

Pacem in
MAREBUS

Quiet Enjoyment: Arms Control and Police Forces for the Ocean

Proceedings of the Preparatory Conference on
Arms Control and Disarmament

January 1970



CHAPTER 6

An Examination of the Existing Constabularies
And Inspectorates Concerning Themselves With
the Sea and the Seabed

by

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This paper is concerned with the ways in which rules, regulations and laws governing existing uses of the sea and the seabed are currently inspected and policed. By discussing present practice in non-military marine superintendence, we hope to throw light on certain of the political, economic, and technological problems which are likely to arise in the implementation of verification measures for disarmament agreements on the sea and seabed. Further, in designing such disarmament verification measures, it may be possible to make use of existing forces exercising a constabulary function in non-military marine matters, since from an economic point of view, existing police forces and inspectorates are able to extend their functions in a given area at a low marginal cost. The current role of national navies in non-military policing at sea is an illustration of this.

What follows has been written with these points in mind, but we have purposely left it to those directly concerned with marine disarmament provisions to make explicit the implications from the non-military discussion. We have confined ourselves to outlining what may be called the hardware of non-military marine constabulary forces: the vessels, instruments and people used to enforce marine laws and regulations. The main non-military uses of the sea with which we will be concerned are: (a) fishing and mariculture, (b) shipping, (c) pollution, (d) raw material exploration and development, (e) submarine cables and pipelines, (f) ocean data collection, (g) broadcasting, and (h) the infringements of national boundary legisla-

tion concerning customs, migration, and exchange control. The discussion will be concerned with territorial waters and other areas of the sea under national jurisdiction as well as with the high seas, since it is in the former that policing has been most fully developed.

One final introductory point should be made. While there is a considerable literature on the law of the seas, and some at least on enforcement provisions for particular branches of marine activity, there is little on the practical application of these provisions, and none, to our knowledge, which attempts to compare enforcement practice in the regulation of the various uses of the sea. The subject matter of this paper is, therefore, somewhat uncharted ground. We have not attempted to cover the whole area in detail: rather we thought it most useful to present two or three examples in each category of use, which, when gathered together, would serve to bring out the value of the comparative approach, and suggest ways in which the subject might be usefully developed. The present paper limits itself to the factual details. These have been gathered from interviews conducted mainly in London, from the replies to a questionnaire which was circulated through embassies and contacts abroad, and from a variety of printed sources.¹

¹ We would particularly like to thank Felix Graham-Jones and Mrs. Elizabeth Young for their help in the preparation of this paper. Among the many organizations who have given us help we would also particularly like to thank officials from the following: the Ministry of Agriculture and Fisheries, the Board of Trade, H.M. Customs and Excise, the Home Office, the British Immigration Service, the Ministry of Technology, the naval section of the U.S. Embassy, the Dutch Embassy, I.C.E.S., I.O.C., I.M.C.O., F.A.O., E.N.E.A., I.A.E.A., I.T.U., the Society for Underwater Technology, the North East Atlantic Fisheries Commission, the International Whaling Commission, the International Commission for North West Atlantic Fisheries, the International Pacific Fisheries Commission, the International North Pacific Fisheries Commission, the International Bureau for the Suppression of Traffic in Persons, the International Chamber of Shipping, the International Cable Protection Committee, TOVALOP, Shell, and Walter Levy Assoc. We are also most grateful to Miss Helen Beguin for her help in typing the manuscript.

Fishing

With a few exceptions, the policing functions of laws and regulations on fishing are performed by national forces. These forces have a double task: first of preserving the rights of their countries' fishermen when these are challenged by foreign fishermen or other sea users, and second of ensuring observance of laws and regulations by their own countries' fishermen.

(i) Constabulary Forces for Surveillance Within National Fishing Limits

Intra-limit fishing constabularies will clearly tend to vary according to the importance which a country attaches to maintaining intact her exclusive fishery limits. The failure to adopt standardized fishery limits was one of the features of the 1958 Geneva Conference, and the fact that the problem is still unsolved means that there remain widely divergent claims. A recent survey of 119 countries, indicates that of the 66 with known fishing limits, 8 claimed less than 12 miles, 38 claimed 12 miles, and 14 claimed more than 12 miles, 12 of these being claims exceeding 100 miles (see Appendix).² Given these divergencies, it remains true that most national constabularies are composed of patrol vessels plus onshore inspectorates, backed up in certain cases with aircraft reconnaissance. These vessels may specialize in fishery patrol, or be seconded from the national navy, or again be part of the national navy fulfilling the fishery patrol function at the same time as undertaking more general duties.

²See also: F.A.O. Limits and Status of the Territorial Sea, Exclusive Fishing Zones, Fishery Conservation Zones and the Continental Shelf. F.A.O. Legislative Series No. 8. Rome 1969.

The U.K. constabulary force, for example, consists of six coastal minesweepers which are allocated from the navy's fleet of minesweepers in an apparently ad hoc way. There tend to be only four of these in operation at any one time, and rather than being assigned to fixed and particular areas, they are all available to go to the area where they are needed. This flexibility appears to be the result of the shortage of patrol vessels since it is said that there tend to be more calls than can be answered by the existing fleet at short notice. In England and Wales, which is the main area covered by the minesweeper patrol, there are on average some twenty major incidents a year leading to prosecution by the Ministry of Agriculture, with guilty parties being subject to fines of up to 500 pounds plus, in a recent case, the confiscation of the catch.

The fishery patrol squadron is concerned above all with the prevention of unauthorized intrusion by foreign fishing vessels in the twelve mile limit. Within the three mile limit, local fishery committees have the responsibility for implementing national fishery legislation and local bylaws, and some of these run patrol vessels. In Scotland the Department of Agriculture and Fisheries for Scotland run a fleet of eight vessels for the superintendence of inshore fisheries along the Scottish coastline, whose activity has been principally concerned with illegal trawling and seining.³

There is, too, an onshore fishery inspectorate consisting, in England and Wales, of twenty inspectors and officers whose job is

³ Offshore grounds around Scotland are patrolled by a vessel assigned by the Ministry of Defense for protection duties in Scottish waters (in 1967 H.M.S. BELTON) together with other vessels from the naval fishery protection squadron, as well as the Scottish Department's own vessels. See: Fisheries of Scotland. Report for 1967. November, 1968. H.M.S.O. pp. 32-4.

to inspect equipment, make spot checks of fish sizes in the markets of major ports and also act as a fishery intelligence service.

The U.K. fishery constabulary thus appears far from homogeneous. The fishery patrol squadron is under the authority of the Ministry of Defense, as are the helicopters which are occasionally called out to survey suspected foreign poachers -- though these helicopters may come from either the army or navy. The inspectorate is under the Ministry of Agriculture, which is also the prosecuting body for infringements. Finally the Department of Agriculture and Fisheries in Scotland has its own superintendence fleet and legal powers.

We may note, however, that this division of powers does to some extent reflect the distinction in the function of fishing constabularies between the protection of the fishing rights of one's own nationals against foreign fishermen, and the ensuring of observance of fishing laws and regulations by one's own nationals. In the latter case, national land constabularies may be relied on for the seizure and arrest of infringers, whereas in the former case this is not so unless the foreign vessel puts in to the aggrieved country's port. Thus fishery patrols against foreign poaching have required the power, including fire-power, to arrest foreign vessels and this has often meant that naval ships are used, under the control of the military, for this purpose.⁴

(ii) Constabulary Forces for Surveillance Outside Agreed Fishing Limits.

The distinction of the last paragraph is operative also on the high seas. Here the protection of the rights of one's own

⁴ The use of fire-power has been known. In 1961 an Aberdeen Trawler off the Faroes, kidnapped a Danish fishery patrol boarding party, at which the Danish patrol vessel opened fire. See: U.K. Treaty Series No. 117. 1961. Command 1575.

national fishermen is in terms of ensuring their freedom to fish in certain waters, rather than the exclusion of foreign vessels. Britain again supplies an interesting example during her dispute with Iceland between 1958 and 1961. In September 1958 Iceland extended her exclusive fishing limits to twelve miles, an act which Britain claimed unfairly kept out British fishermen from traditional grounds. During the dispute Britain sent warships to support her fishing fleets against the armed Icelandic patrol vessels, and though the warships never in fact fired, there were fourteen cases where they prevented the Icelandic patrol boats from arresting British trawlers fishing within the twelve mile limit, either by ramming them or threatening to sink them.⁵ More generally, British frigates will accompany a British fishing fleet en passant for what officials refer to as "moral support."

The United States have defended, or attempted to defend, their fishermen's rights on the high seas in a less direct way. They have made a practice of lending naval vessels to foreign countries, but these loans are immediately terminated if the country to whom the loan was made is found to have seized a U.S. fishing vessel because it was fishing in what the U.S. recognizes as international waters.⁶

The enforcement of laws and regulations on one's national fishermen on the high seas can be carried out by (a) one's own national constabulary; (b) the constabulary of another state; (c)

⁵ For a detailed discussion of this dispute see: Morris Davis, Iceland Extends its Fisheries Limits. Universtitsforlaget, 1964.

⁶ Report of the Bureau of Commercial Fisheries for the Calender Year 1967, Washington 1969, p. 19.

an international constabulary. Although the laws and regulations which are here relevant are for the most part the result of multi-lateral fishery conventions⁷, the policing is still primarily "atomistic:" individual countries being responsible for policing their own vessels on the high seas.

The U.S.A. for example was at the end of 1967, party to seventeen fishery treaties and agreements. The enforcement of conformity to these by U.S. fishermen is in the hands of the U.S. Coast Guards and the Bureau of Commercial Fisheries. Apart from inspection vessels at sea, they organize overflights by planes which make vessel counts and check net size and quota observance by aerial photography. In 1967 officers from the Bureau of Commercial Fisheries alone traveled over 300,000 miles on aerial patrol and 100,000 miles on surface patrol in the Northwest Atlantic Ocean, the Bering Sea, the Gulf of Alaska, and off the Pacific Coast. The Bureau also made 5,200 dockside inspections in California, Puerto Rico, and New England to enforce regulations promulgated under the authority of the Tuna Convention Act and the Northwest Atlantic Fisheries Act.⁸

The International Whaling Commission, set up in 1946, operates entirely with atomistic policing. Contracting governments are required to provide a least two inspectors of whaling on board each

⁷ A full list of these conventions is not relevant here. For a catalogue of international bodies concerned with fishery management the reader is referred to the appendix of J.A. Gulland, "Management of Fishery Resources" in: ed. Sir Frederick S. Russel and Sir Maurice Yonge, Advances in Marine Biology (Vol 6) 1968. pp. 62-71. See also: J.E. Carroz and A.G. Roche, "The International Policing of High Seas Fisheries," The Canadian Yearbook of International Law 1968, pp. 61-90.

⁸ Report of the Bureau of Commercial Fisheries. op. cit. p. 26.

-102-

factory ship for the purpose of maintaining a twenty-four hour inspection. A system of inspection is also required at each land station. This form of inspection, which has operated from the early days of the Commission, has largely been limited to the measuring and typing of whales. Infractions against the provisions of the Commission as to the type and size of whales that may be caught are notified by the governments concerned to the Commission.⁹

Provisions for "cooperative" policing, where laws and regulations are enforced on one's own national fishermen by the constabulary forces of another state, are discussed in an accompanying paper by E.D. Brown. He quite properly distinguishes three aspects of the enforcement function, "boarding and inspection," "seizure and arrest," and "penal jurisdiction," and examines the degree to which "cooperative" policing, as we have called it, is allowed in various fishery conventions in respect to each of these three areas of enforcement.¹⁰

Let us take the arrangements of the North East Atlantic Fisheries Commission as an example of how such provisions may be put into practice as far as boarding and inspection are concerned. Control is carried out by inspectors of the fishery protection services of the contracting states who have the right to inspect any fishing vessel of any of the contracting states. The inspectors

⁹ See: International Convention for the Regulation of Whaling, 1946, particularly article IX; Schedule to the International Whaling Convention, 1946, revised to include the amendments that came into operation after the twentieth meeting in Tokyo, 1968, particularly paragraph 1, and the 19th Report of the International Whaling Commission, London, 1969, p. 141.

¹⁰ E.D. Brown, "Law and Order on the Continental Margin and the Ocean Floor." November 1969. (Chapter 4, above)

carry special identity cards, and the ships carrying them fly a flag indicating that the inspector is on board performing international inspection duties. The N.E.A.F. Commission itself has the right to make suggestions to the contracting states for the coordination of national operations including the number of inspectors and ships carrying inspectors. Seizure and penal jurisdiction remain in the hands of the flag state. It should be noted that inspection covers net and fish sizes, and that the right of inspection varies with the nationality of inspector, since no common rights were agreed upon. The Joint Enforcement Scheme started in March 1970. Similar measures are currently under discussion for the area covered by I.C.N.A.F.¹¹

¹¹ North-East Atlantic Fisheries Convention, U.K. Treaty Series No. 68 (1963) Command 2190. See also: N.E.A.F.C. "Scheme of Joint Enforcement: Notes for Skippers of British Fishing Vessels." December 1969. An interesting part of the N.E.A.F.C. scheme is that contracting states are obliged to inform the Commission on March 1st each year of their provisional plans for participation in the scheme the following year: this is the basis on which the Commission makes its recommendations to member states as to their share in policing activity. A more sophisticated example of guidance and coordination of nationally-run policing activities by a central commission is that which operates under the International Pacific Salmon Fisheries Convention. This agreement between Canada and the U.S.A. coordinates programs for the conservation of Fraser River Sockeye and pink salmon stocks. The major regulatory tool intra-seasonally is the time closure. Each week the Commission announces open periods by regulatory areas for each of the main types of gear. The pattern of closure, which is generally four to five days per week, may again be modified on a short-term basis both in order to adjust for unexpected changes in the size or timing of runs, and to equalize catches by Canadian and American vessels (this was one of the provisions of the agreement). Such a complicated set of regulatory procedures necessitates close integration of the Commission and the policing forces of the respective countries. See: J.A. Crutchfield and G. Pontecorvo, The Pacific Salmon Fisheries. Johns Hopkins Press, 1969, pp. 140-146. The above is one example of where what is permitted is closely geared to information about the state of the fishery: though this information is elicited not by the constabulary forces themselves but the research-intensive regulatory commission.

The Japanese-Soviet Fishery Treaty for the Northwest Pacific specified an international control system which included the right to board and inspect vessels of the other party on the high seas. This "cooperative" inspection has since been considerably developed. In 1965 the parties agreed informally on the supervision of the Japanese salmon fishery in a specific part of the convention area by Soviet inspectors carried on board Japanese patrol vessels. The following year a further informal agreement permitted Soviet officials to be present at Japanese fishing bases in Hokkaido in order to inspect the counting of fish catches.¹² The Japanese-Soviet convention is also significant in that it provides for cooperative seizure. Between the inception of the Treaty in 1956 and 1963, some 110 Japanese vessels were impounded by the U.S.S.R.¹³ Jurisdiction remained, however, with the flag states. Indeed, while there are now a number of conventions which operate "cooperative" seizing, there are none as yet which allow "cooperative" jurisdiction.¹⁴

¹² J.E. Carroz and A.G. Roche. op. cit. p. 84.

¹³ R. Van Cleve. "The Principle of Abstention -- The Case of the U.S. Halibut Fishery" in: ed. J.A. Crutchfield, The Fisheries. Problems in Resource Management. University of Washington Press. Seattle. 1965.

¹⁴ The International Pacific Salmon Fisheries convention, discussed in note 11 above provides for "cooperative" seizure and arrest. The two member states each have a specified area within which they are responsible for patrolling and seizing vessels from either country: this area includes their own territorial waters plus a portion of the high seas covered by the convention. Once arrested the vessel in question is to be delivered to the nearest point to the place of seizure in the country to which the vessel belongs. See Articles VIII and IX of the Sockeye Salmon Fisheries Convention as amended by the Pink Salmon Protocol of 1956. The consolidated agreement is reprinted in: Report of the International Pacific Salmon Fisheries Commission for the Year 1957.

The third form of policing national vessels on the high seas takes the form of an "integrated" constabulary, in contrast to the "atomistic" and the "cooperative." An integrated police force for international fishery conventions, a force that is under the control of a Commission of the contracting states, still appears some way off in practice. The International Whaling Commission scheme for International Observers, adopted in 1963, came to nothing. It foresaw the appointment of inspectors to factory ships of the contracting parties, and their payment as being in the hands of the I.W.C. itself. They, too, would be responsible to the Commission in the matter of reporting. A working group set up by the Commission which met in 1967 to consider the failure of the scheme proposed separate schemes according to region, though most participants agreed that the schemes would conform to the basic principles of the 1963 proposal. There is as yet no concrete outcome.

In assessing the possible forms of high seas fishery policing two variables stand out as particularly significant: first, the seriousness of the conservation problem as it affects all parties; and second, the cost and administrative character of the regulations envisaged. The first will in part determine the willingness of fishery states to forego some part of their national sovereignty for the sake of their economies. The second will be relevant when, for example, a convention's regulations cannot be adequately enforced from onshore. Where enforcement requires a seaborne inspectorate, costs rapidly become prohibitive not only for areas far removed from member states (the Convention area of I.C.N.A.F.; for instance, is a considerable distance from the majority of its members in Western Europe) but even for wealthy and proximate states.

The International Pacific Halibut Commission, whose members are Canada and the U.S.A., has several times referred to the disproportionate expense that effective control involved.¹⁵ Given economies of scale in the policing function, certainly as far as the verification of offenses is concerned, and given the difficulties of enforcement from shore, we may expect economic pressures at least to support the development of "cooperative" if not "integrated" enforcement systems.

Our general conclusion is that the type of constabulary force required for fisheries differs (a) according to whether the policing is of laws and regulations in defense of the rights of the nation's own fishermen or whether it is concerned with ensuring their good conduct, and (b) in relation to the extent that the laws and regulations as they affect the high seas are seriously supported by the countries directly concerned with the fishing of those high seas.

Mariculture

The transferring of highly valued fish to good high seas feeding areas, as well as other forms of fish farming, awaits not only a regime of law, but perhaps more importantly a constabulary force capable of implementing law. Mariculture has been restricted largely to coastal waters; where law holds and policing is less costly. In Britain, for example, where mariculture is concentrated on oysters, mussels and clams, though on a scale far smaller than that say of Australia, there is no special policing of the areas of cultivation. The constabulary function is performed by land-

¹⁵ J.E. Carroz and A.G. Roche. op. cit. p. 85. note 102.

based police forces and anyone found taking shellfish from these areas is prosecuted under the normal laws of larceny.¹⁶

Shipping

Laws and regulations applying to shipping are principally concerned with securing the rights of innocent passage and freedom of the high seas, with preventing and mitigating accidents and loss at sea, and with preserving common law and order on board ships.

In the case of innocent passage and freedom of the high seas, those vessels meeting with what they consider to be a restriction of their rights may be relied upon to inform their flag states of possible infringements of international law and convention rulings. The constabulary function will then be less concerned with the problem of establishing that an offense has been committed than with reestablishing the right once this has been challenged. This it may do either with the force of arms or through diplomatic channels. In the recent case where an American charter ship searching for sunken Spanish gold was seized by a Cuban patrol boat fifteen miles off Cuba, the U.S. government secured the release of the ship through diplomatic means.¹⁷ Most of the restrictions of passage on the high seas derive from military considerations, such as the

¹⁶ As of February 1970, oysters were being cultivated in thirteen places in England and Wales, mussels in some ten places, and clams in two places. For the regulations governing this cultivation see, Sea Fisheries (Shellfish) Act 1967. For discussion of the potential of mariculture see: J.H. Ryther and G.C. Mathiessen, "Aquaculture, its Status and Potential" in: Oceanus Vol. XIV, No. 4, February 1969.

¹⁷ The Times, March 3, 1970.

Cuban blockade, the Beira blockade or the capture of the "Pueblo," and therefore fall outside the scope of this paper.

The prevention and mitigation of accidents and losses at sea covers three sets of laws and regulations: (i) concerned with the seaworthiness of ships, their proper equipping, and their competent handling, (ii) concerned with the provision of information to sailors about natural or man-made hazards, and (iii) concerned with "rules of the road" to be followed by vessels for their own and others' safety. Where these are mandatory, they are almost all enforced from on land.

In the case of the seaworthiness of ships, for example, the great majority of merchant ships will be subject to frequent surveys by Classification Societies, whose assessment will form the basis for the establishment of premiums by insurance companies. Non-conformity to internationally accepted standards of seaworthiness will be penalized, informally, by the market. Further, all significant flag states will, with greater and lesser degrees of substance, make the registration of a ship and the granting of necessary certificates and licenses dependent on the achievement of certain minimum standards with regard to the hull and basic construction (including subdivisions and stabilization), machinery and electrical equipment, fire protection and precautions, life saving appliances, lights, radio equipment and so on.¹⁸ In Britain surveys of safety standards are carried out by Board of Trade surveyors, and in certain

¹⁸ National laws differ, but the substance of many of them can be gathered from the provisions of the International Convention for the Safety of Life at Sea, 1960, Treaty Series No. 65 (1965) Command 2812, which by July 1965 has been accepted by thirty countries.

instances by surveyors of Classification Societies to whom power to carry out these statutory functions has been delegated by the Board.

Whereas there is an elaborate code of laws and repeated inspections as far as the basic hull of a ship and its equipment are concerned, the same is not true of the manning of ships. Those in charge of ships are required to have Master Mariners Certificates, and there are of course in most countries extensive provisions about pilotage and the qualifications required by pilots. But requirements for the achievement of qualifications vary widely. In some countries, Masters Certificates of Competency can be achieved without examination. In Britain where an officer will usually obtain his Masters Certificate around the age of twenty-five, there is no re-checking or re-licensing as there is in the case of airline pilots. Nor are refresher courses required, even for those who have spent some time away from the sea. When an officer wrecks a ship only the flag state has the right to investigate, and the flags of convenience (with now over half the world's shipping under their flags) are reportedly somewhat lax in their investigations. Further, while the Panamanian and Liberian governments may remove their own certificate which they have granted to an officer, the fact that these are granted without examination to anyone holding a certificate of another nation, means that such an officer would continue to hold a Mariners Certificate even after being found responsible for bad navigation. Even the insurance companies require no extensive details of the master and watchkeeping officers, going rather on the owner's record. Thus, not only are the provisions regarding the officer manning of ships somewhat rudimentary; so, too, is the exercise of what inspectorate or sanctions-imposing functions there

are (withdrawal of license or raising of premiums).¹⁹

We turn now to those laws and regulations concerned to provide information to sailors about natural or man-made hazards. The provision of such information is often the responsibility of the public authority who might be expected to police it. The constabulary function will in this case be in the nature of intra-organizational control. In the U.K. the extensive system of lighthouses, lightships, markings of shipping lanes and of wrecks, as well as lighted and unlighted buoys is supervised and inspected by three lighthouse authorities. Trinity House, the lighthouse and pilotage authority for England and Wales, has one to two inspectors who inspect navigational markings every three years.²⁰ In the provision of notification services such as updated information on markings, changes of sea level, movement of buoys and so on, or the sustaining

¹⁹ The information on which this paragraph is based is derived from: D.B. Foy, Officer Manning -- The Neglected Variable in Marine Insurance, Mimeo. September 1968, and the text of a talk and discussion under the same title given by D.B. Foy in November 1969. One of Mr. Foy's principle recommendations is that insurance companies should place an officer on board ships and grant insurance bonuses to ships receiving good reports on their handling from the said officer. They would be in a similar position to the supercargo, that is the officer who is not uncommonly placed aboard ships by a company hiring vessels on a time charter basis. The supercargo is responsible to and paid by the charterer and reports on the speed and efficiency with which the ship is managed: bonuses commonly being paid by the charterer to the ships officers on reception of good reports. Supercargoes are an informal control mechanism used by the charterer, and their economic and administrative experience is clearly relevant to suggested schemes for on-board inspectors for other purposes.

²⁰ Not all lighthouse authorities are publicly operated. The Middle East Navigation Aid Service (formerly the Persian Gulf Lighting Service) provides lighthouses, decca, and navigational aids, and is funded by levy per barrels of oil on oil companies in the Gulf.

of broadcasts of meteorological information, including weather forecasts, control again tends to be intra-organizational; concerned with the standard rather than the actual existence of the service.²¹ Lastly, where the information is provided by ships themselves, in the form of lights, or broadcast messages, enforcement is carried out partly by inspection of the equipment on shore, and partly through civil actions and the evidence of plaintiffs who claim to have suffered from the faulty provisions of such forms of information.

Civil actions and plaintiffs' evidence are likewise the effective constabulary as regards most rules of the road. In the vicinity of ports, lanes are likely to be mandatory, but most other shipping lanes are not so. The North Atlantic Lane Routes Agreement was an agreement between the large private liners using the route, with the informal backing of the contracting governments of the International Convention for the Safety of Life at Sea. Companies were required to give public notice of the regular routes they proposed their ships would follow, and the ice patrol service, managed by the U.S.A., was required to report to the administration concerned, any passenger ship observed not to be on any regular, recognized or advertised route, to be crossing the Newfoundland fishing grounds during the fishing season, or to be passing through regions

²¹ In Britain there is no unified authority. Apart from the lighthouse and pilotage authorities; the Admiralty issues a weekly notice to mariners containing information about hazards, changes in markings and so on, supplemented by radio broadcasts for urgent information. The Board of Trade issues a numbered series of "M" notices which are of an advisory nature, and cover such matters as the siting of compasses, newly recommended precautions against fire, shifting cargoes etc. See: D.B. Foy (1968) op. cit. p. 8.

Believed to be endangered by ice. But the agreement remained a private one and has recently been abrogated after being undermined by the fact that many other liners and all cargo vessels retained and implemented their freedom to use their own selected tracks.²² The Nemedri Channel in the Baltic has established lanes, properly buoyed, but here the ships may be expected to police themselves not merely because of the sanctions of collision, but also because of those threatened by the minefield in the channel. For the most part, however, all ships are potential "inspectors" as far as the observance of rules of the road are concerned, and civil courts the imposers of sanctions on those who infringe.

Let us turn finally to the third set of laws and regulations applying to shipping, namely those concerned with the preservation of social as against navigational law and order at sea. In this category we would specify among other things, those codes dealing with the safety, welfare and working conditions of the crew, and with piracy.²³ In the case of the working and living conditions of the crew, certain means of enforcement are specified in the international conventions on the subject. Inspectorates exist with parallel functions to the factory and health inspectorates of land-based activities. The I.L.O. Recommendation Concerning the General Principles for the Inspection of the Conditions of Work of Seamen

²² International Convention for the Safety of Life at Sea. *op. cit.* Chapter 5, Regulation 8, "North Atlantic Routes." p. 316-8. The regulation referred to is in the process of amendment within IMCO but the final version is not yet available. See also: Chamber of Shipping of the United Kingdom. Annual Report. 1968. p. 88.

²³ The many conventions prior to 1963 concerning the employment, welfare and status of seamen, are conveniently gathered together in: N. Singh, International Conventions of Merchant Shipping, Stevens. 1963. Part II, pp. 877-1044.

(1926) specifies that inspectors should be empowered to prohibit a boat leaving port until it conforms to specified legal standards, and that both the master of a vessel or members of the crew be entitled to call for an inspection.²⁴ The crew has similar rights to call for an inspector with respect to food and catering standards under the 1946 Food and Catering for Crews on Board Ship Convention.²⁵ Thus information about contraventions of these codes can be expected to come from (a) members of the ship, suffering from the contravention, and (b) land-based inspectors. Sanctions in the form of the delay of the ship and of the meeting of minimum requirements are in the hands not only of local courts but in some instances of inspectors themselves.

Piracy is now uncommon. The 1958 Geneva Convention on the High Seas states that ships on suspicion of piracy may be seized on the high seas by warships or other public craft, and tried and penalized in the country which has made the seizure.²⁶ We have come across only one instance where a state provided special anti-pirate patrols, and that was in the late 1940's when Hong Kong financed and manned two M.G.B.s for this purpose.

We have seen that in the three sets of laws and regulations regarding shipping, there are few instances of seaborne inspectorates. Information about contravention is either derived from those suffering from the contravention, or by land-based inspection of conditions and equipment. Contraveners face sanction either by virtue of the

²⁴ Ibid. pp. 1032-1036.

²⁵ Ibid. pp. 1009-1013.

²⁶ Report on the First United Nations Conference on the Law of the Sea, H.M.S.O. 1958. Annex II, Articles 14-22.

contravention itself (using the wrong channel in a strait, for example, or possessing an unseaworthy ship) by civil action against them, or by public prosecution. Such a system of enforcement derives not only from the nature of many of the shipping regulations (it is in the common interest of mariners to observe them) but also from the common agreement among maritime states about the laws of shipping and enforcement systems which prevent wrong-doers escaping into jurisdictional vacuums.

Pollution

One of the main criticisms of the 1954 International Convention for the Prevention of Pollution of the Sea by Oil, as amended in 1962, which is the basis for laws concerning oil pollution on the high seas, is the difficulty of enforcing its provisions. Most classes of ships are required to keep a log book of oil discharges and losses, which is a form of auto-policing, though this requirement itself has to be policed. The provisions for inspecting the log books vary considerably: France and Belgium for example, have a reasonably thorough inspection mechanism, Belgian ships having to send extracts from their log books (which would include their oil log) to the Tribunal de Commerce when they return to a home port, or to the Belgian Consul when in a foreign port.²⁷ Other countries, particularly some smaller ones are repor-

²⁷ In the U.K. the inspection is carried out by the Marine Survey Service, a body of 260 surveyors who are also concerned with the inspection of the provisions of the Merchant Shipping Act. They check on the oil record book as part of a general inspection, but this is more in the nature of a spot check. Further since not all ships are inspected (perhaps 18% of those putting into U.K. ports are inspected per annum), the provisions for inspecting the oil record books are in the nature of a spot check, though there will be a tendency towards checking the bigger ships and tankers as well as any ship suspected of illegal pollution. Clearly, too, on-board inspection by professional surveyors is more liable to expose inconsistencies in the oil log-book, and will therefore constitute a more effective deterrent, than an inspection conducted from on land.

tedly somewhat reluctant to have a stringent inspection scheme for fear of frightening away ships who might otherwise use their ports. The inspection of oil log-books is land-based. Indeed, the 1954/62 Convention explicitly limits the right of inspectors to enter foreign ships to inspect the log book to times when ships are in the port of the inspecting state. As such, it is difficult to verify the entries in the log other than through noting inconsistencies and checking facts against other information that can be derived from inspecting the ship physically while in port. Thus, it is rare for masters to be prosecuted for not keeping, or falsely keeping, an oil record book when they are not also being prosecuted for polluting the sea on the basis of other sources of evidence.²⁸

On the high seas ships and aircraft on other business are relied upon to give information on polluters. France for example authorizes certain ships and aircraft to furnish reports on alleged oil pollution as part of a survey network. In Germany there is no permanent watch by ships or aircraft but lightships are charged with detecting oil pollution, and German masters have reported oil discharges by other ships in prohibited zones.²⁹ In Britain, civil aircraft, the R.A.F., the Royal Navy, merchant ships and private vessels are all asked to report oil discharges.

²⁸ The 1969 amendments to the International Convention for the Prevention of Pollution of the Sea by Oil included a provision which made the details to be recorded in the oil record book more elaborate, thereby increasing the chance that an offender would be caught out either through inconsistencies, or because the record did not tally with observable features of the ship in port.

²⁹ Inter-Governmental Maritime Consultative Organization (I.M.C.O.). Pollution of the Sea by Oil. Results of an Inquiry made in 1963. London, 1964. p. 94.

In spite of these media for the detection of infringements, prosecutions find it difficult to get off the ground since it must be shown that the discharge of oil mixture contained a hundred parts of oil ^{or more} per million parts of mixture.³⁰ Thus in 1967 Britain reported twenty-seven foreign vessels to their flag governments for discharging oil in the prohibited zones surrounding the U.K., and in only one case is there known to have been a successful prosecution, (the Chief Engineer was fined). In 1968 eight foreign vessels were reported and again only one is known to have been fined, though a vessel found discharging oil around the Bahamas was penalized by its flag government. In the case of U.K. ships reported to Britain, no action was taken because of insufficient evidence on the six reported cases during 1967 and 1968. The sole successful prosecution has been of the "Andes" which was photographed discharging oil in the English Channel by a French pilot. The owners were fined 500 pounds with 500 guineas costs, and the captain of the ship was fined 100 pounds for the pollution offense, and 25 pounds for failing to make an entry in the oil log book.³¹

³⁰ The 1969 Amendments referred to in note 28 redefine an oily mixture as "a mixture with any oil content" and lay down more satisfactory criteria for unacceptable pollution on the high seas. See the Amendments to Article I and Article III.

³¹ The procedure by which the "Andes" was prosecuted successfully underlines the difficulties of effective enforcement of the pollution laws on the high seas. The photograph taken by the French pilot plus his report was passed to the French government who forwarded it to the British government. The "Andes" admitted cleaning its tanks with chemicals and discharging the resultant mixture into a prohibited zone of the sea. The Board of Trade Marine Survey Service arranged inspections by both engineering surveyors and nautical surveyors and were able to call evidence which showed that if the chemical cleaning had been successful the amount of oil in the mixture discharged to the sea must have exceeded one hundred parts per million. This was supplemented by evidence of a senior Government scientist who showed on the basis of Government experiments that oil with the appearance shown in the photograph and described by the aircraft pilot must have been a mixture more concentrated than the minimum legitimate amount.

The de facto constabularies for high seas pollution are clearly inadequate to enforce the laws as they now stand: the information they provide has not generally been a sufficient basis on which to mount successful prosecutions: though the mere reporting of ships and the warnings issued by governments to owners where no prosecution occurred, are themselves a form of sanction. Within territorial waters the problem of enforcement is somewhat easier since conditions of proof tend to be less stringent and countries have a greater authority over foreign ships. Many countries prohibit the discharge of oily mixture completely within their territorial waters, and define oily mixture more catholically than is customary for the prohibited zones on the high seas. Some, too, have constabulary forces over and above those mentioned in the previous paragraph. The U.S. Coast Guard have mobile cutters to track infringements. Japan has patrol boats on the alert in areas where oil discharges are likely to occur. Canada uses patrol boats and helicopters on the St. Lawrence River. Poland has a net of twenty-four permanent control stations along the whole of her coastline.³² We should also note that many countries have inspectors to check regulations designed to prevent oil pollution of the sea; oily-water separators,

³² Details of national legislation and enforcement procedures in respect to marine pollution can be found in: I.M.C.O. Pollution of the Sea by Oil. op. cit. Intergovernmental Oceanographic Commission (I.O.C.). Annex to Report of Special Session of the A.C.C. Subcommittee on Marine Science and its Applications. Paris. August 1967; International Council for the Exploration of the Sea (I.C.E.S.) Report of the I.C.E.S. Working Group on Pollution of the North Sea. Cooperative Research Report. Series A. No. 13. July 1969; I.C.E.S. Report of the I.C.E.S. Working Group on Pollution of the Baltic Sea. Cooperative Research Report. Series A. No. 15. February 1970.

facilities for disposal of waste at oil terminals, and so on.³³

Greater restrictions, more extensive detection measures and the right of jurisdiction over foreign ships in territorial waters have all made for higher rates of prosecution and convictions for offenses within territorial waters as compared with those committed outside. Canada reports a high proportion of successful prosecutions against offenders. Romania has on a number of occasions prosecuted and fined foreign ships which have discharged oily mixtures in the Romanian coastal zone of the Black Sea. In the case of the U.K. the figures for prosecutions compare interestingly with those given above for extra-territorial sea offenses.³⁴ In 1967, out of sixty-two prosecutions there were fifty-nine convictions, including twenty-one U.K. ships, thirty-three under foreign flags, and five land installations; in 1968 out of sixty-four prosecutions there were sixty-two convictions, twenty-seven being U.K. ships, thirty sailing under foreign flags and five land installations.³⁵

To sum up, the information about effected or potential oil pollution at sea is derived from public and private vessels and aircraft away from land backed up by on-land inspectorates. Most of these bodies report on pollution as a marginal activity: they are on other business and may perform the function vis à vis oil pollution at low marginal cost. One or two countries do have

³³ Details of facilities for disposal of waste at oil terminals in a variety of countries are given in: I.M.C.O. Facilities in Ports for the Reception of Oil Residues. Results of an Inquiry made in 1963. London 1964.

³⁴ For Canada and Romania, see: I.M.C.O. Pollution of the Sea by Oil. pp. 93 and 100. U.K. information from Board of Trade private communication..

³⁵ However, many of these prosecutions were for offenses in harbors where both the ship and the evidence were readily available.

specialized pollution inspectorates, and a number follow up reports of pollution at sea by sending out aircraft and helicopters to gather evidence.³⁶ While it has been suggested that the liability provisions contained in the International Convention on Civil Liability for Oil Pollution Damage adopted in Brussels in November 1969, might, when ratified, give rise to forms of private policing of pollution provisions by the insurance companies or tanker owners, we have seen in the previous section that there is no sign of insurance companies at least instituting their own "watchdog" supercargoes.³⁷

In spite of the limitations of the policing of marine oil pollution laws, this ad hoc system appears more effective than inspectorates for other forms of pollution. In large part, this is because most other forms of pollution are less apparent to the naked eye, and their effects less easily identifiable. Information about other forms of pollution is therefore most commonly derived from special monitoring and research: detection is a specialized task. In Denmark the policing of effluent quality is in the hands

³⁶ It should be remembered that oil pollution of the sea is much more easily seen from the air than by another ship at sea, though it is not always easily identified as oil.

³⁷ See note 20 above. One possible body that might have been thought to have an interest in private pollution policing is TOVALOP (Tanker Owners' Voluntary Agreement Concerning Liability for Oil Pollution). This is an agreement currently including 77% of the world's tanker owners which came into effect in October 1969 with the aim of inducing responsibility into tankers which have been the cause of pollution. It encourages the owners to clean up their own spillage, compensate those suffering from the spillage, and insure themselves adequately so that they are in a position to fulfill these obligations. However the management of TOVALOP is very much a go-between linking the owners and the Protection and Indemnity Clubs, and thus has no intention at the moment of enforcing codes of navigational conduct on its members.

of the Police and Fishery Control. Poland has a special department called the State Inspection for Water Pollution Control which is extending its range to coastal waters. Finland has a Bureau for the Protection of Water Resources which inspects territorial waters. Yet even with such bodies it remains extremely difficult to identify the pollutor even when the pollution itself has been detected, save in the case where the offense is a continuing one and can therefore be traced.

To prevent pollution where the waste disposal is of an occasional or a once and for all nature, many countries require official notification of the intention to deposit waste, and will then give instructions as to the types of containers to be used, the areas where the waste is to be disposed and so on.³⁸ Such a control mechanism helps limit pollution offenses. It assumes particular importance where the detection of polluting offenders is so naturally difficult.

³⁸ Such regulations exist in the U.S.S.R., Belgium, France, Finland and informally in Germany. See the I.C.E.S. Reports quoted in note 32. In the U.K. the manner and location of the discharge of radioactive waste is under very tight control, and inspectors have been appointed under the terms of section 12 of the Radioactive Substances Act 1960 to ensure that the provisions of the act are followed. The Ministry of Agriculture also operates a voluntary scheme with respect to toxic wastes discharged outside territorial waters whereby those firms which intend to dump industrial and other wastes at sea submit details of their proposals: the Ministry then either approves the proposal or offers alternative suggestions. Besides the Ministry, local Sea Fisheries Committees also have the right to prohibit or regulate the discharge of any substance detrimental to sea-fishing, through by-laws made under the Sea Fish (Regulation) Act 1966, and most of the Committees have a number of staff employed on the general enforcement of their regulations and by-laws.

One area where the control of waste disposal on the high seas has been internationally coordinated is that of the dumping of radioactive waste. Article 25 of the Geneva Convention on the High Seas requires states to prevent pollution resulting from radioactive waste disposal, and instructs them to cooperate with international organizations in doing so.³⁹ In May 1966 the I.A.E.A. convened a panel of experts to discuss research and experience in radioactive waste disposal, and in 1967 five countries within

³⁹ Singh, op, cit. p. 1150.

the framework of the E.N.E.A. cooperated in an experimental operation to dump 10,893 tons of waste in the Eastern Atlantic, about 450 kilometers from the nearest land. The actual dumping was preceded by a hazard assessment of the dumping area by a group of experts, and the nuclear centers concerned subscribed to an insurance scheme to guard against damage arising from the operation with a ceiling of five million pounds. A similar operation was carried out in 1969 with not only officials from the waste disposing countries, but escorting officers from West Germany, Ireland, Japan, and Portugal. These developments may be seen as a form of auto-policing.⁴⁰

Raw Material Exploration and Development

The search for and development of raw materials from the seabed

⁴⁰ The results of the 1967 radioactive waste disposal experiment were published by the E.N.E.A. under the title "Radioactive Waste Disposal Operation into the Atlantic 1967" Paris 1968. One other aspect of radioactive waste disposal which is likely to become increasingly important is that concerning the waste from nuclear ships. Annex C to the International Convention for Safety of Life at Sea specifies that nuclear ships should have safe temporary storage and disposal facilities for radioactive waste, that there should be proper monitoring devices for the waste disposal systems, and that the maximum permissible levels of radiation for waste disposal on the high seas should be in accordance with international levels when established. Several bilateral agreements relating to the entry of nuclear ships into territorial waters and harbors, such as those signed by the U.S. Government with several other states for the N/S "Savannah" or the agreement signed by West Germany and the Netherlands for the "Otto Hahn" provide that the shipowner or government responsible is under obligation to take all the necessary steps to ensure that no radioactive waste disposal takes place in the waters or harbors concerned without specific authorization in advance from the authorities of the host country. We do not know how these various provisions are policed, though clearly this is of particular relevance to verification measures for marine disarmament agreements.

is almost entirely undertaken in areas of national authority, even though this authority may not be internationally recognized.⁴¹ The constabulary function is thus primarily concerned with policing rules, laws and regulations which are exclusive to the zone of operations. For this marine activity at least, there are few of the problems of law enforcement on the high seas which we have noted in other sections.

National codes for exploration and development have a double concern. First they aim to protect the operator's right of quiet enjoyment in the concession area. Second they seek to ensure the proper conduct, both technically and socially, of the concession by the operators. In respect to the first point, the protection of the operation from unnecessary nuisance from other marine users, there appear to be few specialized constabularies. In most countries it would be branches of the armed forces which would be called out for such protection duties during peacetime. There appears to be no direct parallel at sea to the occasion when British Petrol carried guns to protect themselves in Libya, though De Beers do operate security forces to enforce their rights over diamonds in the territorial waters of South Africa. Certainly

⁴¹ By early 1968 fifteen states had issued permits for exploration activity beyond the two hundred meter isobar mentioned in the Geneva Convention. The U.S.A. has granted a phosphate lease forty miles off the California coast in the Forty Mile Bank area in 240-4000 feet of water, and oil and gas leases 30 miles off the Oregon coast in 1,500 feet of water. Australia has granted permits for up to 200 miles, and Nicaragua and Honduras for up to 225 miles. See: Towards a Better Use of the Oceans. A Study and Prognosis. SIPRI, Stockholm, 1968. p. 26.

as regards oil and natural gas operations, peace time threats to offshore quiet enjoyment are rare, and as a senior officer in one of the international major oil companies put it, where they do occur all that is needed is a fast boat with a submachine gun.⁴²

The task of policing the second form of national codes is more substantial. In the case of oil and natural gas, these codes are usually embodied in the contracts signed by the operating companies with governments. They cover good oil field practice (in such matters as deviation drilling, unitization, the abandonment of boreholes and so on), the limiting of nuisance to other users of the sea (by properly lighting offshore installations, supervised use of explosives for seismic surveys, or strict safety measures to prevent pollution), the provision of good working and living conditions, the adoption of adequate safety arrangements, and the supply of full information to the government about the results of surveys, the progress of operations, etc.⁴³

⁴² The Geneva Convention on the Continental Shelf recognizes the rights of states to establish safety zones around exploration and exploitation devices up to a distance of five hundred meters, and "to take in those zones measures necessary for their protection." (see: Report on the First United Nations Conference on the Law of the Sea. H.M.S.O. 1958. Annex IV, Article 5, paras 2 and 3) In Britain the Ministry of Technology (formerly the Ministry of Power) may make Orders prohibiting the entry of vessels into specific areas around installations. By the end of 1969 four such Orders had been made in respect to ten permanent gas production installations; no prosecutions for infringement have yet been instituted.

⁴³ A good example of national code is that governing oil and gas operations in the Norwegian area of the continental shelf. See: Government of Norway. Regulations relating to Safe Practice etc. in Exploration for and Exploitation of Petroleum Resources of the Sea-Bed and its Subsoil. Royal Decree of August 25, 1967. (English translation. U.N. A/AC 135/1/Add. 1 March 12, 1968).

The oil companies themselves claim that there is no intrinsic enforcement problem with regard to these codes, since they have an interest in respecting them just as strong as have the governments. In some cases the point has substance, and is reflected in the existence of intra-company control systems, for example, the Shell Group Safety Committee, which are a form of auto-policing. But in other fields there is no such manifest coincidence of interests. The provision of full information to governments is one. Another was recently exemplified in the Gulf of Mexico disaster, caused by oil leaking from seven wells belonging to a subsidiary of Standard Oil, California. The Department of the Interior claimed that this would have been prevented had a safety valve required by regulations been in place, and the subsidiary acknowledged that 120 of its 292 offshore wells did not have these required valves.⁴⁴

While public enforcement may therefore be called for, its actual practice varies widely. Brunei, for example, has a State Geological Officer, a labor officer and the right of government audit. The great majority of the detailed provisions of the regulations are uninspected. In the U.K. there is both a land-based inspection system, and an on site inspection of the rigs themselves. Each offshore unit is visited three times a year by one of a team of three inspectors, all of whom have previously worked in the oil industry. The owner of the offshore unit indicates a suitable day for the inspection to take place, and flies the inspector out in a company helicopter. Some countries go further and have inspectors on-site during whole periods of operation. In the Netherlands

⁴⁴ New York Herald Tribune (European edition). March 14, 1970.

an inspector of fisheries accompanies each exploration vessel in order to enforce the limitations on the type of explosive that can be used in prospecting.⁴⁵ Survey vessels working off the shores of Honduras and Nicaragua are to be required to call in at a named port to pick up inspectors charged with monitoring the survey.

In general we may note a sharp contrast between the attention that has been given both nationally and internationally to the elaboration of codes for oil and gas exploration and development, and the marked lack of discussion of enforcement procedures. It is notable in this respect that the sophisticated Pro-forma Regulations for the Conservation of Petroleum Resources drafted by O.P.E.C. for adoption by its member countries leaves the enforcement of the provisions entirely up to the states themselves to plan out.⁴⁶ However, the rapid increase in offshore drilling, the growing awareness of the dangers of pollution from offshore operations, and the continuation of potential conflict between offshore petroleum operators and other users of the sea and the seabed, all suggest the importance of developing adequate enforcement procedures for offshore

⁴⁵ See: I.C.E.S. Report of the I.C.E.S. Working Group on Pollution of the North Sea. op. cit. p. 4. The principle responsibility for enforcing the legal measures of the Dutch Mining Act for the Continental Shelf is vested in State Inspection Service for Mines. Inspectors have the right to see the documentation of the licensee, to enter all establishments, ships, and aircraft used in operations, and to suspend operations until the code is obeyed.

⁴⁶ Resolution XVI 90 "Declaratory Statement of Petroleum Policy in Member Countries" adopted in the XVI Conference of the Organization of Petroleum Exporting Countries. June 1968. And, "A Pro-forma Regulation for the Conservation of Petroleum Resources" put before the XVII Conference of O.P.E.C. in November 1968 which decided that it should be adopted in Member Countries.

petroleum codes.⁴⁷

Submarine Cables and Pipelines

The articles of the Geneva Convention on the High Seas in respect to submarine cables and pipelines contain three main points: (i) that there is a basic freedom to lay submarine cables and pipelines in international waters; (ii) that willful or culpably negligent damage to such lines of communication should be a punishable offense, and (iii) that owners of cables and pipelines should compensate owners of ships who have sacrificed gear in order to prevent injury to a particular cable or pipeline.⁴⁸

The Constabulary problem arises little in respect to the first of these points. There is as yet no significant conflict of interest which might lead to a challenge to the freedom to lay cables and pipelines in international waters, and within territorial waters it appears to be common practice to recognize this freedom subject to notification of the public authority. In Britain for instance, the Board of Trade must be notified of proposals for laying cables, and it will normally give consent after consulting other interested parties (Trinity House, Ministry of Agriculture and Fisheries, Commissioners for Crown Lands and so on.)

⁴⁷ In the Gulf of Mexico (Louisiana) oil spill in March, 1970, the Federal Government was blamed for failing to police the regulations adequately. Indeed the Louisiana Attorney General was reported to be prepared to file a suite against the Federal Government for lack of adequate federal supervision. Such actions would clearly heighten the need to develop more effective enforcement procedures. See: New York Herald Tribune (European edition) March 14, 1970.

⁴⁸ Report on the First United Nations Conference on the Law of the Sea H.M.S.O. 1958. Annex II, articles 2, 26, 27, 28, 29, and 30.

The main problem centers round the problem of damage to laid cables and pipelines. In spite of compensation provisions aimed at removing the motivation for an offense, and in spite of the provisions of the 1884 Convention for the Protection of Submarine Cables allowing public ships of other contracting states to require the exhibition of a ship's papers as evidence of nationality, and to draw up reports for presentation as evidence of alleged infringements, there is still heavy damage to submarine cables and little action against offenders.⁴⁹

What constabulary forces there are for the enforcement of the high seas provisions are provided not by public bodies but by the owners of the cables themselves. Since the late 1950's they have operated a North Atlantic patrol for the policing of the Newfoundland fishing area. The patrol is conducted by a ship from the fleet of one of the cable owners, which is supplemented by chartered aircraft. Ships from the fleets of different cable owners will perform the function of the patrol ship according to an agreed rota. Their main functions are to warn fishermen who are fishing near the cables, gather evidence of infringements, and repair any damaged cables. The patrol is organized privately, though the twenty-one leading cable owners are formally linked through the International Cable Protection Committee. The task of this committee is to coordinate all measures for the protection of international communication cables against accidental interruption, including the charting of cables and the informing

⁴⁹ The Convention for the Protection of Submarine Cables is reprinted in Singh. op. cit. pp. 275-278. See particularly Article 10.

of fishermen, ocean scientists and other sea users about cable positions.

The submarine cable constabulary function is therefore privately performed. Its effectiveness is difficult to assess. There are a significant number of claims by fishermen operating the smaller less powerful vessels for compensation for loss of gear, but there is no statistical evidence to indicate how far these have been affected by the patrol and the work of the I.C.P.C. Certainly the number of prosecuted offenses for damage to cables is negligible: in a recent case a French trawler was convicted and fined \$10,000 for damage to a cable on the high seas, but this is a rarity. Finally it should be remembered that while all cable ships operate an informal patrol while pursuing their other activities (there are 56 registered cable ships worldwide which are concerned variously with laying, maintaining and repairing cable) the only formal coordinated patrol is in the Newfoundland fishing area. Whether this will be extended depends partly on the continued growth rate and competitiveness of submarine telephone cables as against communication by satellite, partly on the development of other uses of the sea which might endanger the cables, and partly on the cost of patrolling in relation to these.

Submarine pipelines have a shorter history than submarine cables. There have been attempts to bury them underground and thus avoid damage, but this is both very expensive and in some cases nullified by shifting of the sea bottom. Pipeline owners evidently have no organization comparable to the I.C.P.C., nor any formal patrol. The cable owners have indicated that they would be sympathetic to any approach by pipeline owners for membership of the I.C.P.C.

Ocean Data Collection

There is no generally accepted international law on Ocean Data Acquisition Systems, though a draft Convention on their legal status is currently under discussion.⁵⁰ The absence of such has caused particular concern with respect to the willful damage and removal of O.D.A.S. As an I.O.C. Group paper put it: "[at the present time it is] highly undesirable to leave unmanned surface O.D.A.S. unattended in certain waters. Numerous cases have been reported in the last few years of interference with O.D.A.S. or equipment thereon....and it is clear that many of these cases amount to deliberate theft."⁵¹ The problem is compounded in some countries where salvage is payable on the return to the owners of O.D.A.S., a provision which increases the incentive to larceny. Even where national laws do cover the protection of O.D.A.S. there is no specific system of inspection: the very difficulty of policing unmanned O.D.A.S. led the I.O.C. group of experts to suggest that the offense should be established and inspected at one remove by making it a criminal offense to be found in the possession of the whole or a part of an indentifiable O.D.A.S. "in circumstances that suggest the commission of a criminal offense," if the person cannot prove lawful possession.⁵²

⁵⁰ A copy of the proposed articles for the preliminary draft convention on the Legal Status of Ocean Data Acquisition Systems is printed in: UNESCO (IOC). Summary Report of the Third Meeting of the IOC Group of Experts on the Legal Status of Ocean Data Acquisition Systems. SC/IOC/EG-1/7, SCE/9/89M-ODAS, Paris December 20, 1969. IOC have also published a useful summary of national and international legislation relevant to O.D.A.S. in: IOC "Legal Problems Associated with Ocean Data Acquisition Systems: A Study of Existing National and International Legislation," SC.69/XVI. 5/A UNESCO, Paris 1969.

⁵¹ Summary Report of the Third Meeting of the IOC Group of Experts. op. cit. Annex III. "Problems to be Resolved in Clarifying the Legal Status of O.D.A.S., and their Solutions." p. 6.

⁵² Ibid. p. 7.

The second set of problems concerning O.D.A.S. is their non-interference with other marine users. The national laws and regulations of relevance here cover the provision of information to mariners on the positioning and markings of O.D.A.S., the type of lighting, the avoidance of certain channels, etc. In U.S. navigable waters, public and private placers of "observing buoys" are required to inform the Coast Guard. In the U.K. the Fisheries Laboratory of the Ministry of Agriculture puts out a "Notice to Fishermen" supplemented by radio broadcasts giving information about the buoys in use, the meters attached and so on.⁵³ The owners of the O.D.A.S., in addition to inspecting the O.D.A.S for data results, will also inspect them from the point of view of the safety of other sea users: the American manned offshore scientific buoy called "FLIP" is subject, for example, to biennial inspections of its hull and equipment. The fact, too, that negligently sited or managed buoys are subject to civil claims, certainly within territorial waters, acts as a sanction on O.D.A.S. owners who contravene national laws and codes in this respect.

Broadcasting

There have recently been a number of cases of the extra-territorial sea being used as a base for broadcasting stations. Such operations were prohibited under provisions 422 and 962 of the Radio Regulations, Geneva 1959, and quasi-constabulary powers for the enforcement of these regulations were invested in the International Frequency Registration Board, a permanent organ of the International

⁵³ See: H.W. Hill. "Measuring Currents on Fishing Grounds" in Fishing News. February 1970.

Telecommunications Union. The I.F.R.B. have no powers of enforcement per se. Rather, they investigate alleged contravention of the regulations, contact the Telecommunication Authorities of the country which had registered the ship in question, and informally encourage sanctions against evident offenders. The Telecommunications Administrations of the countries approached by the I.F.R.B. have all complied with the 1959 Provisions. Not only have none of them issued a license to a broadcasting transmitter on board a ship registered in their country, but on receipt of information that a ship registered in their country was carrying out illegal broadcasts, they have immediately revoked the wireless licenses which had been issued to the ship for normal ship communications. Further, they have taken action through the Maritime Authorities of their countries with a view to the cancellation of the registration of the ship itself.⁵⁴

The 1959 Geneva Administrative Radio Conference also adopted a recommendation asking "Governments to study possible means, direct or indirect, to prevent or suspend such [extraterritorial marine] operations, and where appropriate, take the necessary action."⁵⁵ A number of countries have passed laws to this effect,

⁵⁴ The Radio Regulations, Geneva 1959, are reprinted in Singh. op. cit. pp. 350-629. The French authorities have not only taken action with respect to wireless licenses, but have suspended radiotelegraph and radio telephone services with all ships operating a broadcasting service from outside national territorial limits. This measure has been applied to all types of correspondence, whether incoming or outgoing with the exception of messages relating to the safety of life or of navigation.

⁵⁵ Recommendation No. 16. Relating to the Measures to be taken to prevent the Operation of Broadcasting on Board Ships or Aircraft outside National Territories. In Singh. op. cit. pp. 600-601.

prohibiting broadcasts from the open sea. The basic strategy of most of these laws is not only to prohibit the transmission of broadcasts, but to outlaw effectively the transmitters in the medieval sense of the term, i.e. to make it an offense to have any dealings with the transmitting offender. The 1962 Finnish law for example specifies such dealings. It makes liable to fine anyone who promotes an unlawful marine broadcast (i) by financial support, (ii) by delivering, using, repairing or maintaining technical installations or other objects for this purpose, (iii) by supplying or procuring materials for broadcasting, (iv) by providing transport to the ship on which the installation is situated, (v) by taking part in a broadcast on board. Similar provisions are contained in the Swedish, French, Belgian, Danish, and British laws on the subject.⁵⁶

This strategy was necessitated by the fact that, being on the open seas, the transmitting vessel or installation was not subject to seizure and arrest, and also because the cancellation of radio licenses and ship registrations was not considered an adequate tool of enforcement, (many of the ships concerned are registered in Central American countries, and although they have been struck off after diplomatic pressure, it is possible merely to re-register in another Central American state⁵⁷). The strategy of "outlawing"

⁵⁶ English translations of these laws are filed in the International Telecommunications Union in Geneva.

⁵⁷ Sweden reported that in the case of a transmitter being operated off the Swedish coast in the early 1960's, the vessel carrying the transmitter was struck off the register of one Central American country after Swedish diplomatic pressure, but promptly re-registered in another Central American country. See: "Legislative Measures in Sweden on 'pirate' broadcasts" Office of the Director-General of Swedish Telecommunications. June 15, 1962.

effectively shifts the constabulary function to the land and territorial waters, and leaves the performance of this function to the land-based police forces. The British legislation for example states that "A member of a police force shall, for the purpose of enforcement of this Act, have in external waters all the powers, protection and privileges which he has in the area for which he acts as a constable."⁵⁸ The French give official authority to report offenses not only to police officers and constables but to: (i) commanders of ships of the French navy, (ii) administrators and administrative officers of the Seafarers Registration Office, (iii) customs officers, (iv) officials of the telecommunications services.⁵⁹

The constabulary problem in the field of extraterritorial marine broadcasting can be seen to lie not with the obtaining of information establishing the commitment of an offense, as in the case of submarine cables. The offense, by its very nature, reveals itself. Rather the problem is one of seizure and arrest. To this end, national laws have been passed outlawing any contact with the offending unit, and these have created their own constabulary needs, performed for the most part by the general police forces of the country. Yet the fundamental enforcement problem still remains in some measure, since offending transmitters may still be serviced from other countries to which the national legislations do not apply.

⁵⁸ Marine, etc. Broadcasting (Offenses) Act 1967. H.M.S.O. Section 6:6.

⁵⁹ Act No. 67-1206 of December 29, 1967, authorizing the ratification of the European Agreement for the Prevention of Broadcasts transmitted from Stations outside National Territories, and Relating to such Prevention. Section 3, Article 12.

This argues that ultimately some internationally cooperative policing measures will be necessary for the satisfactory enforcement of the relevant provisions of the Geneva Radio Regulations.

Infringements of National Boundary Legislation

The use of the sea in the course of the smuggling of goods, the evasion of exchange controls, or the bypassing of migration regulations is merely as an area of transit. Since the purpose of these offenses is to transfer goods, money or people from one land area to another, many of the constabulary functions may be performed on land, either in the country of departure or in that of destination. Since the evasion of any nations's controls on incoming traffic will not yet have been committed in the country of departure, the de facto inspectorates there will be in the nature of early warners (in the case of overseas informers on intended smuggling for example) or of preventers (as in the case of the checking of passengers' landing credentials by shipping companies and airlines, who stand to be penalized by a fine, by the cost of keep, and by the marginal cost of the return journey, for any passenger landed in the U.S.A. without a satisfactory visa).⁶⁰ Within the country of destination, inspection, excluding coastal inspection, will take the form of checking import permits or duty receipts on

⁶⁰ The U.S.A tends to fine carriers \$1000 for bringing into the country a passenger without a U.S. visa, down to \$100 for every mistake in the passenger manifest. Western European countries do not operate such a system, though many of them require the carriers to pay for the cost of board while a passenger is being investigated, and to ship away passengers refused entry. In spite of these penalties many carriers in and to Europe do not inspect a prospective traveller's papers, though they will tend to when the journey is to the U.S.A.

suspected goods, or checking identity cards, labor permits, hotel registers, passports and so on, for immigrants.

Particular emphasis will be placed on this land-oriented control system where national boundaries are difficult to police. For many continental West European countries the boundary inspection network for immigrants is less emphasized than the continual monitoring of legal papers for people once in the country. In Britain, on the other hand, the control system for both immigrants and imports is based on a strongly policed coastal barrier, with weak internal inspection. Thus hotel registers, which were introduced into the U.K. under the Aliens Order 1953, are not subject to the rigorous day by day police inspection which is a feature of the Belgian system. The U.K. has no identity card system, nor systematic inspection of labor permits. Certainly as far as immigration is concerned once past the coastal barrier, unauthorized immigrants are caught only by chance, and even then if they are Commonwealth immigrants they are immune if they have escaped detection in the U.K. for twenty-eight days.

These points have been made to provide a context for a discussion of coastal policing. We have suggested that coastal policing should be seen as only one part of a more general policing system, whose importance will vary with the feasibility of a coastal-barrier strategy, and also with the political acceptability of intra-boundary controls. Despite these variations, most maritime countries have significant coastal patrols. In general they follow the principle of channelling incoming goods, money and persons to specialized inspection points, and operating patrols to ensure that these channels are observed.

Few of the specialized inspectors are seaborne. Customs

officials travelled on the "Queen Mary" and "Queen Elizabeth" in post-war years up to 1952 in order to speed up clearance, but this was considered uneconomic and was stopped. Immigration officials continued to travel on the trans-Atlantic routes until 1969 and still do travel on the routes across the North Sea, again to speed clearance. In small-boat and merchant shipping, customs checks will be usually made on board, and most ports will have customs launches for this purpose. However, the great proportion of specialized inspection posts will be on land or at the dockside.

The inter-inspection-post patrols on the other hand often involve considerable seagoing activity. The British Water Guard, a division of H.M. Customs and Excise, has three revenue cruisers, with a usual manning of six per vessel, plus motor launches for work in creeks, and the above-mentioned boarding launches. In the U.S.A. the coast guard have an extensive fleet of cutters, which work in cooperation with the U.S. Immigration Service, and have a right to board any U.S. vessel on the high seas which is believed to be violating or has violated U.S. laws. The French Customs have a developed coastal patrol which uses helicopters as well as boats, and in Hong Kong, where the comparative wealth and the tight restrictions cause particular pressure on national boundary legislation, extensive patrols are operated by the water guard, the immigration service and the police.⁶¹

Sea-based patrols are also used in the policing of controls on the outflow of goods, money and people from a country. Soviet naval

⁶¹ Most customs patrols are either armed (the Italian patrol for example), or have access to arms (the British customs patrols are unarmed but have the right to call on the navy, though this has never been done since the 1952 Customs and Excise Act came into force).

vessels on general patrol in the Baltic, watch for vessels with suspectedly unauthorized emigrants on board: and coastal watches are similarly kept from other countries with emigration and exchange control restrictions.

In general, while the seaborne patrols form only a part of the constabulary system for the enforcement of national boundary legislation,⁶² they may nevertheless in some countries be the largest seaborne inspectorate of all those we have up to now discussed. Certainly this is true of Hong Kong, as of Abu Dhabi whose national navy is concerned primarily with the enforcement of customs and migration controls. Changes in technology and factor costs may cause a shift away from seaborne to land-based patrols, as has happened in Britain.⁶³ But as long as the maintenance of a country's economic wealth is seen as particularly dependent on the effective enforcement of boundary controls (as in the cases of Hong Kong or Abu Dhabi cited above, or East Germany as regards labor

⁶² The seaborne inter-inspection-post patrols are themselves coordinated with land-based patrols. Thus the U.K. coast is separated into areas manned by Customs Coast Preventive Officers who link closely with the police and with the Coast Guards: they operate mainly with cars and shortwave radio. In Hong Kong police patrol the coastline.

⁶³ Sir James Crombie writes of the U.K. customs patrol: "The Launch Service, a separate service attached to the Waterguard, still provides mobility as appropriate but where practicable it is being superseded or supported by the motor car which from the shore adds to greater speed the element of surprise." in: Sir James Crombie, Her Majesty's Customs and Excise, Allen and Unwin, 1962, p. 172. The extent of the longer term change can be gauged from the fact that between 1688 and 1815 the customs service had perhaps 5,000 men afloat in 100 boats. The coming of Free Trade weakened the *raison d'etre* for so large a force, and after many of the boats had been called up for service in the Crimean War, the whole fleet was handed over to the Navy in 1856. A history of the British immigration service can be found in: T.W.E. Roche. The Key in the Lock. Murray, 1969.

or indeed most underdeveloped countries with accumulated capital as regards exchange control) then we may expect sea patrols of the kind we have discussed to continue as far as maritime states are concerned.

Conclusion

The foregoing discussion has two concerns: first, it has sought to clarify whether the policing of sea and seabed activities is in any substantial way distinct from the policing of society on land; and second, it has enumerated the types of constabularies and inspectorates which are concerned with non-military uses of the sea and seabed whose existence and practice should be noted in the course of designing verification measures for marine arms control.

With respect to the first of these points, our discussion suggests that there are features which distinguish the policing of marine activities from other forms of policing. First, the fact that the sea is an appendage to land and that all users of the sea return to land, means that many of the constabulary functions both of detection and arrest can be carried out on land. This presupposes that detection takes place by imputation, (as in the case of the inspection of fishing gear, fish sizes, oil tanks, or ship's equipment) or that the offense is committed on landing and may therefore be detected on land (as in the case of smuggling, illegal immigration, or, in a slightly different form, pirate radio broadcasting). It also presupposes that any offender returns to a land area where the political authority has an interest in arresting him or her. These presuppositions commonly, but by no means always, hold.

Where detection and arrest cannot properly be carried out from a specified land area, a second distinguishing feature of the seas becomes relevant, namely the freedom of the high seas. As far as detection is concerned, much information about offenses can be obtained by observation without infringing the freedom of the high seas. In some cases, however, on-board inspection may be desirable and this does raise the issues of freedom of the seas and sovereignty where it is a question of inspecting the vessels of other flag states. Some of the Fishery Conventions have made provisions for "cooperative" inspection systems because of the high cost of "atomistic" policing, but the restricted range of such "cooperative" powers and the failure to develop "integrated" inspectorates underlines the difficulties of developing effective enforcement procedures in zones of restricted jurisdiction.

Thirdly, while users of the sea must necessarily return to land, the fact that high seas are international waters, i.e. not enclosed within a single political authority, means that transgressors of marine laws may be free to return to a land area whose political authority may have no powers nor interest in enforcing the laws in question. The constabulary problems arising from this are reflected in the experience of pirate radio broadcasts and fishing limit offenses by foreign craft. Effective enforcement in these cases depends on common agreement between the states bounding the sea to seize and sanction vessels seeking to escape from particular national jurisdictions.

Fourthly, natural, technological and economic factors have combined to make the average cost of general surveillance higher for marine activities than for those on land. This has led to a

122

further pressure to devise means whereby marine activities can be policed on shore, and where this cannot be done, reliance has been placed on low-cost forms of information such as that deriving from other users of the sea or air-space, both public and private, who are instructed, encouraged or paid for the reporting of suspected transgressions.

Historical, and even contemporary parallels to these four features can be found for land areas, but taken together they do constitute a distinct set of conditions of which account must be taken in the elaboration of enforcement measures for marine activities.

Turning to the second purpose of our paper, we have found that there are already in existence a substantial number of constabularies and quasi-constabularies concerned with the enforcement of marine laws and regulations. The Table below collects together those operating from Britain: similar tabulations could be made without difficulty for other maritime states. The points we have found common to most national systems are: (i) a notable absence of consolidation; (ii) the predominance of land-based inspection, for reasons discussed above; (iii) the rarity of on-board inspectorates traveling with the vessel; (iv) the paucity of "cooperative" or "integrated" constabularies in the sense defined above.

Table showing existing British inspectorates and constabularies concerning themselves with the sea and seabed

<u>On Land</u>	<u>On or Over the Sea ..under national.. jurisdiction</u>	<u>High Seas</u>
Fisheries Inspectors	Fishery patrol Squadron Local fishery patrol vessels Min. of Defense helicopters to survey foreign fishing poaching	*Patrol vessels with NEAFC inspector British frigate accompanying fishing fleet
Classification Society Inspectors	Trinity House Inspectors	
Board of Trade Marine Survey Service		
Coast Guards		
Health and Sanitary Inspectors		
Ministry of Agric. inspectors of radioactive waste disposal		
Harbor authorities checking oil disposal systems	Aircraft surveying reported pollution	*ENEA disposal of atomic waste in the Atlantic
Oil and gas exploration and production inspectors	On-site inspectors of natural gas installations	*North Atlantic patrol
Coast Prevention Control	Customs cruisers and launches. Revenue cutters	Immigration officials on North Sea routes

Additionally:

- i. generalized constabulary function by land police, including policing of laws governing pirate radio stations, mariculture, national boundary legislation etc.
- ii. generalized watch kept by British aircraft and ships for pollution.

*indicates part of cooperative or integrated international patrol

One final point should be made. We have dealt with the constabulary function as composed of two parts:

- (a) the obtaining of information about transgressions (this is a more general formulation than "boarding and inspection").
- (b) the arrest and escort of suspected transgressors to zones of penal jurisdiction.

These are, however, only two aspects of any enforcement system; and it is important when considering the procedures to adopt and the resources to allocate in respect to these two functions to see them in the context of all the factors relevant to enforcement. We may list these other factors as follows:

- (c) making the law known (pollution regulations are included in exams for mariners in many countries, so is submarine cable law and the positioning of cables; informatory leaflets are issued in respect to immigration regulations, pollution, customs controls and so on).
- (d) removing the incentive to break the law (this is the point of submarine cables compensation, or the provision of port facilities for the disposal of waste oil).
- (e) encouraging the desire to obey the law quite apart from fear of detection and penalization (this is a central aspect of the literature on organizational control, and is one aim of policies encouraging participation in rule-making by those to whom the rules will apply).
- (f) instituting technological changes which make it difficult or impossible to disobey the law (this occurs with the regulated net size in fisheries, the limitation of the size of fishing vessels, the sinking of submarine pipelines and cables underground, the design of whalers so that they can only process

whales of a legitimate type, or the design of tankers to make intended oil pollution impossible).

- (g) The conviction of the offender.
- (h) the punishment of the offender, including the size and type of punishment, and the person or persons on whom the punishment will fall.
- (i) the mitigation of the effects of the offense (as in the counter-acting measures used against pollution, the emergency regulations governing conduct and help after shipping accidents, or the jamming of pirate radio broadcasts).

For each of these there will be some optimal method of operation. Thus if the obtaining of information involved (a) sea patrols, (b) air patrols, and (c) onshore inspectors, there will be, for a given probability of detection, some optimal mix between the three which will minimize the cost of inspecting. Similarly for a given level of enforcement, there will be an optimal mix between the enforcement factors which will minimize the cost of enforcement, and an optimal level of enforcement given the minimized costs of enforcement and the benefits deriving from it. What is noticeable in many marine activities, above all in fishing and pollution, is that enforcement procedures have not been devised with a full awareness of the economies to be gained from such an optimizing procedure. Certainly there are problems and costs of obtaining information for implementing this approach, but the real point is that the consciousness of the principle that the costs and the benefits of enforcement procedures should be equal at the margin, and that there is some degree of substitutability between the different types of enforcement procedure, will prompt the designer of an enforcement system to ask questions which he might otherwise not

have asked. On the evidence of the existing constabularies and inspectorates which we have discussed, and in the light of the current proposals for verification measures for marine arms control agreements, it is a point which it is difficult to over-emphasize.

APPENDIX

NATIONAL CLAIMS TO TERRITORIAL SEA AND FISHING LIMITS

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Albania	10	12	From straight base-lines.
Algeria	12	12	
Argentina	200	200	Permission must be sought by boats of foreign flags to carry out fishing activities at a distance of not less than 12 miles from the coast.
Australia	3	12	
Belgium	3	3	Customs control zone 10 nm.
Brazil	12	12	
Bulgaria	12	-	
Burma	12	12	From straight base-lines.
Cambodia	12	12	From straight base-lines.
Cameroon	18	-	
Canada	3	12	
Ceylon	6	106	From "appropriate base-lines." Fishing claim is to conservation zones.
Chile	3	200	Contiguous zone 12 nm.
China(Nationalist)	3	-	
Chinese People's Republic	12	-	From straight base-lines.
Colombia	3	12	Contiguous zone 20km.
Congo(Brazzaville)	3	-	
Congo(Kinshasha)	3	-	
Costa Rica	200	200	
Cuba	3	-	

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Cyprus	12	12	
Dahomey	12	12	
Denmark	3	12	From straight base-lines. Fishing limit 3 nm. South of Kattegat.
Dominican Republic	6	12	Contiguous zone 12 nm.
Equatorial Guinea	-	-	Not known. 6 nm. can be assumed.
Ecuador	200	200	
El Salvador	200	200	
Ethiopia	12	-	Straight base-lines around Dahlak Archipelago.
Faroese	3	12	Fishing limit from straight base-lines.
Finland	4	-	Employs straight base-lines.
France	3	12	Straight base-lines are employed around Brittany and parts of the Mediterr- anean coast and around the West and South coasts of Corsica.
Gabon	12	-	
Gambia	3	-	
Germany, East (not recognized by HMG)	-	-	Not known but 3 nm. can be assumed from straight base- lines.
Germany, Federal Republic	3	3	Contiguous zone 10 nm.
Ghana	12	12	May claim certain areas out to 112 nm. as Fish Conser- vation Zones.
Greece	6	6	Fishing reciprocity between 3 and 6 nm.

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Greenland	3	12	From straight base-lines. Outer 6 nm. of fishing limit phased out until May 31, 1973.
Guatemala	12	-	
Guinea	130	130	
Guyana	3	-	
Haiti	6	-	
Honduras	12	12	
Iceland	3 or 4	12	Breadth of territorial sea uncertain. Fishing limit from straight base-lines.
India	12	112	Fishing claim is to con- servation zones.
Indonesia	12	-	From straight base-lines enclosing whole archipelago.
Iran	12	-	From straight base-lines 12 nm. apart.
Iraq	12	-	
Irish Republic	3	12	From straight base-lines.
Israel	6	6	
Italy	6	6	
Ivory Coast	6	12	Contiguous zone 20 km.
Jamaica	12	-	
Japan	3	-	
Jordan	3	-	
Kenya	12	12	From straight base-lines.
Korea, North	12	-	Probably employs straight base-lines.
Korea, South	-	20-200	Territorial sea not known but 3 nm. can be assumed probably from straight base- lines. Fishing limit now believed to be 12 nm.

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Kuwait	12	-	
Lebanon	6	6	Customs control zone 20 km.
Liberia	12	-	Contiguous zone 2 ⁴ nm.
Libya	12	-	
Malagasy Republic	12	-	From straight base-lines.
Malaysia	12	12	
Maldives	3	-	Measured from rectangle enclosing whole group.
Malta	3	-	
Mauritania	12	12	From straight base-lines.
Mauritius	3	-	
Mexico	9	12	
Monaco	3	-	
Morocco	12	12	Claims only 6 nm. fishing limit in Straits of Gibraltar. Employs bay closing lines limited to 13 nm.
Muscat and Oman	3	-	
Netherlands	3	-	
Surinam	3	-	
New Zealand	3	12	
Nicaragua	-	200	Reported to claim 3 nm. territorial sea.
Nigeria	12	12	
Norway	4	12	From straight base-lines. Outer 6 nm. of fishing limit phased out until October 31, 1970. Customs control zone 10 nm.
Jan Mayen	4	-	From straight base-lines.
Pakistan	12	-	A fish conservation zone extending 100 nm. beyond territorial sea is claimed.

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Panama	200	200	
Peru	200	200	
Philippines	Special	-	Limit of territorial sea is the limit set out in the Treaty of Paris 1898. Straight base-lines enclose whole archipelago for internal water purposes. Fishing limits the same as territorial sea limits.
Poland	3	-	
Portugal	6	12	Overseas territories follow same law as mother country: Angola, Mozambique, Timor, Portugese Guinea, Cape Verde Islands, Sao Tome and Principe Islands, Macao.
Republic of South Africa	6	12	
Romania	12	-	
Saudi Arabia	12	-	From straight base-lines to islands 12 nm. apart.
Senegal	12	18	From straight base-lines. Outer 6 miles of fishing limit not enforced against states conforming 1958 Law of the Sea Conventions.
Sierra Leone	12	12	
Singapore	3	-	
Somalia	12	-	
South Yemen, People's Republic	-	-	Decree to be issued shortly.
Spain	12*	12	*for fiscal purposes. Limits apply to all Spanish territories including enclaves on Moroccan coast.
Sudan	12	-	
Sweden	4	4	From straight base-lines. Fishing limit 2 nm. on on west coast.

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Syria	12	-	
Tanzania	12	-	
Thailand	12	12	
Togo	12	12	
Trinidad and Tobago	3	-	
Tunisia	6	-	Fishing limit is partly 12 nm. and partly out to 50 meter depth contour.
Turkey	6	12	From straight base-lines.
United Arab Republic	12	12	From straight base-lines, to island 12 nm. apart. Claims further 6 nm. con- tiguous zone beyond fishing limit.
United Kingdom	3*	12	*including selfgoverning colonies and protectorates whose foreign affairs are the responsibility of the U.K.
Bahrain	3	-	12 nm. fishing limit under consideration.
Brunei	3	-	
Qatar	3	-	
Tonga	3	-	
Trucial States	3	-	(Abu Dhabi, Ajman, Fujaira, Ras Al Khaima, Sharja, Umm al Qaiwain)
Uruguay	12	*	*fishing limit extends to edge of continental shelf.
U.S.A.	3	12	
U.S.S.R.	12	-	From straight base-lines.
Venezuela	12	-	From straight base-lines. Reported to claim 15 nm. fishing limit.

03 44 4

<u>Country</u>	<u>Territorial Sea</u> (Nautical miles unless otherwise stated)	<u>Fishing Limit</u>	<u>Remarks</u>
Vietnam, North	-	-	Not known but 12 nm. can be assumed.
Vietnam, South	3	20 km.	Contiguous zone 12 nm.
Western Samoa	3	-	
Yemen	-	-	Not known but 12 nm. can be assumed.
Yugoslavia	10	10	From straight base-lines. (claims 2 nm. contiguous zone beyond territorial sea)