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DEPARTMENT OF STATE THE DIRECTOR OF INTELLIGENCE AND RESEARCH

MEMORANDUM FOR THE SECRETARY OF STATE

Oceanography is a rapidly expanding science which will have increasing implications for the national security of the United States. In a broad sense, U.S. foreign relations will involve complex problems relating to the use to which the oceans are put. In a narrow sense individuals will more and more look to the resources of the sea for their promise of adding to the amenities of life.

This Bulletin primarily concerns the rights which the United States and other countries have on, over, and under the surfaces of the oceans. Precise distinctions of jurisdiction on land areas have their counterpart along and off the shores of six continents and hundreds of thousands of islands. The merchant marines of several scores of countries, as well as their fishing fleets, must operate within the precepts of the law of the sea. Forests of oil derricks emerging from coastal waters signal another growing exploitation of the sea for which a legal framework must be developed.

The discussions, technical explanations, tables, and diagrams in the following pages were prepared to shed light on a subject of mounting interest. The material should, however, be utilized for background and reference purposes, and not as a basis for legal decisions or as representing official U.S. policy.

Thomas L. Hughes

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The Single Ocean Concept

The sea covers some 140 million square miles, or 70.8 percent of the world's surface. It is possible to be in the ocean on a ship 1,600 miles from the nearest land. At one point in midocean a ship can be more than 3,500 miles from the nearest continental landmass. Ocean areas run into statistical values of enormous proportion, far exceeding land areas of national and even continental extent. The Pacific Ocean with some 64 million square miles and the Atlantic and Indian Oceans together with another 60 million square miles constitute the bulk of the total hydrosphere.

That the oceans of the world, in addition to their vastness, are joined one to another by wide passages leads some oceanographers to speak of The Global Sea. This concept is indeed well adapted to the modern trend of a world shrinking in travel time and in which states come ever closer in their interspatial relations. Colossal expanses of water off their shores have long intrigued land dwellers. Many have turned to the sea to earn their living in one way or another while countless others have crossed oceans bound from one land area to another. Nevertheless, the sea to date has failed to receive attention commensurate with its dimensions or with the careful examination given to the development of land surface.

As recently as a decade and a half ago little hope was held for the oceans as a reservoir of resources which might help to feed or otherwise reduce the spectre of a hungry and rapidly expanding world population. Ships have long sailed the seven seas and world fisheries for years have yielded an annual catch on the order of 15 to 25 million tons, but new startling innovations and discoveries in marine science have largely taken place only since World War II began to fade into history as another great episode in world affairs. In this new era, however, and with accelerating momentum, oceanography has been sharply enlivened by recognition of a new and vast fishing potential, by offshore oil wells in

deeper and deeper water, by the analysis of mineral globules from the bottom of the sea holding untold wealth, by the successes of nuclear-powered submarines, and by the advances in desalination of sea water. Some enthusiastic scientists declare that indirectly the production of fish meal alone could substantially augment the world's food supply. New methods of travel, fishing, extracting minerals, and making depth soundings exemplify some of the techniques which further advance development of oceanography and direct our interest toward offshore problems.

The U.S. Coast and Geodetic Survey probes deeply into oceanographic research, testifying to our concern with offshore claims and their resource potential. This Bureau operates seven oceanographic vessels, equipped with laboratories, for scientific investigation over all parts of the global sea. One, the "Pioneer," has recently returned from the Indian Ocean where it has engaged in the United Nations-sponsored cooperative Indian Ocean Survey.

Growing nationalism in a world fraught with tensions also causes many nations to look seaward, whether apprehensive as to securing their domain or to extending it. In fact, strong nationalism by its very nature serves as the incipient forerunner to offshore claims—always increasing, never decreasing. Not uncommonly a state will make greater offshore claims in response to similar claims on the part of a neighboring state.

The emergence of 54 newly independent states since December 1943, each with a fresh consciousness as to its national domain, has accentuated attention given to sovereign territory and its bounds. As one naval officer expressed the question of claims at a Law of the Sea Conference, "... international negotiations here are little more than 'diplomacy of the grab.'" Unfortunately these trends are in direct opposition to policies strongly upheld by the United States and other nations be-

lieving in freedom of the seas as a means of engendering world commerce and promoting international cooperation in an effort to insure peace. A paradox appears when a nation that advocates advancing space exploration and utilization by opening the skies to all nations at the same time seeks to restrict movement in the seas. An examination of proceedings in U.N. conferences will show that this incongruous situation has not been uncommon. All the more ironic is the situation when one traces through past centuries the long uphill pull to render the seas free from limitations of mobility in order to facilitate an exchange of goods on a worldwide scale. Highlighting this crusade was Hugo Grotius' much publicized support in the early 17th century of mare liberum. The maritime states, centering along the periphery of the North Atlantic must again champion the right to keep the

world's shipping lanes open in accordance with geographic logic rather than the prejudiced dictates of statesmen.

That the U.S. Government has an intense interest in the new look at the sea, and in pressing for freedom of movement upon it, has ample evidence in the literature of the day and in official writings. An especially graphic document is the text of the "Advancement of Marine Sciences—Marine Sciences and Research Act of 1961." In it President Kennedy is quoted as having written, "Knowledge of the oceans is more than a matter of curiosity. Our very survival may hinge on it." In pursuit of this worthy objective it becomes imperative at the outset to distinguish the rights (or lack of rights) of the several sovereign states of the world in the exploration and exploitation of the seas.

PART II

Question of Offshore Jurisdiction

Every part of the global sea, whether a segment in mid-Pacific or a fragment along an irregular coast such as that of Norway, should in theory at least fit into a worldwide jurisdictional pattern. In other words, every square mile of sea surface and seabed and every gallon of sea water should be accounted for—who controls any given point on, over, or under the surface of the sea and to what degree should be a matter of record. Accord among the states of the world in these matters not only contributes toward stability in international relations but facilitates cooperation in the use of the oceans' resources as well as spatial advantages which their broad expanses have to offer.

No less than 99 sovereign states have coastlines bordering the sea, including insular (Iceland, Philippines) as well as mainland territory (France, Thailand). Another 26 states are landlocked, yet they justifiably demand certain rights with respect to the sea. These figures do not include some 15 dependencies and areas of associated sovereignty along the coasts of continental mainlands as well as a highly diverse assortment of islands, parts of is-

lands, and exclaves of varying sovereignty which also face or are surrounded by the sea (see Table III on page 20, giving coastline distances by countries).

Obviously the landward margin of the sea adjacent to a coastal state demands the preponderant amount of attention from the state—the more immediate the zone offshore the more intense the concern. At the other extreme, all states have interests which stretch across the widest of oceans so that they may engage in maritime commerce with any part of the world or otherwise utilize such broad expanses of emptiness in the interests of science.

Unfortunately offshore claims vary from state to state. Too, there are gaps or vagaries relative to precise definitions and means of identification within the scope of any given claim. At the same time abuses abound in the observance of those acts which

¹ Calendar No. 399, 87th Cong., 1st sess., Senate Report No. 426.

have been established as conventional law of the sea rules and procedures. With respect to the geographic situation along the world's seacoasts it must be granted that distribution of land and water and shoreline configuration produce a pattern which in no place is a duplicate to that of any other place. It is little wonder, therefore, that the application of an effective jurisdictional pattern to so complicated a physical setting encourages biased interpretations and meets with so much controversy.

Breadth of the territorial sea has long caused serious controversy among the world's states but only in 1958 at the first Law of the Sea Convention at Geneva did it take on ominous overtones. Claims vary from 3 miles by the United States and most maritime nations of Europe and the Commonwealth, through 12 miles by the Soviet Union and countries of Eastern Europe, to 200 miles by some of the west coast countries of Latin America. Again, fishing interests widely overlap the issue, creating bitter feelings which have on occasion bounded out of the international courtroom and onto the decks of war vessels convoying fishing craft. Normally, however, fishing agreements take form over the conference table. In recent months frequent talks at high levels between the United States and other countries over fishing rights indicate the concern with which this matter is viewed.

Navigation rights along the periphery of the oceans where shipping lanes narrow to traverse constricted straits and channels likewise signal conflict of national interests. Here converge ocean routes through physical bottlenecks or at the approaches of the world's seaports. Commerce depends entirely upon egress from and ingress to the loading dock, for the millions of square miles of "open seas" are not at all open without accessibility to the terminals.

Less flexible than regulations for water transit, air rights for commercial aviation rigidly restrict air routes to jurisdictional rather than geographic patterns. Aircraft may not fly over the territorial sea of any state unless they have the right to also fly over that state's sovereign land area. Thus, no "right of innocent passage" exists as with surface craft. Rights of a state to overfly the territory of other states are exclusively by agreements among states. The bilateral agreement is the common basis upon which the world's international air route structure hinges. Military aircraft, obviously, cannot fly with impunity over foreign territory, in-

cluding the territorial seas, without risk of diplomatic note or antiaircraft fire.

The itinerary of any naval vessel close along a foreign coast or through strategic waters may be tantamount to creating tension and precipitating crises, even among otherwise relatively friendly states. Visibility may come into play to further complicate the situation. Ships only 3 miles offshore may easily be seen, adding to the emotional factor in the case of naval craft rights. The most peaceful coastal patrol may loom as a war scare if alarm is generated to an uninformed and gullible citizenry. In direct contrast, the presence of war vessels offshore may have a stabilizing influence, a technique at times used by the U.S. Navy in looking after "brush fires."

Visibility further enters the picture in the case of surface craft versus submarines. A submarine may glide through the territorial sea (assuming sufficient depth) unobserved, while a destroyer or cruiser must carefully respect the outer limit of the territorial sea to avoid possibility of an international incident. Here the difference between a 3- and a 12-mile territorial sea makes a tremendous impact, for the offshore zone between mile 3 and mile 12 constitutes an area where undersea craft can act unobserved and with cunning and at the same time be immune from surface vessels in pursuit. Surface ships in this zone have no such advantage and may not pursue submarines within the territorial waters of other states.

Stated succinctly, the problems of offshore sovereignty amount to a single, though complex, question: "What state holds jurisdiction over what part of the seas and to what degree?" Even where there may be fairly precise guidelines by which to measure jurisdictional limits, the highly irregular coastal pattern in many areas handicaps any uniform application of them from one part of the world to another. In response to such an overwhelming problem of legal delineation a worldwide framework of jurisdiction may for reference purposes be constructed from a combination of legal documents and hydrographic charts. The resulting zonation of the sea, vague or conflicting though it be in places, establishes the basis for a system of offshore compartition whereby the potential of the world's major water bodies may be utilized in the most effective manner by the community of nations.

Offshore Pattern of Zones

Lines of jurisdiction, easily fixed and demarcated on land, do not lend themselves to ready identification on the surface of water bodies. A network of buoys could conceivably serve this purpose though for the most part hydrographic charts are used for discerning various zones and their limits. National mapping agencies seldom issue material upon which jurisdictional limits are shown, but charts officially published form the basis for plotting offshore claims. The zonal pattern over the global sea, as discussed below, may not be regarded as constituting a system of political entities such as might commonly be found over land areas. Rather, the zones are delineated according to textual specifications and represent a point of departure, or frame of reference, for carrying on offshore activities and from which procedures may be projected. In many instances these specifications fail to encompass detailed data, thus requiring some objectivity in their interpretation relative to actual coastal or bathymetric situations.

Offshore zones near the continental margins or major islands are normally small and tightly fitting segments, particularly in areas of fringing islands and along irregular coastlines. Lines of contact between jurisdiction of neighboring sovereign states also occasion complexities in the pattern. As distance from a shoreline increases so decreases the interest and concern of the coastal state in offshore matters. In turn, the stringency of jurisdiction also decreases. In the high seas sovereign jurisdiction may theoretically approach zero. An exception would be aboard ship where the sovereignty of the flag flown prevails.

Within the idealized zonal pattern under discussion five basic zones, roughly parallel to the coast, may be distinguished: internal waters, territorial sea, contiguous zone, continental shelf, and high seas. In all instances offshore zones are alined in relation to a baseline, which is the legal version of the coast.¹ The following paragraphs present the highlights of each of the offshore zones as distinguished by jurisdictional function.

Internal waters are those along a coast inside the baseline. They consist of water areas in bays and mouths of rivers or estuaries as well as certain other hydrographic features fringing the shores. In contrast, "inland waters," a somewhat similar sounding term, usually refers to such features of the landscape as lakes, rivers, and canals. The Great Lakes, for example, are inland rather than internal waters. Along coastal stretches where the straight baseline is applied (see explanation on page 12 and chart on page 30) areas of internal waters may lie seaward of what normally would be the baseline of measurement. Sovereignty over these waters is identical to the land area of the coastal state along which they lie.

The territorial sea, or territorial waters, comprises a zone of water off the coast of a state, which may vary in breadth from 3 to 12 or more miles. The United States recognizes the territorial sea as being no more than 3 miles in breadth. Complete sovereignty is maintained over this zone by the coastal state, but in most circumstances with the right of innocent passage to ships of other states.

The contiguous zone comprises a band of water outside, or beyond, the territorial sea in which the coastal state may exercise controls such as those over customs and sanitation. The contiguous zone is measured from the same baseline as the territorial sea, and may extend no more than 12 miles seaward from it. In all cases the contiguous zone is coextensive with the landward margin of the high seas. It also may, and usually does, extend over part of the continental shelf. Since this zone exists for specific purposes, the overlapping of zones creates no particular conflicts in jurisdiction.

Since the Law of the Sea Conferences in Geneva in 1958 and 1960, one frequently sees reference to fishing zones. In theory, these zones in many respects correspond to the principles of the contiguous

A technical explanation of these zones, as well as detail on the establishment of the baseline, appear in the appendixes of this BULLETIN.

zone, but in practice have no status in Law of the Sea documentation.

Continental shelf refers to the seabed area beyond the outer limits of the territorial sea. The term has both physical and legal connotations but in Law of the Sea matters the latter are usually implied (see chart on page 28). Briefly, this zone may be exploited exclusively by the coastal state for mineral and certain other resources. Waters of the contiguous zone, as mentioned above, may either wholly or in part lie over the continental shelf without any conflict in claims because of duplicate legal zonation. Neither are fishing rights affected by any legal aspects of the continental shelf. The rights of the coastal state apply to the water in the case of the contiguous zone and to the seabed below in the case of the continental shelf, thus introducing a third dimension to offshore jurisdiction.

High seas refer to all water beyond the outer limit of the territorial sea. Here are the vast ocean areas of the world, for the most part subject to a minimum of control as denoted by the freedom of the seas concept. Surface navigation, aerial navigation, laying of cables, and laying of pipelines exemplify those activities which may be carried on by any state in any part of the high seas. Although the high seas are in part coextensive with the waters of the contiguous zone and those over the continental shelf, freedom of the seas is not invalidated by the zonal overlap. Only specific activities, as disposal of waste materials and collection of customs,

fall within the category of the high seas (nearest their landward margins) and at the same time come under control of a state's jurisdiction.

Horizontal Stratification of Jurisdictional Limits

On and below the surface of the sea offshore claims run into three dimensions where jurisdiction over the seabed differs from that of the superjacent water. For example, a coastal state may have the right to drill for petroleum in a submarine area for which no fishing rights obtain to that state. In turn, the vertical dimension of offshore rights above sea level may differ from those on and below the surface of the sea. Here airspace must be added to a full inventory of offshore zones, superimposed as it is over the entire surface pattern.

Rights in airspace offer none of the flexibility found on and below the water surface. Overflight of foreign aircraft may not take place over the territorial sea of any state without bilateral (or multilateral) agreement. Nor does there exist in the atmosphere a counterpart to the contiguous zone, or any other special purpose rights of transit. Thus, no right of innocent passage prevails as for surface craft, a situation giving rise to the possibility of hostile action against planes counter to regulations in marginal sea areas where tension exists.

PART IV

Breadth of the Territorial Sea

No state or statesman will deny the fact that there is a territorial sea (or territorial waters) and that it extends along all coastlines of all countries. Such a zone of offshore water lends itself quite logically as that margin of the sea where a state may without interference carry on littoral functions essential to national welfare. The meeting of land and water, two violently contrasting types of physical environments, must necessarily require nu-

merous activities not normally associated with the land alone. Modern methods of transportation and commerce and the consequent easy accessibility of a coastal state create a sense of apprehension on the part of some states to the degree that from a defense point of view the territorial sea may be regarded as a cushion of protection. To other states the opportunity to engage in commerce relegates territorial waters to avenues of ingress and egress and without aspirations of broad exclusive claims of sovereignty.

A major problem of high international concern involves the breadth of the territorial sea—how far

¹ Technical aspects of the territorial sea, including how it is delineated, may be found in Appendix A on page 10.

seaward should a state's sovereignty extend? This specific question, simple though it may appear, has stirred up animosities in the world community, especially plaguing those states seeking to uphold the freedom of the seas concept. Planes and ships may be fired on, and international incidents over coastal fishing operations may result from conflicting views on this score. Full-scale international conferences in 1958 and 1960 at Geneva under the auspices of the United Nations on the Law of the Sea failed to resolve this issue or bring about any agreement among nations.

The primary basis for recognizing any given breadth of the territorial sea as an international norm lies in guidelines provided by the International Law Commission.2 Pertinent statements in the documentation reveal the lack of any precise attempt to pin down a fixed breadth. The result has been interpretation by individual states of the rather inclusively worded premises to support national politics and aspirations. The drafted statements in question are contained in Article 3 of the International Law Commission's report as follows:

 The Commission recognizes that the international practice is not uniform as regards the delimitation of the territorial sea.

 The Commission considers that international law does not permit an extension of the territorial sea beyond twelve miles.

 The Commission, without taking any decision as to the breadth of the territorial sea up to that limit, notes on the one hand, that many States have fixed a breadth greater than three miles and on the other hand, that many States do not recognize such a breadth when that of their own territorial sea is less.

 The Commission considers that the breadth of the territorial sea should be fixed by international conference.

The spirit of the above statements seems to imply 3 miles as the conventional breadth by the phrase, ". . . many states have fixed a breadth greater than three miles . . ." Three nautical miles has long been the distance generally accepted by those states upholding the concept of the freedom of the seas.3 Conversely, other states have set the breadth of their territorial seas at 12 miles, claiming it to be within the limits of the Article. A number of states have also decreed breadths more than 3 and less than 12 miles, while still others have exceeded 12 miles (see Table IV on page 26).

Several countries, along the west coast of Latin America facing the unlimited vista of the Pacific, reached the extreme of settling on a territorial sea of no less than 200 miles in breadth. Such decrees reflect a desire to retain exclusive fishing rights offshore for this distance, but nonetheless they impinge on the concept of the freedom of the seas. The resulting pattern of claims thus varies from the coast of one political entity to another.

In recent years more and more states have unilaterally extended their territorial waters, usually to 12 miles. Several of the newly independent states of Africa have acted in this fashion. According to one estimate, if all countries were to extend their territorial waters to this distance some 3 million square miles would be lost to the regime of the high seas. Even more important, many of the world's strategic straits and narrow water channels along continental margins and between islands in archipelagoes would be converted from high seas to territorial waters. Examples include the Strait of Dover, Strait of Hormuz, entrance to the Gulf of Bothnia, entrance to the Gulf of Finland, Strait of Gibraltar, Straits of Bab-el-Mandeb, and passages in the chain of Indonesian islands (see Table III on page 20 for width of important straits).

During the 1960 Law of the Sea Conference in Geneva the United States, together with Canada, proposed as a compromise a 6-mile territorial sea plus a 6-mile fishing zone. Although the measure failed passage (narrowly) by the necessary twothirds majority, the concept of greater control on the part of coastal states remains active as evidenced by recent claims. States in seeking to extend their offshore claims in this manner have so far favored reasonably modest distances. Despite the abovementioned proposal, which entailed a 6-mile territorial sea, the U.S. policy since the Geneva Conference of 1960 continued to adhere strictly to a

3-mile territorial sea.

^a Report of the International Law Commission, General Assembly, Official Records: 11th sess., Supplement No. 9 (A/3159), United Nations, New York, 1956.

^a Three nautical miles corresponds to 1 league, a former unit of measurement used in marine science. Also, a commonly accepted but not necessarily irrefutable statement attributes the 3-mile breadth to the distance a cannonball could be fired.

Double Continental Shelf

In contrast to offshore zones of planimetric design, the continental shelf definitely involves three physical dimensions. In addition to length and breadth, the floor of the sea varies in bathymetric elevation. Unfortunately, yet a "fourth" dimension comes into the picture, for the legal definition of the continental shelf differs markedly from that pertaining to the physical feature itself. Each of the two concepts needs careful attention in order to properly distinguish between the physical and

the legal versions.

In a literal sense the continental shelf refers to that part of the ocean floor immediately peripheral to the continental landmasses of the world. In scientific literature one usually sees reference to a depth of either 100 fathoms (600 feet) or 200 meters as being the outer edge of the continental shelf, where on the average there tends to be a definite steepening of slope to greater depths. Maps conveniently show submarine contours of these values to illustrate the limits. Actually, 100 fathoms equal only about 183 meters, but the location of the break in the slope is so indefinite that it cannot be precisely identified by a fixed mathematical value. In fact, the criterion of 100 fathoms tends to be somewhat high since available data show the average depth of the break in slope to lie between the 60- and 80-fathom submarine contours. On the other hand there is positive evidence of continental shelves at much greater depths, the most extreme being 550 meters for the Sahul Shelf off the coast of northern Australia.

The actual angle of slope on a true continental shelf is incredibly small, only about 2 fathoms per mile, or 0.085 degree. The human eye cannot detect a slope of even double this inclination. In many instances, however, the surface of the shelf is not smooth, but forms terraces, ridges, hills, depressions, and canyons. Uneven submarine topography of this type obviously makes the physical shelf difficult to delineate, especially where its outer periphery is fractured and defies generalization.

On the average the continental shelf extends sea-

ward for about 30 miles. But the average width is not very meaningful because of the great variation to be found from place to place. Along the west coast of South America, for example, where mountains rise sharply from the coast, the submarine surface in turn plunges to great depths with very little trace of a ledge which could be construed as a continental shelf. At the opposite extreme, the entire Bering Strait area, extending 800 miles north of the north coast of Siberia, is less than 100 fathoms in depth. At other places, also, the width of the shelf is measured in hundreds of miles, including the Atlantic Ocean off the southern coast of Argentina and the South China Sea off the eastern coast of the Malay Peninsula. The Persian Gulf, some 600 miles long by 230 miles wide is nowhere deeper than 50 fathoms. Its seabed qualifies in its entirety as continental shelf.

In view of current international interest in—and conflict over—Law of the Sea matters the continental shelf has strong legal connotations as well as physical import. There must be means of identifying jurisdictionally that zone of water along any coast relative to the resources of its seabed, particularly minerals. Increasingly it becomes necessary to clarify the rights of sovereign states to exploit offshore resources. Regardless of its location, any given offshore resource must legally appertain to one sovereign state or another, or be subject to the regime of the high seas and thus accessible to any sovereign state.

Guided by reference to the Report of the International Law Commission of 1956, a legal definition of the continental shelf was promulgated at Geneva in 1958 by the following wording:

adjacent to the coast but outside the area of the territorial sea, to a depth of 200 meters or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas.

Continuing, the definition went beyond the former Report in that it applies to islands as well as continental mainland: . . . the sca-bed and subsoil of similar submarine areas adjacent to the coasts of islands.

Supplementary to the definition of the continental shelf, the rights of exploitation were expressly specified:

The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.

In light of the above excerpts cited from the Articles adopted by the Conference at Geneva, a coastal state has sovereign rights for the purpose of exploring and exploiting resources on or under the seabed of the shelf.

Thus the zone of territorial waters differs in concept from that of a continental shelf as conceived by international jurists. Territorial waters, including their seabed, are part of the sovereign territory of the state, so that no question arises which might

challenge the rights to exploit resources within these limits. It is beyond the outer limit of the territorial sea of any state that the definition of the continental shelf becomes critical.

Full sovereignty of both water and seabed extends from the shoreline (or baseline) to the outer limit of the territorial sea. Seaward from this limit the water falls into the region of the high seas, of free access to all states. But with respect to the seabed and its resources certain sovereign rights exclusive to the coastal state exist, thus bringing the third dimension into play. In short, beyond the outer limit of the territorial sea any distant state may navigate freely on the surface of the water, may engage in fishing (assuming there are no other restrictions by definition or agreement), but may not exploit minerals and certain other natural resources from the seabed of the continental shelf.

PART VI

High Seas and High Flying

All water beyond the outer limit of the territorial sea qualifies as high seas. Here stretch the vast ocean areas of the world, void of sovereignty and subject to the doctrine known as freedom of the seas. Over, on, or through this part of the sea any nation may operate aircraft, surface vessels, or submarines. Neither are there restrictions in the high seas to such activities as laying cables or pipelines or, if not in violation of international agreements, to fishing.

The landward margins of the high seas may in part be coextensive with the waters of the contiguous zone and over the continental shelf (but coextensive with only a portion of those over the physical version of the continental shelf). The establishment of any fishing zone as projected by some states must necessarily be in the high seas. However, the freedom of the seas concept as it applies over the high seas does not conflict with the right of the coastal state in any of the zones seaward from the outer limit of the territorial sea or with the continental shelf.

Although the high seas represent the ultimate in opportunities for mobility on an extensive scale,

their use for world commerce may be greatly hampered by legal limitation of movement along the margins. A zone of territorial water compounds the restrictive effect of coastal configuration in the narrow seas and along irregular shorelines. Any increase in the width of the territorial sea decreases, out of all proportion to the area involved, high seas maneuverability along the coast. For example, any straits more than 6 but less than 12 miles in width will have a continuous zone of high seas extending through them with a 3-mile but not a 6-mile territorial sea (Strait of Gibraltar, Straits of Malacca). See Table III on page 20 for widths of some of the more important straits.

Air Space

Unlike ships that ply the seas, aircraft have no "right of innocent passage" over territorial waters—only above the high seas is there an absence of any restrictions pertaining to sovereign rights. The complicated structure of international airways with their technical requirements must in all cases con-

form to the sovereign pattern of land and the marginal seas. Each mile in the air denied to commercial aircraft, as by greater breadth of the territorial sea, offsets just that much the great advances made by the aeronautical industry. Planes of one state may fly over the territorial sea of another state only by bilateral or multilateral agreements, and such accord is by no means always assured in the present-day world. In frequent instances aircraft must fly many extra miles to avoid overflight of cer-

tain sovereign territory. For example, a jet aircraft bound from Tehran to Tel Aviv, to avoid flying over Iraq and Syria, will require an additional 245 miles, or approximately an additional 30 minutes of flying time. Flight of military aircraft must adhere strictly to practices incorporated in Law of the Sea conventions. In fact, the shooting down of military planes which "stray" over the territorial waters as well as land territory of an unfriendly state is by no means unknown.

PART VII

Crises Ahead

Accord and agreement prevail in many aspects of Law of the Sea matters. Those functions pertaining to offshore administrative routine, such as collection of customs and sanitation entail very few controversial points. Also, the manner of establishing offshore zones and the degree of control within them find widespread approval from country to country. The international community, however, runs headlong into serious problems over certain specific aspects of marginal sea complexities—commonly in the form of legal impasses. Major attention is focused upon two specific issues and their attendant ramifications in the economic, political, and defense fields: (1) Breadth of the territorial sea and (2) question of zones with exclusive rights.

The U.S. position holds traditionally to a 3-mile territorial sea, falling into classification as "narrow." Arguments in favor also conform with American policies and attitudes toward international cooperation and progress. In brief the U.S. position:

- 1. Supports maritime activities and international trade with a minimum of restriction on traffic.
- 2. Prevents many straits and channels from being closed as high seas passages.
- 3. Proves advantageous for defense measures, hence facilitates world order.
- Favors exploration and investigation of offshore areas by oceanographers and other scientists

with a minimum of restrictions against freedom of movement.

- 5. Reduces expenses for patrolling.
- 6. Allows a flexibility by enabling special-purpose zones to extend beyond territorial waters.

The United States does not recognize any unilateral extension of either the territorial sea or zones of exclusive fishing rights. In the matter of fisheries, however, agreements between or among interested sovereign participants are recognized. In recent months American delegations have participated in conferences designed to properly consider feasible fishing rights off coasts where there have been problems and claimed infractions of international procedure.

Because of growing interest on the part of most countries in oceanography in general and offshore waters in particular the entire subject of the Law of the Sea appears open to expansion. Unfortunately nationalistic aspirations on the part of many states as well as international tension throughout the world augurs badly for harmonious accord over the global sea in the foreseeable future. Alined with these ills is the wide and ofttimes bitter competition for the resources and serviceable uses in, under, and over the sea. Recognition and understanding of the problems and adherence to international justice appears to be the path ahead, with the hope that a more cooperative spirit will evolve and prevail.

The Baseline

Data for identifying and projecting baselines in accordance with Part I of the Convention on the Territorial Sea and the Contiguous Zone, adopted by the Conference at the Law of the Sea Convention in Geneva, 1958.

The entire zonal pattern of offshore water must necessarily depend upon some definite base from which the various claims, including the territorial sea, may be measured. The coastline itself serves this purpose, in some ways similar to the way mean sea level determines the base for measuring all elevations on land (or for measuring submarine depths). The configuration of the world's coastlines, however, are exceedingly complex in many instances, involving irregularities with tortuous embayments and myriads of offshore islands. Thus, a baseline, from which to measure offshore zones, may range from a smoothly curving shoreline offering no problems to a highly complex land-water belt of contact requiring geometric principles by which a theoretical coastline may be established.

The Law of the Sea Conference in Geneva, 1958, adopted the low water line along the coast as the base from which the territorial sea would be measured. In theory, such a line should appear on large-scale hydrographic charts officially recognized by the states concerned. In practice, however, some states produce charts showing the high water line. Also, maps produced may be out of date, with the result that shoreline processes have altered the coastline since any hydrographic survey was made. Again, charts of very large scale show features such as small islets and mud banks which may be missing at smaller scales, further confusing the issue in any attempt for a precise delineation of offshore water. Little choice remains other than to use the best available charts, though the magnitude of offshore problems may justify special efforts toward revising existing charts and making new charts suitable for current requirements.

Coastal Indentations

Where a coastline is broken, as by a bay, mouth of a river, or other indentations it becomes necessary to construct a geometric baseline across the opening by arbitrary means. Solutions may be extremely simple, or may involve intricate computations, depending upon the complexity of the shoreline. Shoreline segments with indentations may fall into types, but in no instances are two ever alike. In all cases a "closing line" must be drawn across the seaward opening of the indentation to simulate a "normal baseline" representing the coast. Otherwise the baseline would extend into land bodies along the banks of rivers and around the shores of bays and inlets.

Rivers seldom present problems of any magnitude. A line drawn directly across the mouth of a river where it empties into the sea usually provides a suitable baseline across a break in the shoreline. Where a river flows first into an estuary or other embayment before emptying into the sea, other techniques come into effect to determine the baseline.

Along any irregular coastline, indentations other than the mouths of rivers and streams fall into two categories: bays and "mere curvatures of the coast." Offshore claims are measured directly from the coast in the latter case, but in the former case closing lines must be drawn. A definite technique has been established and adopted by which a coastal indentation may be identified as a bay. Article 7 in the Convention on the Territorial Sea and the Contiguous Zone stipulates the requirements by which a bay is determined:

. . . a bay is a well-marked indentation whose pene-

tration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as, or larger than, that of the semi-circle whose diameter is a line drawn across the mouth of that indentation.

Regardless of its configuration, however, the mouth of any bay may not exceed 24 miles in width. As set forth in the same Convention, where the natural entrances of a bay are more than this distance,

... a straight baseline of twenty-four miles shall be drawn within the bay in such a manner as to enclose the maximum area of water that is possible with a line of that length.

Where a closing line, or closure, across the mouth of a bay transects an island or islands, the accumulated water distances alone may not exceed 24 miles. Individual segments of the closure must be straight lines but not necessarily alined one parallel with another. Finally, the water of bays within bays may be included as water surface of the outer bay in determining the dimensions of any coastal indentation.

In some instances bays in their legal as well as physical sense may penetrate the land for many miles. For example, Chesapeake and Delaware Bays each have mouths less than 24 miles in width and extend into the interior about 170 and 70 miles, respectively. Along the New England coast Cape Cod Bay represents a less extreme example of a coastal indentation satisfying the legal requirements for a bay. Its natural entrances lie 15.3 miles apart and the partially enclosed surface area of water exceeds that of a semicircle having a diameter coextensive with the closing line. In contrast, Santa Monica Bay on the California coast looks like a bay but does not qualify in the semicircle test.

Estuaries may qualify legally as bays though they are essentially wide river mouths subject to tidal action. It may be difficult to distinguish between a bay and an estuary in some instances, as when a river empties into a partially enclosed coastal indentation.

As an exception to these physical considerations for determining a baseline, permanent harbor works which form part of the harbor system are regarded as a part of the coast. Thus, a breakwater or jetty may project the baseline seaward for hundreds of yards. Geometric means of determination, however, do not apply to any bays which qualify as "historic" (determined legally by precedent and not within the scope of this Bulletin).

Insular Baselines

The coasts of islands have baselines, just as does a mainland coast and generally according to the same rules. As the only exception of note, low tide elevations (reefs, shoals, drying rocks) in certain instances require modification in baseline construction. The low water line of these features may or may not serve as a baseline from which to measure offshore claims, as set forth in Article 11 of the Convention:

1. A low-tide elevation is a naturally formed area of land which is surrounded by and above water at low tide but submerged at high tide. Where a low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea.

2. Where a low-tide elevation is wholly situated at a distance exceeding the breadth of the territorial sea from the mainland or an island, it has no territorial sea of its own.

In light of the fact that islands occur in groups, or often fringe a mainland coast in strings, their baselines may be so close one to another that their offshore waters coalesce to form part of the territorial sea associated with the sovereignty of the group as a whole. For example, if the territorial sea of a state is 3 miles in breadth, all islands whose baselines lie within 6 miles of the mainland or each other are encompassed by the territorial waters of that state.

Measuring the Territorial Sea

Determination of the outer limits of the territorial sea rests directly on the alinement of the baseline as it would apply on a hydrographic chart at a scale sufficiently large to permit such detail.¹

The standard method for plotting the territorial sea is by compass on hydrographic charts. As an

² On a chart at a scale of 1:1,000,000 a 3-mile territorial sea would only be approximately 3/16 inches wide, hardly a workable dimension for precision since an error equivalent to the width of a line represents a substantial fraction of a mile. On the other hand, charts at a scale of 1:80,000, of which the U.S. Coast and Geodetic Survey has a series for the Atlantic and Gulf coasts of the United States, show a 3-mile zone of water as being nearly 2½ inches wide.

example, to plot a territorial sea with a breadth of 3 miles the compass is set at a scale to indicate that distance on the chart, and arcs of circles swung seaward from all points along the baseline. The envelope formed by these arcs of circles makes up the outer limits of a state's territorial waters, and hence the limit of its sovereignty. The result is a geometrically precise line that can be plotted regardless of any complexities of the baseline. (See chart on page 29 for illustration of this procedure.)

A highly irregular coastline or one fringed with islands will have a territorial sea, the outer limits of which are correspondingly, but to a lesser degree, irregular except in those places where straight closing lines mark the outer limit of internal waters. Geometrically the outer limits of the territorial sea under any conditions will not be as irregular as the baseline from which it is measured, for the method of construction smoothes out such a line—the greater the radii of the arcs swung the smoother the contour of the envelope of arcs. Thus it is geometrically possible to have a 3-mile territorial sea with an area in square miles amounting to a value less than that computed by multiplying the length of the baseline by three.

Straight Baselines

In a legal sense the straight baseline means far more than "a baseline which is straight." Rather, it is a concept for simulating the coastline seaward from the normal baseline. In principle the straight baseline is applied by establishing an arbitrary baseline along the headlands of the mainland and outermost points of fringing islands. Such a line may, according to Article 4 of the Convention, be constructed

. . . in localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity.

Further,

. . . the drawing of the baselines must not depart to any appreciable extent from the general direction of the coast and the sea areas lying within the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters.

Examples of coastlines where the straight baseline might be applied with validity are found in relatively few areas in the world, such as along the highly irregular and fragmented coasts of Yugoslavia, Norway, and southern Chile. In these instances the margins of the ocean are not well-defined in the sense that the economic regime of a state encompasses nearby offshore islands and the water passages which separate them from the mainland and from each other.

In contrast most coastlines do not lend themselves to the construction of straight baselines. Even though a number of states have made unilateral claims for additional segments of territorial water by the use of straight baselines, this technique can be supported neither by logic nor in accordance with Articles of the Geneva Convention on the Law of the Sea:

1. Offshore islands (except in instances of islandstudded archipelagoes such as the Norwegian and south Chilean littorals cited above) have their own normal baselines which project the territorial sea of a state seaward and thus allocate an offshore zone of sovereign water commensurate with the coastalconfiguration (see chart on page 29).

2. The 24-mile limit for closing lines by which coastal indentations fulfilling the requirements of a bay may qualify as internal water projects the zone of territorial waters seaward to where it parallels the normal direction of the coast independent of the penetrating water bodies. For example, along the coast of Maine a theoretical straight baseline would approximate the regular baseline based upon a rigid application of the Articles of the Geneva Convention.

3. In instances where the curvature of the coast does not constitute a bay the term "highly irregular" would hardly apply.

Archipelago Concept

Straight baselines have also been unilaterally claimed by certain maritime states, though necessarily of a somewhat different geometric design from the type constructed along a continental mainland. Known as the "Archipelago Concept" an insular type baseline adapts the idea of a perimeter around an island or group of islands.

- 1. Such a line around an island would touch on capes, peninsulas, offshore isles, or other prominent points along the coast.
- 2. Such a line around a group of islands, or archipelago, would "box in" the ensemble, the straight baseline normally touching at the more prominent geographic features of the outermost islands.

This type of straight baseline is no more justified than a corresponding line along the mainland. Again, each island has its own normal baseline and where islands are close together their territorial seas tend to coalesce and form a continuous zone of territorial water. Otherwise the situation is that sufficient water distances exist between or among the islands to justify their status as high seas.

APPENDIX B

Boundaries in the Sea

Alinement of jurisdictional or sovereign limits depends upon specific distances from the coast (baseline). In fact, the offshore sovereignty complex with respect to the law of the sea comprises a system of jurisdictional limits separating: (1) water zones of different categories belonging to the same state, (2) water zones of a state from those with no sovereignty (high seas), and (3) water zones of any category belonging to different states. For example, the outer limits of the territorial sea is "x" miles from the coast and runs between a sovereign state and an area without sovereignty. Again, the baseline, in theory at least, represents the coast and separates two areas of sovereign territory within a single state, differing only in types of jurisdiction. There can be no conflict between states in the latter instance, although the claims of any state may be opposed by another state or other states.

Another set of limits or boundaries also comes into play, namely those which separate the offshore territorities of two coastal states. These limits qualify as international boundaries in their function, but in almost all instances are not so marked in the water (as by buoys) or on charts.¹ Four specific types of limits allow for the great majority of situations whereby sovereign and jurisdictional rights between states need be distinguished:

1. Boundaries separating the territorial seas of adjacent coastal states.

¹ Maps and charts frequently show symbolized lines extending through water, as between or among islands or between islands and mainland. Such lines normally do not represent boundaries, and should not be so construed. Rather, they serve as a cartographic device by which to indicate that all land areas on one side belong to one state and all land areas on the other side belong to another state.

2. Boundaries separating the territorial seas of opposite states.

3. Boundaries separating the continental shelves of adjacent coastal states.

 Boundaries separating the continental shelves of opposite states.

In the cases of the first two types of boundaries the areas separated are sovereign waters of two states, but in the two remaining cases only certain rights of two states are involved. Thus, boundaries through waters above the continental shelf actually extend through the high seas and rights apply only to those which the coastal states have for exploring and exploiting resources of the seabed.

Any two countries with contiguous offshore waters may agree on a common line of demarcation between them, but usually agreements of this type are nonexistent. Most frequently median lines are the means of expressing boundaries between adjacent states, starting at the baseline and extending seaward, first between territorial seas and then between continental shelves of the two states concerned. They also serve to separate the waters of opposite states which have merging territorial seas and/or continental shelves (see chart on page 31).

A median line (at times called "lateral line") has proved to be the best solution for delineating water areas between sovereignties. In both theory and practice the geometrical principle involved in determining the median line is the most satisfactory which has so far been devised, lending itself admirably to the construction of equitable boundaries between states. It depends upon precise measurement rather than subjective factors. Without delving into its technical characteristics, a median line is defined as a line, or boundary, every point of

which is equidistant from the nearest points on the lines from which it is measured. Oddly enough, the technique upon which the construction of such lines depends is purely trial and error, that is, establishment of points contingent upon being so placed that they be no farther from one than from the other fixed point representing the two sovereignties.

Acceptance of the median line concept by the Conference on the Law of the Sea does not preclude other offshore boundary agreements between states. In fact, two Convention articles adopted by the Conference specifically stipulate this condition:

1. In the territorial sea:

Where the coasts of two States are opposite or adjacent to each other, neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured.

2. Over the continental shelf:

Where the same continental shelf is adjacent to the territories of two or more States whose coasts are opposite each other, the boundary of the continental shelf appertaining to such States shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial sea of each State is measured.²

Irregular and undemarcated land boundaries as well as complicated coastal configurations produce situations which create many problems apart from straight geometrical computation of median lines. Of particular note, sovereign exclaves and enclaves along a coast may bring about problems extremely difficult to resolve. Impasses may obviously arise in cases of disputed territory, whereby basic premises for constructing median lines then become unacceptable to one or more of the states involved. The Persian Gulf illustrates one of the more complex areas in which to ferret out a workable set of jurisdictional limits. Along its shores lie five independent states, a neutral territory, and several quasi-independent sheikhdoms, while in the water scattered islands of indeterminate sovereignty add to the problems. Conversely, the terminal point of the U.S. (Alaska)-Canadian boundary on the Arctic Ocean represents a situation uncomplicated by problems. The United States (State of Maine) and Canada (Nova Scotia) facing each other across the Bay of Fundy represents a clear-cut example of opposite states where both the territorial sea and continental shelves merge. In this instance an international boundary has been projected through part of the bay.

The spirit of the articles on median lines is to provide a means whereby boundary agreements between states may be facilitated. But since medianline boundaries are objective they can frequently be used at least as a point of departure in the reaching of agreement. Site of known or potential resources, location of a navigation channel, or traditional offshore practices of a state are among special circumstances which may give rise to modifying or even disregarding completely a median line in affixing a boundary. For example, a boundary in the territorial sea may only roughly approximate a median line, compensating for loss of an area in one place by gain in another. Despite such departures from a formula the actual precisely constructed median line stands as a potential means of establishing fair and lasting offshore boundaries.

²The same concept is employed for that part of the Convention applying to cases where the continental shelf adjoins the territory of adjacent (rather than opposite) States.

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APPENDIX D

Charts for Identifying Offshore Features

U.S. Coast and Geodetic Survey Charts

- Atlantic and Gulf Coasts of the United States: 1200 series of charts at a scale of 1:80,000.
- Pacific Coast of the United States: Series of charts at scales from 1:175,000 to 1:235,000.
- Alaska: Various series and miscellaneous charts; no consistent coverage.
- Hawaii: 400 series at 1:250,000; also some coverage at larger scales.
- Puerto Rico and other areas of U.S. sovereignty: Detailed coverage.

Charts are available upon request from—

Director, Coast and Geodetic Survey U.S. Department of Commerce Washington, D.C. 20235

U.S. Naval Oceanographic Office Charts

Charts for all areas other than those of U.S. sovereignty. Consistent large-scale coverage for many areas.

Charts are available upon request from— U.S. Naval Oceanographic Office

Washington, D.C. 20390

TABLE I

Areas of the Oceans and Principal Seas

Area	Square miles
Pacific Ocean	 . 63, 985, 000
Atlantic Ocean	 31, 529, 000
Indian Ocean	 . 28, 357, 000
	 5, 541, 000
Mediterranean Sea	 . 1, 145, 000
South China Sea	 895, 000
Bering Sea	 878, 000
Caribbean Sea	 = 750, 000
Gulf of Mexico	 700, 000
Sea of Okhotsk	 582, 000
East China Sea	 480, 000
Yellow Sea	 480, 000
Hudson Bay	 472, 000
Sea of Japan	 405, 000
North Sea	 221, 000
Red Sea	 178, 000
Black Sea	 168, 500
Baltic Sea	 158, 000

Note.—The Caspian Sea is normally classed as a lake rather than a sea although its margins are claimed as territorial waters. Its area is 152,123 square miles.

TABLE II

Coastline Measurements of World's Major Political Entities

Explanation of Measuring Techniques

Distances given in the tabulation below represent the extent of each political area's coastline which "faces the sea" exclusive of detailed irregularities. Measurement was effected by swinging a divider over 10-mile intervals on maps at a scale of 1:1,000,000 (the largest for which there is complete world coverage).

Coastline patterns over the world vary one from the other, requiring some latitude in even the most objective measuring techniques. Islands especially create problems with respect to coastal distances. Certain broad principles, however, were followed in measuring the distances, including averaging out

complex coastal configurations within steps of 10 miles, excluding unimportant islands more than 10 miles from the coast, and omitting measurement of insular coastlines facing each other across water passages of 10 miles or less. Closely spaced islands of archipelagoes (within 10 miles of each other) received special attention, namely, their perimeters only were measured to assure generalized distances.

For major political areas with more than one coastline or with other important divisions of coastal features, including offshore islands, supplementary information is included in the tabulation below each

pertinent political entity listed.

Political entity-division	Nautical miles	Political entity-division	Nautical miles
ANGLO-AMERICA		East Coast	46
United States (excluding all		West Coast	132
areas other than the 50		Honduras	374
States, e.g., Guam, Puerto Rico, Trust Territories)	11, 650	East Coast	332 42
East Coast	1, 612	Nicaragua	445
Gulf Coast	1, 679 1, 150 6, 544	East Coast	258 187
Hawaii (8 major islands)	665	Costa Rica	446
Canada (excluding shoreline of Hudson Bay and passages	29	East Coast	116 330
among islands of the north)	11, 129	Panama (Republic) (including Isla Coiba and Isla del Rey)	979
East Coast (including Labra-		East Coast	337
dor, excluding Newfound- land)	3, 181	West Coast	642
Newfoundland	1, 303 920	Canal Zone (Atlantic side, 8 miles; Pacific side, 6	
Northern Area	5, 725	miles)	
MIDDLE AMERICA		El Salvador	164
Mexico (including coast of		SOUTH AMERICA	
Gulf of California)	4, 848	Colombia	1,022 576
East Coast		Pacific Coast	446
Cuba (including Isle of Pines,	,	British Guiana	
101 miles of coastline)	1,747	French Guiana	
Jamaica		Brazil	3, 692
Haiti (including Gonave and other offshore islands)	584	Uruguay	305
Dominican Republic (including offshore islands)		landward to width of miles)	
Puerto Rico	287	Argentina	2, 120
Trinidad and Tobago	254	Chile (excluding passages within	0.000
Trinidad	211 43	archipelago)	1, 258
British Honduras		Venezuela (excluding Isla de Mar and other offshore islands) .	garita

Political entity-division	Nautical miles	Political entity-division	Nautical miles
EUROPE (EXCLUDING U.S.S Rumania	113 134 233	Sweden (includes Gotland) Poland	ls, 155 686 1, 359 241
Black Sea Coast	78 98 57	Finland (includes Aland Islands). Iceland	
Greece (excludes scattered islands Aegean Sea)		AFRICA	010
Mainland and fringing islands. Crete	1, 210 340 95	Libya	strative 1 Arab
Albania	155 426	Red Sea Coast	538 769
Peninsular West Coast Peninsular East Coast Sicily	690 852 461 408 40	Sudan	546 .e. 123 1,596 247
Malta (includes Gozo) France			
Atlantic and North Sea coasts	882 266 225	Mozambique	1, 430 is Bay,
Monaco		Angola (excludes Cabinda)	758 22 48
Portugal (excludes Azores and Mac		Gabon	
United Kingdom	2, 790	Cameroon	187 415
Northern Ireland	115 48 56 235 115	Dahomey	26 285 274 290 219
Ireland Belgium Netherlands Germany West Germany Soviet Zone		Portuguese Guinea (includes Bijage Island)	os

Political entity-division	Nautical miles	Political entity-division	Nautica	l miles
Morocco (includes Presidios, 32 miles)	863	Indonesia (Java includes Madura, 189 miles)		19, 889
State of the state	673			17, 007
Atlantic Coast	190	Sumatra	2, 270	
		Java	1, 571 209	
Ifni		Lombok	155	
Algeria		Sumbawa	380	
Comoro Islands		Sumba	268	
Malagasy Republic		Flores	772	
Mauritius	•	Timor (Indonesian part)	350	
Réunion		Borneo (Indonesian part)	1, 551	
São Tomé and Principe		Celebes	2, 957	
São Tomé	60	Halmahera	848	
Principe	25	Ceram	532	
		West New Guinea	2, 498	
Fernando Po	94	All Others	5, 528	
ASIA		Malaysia		1, 881
Japan (Ryukyu Islands under	4.045	Peninsular West Coast	440	
Japanese administration)	·	Peninsular East Coast	368	
	1, 028	Singapore	28	
	2, 070	Sarawak	410	
Shikoku	410 514	Sabah	635	
Kyushu	483	Portuguese Timor		33
Ryukyu Islands	337	Brunei		88
		Viet-Nam		1, 247
Ryukyus (under U.S. administration)	248	North	382	
		South	865	
Okinawa Archipelago	192			
Sakishima Archipelago	56	Cambodia		210
Korea	1, 290	Thailand		1, 299
North	578	Andaman Sea (West Coast).	354	
South	712	Gulf of Siam (East Coast)	945	
China ?	3, 492	Burma		1, 230
Mainland coast and fring-		Pakistan		750
ing islands	3, 094			
Hainan	398	Arabian Sea (West)		
Hong Kong		Bay of Bengal (East)	310	
Taiwan		India		2, 759
Philippines	6, 997	West Coast		
	1, 480	East Coast	1, 306	
Mindoro	250			
Samar	328	Ceylon		650
Leyte	260	Iran	• • •	990
Panay	322	Persian Gulf	635	
Negros	313	Arabian Sea (Gulf of Oman).	355	
Cebu	254 154			1 005
	1, 314	Muscat and Oman		1, 005 420
Palawan	647	Qatar		204
	1, 675	Bahrain		68
	-, -, -			•

Political entity-division	Nautic	al miles	Political entity-division	Nautical miles
ASIA—Continued Saudi Arabia Persian Sea Red Sea	. 296	1, 316	Baltic Sea and Gulf of Finland Arctic Coast (excluding major islands more than 10 miles offshore)	988 8, 166
Neutral Zone (Kuwait/Saud Kuwait	ectorate	40 115 10 654 244 5 124	Novaya Zemlya	1, 140 193 3, 219 6, 075 1, 339 939 172
Mediterranean		105 82 1, 688	Black Sea	867
Black Sea	. 630 . 141 . 917		North Island	
Cyprus		290	Australia	15,091
SOVIET UNION Soviet Union (Baltic States: Estonia, 418 miles; Latvia, 255 miles; Lithuania, 46 miles)		23, 098	Continent	13, 971 677 143 77 223

TABLE III

Widths of Selected Straits and Channels

Passage (arranged clockwise by major regions)	Sovereignty (on either side)	Least width (in nautical Geographical situation miles)
ANGLO-AMERICA		
Robeson Channel	Canada/Denmark	Between Ellesmere Island and Green- land.
Hudson Strait	Canada	Entrance to Hudson Bay 1 55
Strait of Belle Isle	Canada	Between Labrador and Newfound- 9 land.
Jacques Cartier Passage .	Canada	Between Quebec Coast and Anticosti 15 Island.
Gaspé Passage	Canada	Between Anticosti Island and Gaspé Peninsula. 38

Passage (arranged clockwise by	Sovereignty		Least width
major regions)	(on either side)	Geographical situation	(in nautical miles)
Cabot Strait	Canada	Between Newfoundland and Cape Breton Island.	57
Northumberland Strait	Canada	Between New Brunswick and Prince Edward Island.	7
Florida Strait	United States/Cuba	Between Key West and Cuba	· 282
Santa Barbara Channel .	United States	Between Channel Islands and California Coast.	11
Strait of Juan de Fuca	United States/Canada .	South of Vancouver Island	
Hecate Strait	Canada	Between Queen Charlotte Islands and Mainland.	1 24
Dixon Entrance	United States/Canada .	Between Alexander Archipelago and Queen Charlotte Islands.	27
Amukta Pass	United States	Aleutian Islands: West of Amukta Island.	37
Unimak Pass	United States	Aleutian Islands: West of Unimak Island.	10
Shelikof Strait	United States	Between Alaska Peninsula and Kodial	k 20
Bering Strait	United States/U.S.S.R .	Between Alaska and Siberia	. 719
	8.8		
LATIN AMERICA			
Yucatan Channel	Cuba/Mexico	Between Cuba and Yucatan Peninsula	. 4 105
Northwest Providence Channel.	United Kingdom	Bahamas: Southwest of Great Abaco	
Northeast Providence Channel.	United Kingdom	Bahamas: Between Great Abaco Island and Eleuthera.	5 29
Crooked Passage	United Kingdom	Bahamas: Between Long Island and Crooked Island.	26
Mayaguana Passage	United Kingdom	Bahamas: Between Acklins Island	٥ 39
Caicos Passage	United Kingdom	and Mayaguana Island. Bahamas Area: Between Mayaguana Island and Caicos Islands.	35
Windward Passage	Cuba/Haiti	Between Cuba and Hispaniola	. 45
Turks Island Passage	United Kingdom	Between Turks Islands and Caicos Islands.	13
Mouchoir Passage		Near Turks Islands	. 23
Mona Passage	U.S./Dominican Rep	Between Dominican Republic and Mona Island (P.R.).	33
Virgin Passage	United States	Between Culebra (P.R.) and Virgin Islands.	7 8
Anegada Passage	United Kingdom	Between Anegada and Sombrero	8 48
Guadeloupe Passage	France/United	Between Guadeloupe and Montserrat.	28
Dominica Channel	Kingdom. France/United Kingdom.	Between Marie Galante (Guadeloupe) and Dominica.	16
Martinique Passage	France/United Kingdom.	Between Dominica and Martinique	. 22
See footnotes at end of table.			

Passage (arranged clockwise by major regions)	Sovereignty (on either side)	Geographical situation	Least width (in nautical miles)
LATIN AMERICA—C	Continued		
St. Lucia Channel	France/United Kingdom.	Between Martinique and St. Lucia.	. 17
St. Vincent Passage Dragon's Mouth	United Kingdom Trinidad and Tobago/ Venezuela.	Between St. Lucia and St. Vincent. Between Trinidad (Chacachacare Island) and Peninsula of Paria.	6
Serpent's Mouth	Trinidad and Tobago/ Venezuela.	Between Trinidad and Coast of Venezuela.	8
Aruba-Paraguana	Netherlands/Venezuela.	Between Aruba and Paraguana Peninsula.	15
Passage. Estrecho de la Maire	Argentina	Between Tierra del Fuego and Isla de los Estados.	
Strait of Magellan	Argentina/Chile	Between Tierra del Fuego and Main- land South America.	- 2
EUROPE		C.	
Bosporus	Turkey	Between Turkey in Europe and Anatolia.	(8ª)
Dardanelles	Turkey	Between Gallipoli Peninsula and Anatolia.	(8a)
Kárpathos Strait	Greece	Dodecanese: Between Kárpathos an Rhodes.	d 23
Kásos Strait	Greece	Dodecanese: Between Kásos and Crete.	26
Strait of Otranto	Albania/Italy	Between Albania and Italian Peninsula.	41
Strait of Messina	Italy	Between Sicily and Italian Peninsula	1. 2
Malta Channel	Italy/United Kingdom .	Between Malta (Gozo) and Sicily	44
Strait of Sicily	Italy	Between Pantelleria and Sicily	55
Strait between Elba and Italy.	Italy	Between Elba and Italian Peninsula	
Strait between Corsica and Elba.	France/Italy	Between Corsica and Elba	
Strait of Bonificio	France/Italy	Between Corsica and Sardinia	6
Freu de Minorca	Spain	Between Majorca and Minorca	20
Strait of Gibraltar	Morocco/Spain	Between Morocco and Spain	8
Strait of Dover	France/United Kingdom.	Between England and France	
The Solent	United Kingdom	Between Isle of Wight and English Mainland.	2
St. George's Channel	Ireland/United Kingdom.	Between Ireland and Wales	942
North Channel		Between Northern Ireland and Scotland.	11
Little Minch	United Kingdom	Between Outer Hebrides and Island of Skye.	10
North Minch	United Kingdom	Between Outer Hebrides and Main- land of Scotland.	- 10 20

Passage (arranged clockwise by	Sovereignty	2	Least width (in nautical
major regions)	(on either side)	Geographical situation	miles)
EUROPE—Contin	ued		
Pentland Firth	United Kingdom	. Between Orkneys and Mainland of Scotland.	11 5
The Hole	United Kingdom		ds 23
Skagerrak	Denmark/Norway	Between Denmark (Jutland) and Norway.	61
Ore Sund	Denmark/Sweden		. 2
Bornholmsgat (Hambarne).	Denmark/Sweden		. 19
Kalmar Sund	Sweden	Between Öland Island and Swedish Mainland.	2
Entrance to Gulf of Bothnia.	Finland/Sweden		. 12 17
Entrance to Gulf of Finland.	Estonia/Finland	Between Estonia and Finland	. 17
FAR EAST			
Kuril Strait	U.S.S.R	Between Kamchatka and Kuril Islands.	6
Etorofu Kaikyo	U.S.S.R./U.S.S.R. Administration.	Between Etorofu and Uruppu	. 22
Kunashiri Suido	U.S.S.R. Administra- tion.	Between Etorofu and Kunashira	. 12
Shikotan Suido	U.S.S.R. Administra-	Between Shikotan and Taraku	12
Taraku Suido	U.S.S.R. Administra- tion.	(Habomai Islands). Habomai Island: Between Taraku an Shibotsu.	d 6
Notsuke		Between Hokkaido and Kunashira .	0
Soya Kaikyo (La Perouse Strait).	Japan/U.S.S.R	Between Hokkaido and Sakhalin	. 13 23
Tsugara Kaikyo	Japan	Between Honshu and Hokkaido	. 10
Eastern Chosen Strait	Japan	Between Iki (Off coast of Kyushu) and Tsushima.	d 25
Western Chosen Strait	Japan/Korea	Between Korea and Tsushima	. 14 23
Cheju Haehyop	Korea	Off Southern Coast of Korea (Cheju Do to Haem So).	12
Maemul Suido	Korea	Off Southwest Coast of Korea (Maem To to Yongsan Do).	ul 13
Huksan Chedo	Korea	Off Southwest Coast of Korea	. 8
Pohai Strait	China	Entrance to Pohai Bay	22
Osumi Kaikyo (Van Dieman Strait).	Japan	Between Kyushu and Ryukyus	. 16
Tokara Kaikyo (Colnett Strait).	Japan	Ryukyus: Between Osumi Gunto and Tokara Gunto.	22
Formosa Strait	China	Between Taiwan and Mainland China.	18 74
P'enghu Shuitao (Pescadores Channel).	China	Between Taiwan and P'enghu (Pescadores).	17
See footnotes at end of table.			

Passage (arranged clockwise by major regions)	Sovereignty (on either side)	(in n	width autical iles)
FAR EAST—Continued	1		
Lema Channel	China/United Kingdom.	Between Hong Kong and Lema Islands.	6
Hainan Strait	China	Between Hainan Island and Mainland China.	10
		1	1
SOUTHEAST ASIA			
Babuyan Channel	Philippines	Between Babuyan Islands and Luzon .	15
Polillo Strait	Philippines	Between Polillo Island and Luzon	10
Maqueda Channel	Philippines	Between Cataduanes and Luzon	4 0
Verde Island Passage	Philippines	Between Luzon and Mindoro (Verde	16 4
Acide Island I monde		Island to Mindoro).	•
San Bernardino Passage	Philippines	Between Luzon and Samar	8 ¹⁷ 20
Mindoro Strait	Philippines	Between Calamian Islands and Min-	20
Window State 1	* *	doro (from Apo I. to outermost of	
		Calamian Islands).	10
Surigao Strait	Philippines	Between Leyte and Mindanao	10 7
Basilan Passage	Philippines	Between Mindanao and Sulu	- /
200000000000000000000000000000000000000		Archipelago.	¹⁸ 27
Balabac Passage	Malaysia/Philippines	Between Palawan and Sabah (Island of Borneo).	
Sibutu Passage	Philippines	In Sulu Archipelago near Borneo	18 19
Bangka Passage	Indonesia	Between Bangka Island and offshore	19
		islands to north.	10
Selat Grehund	Indonesia	Between offshore islands of Celebes to east.	¹⁹ 62
Makassar Strait	Indonesia	Between Borneo and Celebes (without regard to offshore islands).	
Koti Passage	Indonesia	Off northwest coast of Borneo	10
Serasan Passage	Indonesia	Off northwest coast of Borneo	23 16
Api Passage	Indonesia	Off northwest coast of Borneo	16
Selat Ombai	Indonesia/Portugal	Between Alor and Portuguese Timor .	6
Selat Roti	Indonesia	Between Roti and Timor	8
Selat Sape	Indonesia	Between Komoda and Sumbawa	5
Selat Alas	Indonesia	Between Lombok and Sumbawa	11
Selat Lombok	Indonesia		2
Selat Bali	Indonesia	T - I Company (not taking	12
Selat Sunda	Indonesia	into account Pulau Sangiang in middle of strait).	
	Tudousia	n 1 - J Dillian	20 8
Gaspar Strait	Indonesia		8
Selat Bangka	Indonesia		21 9
Berhala Strait		n . Malaunia and Compates	20
Strait of Malacca (North).	Indonesia/Malaysia	D. Malausia and Sumatra	8
Strait of Malacca (South) .	Indonesia/Malaysia	opposite Singapore.	

Passage (arranged clockwise by	Sovereignty	(i)	ast width nautical
major regions)	(on either side)	Geographical situation	miles)
OCEANIA			
Alenuihaha Channel	United States	Between Hawaii and Maui	25
Alalakeiki Channel	United States	Between Kahoolawe and Maui	6
Kealaikahiki Channel	United States	Between Kahoolawe and Lanai	15
Auau Channel	United States	Between Lanai and Maui	8
Pailolo Channel	United States	Between Molokai and Maui	8
Kalohi Channel	United States	Between Lanai and Molokai	8
Kaiwi Channel	United States	Between Oahu and Moloaki	22
Kauai Channel	United States	Between Kauai and Oahu	63
Kaulakahi Channel	United States	Between Kauai and Niihau	15
Apolima Strait	Western Samoa	Between Savai'i and Upolu (not taking into account Apolima Island in center of strait).	
Indispensable Strait	United Kingdom	Between Guadalcanal and Malaita	22 19
Manning Strait	United Kingdom	Between Choisel and Santa Isabel	6
Bougainville Strait	United Kingdom	Between Bougainville and Choiseul	15
St. George's Channel	Australia	Between New Britain and New Ireland.	8
Goschen Strait	Australia	Between New Guinea and D'Entrecas- teaux Islands.	7
Dampier Strait	Australia	Between New Britain and Umboi	13
Vitiaz Strait	Australia	Between New Guinea and Bismarck Archipelago.	24
Cook Strait	New Zealand	Between North Island and South Island.	12
Banks Strait	Australia	Between Australia and offshore islands (near Tasmania).	8
Floveaux	New Zealand	Between South Island and Stewart Island.	23 15
MISCELLANEOUS			
Kara Strait	U.S.S.R	Between Novaya Zemlya and Ostrov Vaygach.	19
Palk Strait	Ceylon/India	Through Adams Bridge	3
Strait of Hormoz	Iron/Muscat and Oman.	Entrance to Persian Gulf	21
Bab el Mandeb	France/Yemen	Southern Entrance to Red Sea	²⁴ 14

¹ Entrance to Hudson Strait between Resolution Island and Button Islands (off Labrador Coast), 37 miles.

³ Distance between Bimini (Bahamas) and Florida, 43 miles.

³ Distance given in table is that between Big Diomede Island (U.S.S.R.) and Mainland Siberia. Other distances; (1) Between Little Diomede Island (U.S.) and Big Diomede Island, 2 miles. (2) Between Little Diomede Island and Mainland Alaska, 20 miles. (3) Between Mainland Alaska and Mainland Siberia, 45 miles.

⁴ Distance given is that from Contoy, an island about 6 miles off the Yucatan coast.

⁸ Distance between Great Abaco Island and Royal Island, off Eleuthera coast, 26 miles. ⁸ Distance between Acklins Island and Plana Cays, 12 miles; between Plana Cays and Mayaguana Island, 21 miles.

 $^7\,\mathrm{Distance}$ given in table is from Culebrita, an islet east of Culebra.

³ Distance between Sombrero and Horse Shoe Reef, a breaking reef running southeast of Anegada and attached thereto, is 42 miles.

5. Less than a nautical mile.

⁹ Distance given in table is between mainlands; between South Bishop Rock (Wales) and Tuskar Rock (Ireland), 36 miles.

¹⁰ Between Shiant Island and mainland of Scotland, 17 miles.

11 Between Pentland Skerries and mainland of Scotland,

4 miles. Stroma Island, which also lies in Pentland Firth, is not considered in the computation.

12 Distance given in table approximately correct; several small islands in strait makes precise measurements difficult.

Distance between Hokkaido and Ostrov Kamen' Opasnosti, 20 miles; on to Sakhalin, 9 miles.

is Measured from island off the coast of Korea.

18 Distance is 68 miles if offshore islands are taken into consideration.

Distance between Luzon and Verde Island, 3 miles.
Distance between Mindoro to Apo Reef, 15 miles.

18 Distance given in table is that measured between Balabac, largest of the major islands south of Palawan, and Balambangan, closest of the major islands of Sabah.

19 Distance between Borneo and Pulau Tuguan, 55 miles.

Distance given in table is that measured across Macclesfield Strait portion of Gaspar Strait.

21 Distance from Sumatra to Berhala, in middle of strait, 9 miles; from Berhala to Singkep, 10 miles.

²² Distance given in table is that measured between Malaita and Nura Islands, the latter 10 miles from Guadal-canal.

22 Distance between Centre Island (4 miles off South Island) and Stewart Island at west end of strait, 13 miles. At east end of strait the recommended channel for ships between Dog Island on the north and Ruapuke on the south, the channel is 11 miles wide.

³⁴ Distance given in table is between mainlands; between Perim Island and African continent, 11 miles; between Perim Island and French islets to south, 9 miles.

TABLE IV

Breadth of the Territorial Sea's

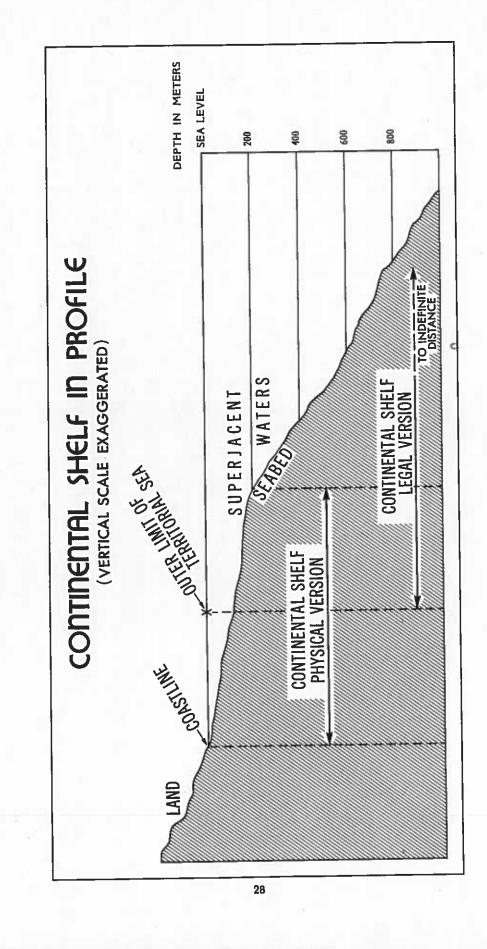
Note.—This table gives the basic claims of various states relative to the breadth of the territorial sea over which sovereignty is claimed. It indicates the prevailing concept of offshore policies, distinguishing the states favoring a narrow zone of territorial waters from those with strong national aspirations for extended offshore sovereignty and jurisdictional rights.

Although comprising the latest available information (at the time of compilation) the table does not represent the official view of the United States or any other country in the matter of sovereignty. Neither does it give full detail on ramifications of the various claims, such as exceptions and qualifications of

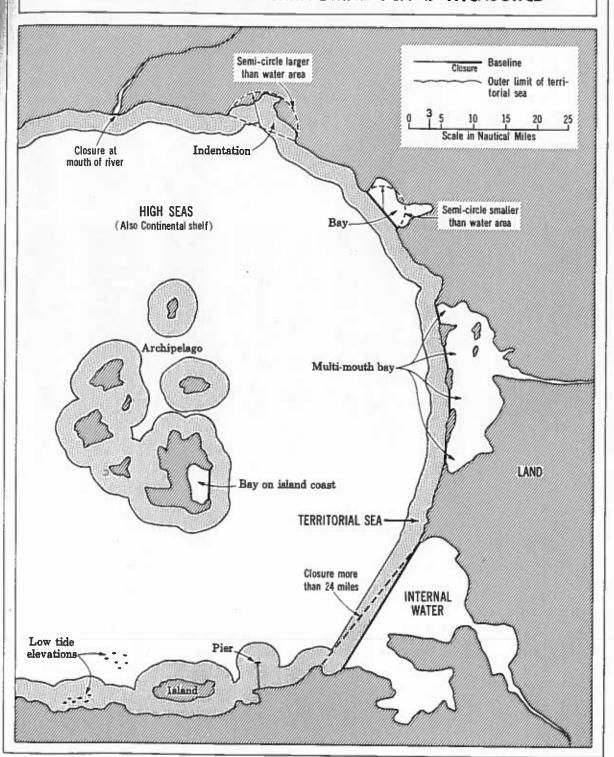
specific values.

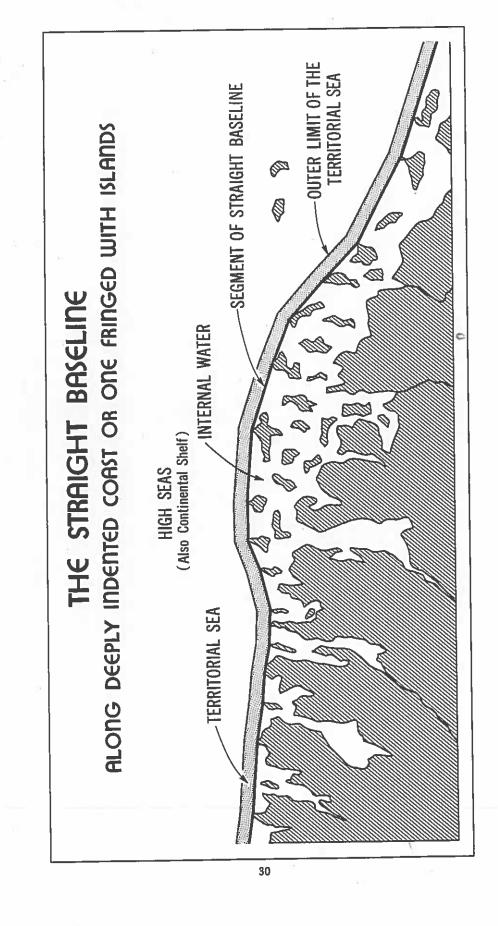
State	Claim	State	Claim
AFRICA Algeria	12 3 6 3 3 12 3 12 130	Nigeria Rio Muni Senegal Sierra Leone Somalia South Africa South-West Africa Spanish Sahara Sudan Tanzania Togo Tunisia United Arab Republic	3 6 6 12 3-6 6 6 12 12 12 12
Kenya	3	ANGLO-AMERICA	
Libya	12 12 3 12	Canada	3
As claimed by selected States, in nautical mil nautical mile equals 1.15 statute miles, or 1.85 kilon	les. One	Argentina	3

State	Claim	State	Claim
Colombia	. 12	Turkey	6
Cuba		Viet-Nam, North	12
Dominican Republic		Viet-Nam, South	3
Guatemala	. 12	Yemen	12
Haiti	. 6		
Jamaica	. 3	Note.—Several political entities, either British	depend-
Mexico	. 9	encies or states depending upon the British fo	r their
Nicaragua	. 3	foreign relations, have claims of 3 miles: Aden a Protectorate of South Arabia, Bahrain, Brunei,	ind the
Panama		Kong, Qatar, and the Trucial States.	riong
Trinidad and Tobago	. 3		
Uruguay	. 6	EUROPE	
Venezuela	. 12	Albania	10
		Belgium .	10 3
Note.—Certain west coast countries of Lat	in America	Bulgaria	12
(Chile, Costa Rica, Ecuador, El Salvador, Hon Peru) have offshore claims extending 200 mile	duras, and	Cyprus	12
either as territorial sea with full sovereignty or ju	risdictional	Denmark	3
claims for special purposes, as over superjacent	vaters.	Faeroe Islands	12
		Finland	4
ASIA		France	3
Burma	. 12	Germany, West	3
Cambodia	. 5	Germany, Eastern Zone	3
Ceylon	. 6	Greece	6
China (mainland)		Iceland	⁸ 12
Cyprus	. 12		3
India	. 6	Malta	6 3
Indonesia	. 12	Netherlands	3
Iran	. 12	Norway	4
Iraq	. 12	Poland	3
Israel	. 6	Portugal	3
Japan	. 3	Rumania	12
Jordan	. 12	Spain	6
Korea, North	12	Sweden	4
Korea, South	12	Turkey	6
Kuwait	6	U.S.S.R.	12
Lebanon	. 6	United Kingdom	3
Malaysia	. 3	Yugoslavia	6
Muscat and Oman	3	OCEANIA	
Pakistan	3		
Philippines	(3)	Australia	3
Saudi Arabia	12	Tonga	3 3
Syria	12	Western Samoa	3
Taiwan	3		J
Thailand	6	Based on treaty.	
	U	Relates to figheries.	



THE BASELINE FROM WHICH THE TERRITORIAL SEA IS MEASURED

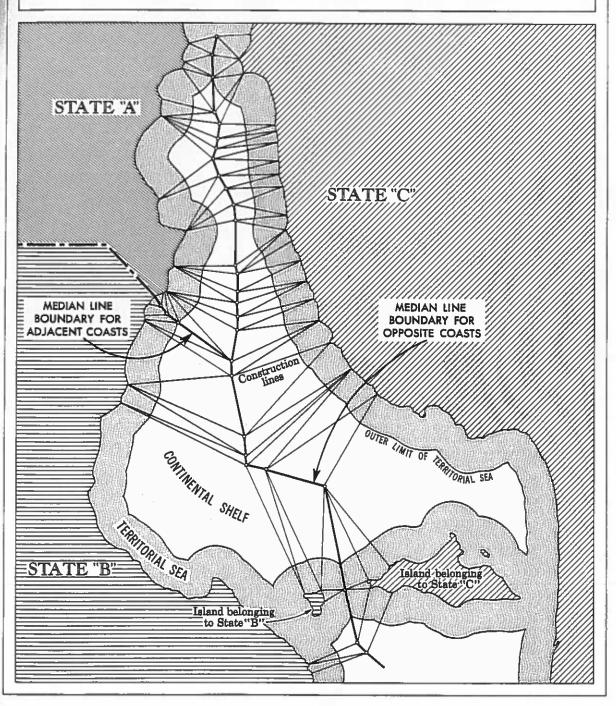




MEDIAN LINE BOUNDARIES

BETWEEN SOVEREIGN STATES

ADJACENT COASTS . OPPOSITE COASTS .





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