territory to and from Bolivia. Within the provisions in force between Bolivia and Chile, free transit shall be understood to extend to every kind of freight at any time, without any exception."

Treaties between Bolivia and Paraguay

80. The Treaty of Peace and Friendship entered into between Bolivia and Paraguay on 21 July 1938⁷⁰ contains similar provisions :

"Article 7. The Republic of Paraguay guarantees the fullest freedom of transit through its territory, and especially through the zone of Puerto Casado, for merchandise arriving from abroad for Bolivia and for products leaving Bolivia for shipment abroad through the said zone of Puerto Casado. Bolivia shall be entitled to establish customs offices and to construct depots and warehouses in the zone of the said port.

"Regulations for the application of this article shall be embodied in a commercial convention to be concluded later between the Governments of the two Republics."

Treaties between Bolivia and Peru

81. Bolivia has also signed several treaties with Peru guaranteeing its right of transit ; for example, the Treaty of Peace and Friendship of 5 November 1863⁷¹ contains the following provisions :

"Article 24. Both the Contracting Parties bind themselves to enter, after the conclusion of the present Treaty, and at the latest within four months from its having been signed by the Plenipotentiaries, into a Treaty of Commerce and Customs, in which a Consular Convention shall be included, and it is understood that from now the establishment of consuls is permitted, as is the case with the most favoured nations, and with their respective consular assistants.

"They also agree to give the most ample freedom for the reciprocal commerce of both countries, and to establish full exemption from duties on the natural products of both. Consequently, only those [duties] shall be collected which are known as 'municipal', such as highway, bridge and other dues reputed as a remuneration for services which the merchant receives and not as an imposition."

The Treaty of Commerce and Customs of 27 November 1905⁷² contains the following provisions relating to transit :

"Article 1. Bolivia and Peru establish their commercial relations on the basis of the most complete reciprocity.

"Article 2. Both countries agree to free commercial transit for all the natural products and industries of the two countries, and for the foreign products which are introduced by the routes of Mollendo and Puno to La Paz, and of Mollendo to Pelechuco via Cojata or *vice versa*.

"Article 4. Both countries bind themselves to grant reciprocally the same advantages or commercial immunities which they concede to the most favoured nation, in such a manner that if one of the Contracting Parties stipulates or has stipulated with a third Power that its natural, industrial or manufactured products shall be introduced into its territories free of import

⁷⁰ *Ibid.*, p. 331.

⁷¹ *Ibid.*, p. 373.

⁷² *Ibid.*, p. 420.

or consumption duties, or that those to be paid are less than those which have to be paid on merchandise of the other Contracting Party, the latter will at once have the right to enjoy the same reductions, immunities and concessions; therefore, in no case can either of the Contracting Nations be charged by the other with higher taxes, duties, charges or tariffs than those already existing for similar products of the most favoured nation, nor shall they be placed in a less advantageous position than those of any other country."

The Convention of 21 January 1917⁷³ concerning commercial traffic through Mollendo (Peru) contains certain guarantees in favour of Bolivia:

"Article 1. The Government of Peru guarantees free transit through its territory in respect of merchandise arriving at the port of Mollendo which is consigned to Bolivia and in respect of products originating in Bolivia which are to be shipped through Mollendo, in conformity with the provisions of the Treaty of Commerce and Customs of 27 November 1905.

"Article 19. This Convention shall apply to traffic through the port of Ilo or through any other port which the Government of Peru designates for transit traffic to Bolivia."

A protocol of 2 June 1917⁷⁴ concerning traffic through Santiago de Huata is also of interest in this connexion. It consists of the following single clause:

"Single article. Meeting in the Ministry of Foreign Affairs at La Paz on 2 June 1917, their Excellencies, Mr. Plácido Sánchez, Minister of Foreign Affairs of Bolivia, and Mr. Felipe de Cama, Envoy Extraordinary and Minister Plenipotentiary of Peru, have agreed that the rules established by the Convention signed on 21 January 1917 shall be extended to imports brought in through Santiago de Huata and to exports shipped from that port; it being understood that, until the Government of Peru appoints a customs agent to be on duty at Santiago de Huata, the return receipt referred to in article 11, signed by the customs officer of Santiago de Huata, shall constitute a sufficiently valid document."

The last provisions to be cited in this section are taken from the Treaty of Friendship and Non-aggression entered into between Bolivia and Peru on 14 September 1936,⁷⁵ by which the two Parties grant each other the fullest freedom of transit through their respective territories:

"Article 5. In conformity with tradition and with the principles guiding their international relations, Bolivia and Peru grant and guarantee to each other the most complete freedom of transit through their respective territories for persons, merchandise and material of any kind crossing those territories *en route* for or proceeding from either State or other countries. If necessary, the application of this Treaty shall be regulated by special treaties or regulations, but the absence or lapse of such treaties or regulations shall not suspend or restrict the application of this Treaty.

"Article 6. Bolivia and Peru grant to each other the most complete freedom of commerce and navigation on their common rivers, subject only to fiscal, police and health regulations."

4. EXAMPLES OF TREATIES EFFECTIVE IN AFRICA AND ASIA

82. The first convention to be mentioned here is that of 17 June 1950 between the United Kingdom

and the Republic of Portugal relative to the Port of Beira and Connected Railways,⁷⁶ the purpose of which was to secure additional outlets to the sea for some African territories under British administration, *viz.* Bechuanaland, Nyasaland, Southern Rhodesia, Northern Rhodesia, Basutoland and Swaziland.*

83. The Contracting Governments undertook not to permit any discrimination in railway freight rates within the territories concerned or alterations of railway freight rates which might contribute materially to the diversion of normal traffic from the Port of Beira (article II).

84. The Portuguese Government undertook to maintain the Port of Beira and the Beira Railway in a state of efficiency adequate to the requirements of the traffic proceeding to or from Southern Rhodesia, Northern Rhodesia and Nyasaland (article III). In the interest of these territories, a free zone was established in the Port of Beira (article VII). The Portuguese Government undertook to establish an Advisory Board to advise on the best means of developing the traffic passing through the Port of Beira and on related matters (article X).

*Treaty of Commerce between India and Nepal of 31 July 1950*⁷⁷

85. In article 1, the Indian Government recognized in favour of the Government of Nepal full and unrestricted right of transit of all goods and manufactures through the territory of India. Such commodities may be transmitted across Indian territory to such places in Nepal as may be approved by the two Governments (article 2). Furthermore, goods and merchandise of Nepalese origin in transit through India are exempted from excise and import duties (articles 3 and 4). Civil aircraft of either country are permitted to fly over the territory of the other.

*Customs Agreement between Thailand and Laos*⁷⁸

86. Goods in transit to the territory of either Party are accorded, in the territory of the other Party, the in-transit rights in accordance with the principles of the "Statute on Freedom of Transit" of the Barcelona Convention (article I). The goods in question remain subject, however, to customs tariffs and formalities in connexion with exchange control as well as to other laws of the country through which they pass (article II). In addition, the two States agreed that they would take steps to prevent smuggling.

⁷⁶ H.M. Stationery Office, Cmd. 8061 (London).

* Note by the Secretariat: At the 6th meeting of the Fifth Committee held on 14 March 1958, the representative of the United Kingdom drew attention to the fact that, in the preamble to the convention, it was stated that the purpose of the convention was to give effect to the desire of the parties "to co-operate fully with a view to the development of the resources of Mozambique on the one hand and of Southern Rhodesia, Northern Rhodesia and Nyasaland on the other".

⁷⁷ ECAFE/I and T/Sub.4/2.

⁷⁸ *Ibid.*

⁷³ *Ibid.*, p. 452.

⁷⁴ *Ibid.*, p. 461.

⁷⁵ *Ibid.*, p. 493.

*Treaty between the Government of Afghanistan and the British Government for the Establishment of Neighbourly Relations, of 22 November 1921*⁷⁹

87. The provision of this Treaty which is most pertinent is article 6, by which the British Government agreed that "whatever quantity of material is required for the strength and welfare of Afghanistan... which Afghanistan may be able to buy from Britain or the British dominions, or from other countries of the world, shall ordinarily be imported without let or hindrance by Afghanistan into its own territories from the ports of the British Isles and British India". Similarly, the British Government acquired the right to purchase and export to India every kind of goods from Afghanistan.

88. With a view to carrying that provision into effect, the Parties also agreed that: "No customs duties shall be levied at British Indian ports on goods imported under the provisions of article 6 ..." (article 7). Customs duties levied upon entry into India on goods intended for Afghanistan were to be reimbursed in full.

*Anglo-Afghan Trade Convention of 5 June 1923*⁸⁰

89. The Trade Convention of 5 June 1923, with two appendices, supplemented the Treaty of 22 November 1921.

*Agreement between the Government of the Union of Soviet Socialist Republics and the Royal Afghan Government on Transit Questions, of 28 June 1955*⁸¹

90. Under the terms of article 1, the Union of Soviet Socialist Republics granted to Afghanistan the right of free transit of goods through its [USSR] territory "...on the same conditions applicable to transit of goods belonging to third countries through the territory of the Union of Soviet Socialist Republics".⁸² This right was extended to all categories of goods, regardless of their origin or destination.

91. Afghanistan granted the same right to goods of USSR origin (article 2). The transport and consignment dues for transit goods are to be calculated according to the lowest tariffs applicable at the sites where dispatching and consignment of goods are carried out (article 3). The right of free transit also applies to unaccompanied private property of citizens of the two countries (article 6).

5. TREATIES CONCLUDED SINCE THE WORLD WAR *
OF 1939-1945

92. Among the treaties concluded since the World War of 1939-1945, attention should be drawn to the Convention regarding the Regime of Navigation on the

⁷⁹ *Ibid.*

⁸⁰ *League of Nations Treaty Series*, vol. XXI, p. 113.

⁸¹ ECAFE/I and T/Sub.4/2.

⁸² *Ibid.*

* For paragraphs 92 to 102, see also the additional information supplied by the delegation of Czechoslovakia and contained in the addendum to this document.

Danube, of 18 August 1948,⁸³ and to various pertinent provisions of the Treaties of Peace.⁸⁴

Another instrument which should be briefly considered is the Communications Agreement between the Polish Republic and the Czechoslovak Republic,⁸⁵ appearing as annex No. 6 to a Convention for ensuring economic co-operation concluded between those two countries on 4 July 1947.⁸⁶

93. In the preamble, the two countries express their desire to guarantee one another the most advantageous conditions with regard to all types of communications, while in article I, referring to article III of the Convention itself⁸⁷ they agreed to establish a "Polish-Czechoslovak Communications Commission" to ensure co-operation with regard to communications.

94. The question of transit is dealt with in article II and the subsequent articles of the Agreement. The Contracting Parties undertook (article II, paras. 2 and 3) to apply on this point: "the provisions of valid bilateral and multilateral conventions to which they have acceded or may in future accede". "In international transit communications, the provisions of the Convention and Statute on Freedom of Transit, signed at Barcelona on 20 April 1921 [shall be applied]".⁸⁸

This provision is in agreement with that of article XXII of annex No. 1 to the Convention, which is a Treaty of Commerce between the two countries.

95. As regards seaports, Poland agreed to permit the use by Czechoslovakia of the seaports of Stettin and Gdynia-Gdansk "...as technical shipping bases for Czechoslovak merchant vessels" (article XVIII of the Agreement in annex No. 6).

96. Pursuant to this Agreement, the Polish Government leased to Czechoslovakia certain sectors of the Customs-free zone in the port of Stettin (article XIX). Furthermore, under article XXI of the Agreement, Czechoslovakia or the Czechoslovak agencies designated for that purpose received the right, in Polish seaports, "to the exclusive use under lease of strictly delimited stretches of water adjacent to the port areas or warehouses leased to them".

97. Under article XXVII of the Agreement, each of the Contracting Parties undertook to accord to the other, in the seaports under its sovereignty, treatment equal to that accorded to its own shipping firms, "as regards free access to and use of ports and unrestricted enjoyment of the facilities granted to shipping firms, the commercial operations of vessels, their crews, cargoes and passengers..."

⁸³ *United Nations Treaty Series*, vol. 33, 1949, No. 518, pp. 197 *et seq.*

⁸⁴ *Ibid.*, vol. 41, Nos. 643 and 644.

⁸⁵ *Ibid.*, vol. 85, 1951, pp. 262 *et seq.*

⁸⁶ *Ibid.*, No. 1146, pp. 204 *et seq.*

⁸⁷ *Ibid.*, No. 1146, p. 208.

⁸⁸ The relevant references are: *League of Nations Treaty Series*, vol. VII, p. 11; vol. XI, p. 407; vol. XV, p. 305; vol. XIX, p. 279; vol. XXIV, p. 155; vol. XXXI, p. 245; vol. XXXV, p. 299; vol. XXXIX, p. 166; vol. LIX, p. 344; vol. LXIX, p. 70; vol. LXXXIII, p. 373; vol. XCII, p. 363; vol. XCVI, p. 181; vol. CIV, p. 495; vol. CXXXIV, p. 393; vol. CXLII, p. 340.

98. The nationality of a vessel is to be determined "in accordance with the laws of the State to which the vessel belongs" (article XXXII).

99. Article XXXIII states that vessels shall be completely exempt from customs duties and all import and export charges, provided that "they enter the Customs zone...as conveyances for the carriage of goods or passengers and leave again—either with or without a cargo..."

100. Article XXXIX and the subsequent articles of the Agreement cover inland navigation and inland ports. As in the case of seaports, special undertakings may be established for purposes of navigation and the Contracting Parties agreed to accord to each other most-favoured-nation treatment. Czechoslovakia was authorized to establish and operate an inland navigation undertaking on the river Oder.

101. Under article L a Polish-Czechoslovak Committee of Studies for Oder-Danube Waterway Problems was to be established to deal with the technical, organizational and economic problems connected therewith.

102. These, very briefly summarized, are some of the pertinent provisions of this important Agreement.

103. Another important instrument is the Agreement between Austria and Italy regarding the Utilization of the Port of Trieste⁸⁹ (text in *Bundesgesetzblatt* of 3 February 1956). Article 7 of the Agreement provides that goods proceeding to and from Austria which are in transit through the port of Trieste shall be accorded most-favoured-nation treatment in the said port with respect to duties and taxes and handling operations, whether they are carried in vessels flying the Italian, the Austrian, or any other flag. Furthermore, the port of Trieste may be used as the home port of merchant vessels flying the Austrian flag (article 8). In the perimeter of the "Free Port", appropriate warehouses shall be made available to the Austrian Government at a reduced rent (article 9). The transit of goods proceeding from Austria through Trieste to a destination overseas is free (article 11), "in conformity with multilateral international agreements".

CHAPTER IV

The problems of transit and access to the sea: solutions offered by multilateral treaties

104. As was pointed out in the introduction, the access of land-locked countries to the sea is but one aspect of the more general problem of the transit of persons and goods from one State across the territory of one or several other States.

105. There have been numerous attempts to find a general solution of this vast question. Especially vigorous efforts were made after the First World War under the auspices of the League of Nations, which had received instructions to that effect under the Treaty of Versailles.

106. It may be appropriate, at this stage, to outline the League's considerable accomplishments in this field,

particularly in connexion with the Barcelona Conference. The land-locked States were represented at the Conference; they defended their interests vigorously and succeeded in securing recognition of their right to a flag in a solemn declaration.

107. The main object of this chapter is to sum up the work of that Conference and the agreements resulting from it.

108. Before dealing with those instruments, however, some mention should be made of the position of the so-called "international" rivers, which provided the basis for the earliest international solutions of the problems of transit and access to the sea.

1. INTERNATIONAL RIVERS: THE RÉGIME OF THE RHINE

109. The problem of the access of land-locked States to the sea acquired great importance in consequence of the Peace of Westphalia, which divided Central Europe into a large number of States, some of which—by no means the smallest—had no sea coast.

110. The principal and, in any event, the most economical means of communication at the time was offered by the rivers which crossed the territories of several adjacent States and debouched into the sea. Consequently, the practice of States and the evolution of international law in the matter of transit are rooted in the law relating to rivers and the régimes gradually established with a view to the utilization of these waterways on a footing of equality.

111. This is not the context for a detailed treatment of this extremely interesting and important question. Brief reference must, however, be made to the rules of the law relating to rivers which developed and are still applicable.

112. This section will be confined to a succinct description of the régime of the Rhine. This European river has been selected as the best example, because the regulation of navigation thereon and related problems have been the object of sustained efforts by the riparian States for several centuries. It is also the river whose régime has attained relatively the greatest degree of perfection.⁹⁰

113. In brief, the Powers which in 1814 conceived for the first time in history a régime applicable to the entire navigable portion of the Rhine agreed that the waterway should be governed by the following principles:

- (i) Navigation should be free along the entire navigable section, both up and down stream;
- (ii) The right to navigation could not be denied to the nationals of any State;
- (iii) Any charges which a riparian State was authorized to levy should be the same for all and should not be such as to impede international trade;

⁹⁰ This is not to say that the régimes of other European and African rivers, and the principles applied in Latin America are not of interest; this analysis is only confined to the régime of the Rhine because the rules applicable to that waterway have been developed in the greatest detail and useful lessons may therefore be learned from them.

⁸⁹ ECAFE/I and T/Sub.4/2.

(iv) These rules should be applicable to all rivers crossing or separating several States.

114. These principles, reaffirmed in practice in the various treaties concluded on the subject of navigation on the Rhine, now constitute an established set of rules, the main features of which, as amended by the Treaty of Versailles, may be summarized as follows:⁹¹

(i) Navigation on the Rhine between its mouths and Basel is free ;

(ii) All States have the right to issue boatmen's licences ;

(iii) It is the duty of the riparian States to maintain towing paths and the navigable channel of the river in good condition ; they must refrain from carrying out any works which would impede navigation ; if they are situated opposite each other, they must inform each other of any hydrotechnical projects the execution of which might have a direct effect on the part of the river belonging to them ;

(iv) There is a "Central Commission" competent to supervise the application by the Parties of regulations agreed upon by the Governments of the riparian States, to consider proposals of these Governments designed to promote navigation on the Rhine, and to hear appeals from judgements of courts of first instance relating to such navigation ;

(v) The Central Commission is composed of representatives of the riparian States and of the following non-riparian States : the United Kingdom, Italy and Belgium ;

(vi) All vessels, of whatever origin, and their cargoes enjoy the rights and privileges accorded to the vessels regularly engaged on Rhine traffic.

115. Charles De Visscher⁹² describes the principles underlying this régime in the following terms :

"...freedom of transit means that any transport which is obliged to traverse a foreign territory...shall not, during this unavoidable passage through an intermediate country, encounter any obstacles, or difficulties, or be subject to any charges which would not have been encountered or imposed if the entire journey had been effected in the territory of one and the same State."

It may be added that it is in the interests of the riparian States to undertake jointly to maintain the navigable part of the river in a condition meeting the requirements of modern technology, and that the establishment of a central organ competent to draw up regulations and technical projects relating to the navigable portion of the river, to supervise the application of the treaty and of regulations and decisions taken in concert and to exercise certain judicial powers, would seem to be an excellent method of ensuring freedom of transit through the territories in question.

⁹¹ The basic document is the Statute of Mannheim of 17 October 1868 (*De Martens, Nouveau Recueil général de traités*, vol. XX, pp. 356 et seq.).

⁹² De Visscher, "Le droit international des communications", Ghent and Paris, pp. 11-12.

2. MULTILATERAL AGREEMENTS ON TRANSIT AND RELATED QUESTIONS

116. The Powers which met at Versailles after the war of 1914-1918 attached great importance to the solution of the problem of freedom of transit. Several articles of the Treaty of Versailles refer to that problem and the future League of Nations was entrusted with its solution.

(a) *Relevant provisions of the Covenant of the League of Nations*

117. Article 23 (e) of the Covenant, which contains the relevant provisions, reads as follows :

"Subject to and in accordance with the provisions of international conventions existing or hereafter to be agreed upon, the Members of the League :

"(e) will make provision to secure and maintain freedom of communications and of transit and equitable treatment for the commerce of all Members of the League. In this connexion, the special necessities of the regions devastated during the war of 1914 to 1918 shall be borne in mind".

118. The development of freedom of transit resulting from this provision has been described in a great many works, some of which are mentioned in the present study. This development was also summarized in the "Preparatory Documents" published by the League of Nations in connexion with the Barcelona Conference, extracts from which will be cited in the summary that follows.⁹³ It should also be noted that part XII of the Treaty of Versailles, although applicable particularly to Germany, contained a statement of principles which the Allied and Associated Powers were desirous of carrying into effect with a view to a solution of the problem of freedom of transit as a whole, and this naturally implied acceptance of the principles by all European States and, if possible, by all the nations in the world.

(b) *General Conferences on communications and transit held at Barcelona (1921) and Geneva (1923) and the Conventions adopted by them*

119. By a resolution of 19 May 1920, the Council of the League of Nations invited the Members of the League to send representatives to a General Conference to draw up the measures which might be taken in fulfilment of Article 23 (e) of the Covenant (text cited above) as well as the conventions on the régime of ports, waterways and railways referred to in articles 338 and 379 of the Treaty of Versailles.

The Conference was also invited to organize a Permanent Communications Committee to consider and propose "measures calculated to assure freedom of communications and transit at all times..."⁹⁴

⁹³ *League of Nations, Document 20/31/58, First General Conference on Freedom of Communications and Transit, Preparatory Documents*. See also, in addition to the works already cited, Jean Hostie, "Le rôle de la Société des Nations en matière de communications et de transit", *Revue de droit international et de législation comparée*, 1921 Third Series, Vol. II, Nos. 1-2, pp. 83-124.

⁹⁴ *League of Nations, General Conference, op cit.*, page 3.

120. A second resolution of the same date defined the relations between the Council and the Assembly of the League and the technical organizations concerned with communications and transit set up by the League.⁹⁵

121. The Commission of Enquiry on Freedom of Communications and Transit, established under the resolution of 19 May 1920, submitted a report to the Conference in which it stated its implicit belief that the Conference would be "inspired by just those principles of freedom in the loftiest sense, and of equal respect for the rights and interests of every nation, which the Commission, in spite of the difficulties presented by technical questions, and of the complex...nature of existing conditions, has never failed to maintain and assert".⁹⁶

122. The Commission submitted the following documents⁹⁷ to the General Conference:

- (i) Draft convention on freedom of transit;
- (ii) Draft convention on the international régime of navigable waterways;
- (iii) Draft convention on the right to a flag of States not possessing a sea coast;
- (iv) Draft convention on the international régime of railways;
- (v) Resolution relative to an international régime for ports;
- (vi) General scheme for the organization of the General Communications and Transit Conference and of the Permanent Communications and Transit Committee.

Each of these texts was accompanied by an article-by-article commentary, extracts from which will be cited below wherever they are helpful for a better understanding of the provisions in question.

(i) *Convention and Statute on Freedom of Transit*⁹⁸

123. In article 1 of this Convention, as adopted at Barcelona, the Contracting Parties declare that they accept "the Statute on Freedom of Transit" annexed to and deemed to constitute an integral part of the Convention. In the preparatory Commission's draft, the relevant provisions were contained in the Convention itself and not in a separate annex.

124. Article 1 of the Statute, which repeats almost verbatim article 1 of the original draft of the Convention, explains that the following shall be deemed to be in transit across the territory of the Contracting States:

"Persons, baggage and goods, and also vessels, coaching and goods stock, and other means of transport... when the passage across such territory... is only a portion of a complete journey, beginning and terminating beyond the frontier of the State across whose territory the transit takes place."

⁹⁵ *Ibid.*, p. 5.

⁹⁶ *Ibid.*, p. 11.

⁹⁷ *Ibid.*, pp. 103 to 153.

⁹⁸ *League of Nations, Treaty Series*, Vol. VII, 1921-1922, Nos. 1-3, pp. 11 *et seq.*

125. In its general commentary, the Commission of Enquiry on Freedom of Communications and Transit (hereinafter referred to as "the Commission") stated that goods in transit

"crossing national territory but originating in and destined for places outside that territory cannot be impeded or restricted at the will of the State exercising sovereignty over such territory, without resultant injury to other States... [which is] inadmissible in itself... Just as, under existing legislation in most countries, a person who has to cross his neighbour's property in order to leave his house and reach the thoroughfare enjoys a right of way over the property, in the same way every State whose external trade is absolutely or virtually forced to pass across neighbouring territory ought likewise to enjoy a guaranteed right of freedom of transit across that territory."⁹⁹

126. These were the guiding principles in the drafting of the Conventions adopted by the Barcelona Conference; even today these principles might serve as the basis of an international regulation concerning the right of access of land-locked countries to the sea across the territory of surrounding countries.

127. Article 2 of the Statute lays down the principle that free transit should be facilitated by the States concerned "on routes in use convenient for international transit"; it also stipulates that no distinctions of any kind are to be made between the States using the routes in question.

128. Broadly speaking, the article is in keeping with the draft prepared by the Commission, which, in its commentary,¹⁰⁰ explained that the words quoted in the preceding paragraph had been inserted because of its desire to lay down that the right of free transit may not be exercised except over routes in existence, and that a demand may not be made for the construction of new routes "but only for freedom to use those which, at a given moment, and taking into account all considerations of traffic, congestion, etc., are the most suitable for international traffic..."¹⁰¹

129. Article 2 of the Commission's draft convention includes the following phrase:

"... it being understood that the crossing of territorial waters is free."¹⁰²

The text adopted by the Conference modified this provision as follows:

"In order to ensure the application of the provisions of this article, Contracting States will allow transit in accordance with the customary conditions and reserves across their territorial waters."

130. The Swiss delegation had proposed, with regard to the words "flag flown by vessels" appearing in article 2, that the text should include a recognition of the right to a flag on the part of land-locked States. The Commission considered the treatment of that subject to be out of place in the Convention.¹⁰³

⁹⁹ *League of Nations, Preparatory Documents, op cit.*, p. 33.

¹⁰⁰ *Ibid.*, p. 35.

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*, p. 113.

¹⁰³ *Ibid.*, p. 43.

131. According to the Commission's commentary, the article should be read in conjunction with the other provisions, in particular article 6, which provides for limitations on freedom of transit.¹⁰⁴ Article 6 stipulates that the Convention does not impose any obligation to grant freedom of transit to a non-contracting State, "except when a valid reason is shown for such transit by one of the other Contracting States concerned. It is understood that, for the purposes of this article, goods in transit under the flag of a Contracting State shall, if no transshipment takes place, benefit by the advantages granted to that flag".

132. According to the commentary,¹⁰⁵ this wording represents a compromise between States which, like Switzerland and the Netherlands, proposed to treat all nations on a basis of perfect equality whether they adhered to the Convention or not, and those which opposed such liberal treatment.

133. Article 3 of the Convention laid down the principle that traffic in transit should not be subject to any special dues, except "dues intended solely to defray expenses of supervision and administration entailed by such transit...", the rate of such dues corresponding with the expenses which they are intended to cover.

134. Article 4 deals with the charges generally applicable to the routes used in the transit traffic and stipulates that they should be "reasonable as regards both their rates and the method of their application..." and article 5 authorizes the Contracting States to prohibit the transit of passengers or goods the admission of which into its territory is prohibited.

135. These articles should be read in the light of the Commission's comment:¹⁰⁶

"Freedom of transit implies equality in the conditions of transit... without this equality freedom of transit would be but an empty phrase... The equality which it has been the unanimous hope of the Commission to see realized is equality between all nations. Nevertheless, the Commission did not consider it equitable to insert this idea in the Convention..."

The principal reason for this restrictive interpretation of freedom of transit seems to have been the fact that, since the conventions covered by the Commission's report were open to accession by all nations, "it was only reasonable to reserve their benefits to those who had assumed their obligation..."¹⁰⁷

The primary purpose of the other articles summarized in paragraph 134 above was to add "other more precise guarantees as to the reasonable regulation of transit, and the economic and financial obligations to which it may be subjected".¹⁰⁸

136. Under the terms of article 7, temporary restrictions on freedom of transit are permitted in case of an emergency "affecting the safety of the State or the vital interests of the country", while the subsequent articles (9-12) refer to the rights and duties of bellige-

rents, to the non-abrogation of treaties on the same subject concluded by the Contracting Parties before the signing of the Barcelona instrument and to privileges temporarily granted to States whose territory had been devastated during the war. These articles require no comment.

137. On the other hand, closer attention must be given to article 13, the subject of which is the settlement of disputes which may arise between the Contracting States as to the interpretation or application of the Statute.

138. This article provides in such cases for the compulsory jurisdiction of the Permanent Court of International Justice, "unless, under a special agreement or a general arbitration provision, steps are taken for the settlement of the dispute by arbitration or some other means". In order to settle such disputes, however, in a friendly way as far as possible, the Contracting States undertook to submit them "to any body established by the League of Nations as the advisory and technical organization of the Members of the League in matters of communication and transit".

139. Ordinarily, therefore, the Contracting States would have at their disposal two successive means of recourse: an attempt at friendly conciliation before the "body" established by the League of Nations and, if this attempt proved a failure, the obligatory jurisdiction of the Permanent Court of International Justice.

140. This "advisory organization" was the Permanent Communications and Transit Committee, the framework for which was proposed by the Commission in its "General Scheme for the Organization of the General Communications and Transit Conference of the Permanent Communications and Transit Committee".¹⁰⁹

141. It should be mentioned briefly that article 376 of the Treaty of Versailles provided that disputes which might arise between the interested Powers with regard to the interpretation and application of part XII of the Treaty "shall be settled as provided by the League of Nations", while article 37 of the Statute of the Permanent Court stipulated that in all cases where a treaty provided for the reference of a matter "to a tribunal to be instituted by the League of Nations, the Court will be such tribunal". The technical communications organization was established in pursuance of the above-mentioned resolution of the Council (of the League of Nations) of 19 May 1920,¹¹⁰ under the name "Permanent Communications Committee"; under the terms of that resolution the Committee was required, *inter alia*,

"... [to undertake] the investigation of any disputes which may be referred to the League under Articles 336, 376 and 386 of the Treaty of Versailles, and corresponding articles in the other Treaties of Peace, and [to] endeavour to adjust such disputes whenever possible by conciliation between the Parties; in the event of such disputes being brought before the Permanent Court of International Justice, the Committee may be called upon to assist the Court."

142. The Committee itself was a subordinate body

¹⁰⁴ *Ibid.*, p. 41.

¹⁰⁵ *Ibid.*, p. 49.

¹⁰⁶ *Ibid.*, p. 35.

¹⁰⁷ *Ibid.*, p. 37.

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*, p. 103.

¹¹⁰ *Ibid.*, p. 3.

of the "General Communications and Transit Conference", one of the purposes of which was, within its domain, to draw up general conventions to be submitted for the ratification of members of the League.¹¹¹

143. According to De Visscher,¹¹² this system was in harmony with the character of the League of Nations which, not having the power to compel Members to comply with the provisions of the Convention, could offer no guarantee of observance except the recognized right of all Contracting Parties to treat alleged violations as the basis of a claim which could be referred for adjudication to an impartial tribunal.

144. It should also be mentioned that in a resolution adopted 21 June 1946,¹¹³ the United Nations Economic and Social Council decided to establish a "Transport and Communications Commission", empowered, among other things:

"(f) On instructions of the Economic and Social Council and when so authorized by convention or agreement between the parties, to perform the task of conciliation in cases of disputes between States and (or) specialized agencies, on problems concerning international transport and communications where not dealt with by other means."¹¹⁴

145. The system established by the Convention on Freedom of Transit affords clear proof of the firm determination of the States represented at the Barcelona Conference to recognize the right of the land-locked countries to transit through surrounding territories, a right supported by strong guarantees regarding equality of treatment and permanent enjoyment and by machinery for the settlement of disputes to which its implementation might give rise.

146. Lastly, it should be noted that most of the Latin American representatives at the Barcelona Conference "took pains to point out that the drafts submitted to them were too exclusively European in character and did not take sufficient account of the special position, in fact and in law, of the States of the New World".¹¹⁵

(ii) *Convention and Statute on the Régime of Navigable Waterways of International Concern*¹¹⁶

147. By this Convention which, like the preceding one, was adopted at Barcelona on 20 April 1921, the signatories undertook to comply with the Statute annexed to the Convention; the Statute itself was approved by the Conference on 19 April and is therefore an integral part of the Convention. The Convention, as provided in its article 2, did not affect the rights and obligations arising out of the Treaty of Versailles. It was open to accession by States Members of the League of Nations and to States not Members of the League "to which the Council of the League may decide officially to communicate the present Convention". It

made provision for denunciation by any Party after the expiry of five years from its entry into force (article 8).

148. Article 1 of the Statute defines "navigable waterways of international concern" in these terms:

"1. All parts which are naturally navigable to and from the sea of a waterway which in its course, naturally navigable to and from the sea, separates or traverses different States, and also any part of any other waterway naturally navigable to and from the sea, which connects with the sea a waterway naturally navigable which separates or traverses different States . . .

"(b) Any natural waterway or part of a natural waterway is termed 'naturally navigable' if now used for ordinary commercial navigation, or capable by reason of its natural conditions of being so used . . . ; by 'ordinary commercial navigation' is to be understood navigation which, in view of the economic conditions of the riparian countries, is commercial and normally practicable."

"2. Waterways or parts of waterways, whether natural or artificial, expressly declared to be placed under the régime of the General Convention regarding navigable waterways of international concern . . ."

149. In its commentary, the Preparatory Commission¹¹⁷ says that, in preparing the draft, it was guided by the relevant principles in force in the legislation of European States. It described the draft convention which it submitted to the Barcelona Conference as a "Revised Act of Vienna", though the document differs substantially from these earlier instruments. The commentary states:

(1) Navigation on "rivers accepted as international by the Congress of Vienna . . . is now only one element in interior international navigation". Hence, the preamble extends the principle of freedom of communications to national waterways. [This preamble does not appear to have been adopted by the Conference.]

(2) As a consequence of the technical evolution since the Congress of Vienna it is now possible to use river waters either as a source of electric power or for purposes of agriculture, forestry and fishing. Cases may therefore arise where the carrying out of such works, although harmful to the interests of navigation, would nevertheless be legitimate.

150. Article 2 of the Statute defines as navigable waterways of international concern, for the purpose of articles 5, 10, 12 and 14 of the Statute, "navigable waterways for which there are international commissions upon which non-riparian States are represented", and those "which may hereafter be placed in this category". Articles 3 and 4 of the Statute call for equality of treatment for all users of the river, and article 5 authorizes the riparian States, except those referred to in article 2, to reserve cabotage between ports in their own territory for their own flag. Article 10 of the Statute states the principle that riparian States are bound "to refrain from all measures likely to prejudice the navigability of the waterway or to reduce the facilities for navigation . . ." In addition, it imposes on the riparian States the duty to execute such works as are necessary for the maintenance and improvement of navigability, "...in the absence of legitimate grounds for oppo-

¹¹¹ *Ibid.*, pp. 19-21.

¹¹² De Visscher, *op. cit.*, pp. 23 and 24.

¹¹³ *Journal of the Economic and Social Council, First Year, 13 July 1946*, No. 29, pp. 515 *et seq.*

¹¹⁴ *Ibid.*, p. 516.

¹¹⁵ De Visscher, *op. cit.*, p. 95.

¹¹⁶ *League of Nations, Treaty Series*, vol. VII, pp. 36 *et seq.*

¹¹⁷ *League of Nations, Preparatory Documents, op. cit.*, pp. 59 *et seq.*

sition by one of the riparian States... based either on the actual conditions of navigability in its territory or on other interests such as... the maintenance of normal water-conditions, requirements for irrigation, the use of water-power, or the necessity for constructing other and more advantageous ways of communication..." (paragraph 3)

The riparian State may, by agreement with other riparian States, entrust such other States with works of upkeep (paragraph 4). Where there is a river commission, "decisions in regard to works will be made by that Commission" (paragraph 5). The settlement of any dispute arising as a result of these decisions may be requested "on the grounds that these decisions are *ultra vires*, or that they infringe international conventions governing navigable waterways..." in the manner specified in article 22 of the Statute, *i.e.* by arbitration and conciliation or by reference to the Permanent Court of International Justice. This provision is similar to that referred to above in connexion with article 13 of the Statute on Freedom of Transit.

151. Article 12 of the Statute gives the riparian States, in the absence of an agreement to the contrary, the right of independent administration over the part of the international navigable waterway which traverses their territory and, among other things, the right to publish the necessary regulations.

152. Article 14 of the Statute provides for cases where there is an international commission, which is directed "to have exclusive regard to the interests of navigation" and which is described as "one of the organizations referred to in article 24 of the Covenant of the League of Nations..." This article states that "there shall be placed under the direction of the League the international bureaux already established by general treaties if the parties to such treaties consent".

153. It may be useful to summarize briefly the provisions of the Statute regarding equality of treatment of the States Parties to the Convention :

(1) No dues of any kind may be levied anywhere on the course or at the mouth of the waterway, other than those intended to cover expenditure actually incurred in maintenance and improvement (article 7) ;

(2) Article 8 lays down the principle that persons and goods in transit on an international waterway should be exempted from customs formalities ;

(3) Article 9 guarantees to users who are nationals of Contracting States treatment equal to that accorded to the nationals of the riparian State in all that concerns use of ports, port installations and the like.

154. An additional Protocol, signed at Barcelona on 20 April 1921¹¹⁸ by Albania, Belgium, the British Empire, Chile, Czechoslovakia, Denmark, Finland, Greece, India, New Zealand, Norway, Portugal, Spain and Sweden, provided that those States would, on condition of reciprocity, concede on all navigable waterways and naturally navigable waterways "... which ... are accessible to ordinary commercial navigation to and from the sea, and also in all the ports situated

on these waterways, perfect equality of treatment for the flags of any State signatory of this Protocol as regards the transport of imports and exports without transshipment..."

155. It should be noted that article 3 of the draft Convention,¹¹⁹ entitled "Equality of Treatment", included a reference to land-locked States. It stated that, in applying the article "... the High Contracting Parties shall recognize the maritime flag of vessels belonging to any High Contracting Party not possessing a sea coast..." This provision was originally inserted at the request of the Swiss delegation¹²⁰ and extended to the signatories of the Convention the provisions of article 273, final paragraph, of the Treaty of Versailles and of article 225 of the Treaty of St. Germain, which read as follows :

"The High Contracting Parties agree to recognize the flag flown by the vessels of an Allied or Associated Power having no sea coast which are registered at some one specified place situated in its territories and such place shall serve as the port of registry of such vessels."¹²¹

This provision is included, in more general terms, in article 4, last paragraph, of the Statute, which states :

"No distinction shall be made in the said exercise [of navigation], by reason of the point of departure or of destination, or of the direction of the traffic."

Although this clause does not refer directly to the flag of nations having no sea coast, it follows from it that persons and goods proceeding from or to those States are to enjoy freedom of transit along international navigable waterways. The question of the "flag" was, in fact, dealt with in a solemn "Declaration" adopted by the Conference, which will be discussed below.

(iii) *Declaration recognizing the right to a flag of States having no sea coast*¹²²

156. The text of this Declaration resembles that of the provision in the Treaty of Versailles which was briefly commented on in the preceding paragraph. For the sake of greater clarity, the Declaration adopted by the Conference is quoted below :

"The undersigned, duly authorized for the purpose, declare that the States which they represent recognize the flag flown by the vessels of any State having no sea coast which are registered at some one specified place situated in its territory ; such place shall serve as the port of registry of such vessels."

157. In order to settle this question generally, that is, in order to render these clauses of the Treaties of Versailles and St. Germain applicable to all nations, the Commission¹²³ had proposed the special instrument

¹¹⁹ League of Nations, *Preparatory Documents, op. cit.*, p. 125.

¹²⁰ *Ibid.*, p. 69.

¹²¹ De Martens, *Nouveau recueil général de Traités*, Third Series, vol. XI, pp. 533 and 773.

¹²² League of Nations, Barcelona Conference, *Verbatim Records and Texts relating to the Convention on the Regime of Navigable Waterways of International Concern and to the Declaration recognizing the Right to a Flag of States having No Sea Coast*, Geneva 1921, p. 462.

¹²³ *Ibid.*, p. 421, and League of Nations, *Preparatory Documents, op. cit.*, p. 69.

¹¹⁸ *League of Nations Treaty Series*, vol. VII, pp. 67 *et seq.*

quoted above. In the course of the discussion of the draft submitted by the Commission—which was adopted unanimously¹²⁴—the representative of Great Britain observed that

“Certain difficulties are attendant upon the making of a Convention on this subject. . . . It may be claimed that the right to a flag cannot be granted in a Convention which is open to denunciation. Legal difficulties might ensue. The vessels flying the flag of Switzerland, for example, might be considered as pirates. The opinion of the jurists is then that a declaration must be drafted.”

158. The Conference concurred with this point of view and at its thirtieth meeting Mr. M. Valloton stated in his report, which was adopted unanimously, that the Committee on Navigable Waterways, after having adopted unanimously and without discussion the juridical principle contained in the draft convention, considered “that by means of an international declaration of a permanent character a higher juridical value could be secured for this recognition of the right to a flag of States which do not possess a sea coast”.¹²⁵

159. In consequence of this Declaration, the Swiss Confederation took the necessary action to give practical effect to these principles. The relevant texts have been published by the Swiss Federal Chancellery.¹²⁶

(iv) *Recommendations relating to the International Régime of Railways and to ports placed under an international régime*; ¹²⁷ *subsequent treaties*

Railways

160. The Barcelona Conference adopted, in addition, recommendations relating to the two matters mentioned above. The Conference proposed, with respect to railways, that States should adopt the following principles to govern railway traffic: ¹²⁸

(1) The international transport of goods should be facilitated by measures providing for:

(a) Through transport on the basis of a single waybill, subject throughout to the same obligations;

(b) Treatment of goods during the journey;

(c) Transshipment;

(d) The form in which international tariffs are to be established and the conditions of their application;

(2) The adoption by the Contracting States of measures to facilitate the international transport of passengers;

(3) The adoption by States of measures to facilitate the exchange of their rolling-stock;

(4) The adoption of the principle of non-discrimination with respect to passengers and goods;

¹²⁴ League of Nations, Conference of Barcelona, *Verbatim Records and Texts*, etc., sixteenth meeting of the Committee on Navigable Waterways, pp. 380 *et seq.*

¹²⁵ *Ibid.*, p. 384.

¹²⁶ *Recueil systématique des lois et ordonnances 1848-1947*, Berne 1951, vol. 7, pp. 502 *et seq.*

¹²⁷ League of Nations, Barcelona Conference, *Verbatim Records and Texts of the Recommendations Relative to the International Régime of Railways and of the Recommendations Relative to Ports Placed under an International Régime*, Geneva 1921.

¹²⁸ *Ibid.*, pp. 216-217.

(5) The creation of international bureaux which shall exchange any useful information relating to the exercise of their functions with the League of Nations.

161. These principles received concrete expression at the Second General Conference on Communications and Transit (Geneva, 15 November to 9 December 1923) in a Convention adopted by that Conference.¹²⁹ Like the Conventions on Freedom of Transit and the Régime of Navigable Waterways (*vide supra*), the Convention on the International Régime of Railways consists of the text of the Convention itself and of the Statute which, according to article 1 of the Convention, constitutes an integral part of the latter. It is hardly necessary at this point to discuss the instrument in detail; it consists of forty-four articles and its object is to give effect to the principles concerning transit laid down by the Barcelona Conference.

162. It should be noted, however, that by virtue of article 4, paragraph 2, the Contracting States undertook “... to give reasonable facilities to international traffic and to refrain from all discrimination of an unfair nature directed against the other Contracting States, their nationals or their vessel”; that the same provision recurs in article 20 (in the section dealing with scales of charges); that articles 35 and 36 contain the stipulations (considered above in another context) dealing with the settlement of disputes—conciliation and, if conciliation should fail, jurisdiction vested in the permanent Court of International Justice; and that the Protocol of Signature states: “that any differential treatment of flags based solely on the consideration of the flag should be considered as discrimination of an unfair nature in the sense of articles 4 and 20 of the Statute...”

Ports placed under an international régime ¹³⁰

163. The Barcelona Conference, while considering that the moment had not yet arrived for the conclusion of a general convention on the régime of ports, recommended that the following provisions should be applied:

“to the ports or parts of ports, with or without free zones, which may be placed under an international régime...”

“(i) The nationals, property and flags of all nations shall enjoy complete freedom in the use of the port and shall be treated on a footing of absolute equality (article 1);

“(ii) This principle of equality shall also apply to charges imposed for the use of the port (article 2);

“(iii) In principle, the State in whose territory the port is situated shall be under an obligation to take measures to facilitate the operation of vessels in the port and to undertake works for upkeep and improvement (articles 3 and 4);

“(iv) In principle, the State which exercises sovereignty over the port shall be responsible for its administration. Similarly, the jurisdiction in administrative, civil, commercial or penal matters shall be that of that State (articles 5 and 6);

¹²⁹ League of Nations, Document C.28.M.14.1924.VIII, pp. 85 *et seq.*, and official text in *League of Nations Treaty Series*, 1926, vol. XLVII, pp. 57 *et seq.*

¹³⁰ League of Nations, Barcelona Conference, *Verbatim Records and Texts Relative to... the Recommendations Relative to Ports Placed under an International Régime*, Geneva 1921, pp. 241-244.

“(v) With respect to free zones, persons, goods, etc. proceeding to such a zone or to a third State shall be considered in transit across the territory of the State in which the port is situated (article 11);

“(vi) Any dispute concerning these principles shall be submitted to arbitration and, if necessary, to the judgement of the Permanent Court of International Justice (article 15)”.

164. These principles were incorporated in a Convention and a Statute on the International Régime of Maritime Ports, which were adopted at the Second General Conference on Communications and Transit (Geneva, 15 November to 9 December 1923).¹³¹

165. This Convention, like those summarized above, referred in its preamble to article 23 (e) of the Covenant of the League of Nations and declared that the signatory States were desirous of ensuring, in the fullest measure possible, freedom of communications “by guaranteeing in the maritime ports...for purposes of international trade equality of treatment between the ships of all the Contracting States, their cargoes and passengers”.

166. The signatories adopted the Statute annexed to and forming an integral part of the Convention. The provisions of the Convention are, *mutatis mutandis*, similar to those of the Convention on the International Régime of Railways.

167. Article 1 of the Statute defines “maritime ports” in these terms: “All ports which are normally frequented by sea-going vessels and used for foreign trade...” All vessels in these ports are guaranteed the fullest equality of treatment—subject to the principle of reciprocity—“...as regards freedom of access to the port, the use of the port and the full enjoyment of the benefits as regards navigation and commercial operations which it affords to vessels, their cargoes and passengers” (article 2). By article 8, paragraph 1, the signatories reserved the power of suspending the benefit of equality of treatment from any vessel of a State which does not apply the provisions of the Statute. Article 5 states that equal treatment shall be given to vessels of all flags in the assessment and application of customs duties. In addition, articles 4, 20, 21 and 22 of the Statute on the International Régime of Railways (*vide supra*) are declared to be applicable “in order that the principle of equal treatment in maritime ports laid down in article 2 may not be rendered ineffective...” (articles 5 and 6). Unless there are special reasons justifying an exception, the customs duties levied in the ports may not exceed those levied at customs frontiers (article 7).

The Statute applies to all vessels, whether publicly or privately owned, with the exception, however, of warships or vessels performing police or administrative functions (article 13). Article 21 contains the customary clause respecting arbitration and the compulsory jurisdiction of the Permanent Court of International Justice.

168. Some of the provisions of the Protocol of Signature should be mentioned. For example, paragraph 1 states that the Statute applies “to ports

of refuge specially constructed for that purpose”, and paragraph 4 is of direct interest to States not having a sea coast, for it states:

“(4) It is understood that the conditions of reciprocity laid down in article 2 of the Statute on the International Régime of Maritime Ports shall not exclude from the benefit of the said Statute Contracting States which have no maritime ports and do not enjoy in any zone of a maritime port of another State the rights mentioned in article 15 of the said Statute”.¹³²

(v) *Clauses relating to state of emergency and war*

169. All the instruments discussed above contain clauses in analogous terms relating to the right reserved to the Contracting States to suspend or restrict, in certain circumstances, the application of the liberal régime in question. For example, article 16 of the Statute on Maritime Ports provides:

“Measures of a general or particular character which a Contracting State is obliged to take in case of an emergency affecting the safety of the State or the vital interests of the country may, in exceptional cases, and for as short a period as possible, involve a deviation from the provisions of articles 2 to 7 inclusive; it being understood that the principles of the present Statute must be observed to the utmost possible extent.”

and article 18 states:

“This Statute does not prescribe the rights and duties of belligerents and neutrals in time of war. The Statute shall, however, continue in force in time of war so far as such rights and duties permit.”

Conclusion

170. This study has dealt with certain aspects of the problems of the access of land-locked countries to the sea, both from the theoretical and from the practical point of view. The subject is vast and touches on a large number of related questions—freedom of the sea, freedom of passage across the territorial sea, the use of maritime ports open to commerce, the equal treatment of the users of those ports, communication by road, rail and air across countries whose territories block the access of other countries to the sea.

171. The learned authorities have built up many theories to provide the access to the sea with a basis in doctrine. Some hold that access is a right conferred by nature on every country; others consider that the principle of the freedom of the sea is the foundation of access; and yet others take the view that a country without a sea coast is the beneficiary of a servitude of passage across a country having a sea coast.

172. In this connexion, the multilateral conventions concluded under the auspices of the League of Nations at Barcelona and Geneva testify to the progress of the idea that land-locked countries should be assured of free access to the sea and that such access should be provided

¹³² Article 15, paragraph 1, provides:

“When in virtue of a treaty...or agreement, a Contracting State has granted certain rights to another State within a defined area in any of its maritime ports for the purpose of facilitating the transit...no other Contracting State can invoke the stipulations of this Statute in support of any claim for similar special rights.”

¹³¹ League of Nations, Document C.29.M.15.1924.VIII, pp. 97 *et seq.*, and *League of Nations Treaty Series*, vol. LVIII, 1926-1927, No. 1379, pp. 287 *et seq.*

for both in their interest and in the interest of the international community.

173. The practice of States has evolved a number of principles which find tangible expression in multilateral and bilateral treaties and of which the most important are :

- (1) The principle of freedom of transit ;
- (2) The principle of non-discrimination, irrespective of the origin and destination of the goods and passengers in transit ;
- (3) The principle that persons and goods in transit should not be subjected to any vexatious formalities and that the charges payable by or in respect of them should be the same as those payable by other users.

In principle, these rules apply to traffic by whatever means of communication are chosen — rail, air or river. Ever since the Congress of Vienna, rivers have been governed by various regulations. International river commissions have been set up, composed of riparian and non-riparian States, which possess virtual administrative, police and regulatory powers and a very large measure of autonomy *vis-à-vis* the Governments which formed them. These bodies have proved their usefulness as instruments for carrying out the collective will of

the States in a field which is of particular importance for the well-being of all.

174. Lastly, it should be noted that all the conventions referred to above contain general clauses providing for conciliation, arbitration and recognition of the compulsory jurisdiction of the Permanent Court of International Justice. These are useful provisions, for transit and access to the sea are capable of being divorced, in the interest of all States, from ephemeral political considerations and of forming the subject of arbitration — in the broad sense of the term — in the event of disputes between States.

175. Altogether, despite the imperfections discernible in it, the work accomplished under the auspices of the League of Nations is of undeniable value and the principles laid down in the instruments referred to can serve as a starting point for fresh advances in the field of freedom of transit, a freedom which is indispensable to the peaceful development of international relations.

176. From the numerous treaties and conventions considered, it would appear that there are a few, but sufficiently clear, rules which could no doubt serve as a basis for the framing of new provisions allowing to land-locked States an unquestioned right of access to ports and to the open sea — a right which those States need if they are to achieve full economic development.

ADDENDUM *

177. *The following additional information was received from the delegations of Bolivia, Czechoslovakia and Luxembourg after the memorandum (A/CONF.13/29) had been issued.*

1. Additional information concerning paragraphs 77-81 ¹³⁸

(Paragraph 77) Treaties between Bolivia and Argentina

Under article 21 of the Convention on Economic, Financial and Cultural Co-operation of 26 March 1947, "the means of transport of each of the High Contracting Parties shall enjoy in the territory of the other the most favourable treatment permissible under their respective laws". Under article 23, the two countries agreed to grant each other for a period of fifty years freedom of transit for all kinds of products and goods imported through their territories from third countries. This privilege also applied to the products and goods of either country entering the other in transit when returning to their country of origin. Under article 24, each country granted the other the necessary permission and

facilities to establish special zones and free warehouses in its river or inland ports, subject to local laws and regulations. Subsequent amendments to the above-mentioned Convention by the two Governments did not affect the provisions concerning transport and transit.

On 9 September 1954 an Economic Union Agreement was concluded, subsequently amended by the Argentine-Bolivian Commercial and Payments Agreement of 11 December 1956. Under article 1 of the latter, the two countries agreed to take the necessary steps to facilitate the import and export of their goods and products in which they normally trade. They also agreed to co-ordinate transport services in such a way as to promote such trade.

Lastly, it was agreed by an Exchange of Notes of 21 December 1957, signed on the occasion of President Aramburu's visit to Bolivia, to convene a meeting of

* Circulated as document A/CONF.13/29/Add.1, dated 3 March 1958.

¹³⁸ Supplied by the Bolivian delegation.

government representatives and railway, customs and immigration experts from Bolivia and Argentina to work out a system and propose a Rail Traffic and Rolling-Stock Agreement which, in keeping with the best international practices as regards combined railway services, would enable the railway lines of both countries to be more fully co-ordinated. Apart from these provisions, it should be noted that on various occasions the Argentine Government has offered to grant free warehouses and zones in the port of Rosario to facilitate Bolivian imports and exports through that port.

(Paragraph 78) Treaties between Bolivia and Brazil

The Treaty on the Export and Supply of Bolivian Petroleum, concluded at Rio de Janeiro on 25 February 1938, granted the fullest possible transit facilities, in accordance with international doctrine and existing treaties between Bolivia and Brazil, for the export of Bolivian petroleum and its derivatives through Brazilian territory. It was agreed that no national, State or municipal taxes should be levied on Bolivian liquid fuels in transit through Brazil and that Brazilian railway tariffs for their carriage should in no case be higher than those applied to petroleum and its derivatives from other sources consigned to Brazil.

By note of 28 June 1943, the Republic of Brazil informed Bolivia of its intention to establish in the port of Santos a free zone for the warehousing of goods consigned to or from Bolivia as soon as the Brazil-Bolivia railway came into public service.

At a meeting of the Bolivian and Brazilian economic delegations held at La Paz from 11 January to 23 February 1957, an instrument was signed (on 22 February) whereby the two Governments were recommended to conclude a Frontier Trade Agreement and an Agreement for the Establishment at Santos of Free Warehouses and Wharfs for Goods exported or imported by Bolivia. It was also recommended that an Exchange of Notes be signed laying down rules concerning freedom of transit between the two countries, additional to the provision then in force.

(Paragraph 79) Treaties between Bolivia and Chile

On 1 and 2 June 1950, Mr. Walter Larrain, the Chilean Chancellor, and Mr. Alberto Ostria Gutiérrez, Ambassador at Santiago, exchanged Notes in which — after referring to the orientation of Chile's international policy with respect to Bolivia's desire to obtain its own outlet to the Pacific Ocean, and recalling the terms of the Treaty of 18 May 1895 and the instrument of 10 January 1920, signed but not ratified by the legislatures; and the statements made by Mr. Agustín Edwards, Chilean delegate to the League of Nations, in 1920, by President Arturo Alessandri in 1922, and by Mr. Luis Izquierdo, Minister for Foreign Affairs, in 1923; and also the reply by Mr. Jorge Matte to Mr. Secretary of State Kellogg's proposal of 15 April 1926 that Chile and Peru should cede Tacna and Arica to Bolivia — Mr. Walter Larrain stated that his Government, bearing this situation in mind, and imbued with fraternal sentiments towards Bolivia, "is prepared formally to enter into direct negotiations with a view to seeking

a formula whereby Bolivia can be given its own sovereign outlet to the Pacific Ocean, and Chile can obtain compensation not of a territorial character but in a form which effectively meets its interests". In the above-mentioned Note, Chile offered to consult with Peru under the Protocol of 3 June 1929 to that end.

In January 1953, as the outcome of talks held at Arica, Mr. Guevara and Mr. Olavarria, the Chancellors of Bolivia and Chile respectively, signed an instrument stating that Bolivian goods in transit through Chilean territory should not be subject to the jurisdiction of the Chilean administrative and judicial authorities.

The Treaty on Bolivian-Chilean Economic Co-ordination, signed at Arica on 3 January 1955, provided that an agreement should be concluded, broadening and simplifying the present system of freedom of transit for goods exported from either country through the territory of the other to third countries. "The said system would likewise include the necessary facilities for the conveyance from either country through the territory of the other of goods coming from third countries". At the same time, in view of its importance for the economies of both countries, and in accordance with existing treaties on freedom of transit, both Governments agreed to grant each other facilities for the construction and operation by the *Yacimientos Petrolíferos Fiscales Bolivianos* of a pipeline between Oruro and Arica, to supply petroleum to consumers in Chile and provide an outlet to other markets.

Under the Additional Protocol signed at La Paz on 14 October 1955, the provision concerning the construction of the pipeline was amplified in the following terms: "Both Governments agree to provide all the necessary facilities for the construction, maintenance and operation, by the *Yacimientos Petrolíferos Fiscales Bolivianos* or by any private undertaking licensed by the Government of Bolivia, of pipelines linking Bolivian territory with the port of Arica or any other Chilean port". Under the same Protocol, Chile had first claim on Bolivian petroleum conveyed by the said pipelines. Methods of payment, in United States dollars, for Bolivian petroleum imported by Chile were laid down in an Exchange of Notes of 16 April 1956.

Referring to the above-mentioned documents, and announcing their approval by the Chilean National Congress, the Chilean Embassy at La Paz informed the Bolivian Chancellery, by Note of 22 March 1957, that the need for ratification by the Chilean Congress, an internal legal requirement in Chile, did not affect the Treaty and Additional Protocols or "the obligations concerning freedom of transit solemnly contracted by Chile with Bolivia in conformity with the existing Treaties between the two countries"; nor did it "affect the general facilities for pipelines constructed and operated by the *Yacimientos Petrolíferos Fiscales Bolivianos*, or by any private undertaking licensed by the Government of Bolivia, to terminate at Arica or any other Chilean port".

Lastly, by Notes of 23 April 1957 concerning details of the pipeline from Sicasica to Arica in the Chilean sector it was provided that the works should as far as possible be constructed on Chilean fiscal territory, the land being granted free of charge to the *Yacimientos*

Petrolíferos Fiscales Bolivianos in the form of a concession for the period during which the pipeline was in operation and that, should it become necessary to expropriate or to impose obligations, the Chilean Government would lease the land to the *Yacimientos Petrolíferos Fiscales Bolivianos*, which would pay any compensation involved.

(Paragraph 80) Treaties between Bolivia and Paraguay

On 20 October 1939, the Protocol on Economic Co-operation and Transit Facilities was signed, under which, for the purpose of promoting the development of natural resources, transit and trade between the two Republics, it was agreed to construct an overland means of communication between them.

The Joint Bolivian-Paraguayan Commission, which met on 10 November 1939, recommended a study of freedom of transit in accordance with the Peace Protocol of 12 June 1935 and the Final Treaty on Peace, Friendship and Boundaries of 21 July 1938.

An Agreement for the Construction of a Pipeline through the Paraguayan Chaco for the conveyance of Bolivian petroleum to a navigable port on the River Paraguay was signed on 16 November 1943. On the same date, Bolivia and Paraguay signed a Protocol on International Co-operation, under which the two Governments, bearing in mind the difficulties involved in the land-locked position in which their countries were situated "agreed on co-operation and mutual aid

in their friendly negotiations, in accordance with existing international covenants and in harmony and solidarity with the other nations of the continent". In addition, by an Exchange of Notes also signed on 16 November 1943, it was agreed to set up a Joint Bolivian-Paraguayan Commission for the implementation of article 7 of the Treaty on Peace, Friendship and Boundaries of 21 July 1938, which definitively proclaimed that "Paraguay guarantees the fullest freedom of transit through the Puerto Casado zone for products from and to Bolivia, with the right to establish customs offices and to construct depots and warehouses".

The Agreement on Pipelines and Petroleum to Paraguay, concluded between the two countries on 21 December 1956, repeated the undertaking that the fullest freedom of transit would be afforded for Bolivian petroleum through Paraguayan territory.

(Paragraph 81) Treaties between Bolivia and Peru

Under the Declaration signed at Lima on 30 July 1955, in which the Governments of Bolivia and Peru reiterated their intention to develop and improve communications between the two countries, it was agreed to conclude a Treaty on Common Traffic which "in the light of the reciprocal facilities already available to both countries, will take due account of the future utilization of the proposed highways and railway and will explicitly provide full and unrestricted freedom of transit between the two countries, so that Bolivia will be able to use all ports and means of communication in Peru".

2. Communications Agreement between the Polish People's Republic and the Czechoslovak Republic, signed at Prague on 13 January 1956

This Agreement abrogated and superseded the Agreement concluded between the two countries on 4 July 1947 (see paras. 92-102 of the memorandum).

Considering the general development of economic co-operation between Poland and Czechoslovakia, particularly in the fields of maritime and inland waterway navigation and railway transport, the State Council of the Polish People's Republic and the President of the Czechoslovak Republic have decided to replace the Polish-Czechoslovak Communications Agreement, signed at Prague on 4 July 1947, by a new communications agreement designed to meet the present economic requirements of the two States and have appointed for that purpose as their plenipotentiaries:

The State Council of the Polish People's Republic:

Mr. Mieczyslaw Popiel, Minister of Navigation;

The President of the Czechoslovak Republic:

Mr. Antonin Pospisila, Minister of Communications,

Who, having exchanged their full powers, found in good and due form, have agreed on the following provisions:

SECTION I

Sea transport

Article 1

(1) The two Contracting Parties shall, in accordance with

their economic requirements, create the conditions necessary for the proper utilization of Polish and Czechoslovak sea-going vessels.

(2) Poland shall, in accordance with its economic requirements, provide in Polish seaports the facilities necessary for Czechoslovakia to derive the greatest possible benefit from those ports.

Article 2

(1) Merchant vessels flying the Czechoslovak flag, hereinafter referred to as "Czechoslovak vessels", shall be permitted to use Polish seaports as technical shipping bases.

(2) In particular, Poland shall make available to Czechoslovak vessels space for the storage of materials necessary for their operation and maintenance, and shall permit them to use the repair services in workshops and dockyards and all other technical and classification services and to take on the necessary supplies of fuel, food, water, etc.

Article 3

(1) Czechoslovak vessels, vessels chartered by Czechoslovak undertakings and the cargoes of such vessels shall be accorded in the Polish seaports and in Polish internal maritime waters and territorial waters the same treatment as Polish vessels and cargoes.

(2) The vessels mentioned in the preceding paragraph shall not be entitled to engage in coastal shipping, fishing or any

other maritime operation in Polish internal maritime waters and territorial waters, nor shall they perform in Polish ports and roadsteads and on beaches such functions as piloting, towing, salvage and subsidiary services.

Article 4

Without prejudice to the provisions of article 5, the vessels mentioned in article 3 (1) shall be subject in Polish seaports and in Polish internal maritime waters and territorial waters to the provisions of Polish law, especially the provisions concerning public order and security, customs, foreign exchange, public health, veterinary services, plant protection, etc.

Article 5

(1) The national character of Czechoslovak vessels shall be determined in conformity with the provisions of Czechoslovak law.

(2) In Polish seaports and in the internal maritime waters and territorial waters of the Polish People's Republic, Czechoslovak vessels shall be subject to the provisions of Czechoslovak law concerning the fitting-out, installation, rescue equipment, measurements and seaworthiness of vessels, provided that those provisions do not conflict with the generally accepted principles of international law.

(3) Czechoslovak vessels shall not be subject in Polish seaports to any new measurement requirements and the amounts of port charges shall be determined on the basis of the measurement certificate issued or recognized by the Czechoslovak authorities.

Article 6

(1) Each of the Contracting Parties shall be entitled, in accordance with the economic requirements of the two States, to establish and maintain in the territory of the other Contracting Party undertakings the activities of which are connected with sea transport, provided that such undertakings comply with the legal provisions in force in that territory.

(2) Undertakings of either Contracting Party which engage in activities connected with sea transport may, provided that they comply with the conditions mentioned in the preceding paragraph, establish and maintain in the territory of the other Contracting Party enterprises, agencies, branches and other places of business.

Article 7

As regards free access to ports, commercial facilities granted in connexion with vessels and their cargoes, the facilitation of loading and discharging and the like, Poland shall accord to the Czechoslovak undertakings and places of business specified in article 6 the same treatment as it accords to Polish undertakings and places of business.

Article 8

(1) In effecting shipments of merchandise, the undertakings of the two Contracting Parties specified in article 6 shall act in close economic co-operation. Such co-operation shall also extend to mutual assistance and collaboration in the purchase, construction and repair of vessels, in the storage of cargoes, in giving assistance in the case of accidents, in the replacement of crew shortage and in granting *pratique* to sea-going merchant vessels.

(2) The scope and conditions of the co-operation referred to in the preceding paragraph shall be agreed upon by the above-mentioned undertakings. Where necessary, such undertakings shall hold joint consultations.

SECTION II

Transport on Inland Waterways

Article 9

(1) Each of the Contracting Parties shall grant inland navigation undertakings of the other Contracting Party the right to use specified inland waterways in its territory for the conveyance of goods, passengers and baggage between the two States and for transit traffic.

(2) Transport routes shall be determined by special agreement.

Article 10

Navigation on the inland waterways of either Contracting Party shall be open to vessels which are registered at a port of one of the Contracting Parties and which conform to the technical shipping standards required on the waterway concerned.

Article 11

Inland navigation vessels of either Contracting Party may use the inland ports of the other Contracting Party as technical shipping bases.

Article 12

(1) Vessels of either Contracting Party shall be subject to the legal provisions in force in the territory which they are traversing.

(2) The shipping traffic organized in the territory of one of the Contracting Parties by an inland navigation undertaking of the other Contracting Party shall be subject only to the restrictions arising out of legal provisions regarding public order and security, customs, public health, veterinary services and plant protection.

Article 13

In the event of accident, collision or other like occurrence, the two Contracting Parties shall give each other all possible assistance, including assistance in workshops and shipyards. The amount of assistance thus given shall be sufficient to enable the vessel concerned to return safely to its own waterways system.

Article 14

Ships' documents and documents concerning crews issued by the competent authorities of one of the Contracting Parties shall be recognizing by the other Contracting Party.

Article 15

The inland navigation undertakings of either Contracting Party may establish and maintain in the territory of the other Contracting Party:

- (a) Representatives' offices, agencies and branches;
 - (b) Repair yards; and
 - (c) Stores of technical supplies and materials,
- provided that they comply with the legal provisions in force in that territory.

Article 16

As regards the use of river and sea ports, specific transport routes, repair possibilities, supplies and the like, each of the Contracting Parties shall accord to the vessels and cargoes of inland navigation undertakings of the other Contracting Party and to their places of business as specified in article 15 the same treatment as it accords to the vessels and cargoes of its national undertakings and to their places of business.

SECTION III

Railway transport*Article 17*

With a view to the further improvement of railway communications and the proper utilization of rolling stock, each of the Contracting Parties shall :

(a) Endeavour to ensure convenient railway connexions for mutual and transit communications ;

(b) Ensure the speedy completion of all formalities connected with the conveyance of passengers, baggage and goods through frontier crossings and, by mutual agreement, endeavour to simplify those formalities in such a manner that trains shall pass through frontier stations with the minimum of delay ;

(c) Provide for the rapid, safe and regular railway transport of passengers, baggage, goods and express consignments ;

(d) Arrange for the speedy return of railway cars of the other Contracting Party which are present in its territory.

Article 18

The two Contracting Powers shall endeavour to fix the number of routes and frontier crossings, as well as the timetables, that shall ensure the most favourable conditions for railway transport.

SECTION IV

Joint provisions*Article 19*

Each Contracting Party shall submit to the other Contracting Party all plans concerning the transit of goods through its territory. The volume of goods covered by such plans shall be determined by mutual agreement with due regard to the economic requirements of the country effecting transit and to the capacity of the means of transport and installations at the disposal of the country through which transit is effected.

Article 20

Undertakings and places of business of each of the Contracting Parties, as specified in articles 6 and 15, shall be entitled to employ in the territory of the other Contracting Party nationals of either Contracting Party and nationals of third countries, subject to the regulations concerning the crossing of the State frontier and residence in the territory of the other Contracting Party.

Article 21

Holders of Czechoslovak seamen's books and, in the case of navigation on inland waterways, holders of boatmen's books or persons whose names have been entered therein, shall be entitled to cross the State frontier at places designated for that purpose, in conformity with the provisions stipulated in a special agreement.

Article 22

(1) Undertakings and places of business of each Contracting Party, as specified in articles 6 and 15, shall be exempt in the territory of the other Contracting Party, on a basis of reciprocity, from taxes on income from and turnover of transport activities in the territory of the other Contracting Party and from taxes on their property in that territory.

(2) Save as provided by special agreements, the above-mentioned exemption shall not apply to any activity which is not directly connected with transport effected by the under-

takings and places of business specified in the preceding paragraph or to any non-transit transport which they may effect between river ports of the other Contracting Party (cabotage).

Article 23

(1) Subject to compliance with the regulations concerning public order and security, health, and animal and plant protection, the two Contracting Parties shall grant each other mutual exemptions from customs duties and customs charges and from restrictions on imports and exports in respect of :

(a) Sea-going and non-sea-going vessels with standard equipment and fittings, spare parts, instruments, fuel, lubricants in quantities corresponding to normal requirements, food supplies for the crew and other necessary supplies for use on the vessel ;

(b) Cargoes imported by any means of transport belonging to one of the Contracting Parties and conveyed through the territory of the other Contracting Party ;

(c) Articles conveyed for the equipment, maintenance or repair of sea-going or non-sea-going vessels and articles imported for the equipment of shipping undertakings or their representatives' offices, agencies, branches or other places of business with a view to conducting shipping business.

(2) Detailed provisions concerning the customs exemptions referred to in the preceding paragraph shall be drawn up by agreement between the customs authorities of the two Contracting Parties.

(3) The customs authorities of the two Contracting Parties shall reach a mutually satisfactory agreement regarding customs concessions and exemptions to be granted to members of crews and the members of their families importing articles for personal use.

Article 24

(1) The exemption from customs duties and customs payments shall not apply to fees for services.

(2) Articles which have been exempted from customs duties and customs payments may not be resold to any other person in the territory into which they have been imported. The customs authorities may take measures to ascertain whether such articles have been used for the declared purpose.

(3) The customs offices of the country of transit may examine any transit cargo or order that it be accompanied by an official guard.

Article 25

In order to ensure that this Agreement is duly carried into effect and to create conditions conducive to the further development of co-operation, the interested authorities and the undertakings of the two Contracting Parties shall hold joint consultations ; such consultations shall be called at the request of either Party.

SECTION V

Final provisions*Article 26*

If at any time during the term of this Agreement either of the Contracting Parties asks for a revision of all or any of the provisions thereof, the other Contracting Party shall be bound to open negotiations not later than three months from the date of submission of a proposal for revision.

Article 27

This Agreement is subject to ratification and shall enter into

force on the date of the exchange of the instruments of ratification, which shall take place at Warsaw.

Article 28

This Agreement is concluded for a period of five years from the day of its entry into force. It shall be automatically extended for successive periods of five years, unless one of the Contracting Parties denounces the Agreement not later than one year before the expiry of any given five-year period.

Article 29

This Communications Agreement shall supersede the Polish-Czechoslovak Communications Agreement signed at Prague on 4 July 1947.

On the entry into force of this Agreement, all Polish-Czechoslovak agreements concluded in connexion with the aforesaid Communications Agreement of 4 July 1947 shall cease to have effect.

This Agreement was drawn up at Prague on 13 January 1956, in duplicate, in the Polish and Czech languages, both texts being equally authentic.

IN FAITH WHEREOF the aforesaid plenipotentiaries have signed this Agreement and have affixed thereto their seals.

For the Polish People's Republic :

(Signed) M. POPIEL

For the Czechoslovak Republic :

(Signed) A. POSPISILA

Government declaration of 16 November 1956 concerning the exchange of the instruments of ratification of the Communications Agreement between the Polish People's Republic and the Czechoslovak Republic, signed at Prague on 13 January 1956.

Notice is hereby given that, pursuant to article 27 of the Communications Agreement between the Polish People's Republic and the Czechoslovak Republic, signed at Prague on 13 January 1956, the exchange of the instruments of ratification of the aforesaid Agreement took place at Warsaw on 14 September 1956.

For the Minister of Foreign Affairs :

(Signed) J. WINIEWICZ

3. List of Clauses having a bearing on the question of free access to the sea of land-locked countries, contained in the treaties establishing an economic union between Belgium and Luxembourg and between the Benelux Group of States

In the Convention of 25 July 1921 establishing an economic union between Belgium and Luxembourg, this question is governed by articles 3 and 9, which read as follows:

Article 3

Except as otherwise provided in the present Treaty, commerce between the countries of the Union shall be entirely free and unrestricted and subject to no import, transit or export limitations or prohibitions nor to duties or charges or any kind.

The subjects of one of the States of the Union, who are settled or reside temporarily in the territory of the other State, or make use of the territory of that State or its land, water or air transport installations, may not be subjected in the latter State, either in respect of the produce of their agriculture, trade, industry, capital or labour, or in respect of the agricultural, commercial, industrial or financial operations, or of the trades and professions which they practise in that State, or in respect of the transport of their merchandise, persons or property, to methods of taxation, traffic regulations, duties, charges, tariffs, taxes or licences, under whatever name they may be described, other than those which may be applied to nationals; and the privileges, immunities or benefits of any description whatever enjoyed by the nationals of one of the Contracting Parties as regards trade or industry shall be shared by the nationals of the other.

Merchants, manufacturers and their representatives who are established in one of the contracting States may make purchases in the other State to meet their commercial and industrial requirements and may obtain orders, with or without samples, but without actually introducing the goods for sale, and they shall not be liable in that State to any trade licence or tax if they furnish satisfactory proof that they themselves, or the firm

which they represent, have complied with all the obligations imposed in this connexion by the country in which they are established.

Article 9

Each of the High Contracting Parties reserves the right to issue such decrees prohibiting traffic and movement as it may deem necessary in the interests of law and order or for sanitary reasons, more particularly to prevent the spread of epidemics and epizootic diseases or to protect agriculture from the introduction or propagation of noxious insects, provided always that such prohibitions do not affect traffic between the Contracting States in any other way, or affect it more injuriously than they affect the internal traffic of the State which has resorted to them.

Licences or permits for the transport of dangerous goods, such as explosives, which have been issued by the competent authorities in Belgium shall be valid for the Grand-Duchy of Luxembourg and vice versa.

The movement of goods which are consigned to one of the States of the Union and are in transit through the territory of the other may under no condition be subjected to any hindrance or prohibition.

In the draft treaty establishing the Benelux Economic Union, the question of communications is governed by the articles reproduced below:

Article 2

1. The nationals of each of the High Contracting Parties shall be entitled to enter and leave the territory of the other Contracting Parties.

2. They shall enjoy, in that territory, the treatment accorded to nationals in regard to :

¹³⁴ This list was supplied by the delegation of Luxembourg.

- (a) Movement, sojourn and establishment ;
- (b) Economic and professional activities, including provision of services ;
- (c) Transactions relating to capital ;
- (d) Conditions of work ;
- (e) Benefit of social security ;
- (f) Taxes and dues of all kinds ;
- (g) Enjoyment of civil rights and legal and judicial protection of their person, rights and interests.

Article 3

1. The movement of goods, without distinction as to origin, place of consignment or destination, between the territories of the High Contracting Parties shall be exempt from all import and excise duties and from all other taxes, dues, fees or charges whatsoever.

2. Such movement shall also be exempt from all economic and financial prohibitions or limitations including quantitative, qualitative and exchange restrictions.

3. Goods originating in the territory of one of the High Contracting Parties shall enjoy, in the territory of the other Contracting Parties, the treatment accorded to national goods.

Article 4

The movement of capital between the territories of the High Contracting Parties shall be exempt from all prohibitions or limitations.

Article 5

1. The movement of services between the territories of the High Contracting Parties shall be exempt from all taxes, dues, fees or charges whatsoever.

2. Such movement shall also be exempt from all economic and financial prohibitions or limitations, including quantitative, qualitative and exchange restrictions.

Article 6

Without prejudice to the provisions of articles 2 to 5 inclusive of the present Treaty, the High Contracting Parties shall take joint action to ensure that freedom of movement is not unduly restricted by any legislative provision or regulation or any other provision of public law, including sanitary regulations.

Article 7

The High Contracting Parties shall take joint action to ensure that conditions of competition in their territory are not distorted by any legislative provision or regulation or any other provision of public law.

...

Article 85

The conditions under which nationals of the High Contracting Parties not settled in the territory in which they wish to offer their services may use national transport by road or inland waterway shall be determined by the Committee of Ministers.

Article 86

1. Transport of goods by road and occasional transport of passengers by road between the territories of the High Contracting Parties shall be subject to common rules for operation and supervision laid down by the Committee of Ministers. With a view to promoting the harmonious development of such transport of goods, the Committee of Ministers shall also adopt any necessary measures, including price-fixing measures.

2. The régime of regular transport of passengers by road between the High Contracting Parties shall be determined by the Committee of Ministers.

Article 87

1. In regard to international transport by road, except for occasional passenger transport, leaving the territory of a High Contracting Party for a country not a party, the Committee of Ministers shall lay down the conditions for admission of nationals of the High Contracting Parties not settled in the territory of that High Contracting Party.

2. The Committee of Ministers shall lay down rules for the operation and supervision of occasional transport of passengers by road leaving the territory of one of the High Contracting Parties for a country not a party.

Article 88

In regard to transport by road or inland waterway operated by nationals of the High Contracting Parties, each Party shall guarantee persons not settled in its territory treatment at least as favourable, compared with persons settled there, as the treatment accorded when the present Treaty enters into force.

Article 89

In regard to air transport, each of the High Contracting Parties shall pursue, without prejudice to the provisions of article 5 of the present Treaty, a liberal policy on the granting of commercial air rights to other Contracting Parties for the operation of regular international air services traversing its territory or within its territory.

Articles 34 and 35 of the Transitional Convention and article 9 of the Protocol giving effect to the Treaty of Union :

Article 34

Within a period not exceeding three years, the High Contracting Parties shall progressively abolish quantitative restrictions :

(a) Relating to transport of goods by road and occasional transport of passengers by road between their territories ;

(b) Relating to occasional transport of passengers by road from the territory of one of the High Contracting Parties to a country not a party.

Article 35

During a period of five years, the transport by water of river sand and gravel imported from the Netherlands into Belgium, may be carried on, as regards the utilization of river craft, in accordance with the procedure applicable to the import of sand and gravel at the time when the Treaty of Union entered into force.

Article 9

1. With a view to the implementation of articles 2, 5, 6, 7, 85 and 87 of the Treaty of Union, the High Contracting Parties shall endeavour to harmonize their legislative provisions and regulations and other provisions of public law relating to national transport by rail, road and inland waterway.

2. For the implementation of article 7 of the Treaty of Union, the High Contracting Parties shall abolish all measures of support or protection, operating through internal transport and favouring one or more undertakings or industries. This provision shall not apply to competitive rates.

3. When the Communications Commission, acting within its terms of reference, examines particular cases coming within the

scope of paragraph 2 above, it shall receive, confidentially, at the request of the delegates of one of the High Contracting Parties, any information required concerning the prices and conditions of transport applied.

4. For the purposes of article 68, paragraph (a), of the Treaty of Union, "charges" shall be understood to mean charges borne by transport undertakings which are in fact chargeable to the community, and taxes which are liable to distort conditions of competition between the different modes of transport. "Advantages" shall be understood to mean charges borne by the community which are in fact chargeable to transport undertakings.

5. No provision of the Treaty of Union shall prejudice :

(a) Measures taken or to be taken to implement principles adopted before the Treaty of Union entered into force by one of the High Contracting Parties, with a view to the financial reform of the national railways, provided that such measures

are in conformity with the provisions of article 68 of the Treaty of Union ;

(b) Credit facilities or other measures to promote the development or modernization of a particular mode of transport, provided that such facilities or measures do not affect commercial relations between the High Contracting Parties in a manner incompatible with the aims of the Union.

6. In regard to air transport, the High Contracting Parties shall apply the provisions of article 9 of the Treaty of Union, in particular to technical questions under study or discussion by international civil aviation organizations. At the request of one of the High Contracting Parties they shall examine the possibility and advisability of extending the co-ordination of policies to other questions and in particular to their relations with countries not Parties to the present Treaty.

Luxembourg, 21 November 1957.

COMMENTS BY THE INTERNATIONAL CIVIL AVIATION ORGANIZATION ON THE
DRAFT ARTICLES CONCERNING THE LAW OF THE SEA ADOPTED BY THE
INTERNATIONAL LAW COMMISSION AT ITS EIGHTH SESSION *

[Original text : English]
[24 January 1958]

1. The articles concerning the Law of the Sea prepared by the International Law Commission contain certain provisions which either directly relate to international air navigation and the right to fly, or are specifically stated as applying to aircraft, or, although intended to apply to ships, are so drafted that they could either by interpretation or by analogy be considered as capable of application to aircraft also. Insofar as concerns the aforementioned provisions of the articles in question, comments are made hereunder with a view to inviting attention to the provisions of the Convention on International Civil Aviation, 1944, on corresponding topics. Seventy-two States are parties to that Convention (see annex).

Article 1

2. As has been pointed out by the Commission in its Commentary, the Convention on International Civil Aviation of 1944 treats the territorial sea in the same way as other parts of State territory. The Convention uses the expression "territorial waters" and includes within the territory of a State the land areas and territorial waters adjacent thereto. The actual text (article 2) of the Convention reads as follows:

"For the purposes of this Convention the territory of a State shall be deemed to be the land areas and territorial waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such State."

Article 2

3. The rule of sovereignty over airspace is stated in article 1 of the Convention on International Civil Aviation, 1944, as follows:

"The contracting States recognize that every State has complete and exclusive sovereignty over the airspace above its territory."

Since "the territory" includes the territorial sea, the legal status of the airspace above the territorial sea is, under the Convention on International Civil Aviation, the same as that of the airspace over other parts of the territory of a State.

Articles 15, 16 and 17

4. The Convention on International Civil Aviation makes no distinction, in regard to passage by foreign

* This document contains comments transmitted to the Secretariat of the United Nations by a letter from the Secretary-General of ICAO, dated 17 January 1958.

aircraft through the airspace above the territory of a State, as between the subjacent area being the land area of that State or the territorial sea. States participating in the Convention have agreed to one another's civil aircraft¹ making flights through their airspace when such aircraft are not engaged in scheduled air services, in accordance with the terms of article 5 of the Convention.² Except within the limits of the grant under that article or under some special authorization, a foreign aircraft does not enjoy a right of aerial passage over the land area of a State or over the adjacent territorial sea.

Article 18

5. Foreign aircraft flying through the airspace above the territory of a State, including the territorial sea, must, under the terms of the Convention on International Civil Aviation,³ comply with the air regulations of the coastal

¹ This does not apply to State aircraft, that is to say aircraft used in military, customs and police services as to which Article 3 (c) of the Convention provides:

"No state aircraft of a contracting State shall fly over the territory of another State or land thereon without authorization by special agreement or otherwise, and in accordance with the terms thereof."

² Article 5 of the Convention on International Civil Aviation, 1944, reads:

"Each contracting State agrees that all aircraft of the other contracting States, being aircraft not engaged in scheduled international air services shall have the right, subject to the observance of the terms of this Convention, to make flights into or in transit non-stop across its territory and to make stops for non-traffic purposes without the necessity of obtaining prior permission, and subject to the right of the State flown over to require landing. Each contracting State nevertheless reserves the right, for reasons of safety of flight, to require aircraft desiring to proceed over regions which are inaccessible or without adequate air navigation facilities to follow prescribed routes, or to obtain special permission for such flights."

"Such aircraft, if engaged in the carriage of passengers, cargo, or mail for remuneration or hire on other than scheduled international air services, shall also, subject to the provisions of Article 7, have the privilege of taking on or discharging passengers, cargo, mail, subject to the right of any State where such embarkation or discharge takes place to impose such regulations, conditions or limitations as it may consider desirable."

³ See articles 11 and 12 of the Convention, which read as follows:

"Article 11 - Subject to the provisions of this Convention, the laws and regulations of a contracting State relating to the admission to or departure from its territory of aircraft engaged in international air navigation, or to the operation and navigation of such aircraft while within its territory, shall be applied to the aircraft of all contracting States without distinction as to nationality, and shall be complied with by such aircraft upon entering or departing from or while within the territory of that State."

"Article 12 - Each contracting State undertakes to adopt measures to insure that every aircraft flying over or maneuvering within its territory and that every aircraft carrying its nationality mark, wherever

State, but such regulations are to be applied to the aircraft of all contracting States without distinction as to nationality.

Article 19

6. The Convention on International Civil Aviation, while specifying certain conditions relating to airport and similar charges, provides: "No fees, duties or other charges shall be imposed by any contracting State in respect solely of the right of transit over or entry into or exit from its territory of any aircraft of a contracting State or persons or property thereon."⁴

Article 20

7. The question of crimes committed on board aircraft engaged in international air navigation and the detention and arrest of offenders is at present being studied by the Legal Committee of the International Civil Aviation Organization which has the function, among others, of preparing drafts of international air law conventions. No firm principles or draft articles on this subject have yet been developed.

Article 27

8. This article enunciates the principle of freedom to fly over the high seas. The existence of such freedom would not be denied if its exercise were subject to international regulations concerning safety of air navigation. Thus, with respect to the rules relating to flight and manoeuvre of aircraft, the Convention provides: "Over the high seas, the rules in force shall be those established under this Convention" (See article 12 of the Convention reproduced in footnote (3)). Accordingly, the Council of ICAO has adopted Annex 2 to the Convention on International Civil Aviation, entitled "Rules of the Air" and has specified that the Annex constitutes rules relating to the flight and manoeuvre of aircraft within the meaning of article 12 of the Convention and that, therefore, over the high seas those rules apply without exception.

Articles 28, 29, 30 and 31

9. The Convention on International Civil Aviation contains the following provisions concerning nationality and registration of aircraft:⁵

"Article 17 - Aircraft have the nationality of the State in which they are registered.

"Article 18 - An aircraft cannot be validly registered in more than one State, but its registration may be changed from one State to another.

"Article 19 - The registration or transfer of registration of

such aircraft may be, shall comply with the rules and regulations relating to the flight and manoeuvre of aircraft there in force. Each contracting State undertakes to keep its own regulations in these respects uniform, to the greatest possible extent, with those established from time to time under this Convention. Over the high seas, the rules in force shall be those established under this Convention. Each contracting State undertakes to insure the prosecution of all persons violating the regulations applicable."

⁴ See article 15 of the Convention.

⁵ Annex 7 to the Convention on International Civil Aviation contains detailed provisions concerning aircraft nationality and registration marks.

aircraft in any contracting State shall be made in accordance with its laws and regulations.

"Article 20 - Every aircraft engaged in international air navigation shall bear its appropriate nationality and registration marks."

Article 34

10. Certain provisions concerning water operations of aircraft, particularly concerning avoidance of collision and lights to be displayed, are included in Annex 2 (Rules of the Air) to the Convention on International Civil Aviation mentioned above.⁶

Articles 39, 40, 45 and 47

11. In the English text of these articles of the draft, the following expressions are used: "private aircraft", "government aircraft", "military aircraft" and "aircraft on government service". The Convention on International Civil Aviation uses the expressions "civil aircraft" and "state aircraft", the latter being defined as follows (article 3 (b)):

"Aircraft used in military, customs and police services shall be deemed to be state aircraft."

12. An aircraft can be a "civil aircraft" even if it is owned and operated by a government. As a matter of historical interest, it may be stated that the Convention Relating to the Regulation of Aerial Navigation (Paris, 1919) used the term "private aircraft" to describe all aircraft other than "military, customs and police aircraft",⁷ but that is otiose. In modern aviation practice, the expression "private aircraft" is used to describe such "civil aircraft" as are engaged in "private flying", which means flights which are performed without any remuneration by a person who does not operate a scheduled air transport service. A "civil aircraft", even if owned and operated by a government, is subject to the provisions of the Convention on International Civil Aviation (and also other international conventions on air law, such as the International Air Services Transit Agreement of 1944 and the Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface of 1952).

13. In the French text of the draft, however, the term "*aéronef d'Etat*" is used to describe government aircraft.

14. In drafting the proposed Convention on the Law of the Sea, note might be taken of the modern aeronautical practice and of the expressions "civil aircraft" (instead of "private aircraft") and "state aircraft" used in the Convention on International Civil Aviation, as explained above.

⁶ In para. 3.2.7.3 of the Annex it is provided that "In areas in which the International Regulations for Preventing Collisions at Sea are in force, aircraft on the water shall, in addition . . . comply with such other of the Regulations as are pertinent."

⁷ Article 30 of the Paris Convention of 1919 read as follows:

"The following shall be deemed to be state aircraft:

"(a) Military aircraft;

"(b) Aircraft exclusively employed in state service, such as posts, customs, police.

"Every other aircraft shall be deemed to be a private aircraft.

"All state aircraft other than military, customs and police aircraft shall be treated as private aircraft and as such shall be subject to all the provisions of the present Convention."

Article 42

15. This article appears to be consistent with the provisions of articles 17 and 19 of the Convention on International Civil Aviation (see paragraph 9 above).

Article 48, paragraph 3

16. Pollution of the airspace above the seas resulting from experiments or activities with radioactive materials or other harmful agents could be significant in respect also of the safety of aircraft operations.

APPENDIX

List of Parties to the Convention on International Civil Aviation

Afghanistan	Germany (Federal Republic of)	Netherlands
Argentina	Ghana	New Zealand
Australia	Greece	Nicaragua
Austria	Guatemala	Norway
Belgium	Haiti	Pakistan
Bolivia	Honduras	Paraguay
Brazil	Iceland	Peru
Burma	India	Philippines
Cambodia	Indonesia	Poland
Canada	Iran	Portugal
Ceylon	Iraq	Spain
Chile	Ireland	Sudan
China	Israel	Sweden
Colombia	Italy	Switzerland
Cuba	Japan	Syria
Czechoslovakia	Jordan	Thailand
Denmark	Korea (Republic of)	Tunisia
Dominican Republic	Laos	Turkey
Ecuador	Lebanon	Union of South Africa
Egypt	Liberia	United Kingdom of Great Britain and Northern Ireland
El Salvador	Libya	United States of America
Ethiopia	Luxembourg	Uruguay
Finland	Mexico	Venezuela
France	Morocco	Viet Nam (Republic of)

MEMORANDUM BY THE WORLD HEALTH ORGANIZATION ON DRAFT ARTICLE 66
CONCERNING THE LAW OF THE SEA ADOPTED BY THE INTERNATIONAL LAW
COMMISSION AT ITS EIGHTH SESSION

[Original text: English]
[28 February 1958]

1. Under article 66 of the draft concerning the law of the sea adopted by the International Law Commission at its eighth session, a coastal state would be entitled to exercise, within a zone of the high seas contiguous to its territorial sea, certain rights regarding the enforcement of its sanitary regulations.

2. In this connexion, the World Health Organization would wish to draw the attention of the Conference to the International Sanitary Regulations,¹ adopted by the World Health Assembly under article 21 (a) of the Constitution of the World Health Organization. These Regulations, which have as their object to ensure the maximum security against the international spread of disease with the minimum interference with world traffic, replace in whole or in part thirteen earlier conventions, agreements and protocols, including in particular the International Sanitary Convention signed in Paris on 21 June 1926.

3. With regard to the sanitary measures which are permissible under these Regulations as applicable to international traffic, attention is drawn in particular to the following articles;

"Article 23 - The sanitary measures permitted by these Regulations are the maximum measures applicable to international traffic, which a State may require for the protection of its territory against the quarantinable diseases."

"Article 32 - 1. No sanitary measure shall be applied by a State to any ship which passes through its territorial waters without calling at a port or on the coast.

"2. If for any reason such a call is made, the sanitary laws

¹ Official Records of the World Health Organization, 37, pp. 316, 335. The Eighth and Ninth World Health Assemblies in 1955 and 1956, amended the Regulations as regards the yellow fever provisions, the sanitary control of pilgrim traffic and the international certificate of vaccination or revaccination against smallpox.

and regulations in force in the territory may be applied without exceeding, however, the provisions of these Regulations."

"Article 44 - 1. Except as provided in paragraph 2 of this Article, any ship or aircraft, which is unwilling to submit to the measures required by the health authority for the port or airport in accordance with these Regulations, shall be allowed to depart forthwith, but it shall not during its voyage call at any other port or airport in the same territory. Such a ship or an aircraft shall nevertheless be permitted to take on fuel, water, and stores in quarantine. If, on medical examination, such a ship is found to be healthy, it shall not lose the benefit of Article 33.

"2. A ship or an aircraft arriving at a port or an airport situated in a yellow-fever receptive area shall not, in the following circumstances, be allowed to depart and shall be subject to the measures required by the health authority in accordance with these Regulations—

"(a) If the aircraft is infected with yellow fever;

"(b) If the ship is infected with yellow fever, and *Aedes aegypti* have been found on board, and the medical examination shows that any infected person has not been isolated in good time."

4. In the light of the limitation of the sanitary measures which may be applied by States to shipping, the World Health Organization would understand article 66 of the articles concerning the law of the sea as not implying the right of States to extend existing permissible sanitary measures, in particular in respect to transit traffic. Moreover, since medical inspection of ships and any consequent sanitary measures such as disinfecting or deratting can only be carried out effectively in ports equipped for the purpose, the World Health Organization believes that careful consideration should be given to the actual need for the special provisions envisaged in article 66 insofar as sanitary measures are concerned.

5. The States and territories bound by the International Sanitary Regulations are listed in the Annex.

ANNEX

List of States and territories to which article 32 of the International Sanitary Regulations applies

Aden Colony	Gilbert and Ellice Islands Colony	Poland
Aden Protectorate	Greece	Portugal
Afghanistan	Grenada (Windward Islands)	Portuguese Guinea
Albania	Guam	Portuguese India
American Samoa	Guatemala	Portuguese Timor
Angola	Haiti	Puerto Rico
Argentina	Honduras	Quatar
Austria	Hong Kong	Rhodesia and Nyasaland, Federation of
Bahamas	Iceland	Romania
Bahrein	India	Sao Tome and Principe
Barbados	Indonesia	Sarawak
Basutoland	Iran	Saudi Arabia
Bechuanaland	Iraq	Seychelles Islands
Belgian Congo and Ruanda Urundi	Ireland	Sierra Leone
Belgium	Israel	Somalia
Bermuda	Italy	Somaliland Protectorate
Bolivia	Jamaica	South West Africa
Brazil	Japan	Spain
British Guiana	Jordan, Hashemite Kingdom of	Spanish Guinea
British Honduras	Kenya	Spanish West Africa
British Solomon Islands Protectorate	Korea, Republic of	St Helena
British Virgin Islands	Kuwait	St Lucia (Windward Islands)
Brunei	Laos	St Pierre and Miquelon
Bulgaria	Lebanon	St Vincent (Windward Islands)
Cambodia	Leeward Islands	Sudan
Cameroons	Liberia	Surinam
Canada	Libya	Swaziland
Cape Verde Islands	Luxembourg	Sweden
Ceylon	Macao	Switzerland
China	Madagascar and dependencies	Syria
Colombia	Malaya	Tanganyika
Comoro Islands	Maldeve Islands	Thailand
Cook Islands	Mauritius	Togo
Costa Rica	Mexico	Tonga Islands
Cuba	Monaco	Trinidad and Tobago
Cyprus	Morocco	Trucial States
Czechoslovakia	Mozambique	Tunisia
Denmark	Nepal	Turkey
Dominica (Windward Islands)	Netherlands	Uganda
Dominican Republic	Netherlands Antilles	Union of South Africa
Ecuador	New Caledonia and dependencies	Union of Soviet Socialist Republics
Egypt	New Hebrides	United Kingdom of Great Britain and Northern Ireland
El Salvador	New Zealand	United States of America
Ethiopia	Nicaragua	Uruguay
Falkland Islands	Nigeria, Federation of	Vatican City
Fiji and Dependency	North Borneo	Venezuela
Finland	Norway	Viet Nam
France	Pacific Islands (United States Trust Territories)	Virgin Islands
French Equatorial Africa	Pakistan	West New Guinea
French Settlements in Oceania	Panama	Western Samoa
French Somaliland	Panama Canal Zone	Yemen
French West Africa	Paraguay	Yugoslavia
Gambia	Peru	Zanzibar
Germany, Federal Republic of	Philippines	
Ghana	Pitcairn Islands	
Gibraltar		