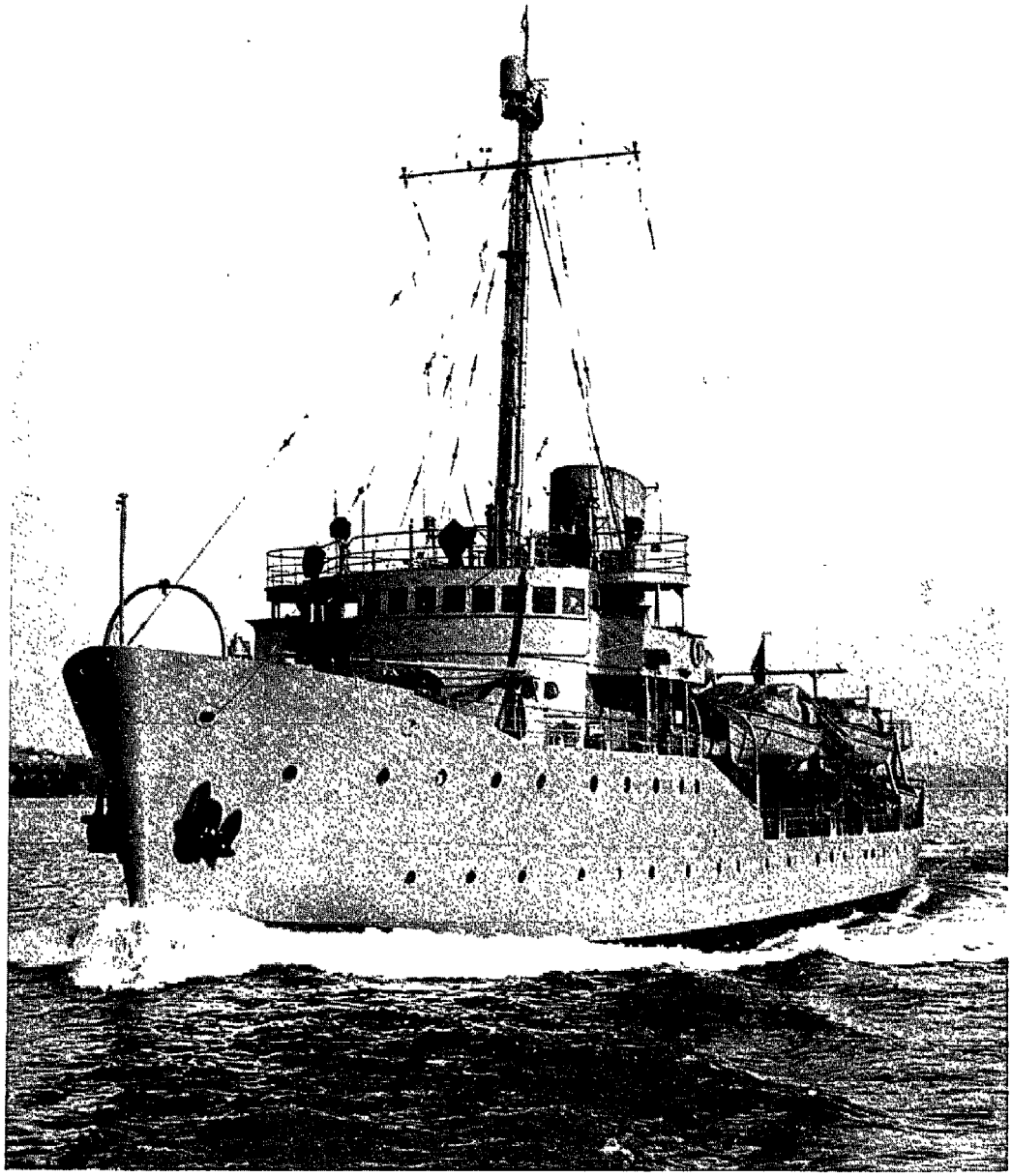
SHORE AND SEA BOUNDARIES

Volume One



USCGS SHIP *PATHFINDER*
One of the fleet of vessels used in offshore surveying.

SHORE AND SEA BOUNDARIES

WITH SPECIAL REFERENCE TO THE INTERPRETATION AND USE OF COAST AND GEODETIC SURVEY DATA

BY

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In Two Volumes

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Volume One

Boundary Problems Associated with the Submerged Lands Cases and the Submerged Lands Acts

(Including Recent Developments in the International Law of the Sea)

Foreword

In its long history as a major surveying and charting agency of the Federal Government, the Coast and Geodetic Survey has served many interests—scientific, engineering, and legal. Our changing coastline, to which man and nature contribute, is recorded in the progressive surveys which the Bureau has made during the past century and a quarter. These surveys, together with other accumulated observational data of the Bureau, find application in the consideration of boundary disputes involving waterfront property. Their specialized nature and the technical methods used in their execution make it imperative that their scope and limitation be understood. This publication has for its purpose the development of this understanding among the technical and legal professions so that full and effective use can be made of our surveys and data by those who have need to use them.

The publication will be in two volumes and will be responsive to matters with which the Bureau has had to deal. Volume One, which is being presented at this time because of the currency of the subject matter treated, deals with the Bureau's long association with the boundary aspects of the Submerged Lands Cases and the Submerged Lands Acts during which time we have been called upon by federal and state agencies, by industry, and by engineers and attorneys for information and guidance in the clarification and application of the technical and legal-technical provisions of the Supreme Court decisions and the Acts of Congress. It deals objectively with the principles developed, the problems yet to be resolved, and the present status, nationally and internationally, of applicable doctrines.

Volume Two will deal with the Use and Interpretation of Coast and Geodetic Survey Data, particularly the early surveys and charts, with special emphasis on those features and aspects that have legal significance. It reflects participation by the Bureau—through its records and through expert testimony of officials—in many important waterfront litigations, some of which involved a boundary demarcation on the ground.

The author, Mr. Shalowitz, has brought to this undertaking a rich background of experience in the field and office operations of the Survey that reaches

back nearly a half century. He was technical adviser to the Department of Justice on the boundary aspects of the Submerged Lands Cases and was the Government's principal witness on the cartographic phases of the *California* case before a Special Master.

It is hoped this publication will provide a uniform approach to the interpretation of our data and will be a permanent source of reference for dealing with future inquiries involving shore and sea boundaries.

H. ARNOLD KARO
Rear Admiral, USC&GS
Director

Preface

This publication is the first of two volumes that treat of shore and sea boundaries, with special reference to the use and interpretation of Coast and Geodetic Survey data. The purpose and scope of Volume One is set out in the Introduction.

A decimal system of numbering is used throughout the volume for subdividing the text, and cross-referencing is by these numbers. Each Part is subdivided into not more than nine chapters, each of which is divided into not more than nine sections. Each section is subdivided into not more than nine subjects and each subject into not more than nine numbered headings. The first digit of a number identifies the chapter, the second digit the section, the third digit the subject, and the fourth digit the heading. For example, 6422, Changes in Low-Water Line, is the second heading under the second subject in the fourth section of Chapter 6, entitled "The Tidal Boundary Problem." Further subdivisions of the headings are identified by letters "A," "B," etc. Cross-references within any one Part of the volume are shown by the number only, thus (*see* 231), but where the reference is to another Part, the Part number is also given—for example (*see* Part 2, 1121).

The form of legal citations follows generally the rules formulated in the manual, *A Uniform System of Citation,* a joint publication of the law reviews of Columbia, Harvard, Pennsylvania, and Yale. Wherever possible, citations are given to cases reported in the National Reporter System.

The author wishes to thank all those who have given him their advice or have helped him in any other way.

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Introduction to Volume One

At the time of its inception, the primary function of the Coast Survey was to survey and chart the coastal regions of the United States for the promotion of waterborne commerce. Because of the precise methods used and the carefully accumulated observational data, it soon became apparent that the Bureau could serve many collateral interests other than strictly maritime. This has manifested itself through the years in advice and services rendered, and in the utilization of Bureau records and testimony in important waterfront litigations.

A high point was reached in this area in 1947 when the Supreme Court first announced its historic decision that the Federal Government and not the states has paramount rights in the submerged lands seaward of low-water mark along the coast of California and outside of its inland waters. While the basic legal rights in the offshore submerged lands were thus settled, the decision was couched in terms too general to provide the technical and legal-technical criteria necessary for a precise determination of the federal-state boundary. Bureau participation in this litigation began soon after the decision was announced. The Department of Justice sought the advice and guidance of the Bureau in resolving the technical problems that the Court's findings posed. This was the beginning of a long association with many aspects of shore and sea boundaries encompassed by the three *Submerged Lands Cases* (sometimes referred to as "tidelands" cases) decided in 1947 and 1950; by the Submerged Lands Acts passed by Congress in 1953; and by the Conventions on the Law of the Sea adopted at Geneva in 1958. For a decade and a half the Bureau has served many interests in this specialized field.

The purpose of Volume One of *Shore and Sea Boundaries* is to write the record of this long association; to deal objectively with the boundary problems associated with the Supreme Court's decisions, the acts of Congress, and the Geneva conventions; and to emphasize the principles that underlie the delimitation and demarcation of sea boundaries in order to provide a technical and legal background for the consideration of similar or related problems that might arise in the future.

The volume is divided into three Parts. Part 1 begins with the legal and historical background of the *California* case, and the later *Louisiana* and *Texas* cases. Under the federal paramount rights doctrine enunciated in these cases,

the United States was recognized as having full dominion and power over the resources in the submerged lands underlying the marginal sea and beyond as an incident of its national external sovereignty. In thus deciding the basic legal question, the Court was not unmindful of the many complexities that would be entailed in establishing the boundary between federal and state jurisdiction, for it said "there is no reason why, after determining who owns the three-mile belt here involved, the Court might not later, if necessary, have more detailed hearings in order to determine with greater definiteness particular segments of the boundary." For this, it later named a Special Master, and directed him to make recommendations on three specific questions. These presented for solution three groups of problems: the inland waters problem, the offshore islands problem, and the tidal boundary problem.

Chapter 2 of Part 1 deals with the proceedings before the Special Master: the preparatory work of the Bureau for the Department of Justice and the documentary material furnished, and the nature of the testimony presented at the hearings.

Since the Supreme Court's holdings in the *Submerged Lands Cases* were based on national external sovereignty in the marginal sea and the waters beyond (international law concepts), the Special Master considered the questions propounded by the Court against the background of applicable principles of international law in their relation to the seaward boundaries of a littoral nation. Chapter 3 lays the foundation for an understanding of these principles. The threefold division of the sea and the boundaries entailed are examined as are certain historical developments in the law of the sea, particularly the transition from the early Roman doctrine of *mare liberum*, or free sea, to the doctrine of *mare clausum,* or closed sea, and finally back to the freedom of the seas doctrine, which has been one of the keystones of American foreign policy since the early days of the Republic.

In Chapter 4, the inland waters problem is considered, beginning with the exhaustive study made by the North Atlantic Coast Fisheries Tribunal in 1910 that arbitrated the long-standing dispute between the United States and Great Britain over the interpretation of the word "bays" in the Convention of 1818, and how the 3-mile limit was to be measured at such geographic features. This is followed by a discussion of the concept of a bay as inland waters, and the technical basis of the solutions advanced for resolving the important questions—left unsettled by the 1910 Tribunal—as to the kind of indentations that possess the configuration and characteristics that justify bringing them into the category of inland waters over which a nation can exercise exclusive jurisdiction. The findings of the Special Master as to the status (inland water or open sea) of the

water areas along the California coast are reviewed in the light of the traditional position taken by the United States in its international relations. Particular emphasis is placed on "historic bays"—those well-recognized exceptions to the rules applicable to ordinary bays—which form part of the inland waters of a country, provided certain constituent elements are present.

Chapter 5 deals with the offshore islands problem in relation to the status of the channel areas along the southern California coast. This is considered primarily in relation to the *Anglo-Norwegian Fisheries* decision—one of the most important judgments ever to be pronounced by an international tribunal on matters dealing with delimitation of the territorial sea—in which the International Court of Justice sanctioned the use by Norway of straight baselines for delineating an exclusive fisheries zone along its highly broken coast north of the Arctic Circle.

The last of the three questions on which the Supreme Court sought recommendation from the Special Master in the *California* case dealt with tidal boundaries. Boundaries determined by the course of the tides involve two engineering aspects: a vertical one, predicated on the height reached by the tide during its vertical rise and fall, and constituting a tidal plane; and a horizontal one, related to the line where the tidal plane intersects the shore to form the boundary desired. The first is derived from tidal observations alone and, once derived (on the basis of long-term observations), is for all practical purposes a permanent one. The second is dependent on the first, but is also affected by the natural processes of erosion and accretion, and the artificial changes made by man.

The language of the Court defining the federal-state boundary as the "ordinary low-water mark" lacked the technical precision essential in the establishment of water boundaries and raised problems of interpretation that involved a consideration of the tide along the coast of California and a development of criteria by which the boundary line could be demarcated on the ground. Chapter 6 deals with these problems. Certain aspects of the tide are reviewed—for example, diurnal inequality and spring and neap tides—and their impact on the selection and determination of tidal datum planes explained. The term "ordinary high-water mark" is traced from the early English common law, and the judicial interpretations placed upon the term in American state and Federal courts critically examined for the light they shed on the interpretation of the cognate term "ordinary low-water mark."

In Part 2, two legislative enactments, by which Congress provided the machinery for the exploration of the natural resources of our continental shelves, are considered—Public Law 31 (approved May 22, 1953, and identified as the

Submerged Lands Act) established titles in the states to lands beneath navigable waters within their historic boundaries, and Public Law 212 (approved August 7, 1953, and identified as the Outer Continental Shelf Lands Act) provided for jurisdiction by the United States over the submerged lands seaward of the state boundaries.

Chapter 1 begins with the purpose and legislative history of the Submerged Lands Act. The pertinent provisions are appraised, especially those dealing with the baseline (coast line under the act) and the seaward boundaries of the states. The Supreme Court decision of May 31, 1960, is dealt with in some detail to provide a better understanding of the rationale of the Court's holding that, for purposes of the Submerged Lands Act, Texas and Florida are entitled to 9-mile boundaries in the Gulf, but Louisiana, Alabama, and Mississippi to only 3. This decision settled a significant but limited phase of the boundary problems raised by the act. These problems are not unlike those considered by the Special Master in the *California* case. Although his recommendations have not been finalized by the Court, his findings represent the nearest approach thus far made in this country to a judicial determination of the inland waters and associated boundary problems and, absent legislative guidance, should provide a basis for an interpretation of the boundary provisions of the Submerged Lands Act. These findings are drawn on freely in developing interpretative guides based on historical precedent in the judicial and executive fields. The interpretations made are not advanced as established Government policy but rather as those that seem technically appropriate. What is attempted is an objective analysis of the problems to be resolved and a resolution of them consistent with past practices in the law of the sea and with the legislative history of the act.

Chapter 2 deals with the Outer Continental Shelf Lands Act. This asserts federal rights over the continental shelf of an extraterritorial nature and does not operate as an extension of national territorial limits, in the sense that the territorial sea defines national boundaries. The act is closely linked to the boundary problems of the Submerged Lands Act because federal jurisdiction over the continental shelf begins at the seaward limits of state jurisdiction. The act gives legislative expression to the Presidential Proclamation of September 28, 1945, by which the United States asserted jurisdiction and control over the natural resources of the subsoil and seabed of the continental shelf. This was the real impetus to present-day developments in the legal status of the continental shelf which now has the sanction of the International Law Commission and the United Nations Conference on the Law of the Sea. The chapter deals with the physical characteristics of the shelf as a worldwide, but not uniform, feature,

and with the emergence of a continental shelf doctrine—one of the significant developments in the modern law of the sea. The pertinent provisions of the Outer Continental Shelf Lands Act are considered—the operative extent, the laws governing operations on the shelf, and the geological and geophysical explorations provided for.

To round out the subject matter of Volume One, Part 3 has been included. This deals with recent developments in the international law of the sea, notably the preparatory work of the International Law Commission, and the definitive action of the 1958 United Nations Conference at Geneva. A summation only of the rules adopted by the Commission are given in Chapter 1, and these are considered against the background of established American practice. A fuller treatment is included in Chapter 2 which deals extensively with the United Nations Conference.

Adoption by the Conference of four conventions (supported by the United States delegation and since ratified by the Senate) by substantial majorities marks a major forward step in the codification of the law of the sea. Although the Conference brought to light a wide variety of conflicting interests between countries, it was possible to reconcile many of these conflicts and to achieve a wide area of agreement on such substantive matters as the right to the use of the high seas, the right of passage through straits used for international navigation between the high seas and the territorial sea, and the right of each coastal State to exploit the resources of its continental shelf. These areas of accord were further reflected in the adoption of rules for defining the limits of inland waters, for the drawing of baselines, for determining the status of indentations, and for delineating the outer limits of the territorial sea and boundaries through the territorial sea. Ratified or unratified, the conventions represent the most recent restatement of the law of the sea and are bound to have an impact in many situations nationally and internationally.

Like many conventions the rules agreed on are general in nature and in many cases are not susceptible of application to the complex coastal configurations likely to be encountered, without further clarification and interpretation. This is what has been attempted in Chapter 2. The interpretations are based in the main on the commentaries in the final report of the International Law Commission (the principal document considered by the Geneva Conference), and on the discussions in the various committees of the Conference. The chapter deals primarily with the technical provisions of the conventions adopted, particularly as they relate to boundary problems. The Convention on the Territorial Sea embodies the first formulation of the median-line principle for delimiting boundaries through the territorial sea and the continental shelf. The

construction of such line for coasts opposite each other and coasts adjacent to each other is described. A comparison is included between the provisions of the Geneva convention and the criteria formerly used by the United States for delimiting the territorial sea, and agreements and differences noted. Other conventions adopted at Geneva are appropriately considered in their impact on sea boundaries. The chapter concludes with a discussion of the Second Geneva Conference which was convened in 1960 for the purpose of reaching agreement on the breadth of the territorial sea. The various proposals advanced are noted, as are the implications of a 12-mile breadth in its effect on freedom of navigation and on navigational aids and charting programs.

Some documentation is included in the Appendixes in order to make the publication as nearly self-contained as possible. Principal among these is the Special Master's final report to the Supreme Court. This is reproduced in its entirety as Appendix C (with original pagination indicated) because of the numerous references made to it in the text, and because copies of the report are no longer available. Also included as Appendix I are the substantive articles of the Geneva conventions because of their historic nature and the likelihood of future reference being made to them by the Bureau.

As to the physical makeup of the volume, the footnote method was decided on as the only satisfactory approach to a publication of this kind, where citations to legal and technical authorities and accompanying explanations are invaluable to those working in this field. To have dealt with it in any other way would have meant endless, disconcerting digressions in the main text. It was not possible to treat all aspects of a particular subject completely in one place, and a certain amount of repetition became unavoidable. This results from the nature of the publication and the similarities in the subject matter treated but dealt with in different contexts. For example, the tidal boundary problem arose in the *California* case in connection with a specific type of tide that prevails along the California coast. It arises again, in a broader context, under the Submerged Lands Act as part of the definition of "coast line" which is applicable to all coasts. The same is true of the treatment of the continental shelf under the Outer Continental Shelf Lands Act and the Geneva Convention on the Continental Shelf. Reciprocal cross-references are given in such cases to assure the user full coverage of the subject.

July 1962 *Aaron L. Shalowitz*

CHAPTER 1

Legal Background

The developments leading up to the controversy between the United States and several of the coastal states began in the 1920's with the State of California, under claim of ownership, issuing oil and gas leases on certain submerged lands underlying the waters of Santa Barbara Channel. With the development of oil production from offshore submerged lands along the California coast, applications were filed with the Federal Government for oil and gas rights under the Mineral Leasing Act of 1920 (41 Stat. 437). The attitude of the United States towards these applications vacillated from a policy of rejection, on the ground that the submerged lands were the property of the State of California, to a policy of acceptance, on the basis of federal ownership. Finally, upon recommendation of an interdepartmental committee, appropriate steps were taken by the Attorney General to have the conflicting federal-state claims adjudicated.[1]

II. UNITED STATES *v.* CALIFORNIA

United States v. *California,* 332 U.S. 19 (1947), was the first of three Supreme Court cases—commonly known as the *Submerged Lands Cases*—involving rights in the submerged lands underlying the ocean and outside of the inland waters of the States of California, Louisiana, and Texas.

The *California* case was the pilot case to establish rights one way or the other. The litigation began in 1945 when the United States invoked the original jurisdiction of the Supreme Court by instituting a suit against the State of California. The Government complaint alleged that the United States "is the owner in fee simple of, or possessed of paramount rights in and powers over, the lands, minerals and other things of value underlying the Pacific Ocean, lying

1. CHAPMAN, YEARS OF PROGRESS (1945–1952) 192, U.S. DEPT. OF INTERIOR. For a chronology of the major background events in the submerged lands controversy from 1921 to 1953, *see* Memorandum of Feb. 14, 1953, from staff counsel, Senate Committee on Interior and Insular Affairs, to Senator Guy Cordon, in *Hearings before Committee on Interior and Insular Affairs on S. J. Res. 13 and other Bills,* 83d Cong., 1st sess. 1231 (1953).

seaward of the ordinary low-water mark on the coast of California and outside of the inland waters of the State, extending seaward three nautical miles"; that California had unlawfully issued oil and gas leases on lands underlying such ocean area; and that the state's lessees had entered upon such lands and taken oil and gas from them. (*See* fig. 1.)

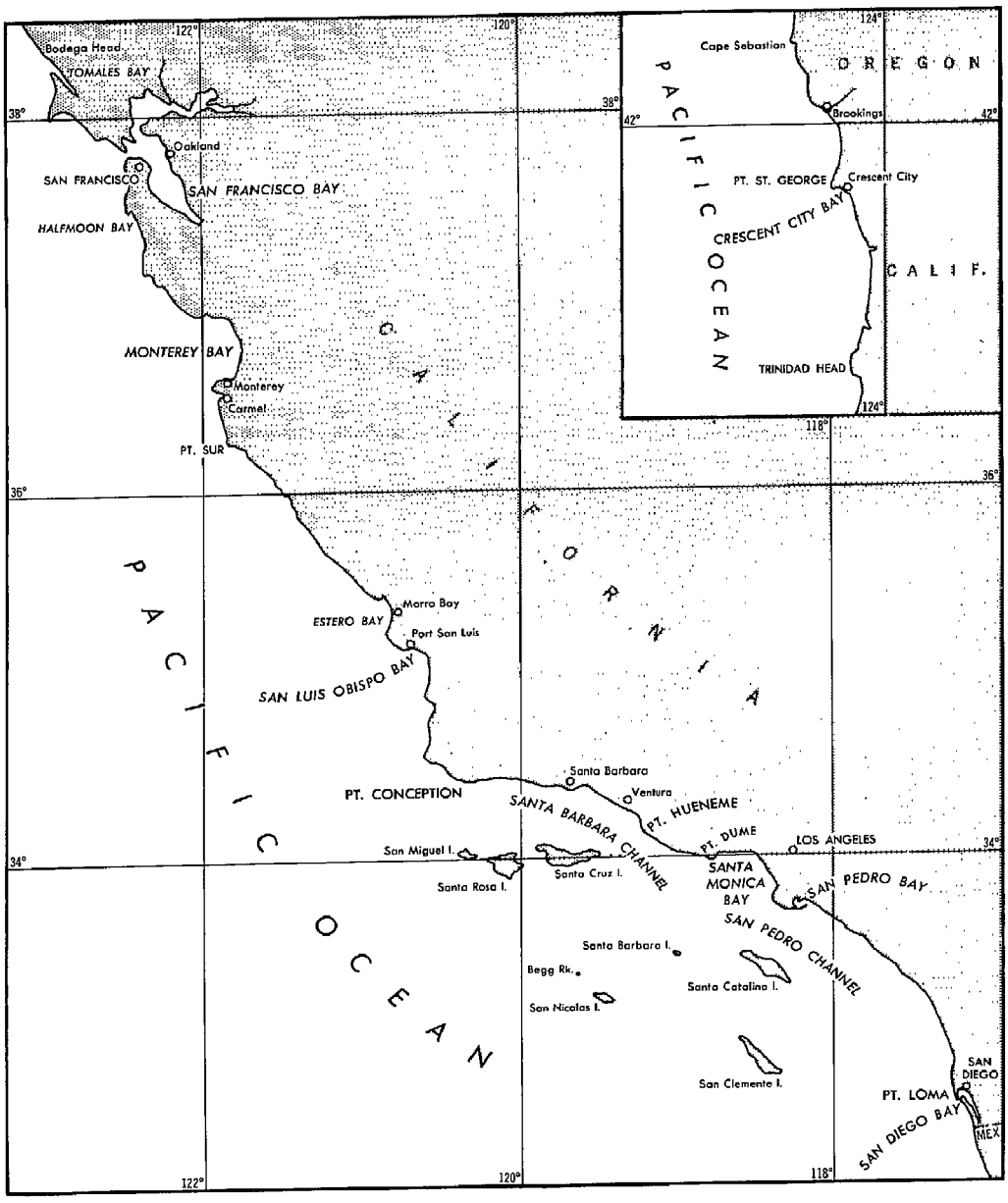

FIGURE 1.—Bays and channels along the California coast.

California filed an answer in which it was contended among other things that the 3-mile belt was within her boundaries, that title to submerged lands within the boundaries of the Thirteen Original States was acquired by those states from the Crown of England, and that since California was admitted on an equal footing with those states she also became vested with title to such lands.[2] It was also contended that no case or controvery in a legal sense was presented so as to fall within Article III, section 2, of the Constitution, but merely a difference of opinion between federal and state officials; and that it was impossible to identify the subject matter of the suit because the land claimed by the Government had not been sufficiently described and because of the numerous difficulties in fixing the point where inland waters end and the marginal sea begins. Therefore, it was contended, there was no basis for a definite decree, and that all that was wanted was an abstract declaration of rights concerning an unidentifiable 3-mile belt, which could only be used as a basis for subsequent actions in which specific relief could be granted as to particular localities.

The United States moved for judgment on the basis of the state's answer and the motion was set down for hearing. No documentary nor oral evidence was introduced.

III. The Government's Complaint—Tidelands Not Involved

The Government's Complaint in the *California* case specifically excluded from the controversy lands under inland navigable waters and the tidelands. It stated: "This suit does not involve any bays, harbors, rivers or other inland waters of California, nor does it involve the so-called tidelands, namely those lands which are covered and uncovered by the daily flux and reflux of the tides." [3]

State sovereignty over such lands goes back to the early days of the Republic. State and Federal courts have repeatedly expounded the theory on which such sovereignty rests. For centuries the title to the beds and shores of navigable waters within the territory or jurisdiction of England was owned by the Crown as an incident of sovereignty, subject to the public right of fishing and navigation. This was true of the English possessions in America.

After the American Revolution the Thirteen Original Colonies became sovereign states and, as successors to the Crown, became vested with the title

2. This contention relies in large measure on the theory that the Original States, and subsequently admitted states, owned, as an incident of their sovereignty, the tidelands and lands under navigable waters within their respective boundaries.

3. Motion for Leave to File Complaint and Complaint 2, United States v. California, Sup. Ct., No. 12, Original, Oct. Term, 1945.

to all lands within their boundaries over which the tide ebbed and flowed and to the beds of inland navigable waters.

With the adoption of the Federal Constitution, the states ceded to the Federal Government certain powers, one of which was the right to regulate interstate commerce, and with it the concomitant right to control navigation. No title to the tidelands nor to the lands submerged under navigable inland waters was thereby conferred. As the United States Government is one of delegated, limited, and enumerated powers, any power not expressly granted or necessarily implied in the Constitution is beyond its scope. Title to the tidelands and to the soil under inland navigable waters therefore remained in the several states, to be disposed of by them as they deemed fit, or to be reserved for their own uses.

New states, such as California, entering the Union subsequent to the adoption of the Constitution, were admitted on an equal footing with the Original States, and therefore acquired the same rights in the tidelands and submerged lands under inland navigable waters.

Martin v. *Waddell,* 16 Pet. 367 (41 U.S., 1842),[4] and *Pollard's Lessee* v. *Hagan,* 3 How. 212 (44 U.S., 1845), are the earliest cases in which the Supreme Court expounded these doctrines. The first involved title to an oyster bed in Raritan Bay and River of New Jersey (one of the Original States). The Court held that upon attainment of independence, New Jersey became the owner of the bed of the bay and river and had the authority to issue an exclusive license for the taking of oysters therefrom. The *Pollard* case involved a controversy over a tideland area bordering on the Mobile River in Alabama (a subsequently admitted state). The Court said that when Alabama ceased to be a territory and was admitted into the Union as a state, she was thereby placed "on an equal footing with the Original States," and as an incident of that status, the ownership of the tidelands within her boundaries was transferred from the United States to Alabama.

112. The Supreme Court Decision

On June 23, 1947, the Supreme Court, by a vote of 6 to 2, enunciated its now historic decision that "California is not the owner of the three-mile marginal belt along its coast, and that the Federal Government rather than the state has paramount rights in and power over that belt, an incident to which

4. Prior to 1882, the volumes of the United States Supreme Court reports were designated by the name of the official reporter and a number—for example, 1 Dallas, 16 Peters, 3 Howard, etc. Later, a serial number was added which carries through to the present time. In this publication, cases in the early series are cited by giving both the original reference and the serial reference, thus: 16 Pet. 367 (41 U.S., 1842).

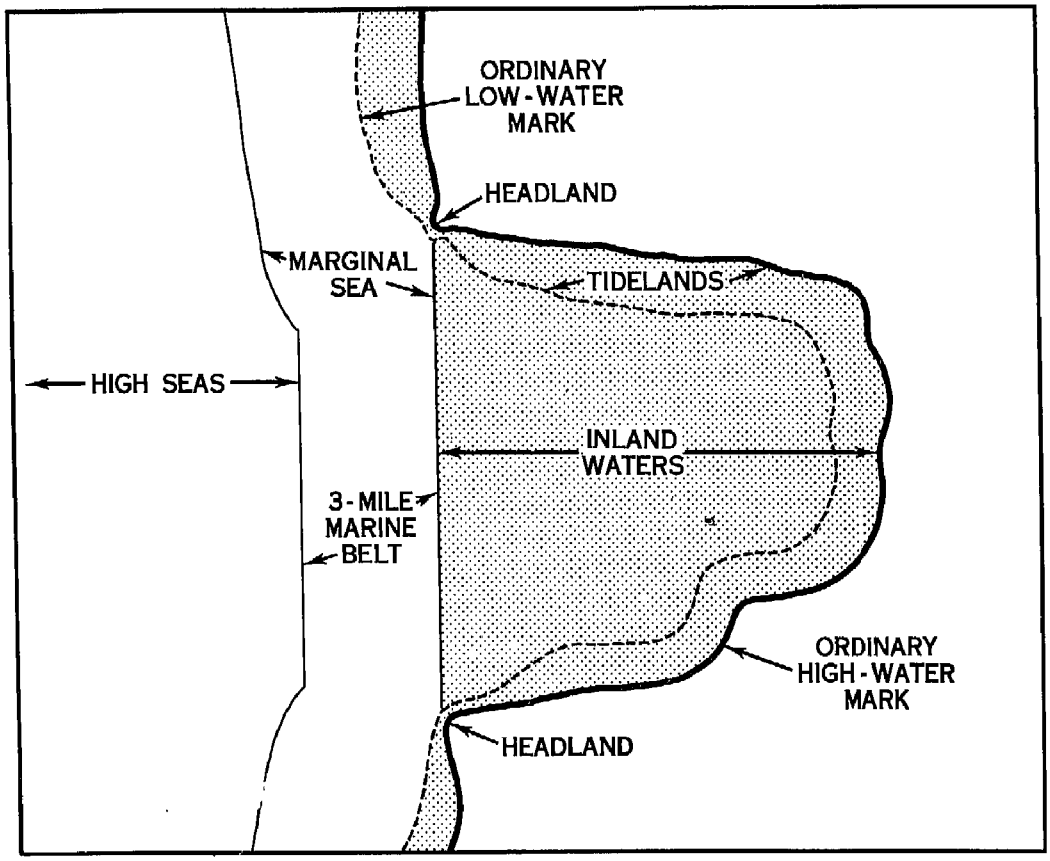

FIGURE 2.—The 3-mile marginal belt and its relation to inland waters and the high seas.

is full dominion over the resources of the soil under that water area, including oil." [5] (*See* fig. 2.)

The basis for the Court's finding was that historically the concept of a maritime belt around a country, over which it could exercise exclusive jurisdiction, was only a nebulous suggestion at the time the Thirteen Colonies separated from the British Crown.[6] "From all the wealth of material sup-

5. *United States* v. *California*, 332 U.S. 19, 38 (1947). This was spelled out in greater detail in the Court's decree, entered Oct. 27, 1947, as embracing "the lands, minerals, and other things underlying the Pacific Ocean lying seaward of the ordinary low-water mark on the coast of California, and outside of the inland waters." 332 U.S. at 804.

6. To support this, the Court cited FULTON, THE SOVEREIGNTY OF THE SEA 21 (1911), where it is stated that "mainly through the action and practice of the United States of America and Great Britain since the end of the eighteenth century, the distance of three miles from shore was more or less formally adopted by most maritime states." Also cited by the Court was the note from Secretary of State Jefferson in 1793 to the British Minister (reprinted in H. Exec. Doc. 324, 42d Cong., 2d sess., 553–554 (1872)), in which he pointed to the nebulous character of a nation's assertions of territorial rights in the marginal belt and put forward, the Court states, "the first official American claim for a three-mile zone which has since won general international acceptance." *United States* v. *California, supra* note 5, at 32, 33.

plied,"[7] the Court said, "we cannot say that the Thirteen Original Colonies separately acquired ownership to the three-mile belt or the soil under it, even if they did acquire elements of the sovereignty of the English Crown by their revolution against it."[8] The Court also found that no previous case had ever been before it in which this particular state-federal conflict was put squarely in issue.[9] It therefore felt free to decide whether to transplant the *Pollard* rule of ownership as an incident of state sovereignty, in relation to inland waters, out into the soil beneath the ocean, or whether to establish a new ocean rule. In its judgment, there were compelling reasons why a new rule should be established.

The Court found that "the three-mile rule is but a recognition of the necessity that a government next to the sea must be able to protect itself from dangers incident to its location." Protection and control of the three-mile belt, the Court said, "has been and is a function of national external sovereignty" and is "of vital consequence to the nation in its desire to engage in commerce and to live in peace with the world; it also becomes of crucial importance should it ever again become impossible to preserve that peace. And as peace and world commerce are the paramount responsibilities of the nation, rather than an individual state, so, if wars come, they must be fought by the nation. The state is not equipped in our constitutional system with the powers or the facilities for exercising the responsibilities which would be concomitant with the dominion which it seeks." 332 U.S. at 34, 35.

7. For a representative collection of official documents and scholarship on the subject, the Court cited CROCKER, THE EXTENT OF THE MARGINAL SEA (1919); JESSUP, THE LAW OF TERRITORIAL WATERS AND MARITIME JURISDICTION (1927); MASTERSON, JURISDICTION IN MARGINAL SEAS (1929); Comment, *Conflicting State and Federal Claims of Title in Submerged Lands of the Continental Shelf*, 56 YALE [illegible] JOURNAL 256 (1947).

8. *United States* v. *California, supra* note 5, at 31. The Court cited *United States* v. *Curtiss-Wright Export Corp.*, 299 U.S. 304, 316 (1936), in which it was said: "The broad statement that the Federal Government can exercise no powers except those specifically enumerated in the Constitution, and such implied powers as are necessary and proper to carry into effect the enumerated powers, is categorically true only in respect of our internal affairs. . . . As a result of the separation from Great Britain by the colonies acting as a unit, the powers of external sovereignty passed from the Crown not to the colonies severally, but to the colonies in their collective and corporate capacity as the United States of America."

9. Some 50 cases were cited by California in support of state ownership of submerged lands in the marginal belt, beginning with the cases of *Martin* v. *Waddell* and *Pollard's Lessee* v. *Hagan* (*see* 111). A partial list of these includes *Smith* v. *Maryland*, 18 How. 71 (59 U.S., 1855) (Chesapeake Bay); *Barney* v. *Keokuk*, 4 Otto 324 (94 U.S., 1877) (Mississippi River); *McCready* v. *Virginia*, 4 Otto 391 (94 U.S., 1877) (Ware River); *Manchester* v. *Massachusetts*, 139 U.S. 240 (1891) (Buzzard's Bay); *Hardin* v. *Jordan*, 140 U.S. 371 (1891) (inland lake); *Illinois Central Railroad* v. *Illinois*, 146 U.S. 387 (1892) (Lake Michigan); *Shively* v. *Bowlby*, 152 U.S. 1 (1894) (Columbia River); *United States* v. *Mission Rock Co.*, 189 U.S. 391 (1903) (San Francisco Bay); *Louisiana* v. *Mississippi*, 202 U.S. 1 (1906); *The Abby Dodge*, 223 U.S. 166 (1912) (Gulf of Mexico and Straits of Florida); *Port of Seattle* v. *Oregon & Washington Railroad Co.*, 255 U.S. 56 (1921) (Port of Seattle); *Oklahoma* v. *Texas*, 258 U.S. 574 (1922) (Red River); *Massachusetts* v. *New York*, 271 U.S. 65 (1926) (Lake Ontario); *Borax Consolidated, Ltd.* v. *Los Angeles*, 296 U.S. 10 (1935) (Inner San Pedro Harbor); *United States* v. *O'Donnell*, 303 U.S. 501 (1938) (San Francisco Bay). For a more complete list, *see* Radigan, *Jurisdiction Over Submerged Lands of the Open Sea* 6–7, 17–20 (1951), Legislative Reference Service, Library of Congress (prepared for Senate Committee on Interior and Insular Affairs, 82d Cong., 1st sess.).

If the rationale of the *Pollard* case is a basis for a conclusion that paramount rights run to the states in inland waters to the shoreward of the low-water mark, then, the Court said, "the same rationale leads to the conclusion that national interests, responsibilities, and therefore national rights are paramount in waters lying to the seaward [of the low-water mark] in the three-mile belt." *Id.* at 36. The Court was fully cognizant of the fact that in many of the cases which California cited in support of its position (*see* note 9 *supra*), language had been used that was strong enough to indicate that the Court then believed that states not only owned the tidelands and the soil under inland navigable waters, but also owned soils under all navigable waters within their territorial jurisdiction, whether inland or not. But the Court said: "All of these statements were, however, merely paraphrases or offshoots of the *Pollard* inland-water rule, and were used, not as an enunciation of a new ocean rule, but in explanation of the old inland-water principle." But, "none of these cases either involved or decided the state-federal conflict presented here. . . ." [10]

On the question of the absence of a case or controversy (*see* 11), the Court said that "conflicts as these constitute a controversy in the classic legal sense, and are the very kind of differences which can only be settled by agreement, aribtration, force, or judicial action." 332 U.S. at 24–25.

As to the difficulties that might be encountered in fixing the exact boundary between inland waters and the marginal sea, the Court said: "We may assume that location of the exact coastal line will involve many complexities and difficulties. But that does not make this any the less a justiciable controversy. Certainly demarcation of the boundary is not an impossibility. Despite difficulties this Court has previously adjudicated controversies concerning submerged land boundaries." 332 U.S. at 26.[11]

1121. *Dissenting Opinions*

Justices Reed and Frankfurter dissented from the conclusion reached by the majority; [12] the former on the ground that "While no square ruling of this Court has determined the ownership of those marginal lands, to me the tone

10. *United States* v. *California, supra* note 5, at 36. The Court examined but distinguished three such cases—*Manchester* v. *Massachusetts, Louisiana* v. *Mississippi,* and *The Abby Dodge* (*see* note 9 *supra*)—whose language, in its opinion, lent more weight to California's argument than any of the others. *Id.* at 37–38.

11. The Court cited *New Jersey* v. *Delaware,* 291 U.S. 361 (1934), 295 U.S. 694 (1935); *Borax Consolidated, Ltd.* v. *Los Angeles,* 296 U.S. 10, 21–27 (1935); and *Oklahoma* v. *Texas,* 256 U.S. 70, 602 (1921).

12. Justice Jackson took no part in the consideration or decision of the case, having been Attorney General of the United States when the litigation was first prepared.

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of the decisions dealing with similar problems indicates that, without discussion, state ownership was assumed." 332 U.S. at 43.

Justice Frankfurter's dissent was based not on the ground that California had proven ownership, but rather that proprietary interest in the Government "has not been remotely established except by sliding from absence of ownership by California to ownership by the United States." In his view, assuming that ownership by California cannot be proven, a fair analysis of all the evidence bearing on ownership would indicate the area to be "unclaimed land, and the determination to claim it on the part of the United States is a political decision not for this Court." 332 U.S. at 45.

12. UNITED STATES *v.* LOUISIANA

The *California* case laid the groundwork for the suits against Louisiana and Texas. Both were decided on June 5, 1950, and upheld the rights of the United States to the lands and minerals underlying the open waters of the Gulf of Mexico adjacent to these states.[13]

The *Louisiana* case was in many respects strikingly parallel to the *California* case. The preadmission histories were much the same; Louisiana was acquired from France and California was acquired from Mexico. Both became member states of the Union subsequent to its formation, and in each statute of admission there was the customary clause "on an equal footing with the Original States in all respects whatever."[14] Louisiana's defense was therefore substantially similar to California's.[15] There was one significant difference, however, between the two cases. In the *California* case, the suit covered rights in the lands underlying the 3-mile marginal belt, whereas in the *Louisiana* case the Government prayed for a determination of rights in the submerged lands to a distance of 24 marine miles beyond that belt.[16]

The Court unanimously upheld the claim of the United States on the principle laid down in the *California* case (*see* 112).[17] It perceived no reason

13. *United States* v. *Louisiana*, 339 U.S. 699 (1950); *United States* v. *Texas*, 339 U.S. 707 (1950). Decrees were entered on Dec. 11, 1950 (340 U.S. 899, 900).

14. Louisiana became a state under the Act of Apr. 8, 1812 (2 Stat. 701, 703).

15. In its answer, Louisiana admitted the paramount rights in and full dominion and power of the United States over the lands in controversy "to the extent of all governmental powers existing under the Constitution, laws and treaties of the United States," but it denied that its claim of title constituted an interference with such rights and power. See *United States* v. *Louisiana*, *supra* note 13, at 702, where the Court summarizes Louisiana's defense.

16. This was because Louisiana, by statute in 1938, had extended its seaward boundary to 27 marine miles from the shoreline. La. Rev. Stat., Sec. 49:1 (1950).

17. Justices Jackson and Clark took no part in the consideration or decision of the case, the latter having been Attorney General when the litigation was being prepared (*see* note 12 *supra*).

why Louisiana stood on a better footing than California insofar as the 3-mile belt was concerned. "The national interest in that belt," it said, "is as great off the shoreline of Louisiana as it is off the shoreline of California." It took note of the fact that Louisiana had extended its boundaries beyond the 3-mile belt, but intimated no opinion on the power of a state to unilaterally extend its external territorial limits. As far as the rights of the United States in the submerged lands beyond the marginal sea are concerned, it held the matter of state boundaries to have no relevancy. "If as we held in California's case," the Court said, "the three-mile belt is in the domain of the Nation rather than that of the separate States, it follows *a fortiori* that the ocean beyond that limit also is. The ocean seaward of the marginal belt is perhaps even more directly related to the national defense, the conduct of foreign affairs, and world commerce than is the marginal sea. Certainly it is not less so." 339 U.S. at 705.

13. UNITED STATES *v.* TEXAS

The *Texas* case presented somewhat different problems, arising primarily from Texas' preadmission status.[18] The State of Texas was not created out of federal territory, as were the States of California and Louisiana, but was admitted into the Union through the process of annexation. Of the 37 states that have joined the Union subsequent to its formation, Texas alone was an independent nation immediately prior to statehood and did not first pass through a territorial status.[19]

As an independent republic, Texas must have enjoyed the same paramount rights in its offshore submerged lands that the Court in the *California* case said the United States possessed by virtue of its national external sovereignty. On the other hand, if the doctrine of federal paramount rights was valid with respect to California, then it must necessarily apply with equal force to every state whose shores are washed by the open sea, regardless of the status a state may have

18. In 1836, the Texans revolted from Mexico and established the independent Republic of Texas. 1 Laws, Rep. of Texas 6.

19. Texas was admitted to the Union under the joint resolution of the United States Congress of Mar. 1, 1845 (referred to as the joint resolution of annexation), 5 Stat. 797, and the joint resolution of Dec. 29, 1845 (referred to as the resolution of admission), 9 Stat. 108. In the resolution of annexation the conditions of annexation were set out, among which was the provision that Texas would be allowed to retain "all the vacant and unappropriated lands lying within its limits, to be applied to the payment of the debts and liabilities of said Republic of Texas." The Republic of Texas, by Act of Dec. 19, 1836, had fixed its seaward boundary in the Gulf of Mexico at a distance of 3 leagues (9 nautical or geographic miles) from land. 1 Laws, Rep. of Texas 133. The resolution of admission, which finalized Texas' entry as a state, provided, among other things, that Texas is admitted "on an equal footing with the Original States in all respects whatever." These two provisions constituted the crux of the *pro* and *con* aspects of the *Texas* case.

enjoyed prior to its admission. In finding for the United States, the Court resolved this seemingly irreconciliable situation by a new interpretation of the "equal-footing doctrine," which it held works also in the converse and prevents extension of the sovereignty of a state into the domain of national sovereignty from which other states have been excluded.[20] "When Texas came into the Union," the Court said, "she ceased to be an independent nation. She then became a sister state on an 'equal footing' with all the other states. That act concededly entailed a relinquishment of some of her sovereignty . . . as an incident to the transfer of that sovereignty any claim that Texas may have had to the marginal sea was relinquished to the United States." The United States then took her place as respects foreign commerce, the waging of war, the making of treaties, defense of the shores, and the like. 339 U.S. at 717–718.

On the question of separating the *dominium* (ownership or proprietary rights) from the *imperium* (governmental powers of regulation and control) in the submerged lands, as urged by Texas, so as to leave the former with the state, the Court said that although the two are normally separable and separate, in this case, "once low-water mark is passed the international domain is reached. Property rights must then be so subordinated to political rights as in substance to coalesce and unite in the national sovereign. . . . If the property, whatever it may be, lies seaward of low-water mark, its use, disposition, management, and control involve national interests and national responsibilities. . . . Unless any claim or title which the Republic of Texas had to the marginal sea is subordinated to this full paramount power of the United States on admission, there is or may be in practical effect a subtraction in favor of Texas from the national sovereignty of the United States." [21] 339 U.S. at 719.

The Court did not pass upon the relevancy of the "vacant and unappropriated lands" provision in the resolution of annexation (*see* note 19 *supra*), but merely noted the conflicting contentions of the parties.[22] 339 U.S. at 715.

20. The Court said that while the "equal footing" clause generally refers to political rights and to sovereignty and not to economic stature, yet it has long been held to have a direct effect on certain property rights and operated to establish in the newly created states rights comparable to those of the Original States—for example, ownership of the shores of navigable waters and the soils under them. *United States* v. *Texas, supra* note 13, at 716.

21. Justices Reed and Minton dissented from the majority opinion. In their view, Texas owned the marginal area by virtue of its original proprietorship which it had not lost by the terms of the resolution of annexation. Justice Frankfurter, without joining the majority of the Court, stated: "Time has not made the reasoning of *United States* v. *California* more persuasive but the issue there decided is no longer open for me." He recognized, however, "the historically very different situation of Texas" and that the lands in controversy were at one time "part of the domain of Texas." Justices Jackson and Clark took no part in the consideration or decision of this case (*see* note 17 *supra*).

22. In the Government's view, the purpose of the clause, the circumstances of its inclusion, and the meaning of the words in federal and Texas usage (citing *Mann* v. *Tacoma Land Co.*, 153 U.S. 273, 284

One other feature of the *Texas* case differentiates it from the *California* and *Louisiana* cases. The controversy involved not only lands under the marginal belt but also lands beyond to the outer edge of the continental shelf.[23] The Court noted the irrelevancy of Texas' unilateral extension of its seaward boundary to the issue before it, thus following its holding in the *Louisiana* case (*see* text following note 17 *supra*).

The *Texas* decision spelled out more specifically the nature of the rights which the Court was adjudicating in the three submerged lands cases. The emphasis on the inseparability of the *dominium* from the *imperium,* and the coalescence of the two in the national sovereign, seemed to be designed to set at rest the doubts that had arisen in the wake of the *California* decree as to federal "ownership" of the submerged lands.[24]

The *Texas* decision also lent color to the suggestion that in laying down the doctrine of federal paramount rights in the marginal belt in the *California* case as an attribute of national external sovereignty, the Court intended to foreclose any other state from asserting a superior right.[25] Had the Court in the latter case based its decision solely on title, as the term is ordinarily understood, it would have been hard put to rationalize the *Texas* decision. But it said, "the crucial question on the merits is not merely who owns the bare legal title. . . . The United States asserts rights transcending those of a mere property owner."[26]

(1894), and *Galveston* v. *Mann,* 143 S. W. 2d 1028 (1940)) gave them a more restricted meaning. The lands contemplated were those which were suitable for sale and disposal and from which money could be realized for the reduction of the Republic's debt. This, it said, could hardly apply to lands under the sea in 1845. Texas, in reply, contended that since the United States refused to assume the liabilities of the Republic, it was to have no claim to its assets except the defense properties expressly ceded. (Five years after Texas became a state, she actually did sell a portion of her territory to the United States for 10 million dollars (9 Stat. 446 (1850)). This land is now included in the States of Kansas, Colorado, New Mexico, Oklahoma, and Wyoming.)

23. This was because Texas in 1941 extended its seaward boundary to a line 24 marine miles beyond the 3-mile limit (Act of May 16, 1941, L. Texas, 47th Leg. 454), and in 1947 extended it to the edge of the continental shelf (Act of May 23, 1947, L. Texas, 50th Leg. 451).

24. The Court struck the words "of proprietorship" from the decree proposed by the United States, which read "possessed of paramount rights of proprietorship in, and full dominion and power over." *United States* v. *California, supra* note 5, at 804. This led to the belief that the Court was adjudicating something less than ownership. Whatever the Court's reasoning for modifying the proposed decree, the *Texas* decision made it clear that what the Court was thinking of in the *California* case was not a diminution of rights associated with ownership, but rather an enlargement of such rights (*see* Part 2, 1521). *United States* v. *Texas, supra* note 13, at 719.

25. BARTLEY, THE TIDELANDS OIL CONTROVERSY 203 (1953).

26. *United States* v. *California, supra* note 5, at 29. The Government had based its case on two theories: the chain of title theory, under which the territory of California was ceded by Mexico to the United States in consonance with the Treaty of Guadalupe Hidalgo, proclaimed July 4, 1848 (9 Stat. 922), followed by the express reservation in the act admitting California to statehood, that title to all public lands were to remain in the United States; and the theory of national external sovereignty based upon the position of the United States as a member of the family of nations. The Court adopted the latter theory.

14. SUMMARY OF CASES

The *Submerged Lands Cases* established the doctrine that the Thirteen Original Colonies did not acquire ownership of the lands under the 3-mile belt along the open coast, seaward of the ordinary low-water mark, even if they did acquire elements of the sovereignty of the English Crown by their revolution against it; that states subsequently admitted to the Union did not acquire and did not retain ownership (as in the case of Texas) of these lands; and that the Federal Government and not the states has paramount rights in and full dominion and power over that belt as a function of national external sovereignty, and that these rights, *vis-a-vis* the states, extend to the outer edge of the continental shelf.[27]

27. Although the decisions adjudicated a controversy between the Federal Government and the states, they were in effect a tacit recognition of the validity of the United States' claim to jurisdiction over the continental shelf under the Presidential Proclamation of Sept. 28, 1945 (*see* Part 2, 2221). The Court cited the proclamation as an example of the broad dominion exercised by the political agencies of the Government over the 3-mile marginal belt and beyond. *United States* v. *California, supra* note 5, at 33–34.

CHAPTER 2

Technical Background

21. THE FEDERAL-STATE BOUNDARY

While the *Submerged Lands Cases* settled the basic legal rights in the offshore submerged lands, the decisions and decrees were couched in terms too general to provide specific criteria for a precise determination of the federal-state boundary. This was particularly true of the California coast, where islands fringe the coast and embayments indent the shore. The Supreme Court recognized this when it said: "And there is no reason why, after determining in general who owns the three-mile belt here involved, the Court might not later, if necessary, have more detailed hearings in order to determine with greater definiteness particular segments of the boundary." [1] Jurisdiction was therefore reserved by the Court, in its decree of October 27, 1947, "to enter such further orders and to issue such writs as might from time to time be necessary." 332 U.S. at 804, 805.

The *Louisiana* and *Texas* cases were decided during the pendency of the *California* case before a Special Master (*see* 2111). Although the decisions and decrees in these cases were also couched in general terms, no request was made of the Court for further action because it was believed the principles established in the *California* case could be applied with appropriateness to the Louisiana and Texas coasts. However, in order to hold future litigation to a minimum in the seaward area off Louisiana (most of the producing wells were in this area rather than off the Texas coast), the United States established a tentative administrative line, which became known as the "Chapman Line," as the dividing line between federal and state jurisdiction. The circumstances surrounding its promulgation and other significances of the line are discussed in Chapter 7.

1. *United States* v. *California,* 332 U.S. 19, 26 (1947). The Court cited *Oklahoma* v. *Texas,* 258 U.S. 574, 582 (1922) in support of this. The coast of Louisiana also poses many problems due to its peculiar geography (*see* figs. 22 and 23). The Texas coast is relatively simple by comparison.

211. United States *v.* California

In January 1948, the Government filed a petition for the entry of a supplemental decree, seeking an adjudication of the precise boundary along three segments of the California coast where oil was being extracted. These comprised an area in Santa Barbara Channel, San Pedro Bay, and an area southeastward of San Pedro Bay.[2] California sought a determination of the entire 1,100 miles of coastline. The Court denied California's petition but expressed doubt as to what particular segments should then be determined.

2111. *A Special Master Is Named*

The matter of determining what segments of the federal-state boundary required immediate adjudication was ultimately referred by the Court to a Special Master with instructions to make recommendations as to the segments that "call for precise determination" and "to recommend . . . an appropriate procedure to be followed in determining the precise boundary of such segments." [3]

After many preliminary, informal conferences with the litigants looking toward a clarification and narrowing of the issues,[4] the Special Master recommended for present adjudication the following seven segments as being representative of physiographic conditions along the California coast (*see* fig. 1):[5]

2. Petition for the Entry of a Supplemental Decree, 2–3, United States v. California, Sup. Ct., No. 12, Original, Oct. Term, 1947. Stipulations had been made between the parties that San Francisco Bay, shoreward of the line from Bonita Pt., through Mile Rocks Lt., to the low-water line at San Francisco; San Pedro Bay, shoreward of a line beginning at a point on the low-water mark of the Pacific Ocean, 850 yards in an easterly direction from Pt. Fermin lighthouse, and running in a northeasterly direction through a point 300 feet due south of the southerly extension of the Navy mole and breakwater, to the line of ordinary low tide in the City of Long Beach; and San Diego Bay, shoreward of the line Pt. Loma to Zuniga Pt., would be considered as falling within the purview of "ports, harbors, bays, and other inland waters" and therefore excluded from operation of the Court's decision. The stipulations, however, left California free to urge a more seaward position for the limits of inland waters.

3. The several orders of the Court relative to the proceedings before the Special Master were: Order of June 21, 1948 (334 U.S. 855); Order of June 27, 1949 (337 U.S. 952); Order of June 4, 1951 (341 U.S. 946); Order of Dec. 3, 1951 (342 U.S. 891); Order of Nov. 10, 1952 (344 U.S. 872).

4. The Department of Justice was in frequent consultation with officials of the Coast and Geodetic Survey for assistance in formulating and clarifying the technical issues before the Special Master.

5. The Special Master filed two reports with the Supreme Court preliminary to making his final recommendations. The first (dated May 31, 1949) set forth the segments recommended for adjudication, the questions on which answers were required before a precise determination of the boundary could be undertaken, and a recommended procedure for arriving at these answers; the second (dated May 22, 1951) dealt with the issues, the positions of the parties, and the nature and form of the evidence proposed to be submitted.

1. Crescent City Bay
2. Monterey Bay
3. San Luis Obispo Bay
4. Point Conception to Point Hueneme
5. Santa Monica Bay
6. San Pedro Bay
7. Area east of San Pedro Bay

While these segments covered a relatively small portion of the California coast, they presented in reasonably significant variety the principal questions posed by the Court's decision, which could be applied to other areas.

The basic question involved in all the submerged lands cases was where to draw the line that separates the inland waters from the marginal sea, for the Court said in the *California* case, that "the Federal Government rather than the state has paramount rights in and power over that belt [the marginal sea]" and that the belt embraces the submerged lands "lying seaward of the ordinary low-water mark . . . and outside of the inland waters." This was formalized in an order of the Court, dated December 3, 1951 (342 U.S. 891), in the following three questions on which the Special Master was directed to hold hearings and to take whatever testimony was necessary for the purpose of making recommendations to the Court:

Question 1. What is the status (inland waters or open sea) of particular channels and other water areas between the mainland and offshore islands, and, if inland waters, then by what criteria are the inland water limits of any such channel or other water areas to be determined?

Question 2. Are particular segments in fact bays or harbors constituting inland waters and from what landmarks are the lines marking the seaward limits of bays, harbors, rivers, and other inland waters to be drawn?

Question 3. By what criteria is the ordinary low water mark on the coast of California to be ascertained?

As applied to the California coast, these presented for solution three groups of problems: the inland waters problem, the offshore islands problem, and the tidal boundary problem. The questions propounded by the Court will be dealt with for convenience in these contexts (*see* Chapters 4, 5, and 6).

2112. *Preparatory Work by the Coast and Geodetic Survey*

Almost from the moment the decision in *United States* v. *California* was announced in June 1947, the Attorney General of the United States approached the Secretary of Commerce for assistance from the Coast and Geodetic Survey

in the matter of delimiting the federal-state boundary under the decision of the Court.[6]

Specific materials furnished and services rendered preparatory to the taking of testimony by the Special Master included the following:

(*a*) Eight large-scale Bureau charts of sections of the California coast on which the earliest shorelines were superimposed in color.[7]

(*b*) Drawings covering three segments of the California coast showing the lines contended for by the Government and which it urged for immediate adjudication (*see* note 2 *supra* and accompanying text).

(*c*) A series of maps and charts, covering the entire coast of California, on which the earliest shoreline was superimposed for use in developing a Government policy for dealing with piers, wharves, and similar structures, and of artificially filled lands which had been erected or created within the marginal sea.[8]

(*d*) Research into the cartographic history of San Pedro Bay, with particular emphasis on its historic limits, and into the origin and charting history of Point Lasuen.[9]

(*e*) A Memorandum on Mean Low Water (dated May 26, 1949) clarifying the distinction between the "plane of mean low water" and the "line of mean low water" together with a discussion of the technical problems involved in the determination of each.

(*f*) Assistance in the preparation of a memorandum requested by the Special Master on the position of the United States with respect to the boundary line between inland waters and the open sea for the seven areas under consideration.[10]

6. Letter of July 14, 1947, from Attorney General Clark to Secretary of Commerce Harriman and reply of July 21, 1947. The assistance requested covered the following subject matter: "(1) The preparation of maps reflecting the comparative positions of the shoreline along the California coast at the time of earliest survey and in 1947; (2) advice of a technical nature in connection with the preparation of an appropriate description of the line of demarcation in those areas as to which hearings appear to be unnecessary; (3) similar advice in respect to the matter of determining what line should be insisted upon by the Government in those areas in respect to which it is found that hearings are required; (4) appearance of representatives of your Bureau as expert witnesses for the Government in any such proceedings; and (5) assistance in the drafting of an appropriate description of a line of demarcation in connection with the preparation of a final decree to be entered by the Court." Letter of July 29, 1947, from Assistant Attorney General to Director, Coast and Geodetic Survey.

7. These comprised charts 5007 (Point Mugu to Ventura (Santa Barbara Channel)), 5107 (San Diego Bay), 5108 (Newport Bay), 5143 (Los Angeles Harbor), 5144 (portion of Santa Monica Bay), 5261 (Santa Barbara), 5403 (Monterey Bay), and 5832 (entrance to Humboldt Bay).

8. Copies of the latest planimetric or planetable surveys were used except where large-scale charts were available. This series comprised 96 topographic surveys (made between 1928 and 1935) and 20 of the then latest published charts (1947). The entire series was prepared in atlas form in two parts.

9. The resulting memorandum, dated Dec. 1, 1948, formed the basis for the Government's rebuttal testimony before the Special Master (*see* 4541).

10. The memorandum (dated Aug. 12, 1949) included a method of determining the termini of the boundary line at headlands, a method of determining when an indentation of the coast is a true bay,

(*g*) Copies of Coast Survey charts, covering the seven segments to be adjudicated (*see* text at note 5 *supra*), on which were drawn the federal-state boundary line as contended for by the Government together with the 3-mile marginal belt along the mainland coast and around the offshore islands using an envelope line (*see* Part 2, 1621(*c*)) and following the principles of delimitation advocated by the U. S. delegation at the 1930 Hague Conference for the Codification of International Law (*see* Part 3, 2218).[11]

(*h*) A computation of the ratio of land to water area included between the general mainland coast of Norway (covering the skjaergaard area) and the straight baselines approved in the *Anglo-Norwegian Fisheries* case (*see* 511 and 513). The measurements were made on copies of charts used in the proceedings of that case. A similar determination was made for the ratio of land to water area included between the mainland coast of California and the outer coasts of the offshore islands as exemplified by the lines marking the overall unit area contended for by California (*see* 53).

2113. *Proceedings Before the Special Master*

Besides the briefs and documentary material submitted by both litigants, oral testimony was also heard by the Special Master.[12] The Government's direct presentation consisted of oral testimony relative to Pacific coast tides and tidal datums;[13] testimony on the application of a technical method urged by the Government for the determination of the status of coastal indentations, that is, whether inland waters or open sea;[14] and the introduction of Coast Survey charts on which the federal-state boundary line, as contended for by the Government, was delineated for the several coastal segments in question. In addition, two memorandums from the Department of State setting forth the criteria which govern the delimitation of the territorial waters of the United States were made part of the record.[15] A memorandum from the Coast and Geodetic

criteria for ascertaining "the ordinary low-water mark" along the Pacific coast and special problems arising therefrom, and principles applicable to the determination of the limits of inland waters in the area of the offshore islands.

11. While the seaward limit of the marginal belt was not in issue in this proceeding, it was delimited for the purpose of pointing up the relationship of this belt to the California coast, particularly in the area of the offshore islands.

12. Hearings were held during Feb., Mar., and Apr. of 1952, at Washington, D.C., and at Los Angeles, Calif. At the request of the Solicitor General of the United States (letter of Jan. 2, 1952, to Director, Coast and Geodetic Survey), the author served as consultant to the Department of Justice at all hearings before the Special Master and as an expert witness for the Government.

13. This testimony was given by H. A. Marmer, then Assistant Chief, Tides and Currents Division, Coast and Geodetic Survey.

14. This testimony was given by the author.

15. Letter of Nov. 13, 1951, from Acting Secretary of State to Attorney General and letter of Feb. 12, 1952, from Secretary of State to Attorney General. (*See* Appendix D.)

Survey, explaining the various uses of tidal datum planes, and a discussion of the term "ordinary low water," insofar as it pertained to the California coast, was also made part of the record.[16]

California introduced a number of expert witnesses, consisting of a former judge of the World Court to show the present status of international law in this field; a professor of geology to show that at some time in the geologic past, perhaps 25 million years ago, the channel islands off the southern California coast were connected to the mainland; an oceanographer to show the effect of wave refraction on the channel areas and on indentations; an engineer to describe the physical and geographic features of the coast, with particular reference to wind and wave conditions and to the sheltered character of the area; a state engineer to show the low-water datum used by the California Lands Commission; another state engineer to explain the cartographic history of San Pedro Bay, particularly with respect to the location of Pt. Lasuen and the southeastern headland of the bay; a professor of history to show the use and development of the various areas from early 16th century days, with a view to showing their protected nature; and about 40 other fact witnesses, consisting of county surveyors, longshoremen, fishermen, salvage officials, pleasure boat captains, harbor masters, pilots, law enforcement officers, fish and game officials, and others who testified with respect to the use aspects of the areas to substantiate their protected nature.

Rebuttal testimony for the Government was presented by a professor of international law on the interpretation of the *Anglo-Norwegian Fisheries* case (*see* 513) in its application to the California coast; by an engineer from the Beach Erosion Board on the significance of the wave-refraction studies introduced by California; by a geographer from the Coast and Geodetic Survey on the location of the seaward boundaries of the southern California counties in relation to the channel islands; [17] and by a cartographic engineer from the Coast and Geodetic Survey on the relative geographic differences between the Norwegian coast and the southern California coast, and on the cartographic history of San Pedro Bay.[18]

Besides the oral testimony, documentary evidence was presented, some of which was received in evidence and some of which was excluded as within the reach of judicial notice. Such documents were submitted in written form to

16. Letter of Feb. 8, 1952, from Director, Coast and Geodetic Survey, to Solicitor General. (*See* Appendix E.)

17. This testimony was given by A. Joseph Wraight who had been assigned to the Department of Justice for about 9 months on a reimbursable basis, during the later stages of the case, to investigate certain geographic and historic documents cited in the California briefs, and to assist the author in various researches.

18. This testimony was given by the author.

the Court, to accompany but not to be a part of the proceedings upon which the Master acted.[19]

The Special Master filed his report with the Supreme Court on October 14, 1952 (*see* note 19 *supra*) in which he set forth his recommendations on the three principal questions propounded by the Court as well as on certain questions ancillary thereto. These are dealt with in Chapters 4, 5, and 6.

19. Report of Special Master 2, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952.

CHAPTER 3

Applicable Principles of International Law

Before considering the Special Master's findings and the bases for his conclusions, certain historical developments in the law of the sea will be examined. Terminology is important. Neither the Supreme Court in the three cases nor the Special Master in his final report specifically defined the technical terms used. Since the Court's finding was based upon national external sovereignty, these terms must be considered against the backdrop of applicable principles of international law and in their relation to the seaward boundaries of a littoral nation.

31. THE THREEFOLD DIVISION OF THE SEA

It is now generally agreed that the navigable waters of the world may be classified under three broad heads, each with its own significance in point of control which a coastal nation may exercise over it. The classification begins from the land outward and comprises inland waters, the marginal sea, and the high seas.[1] (*See* fig. 2.)

311. Inland Waters

The inland or internal waters include all bodies of water within the land territory, such as rivers and lakes, as well as bodies of water which open on the coast and fall within the category of "true" bays. Along a generally straight coast, without major indentations, it would also include the area subject to the flux and reflux of the tide, that is, between high-water mark and low-water mark.

1. Smith, The Law and Custom of the Sea 6 (1950).

The common legal feature of all inland waters is the complete sovereignty which a nation exercises over them, the same as it exercises over its land territory. This sovereignty includes the right of exclusion of foreign vessels.[2]

This physiographic concept of the limits of inland waters should not be confused with the lines established by the United States Coast Guard to separate the areas where the Inland Rules of the Road apply from those to which the International Rules apply. These lines are established for administrative purposes and have been held to have no application other than the specific purpose of determining what rules of navigation are to be followed.[3]

Once the limits of inland waters of a nation are established then its seaward boundaries become automatically fixed by the width of its marginal sea.

312. The Marginal Sea

Seaward of the inland waters of a nation is the marginal sea, also called the "territorial sea," the "marine belt," and the "3-mile limit." This forms part of the national territory of the coastal nation, but foreign merchantmen, and perhaps foreign warships in time of peace, have the right of innocent passage through them.[4] The enjoyment of this right may be conditioned upon the observance of special regulations laid down by the coastal nation for the protection of navigation and for the execution of municipal laws relating to customs, quarantine, and other local interests. This privilege is in the nature of a concession which leaves the general principle of sovereignty intact, and within the limits of the marginal belt the jurisdiction of the coastal nation is as exclusive as is its jurisdiction over the land itself.

Along a straight coast, the marginal sea extends seaward of the low-water mark; along an indented coast it begins at the seaward limits of inland waters. The landward limit of the marginal sea is thus conterminous with the seaward limits of inland waters. The term "territorial waters" is frequently used to designate the water area comprising both the inland waters and the territorial sea.

2. *Research in International Law,* 23 American Journal of International Law (Special Supplement) 262 (Apr. 1929). The advent of straight baselines in the law of the sea has created another category of water areas, which while assimilated to inland waters is nevertheless subject to the right of innocent passage of foreign vessels (*see* 312), if such water areas were formerly part of the territorial sea or of the high seas (*see* Part 3, 2216).

3. *United States* v. *Newark Meadows Improvement Co.,* 173 Fed. 426, 428 (1909).

4. Innocent passage (including stopping and anchoring) has been defined as that passage through the territorial sea for the purpose of either traversing it without entering inland waters, or of proceeding to inland waters, or of making for the high seas from inland waters, so long as the ship does not commit any acts prejudicial to the security of the coastal nation or contrary to the rules of international law (*see* Part 3, 2214).

313. The High Seas

Seaward of the marginal sea lie the high seas. Freedom is their principal characteristic, which means they are not subject to the sovereignty of any one country, but every country has equal rights of user in them. This freedom of the high seas with its concomitant manifestations of free navigation and free fisheries is today a dominant principle of maritime law, although as will be seen it is being modified to an extent by the new continental shelf doctrine (*see* Part 2, 223 and Part 3, 222).

The high seas are often referred to as the "open sea," but in the context of the submerged lands cases, open sea refers to all the water area seaward of the inland waters.

32. DEVELOPMENT OF THE MARGINAL SEA CONCEPT

As a legal concept, the marginal sea is closely related to the doctrine of freedom of the high seas. The early Roman jurists looked upon the sea as common to all mankind. Theirs was the doctrine of *mare liberum,* or free sea. With the development of commerce in the late Middle Ages, maritime nations began to claim exclusive control over parts of the open sea adjacent to their territories. These claims reached their height of extravagance toward the end of the 15th century when Spain claimed exclusive rights of navigation in the Pacific Ocean, the Gulf of Mexico, and the western Atlantic; and Portugal asserted a similar right in the Atlantic south of Morocco, and in the Indian Ocean. There was little law recognized in this matter and each nation asserted such claims as seemed warranted in its own eyes, and obtained recognition of them in proportion to its power to defend them. This was the doctrine of *mare clausum,* or closed sea.[5]

By the close of the 17th century, there was a reversion to the Roman doctrine of freedom of the seas, and the right of free navigation won general acceptance. With this right to navigate the Seven Seas came an unwillingness on the part of nations to say that the free seas touched their very shores. The need for a maritime nation to exercise jurisdiction over the waters along its coasts, to some distance from shore, seemed a logical development in the interest of self-defense, or for the protection of neutral shipping in time of war. The early jurists were unable to agree on an exact distance because they failed to perceive any specific guiding principle. Some asserted it should

5. Fenwick, International Law (3d ed.) 417 (1948).

extend for a distance of 100 miles from the coast, others that the distance should be as far as one could sail in a certain number of days, or as far as one could see, etc. Finally, the "cannon-shot" rule was hit upon, that is, the distance from shore that a nation could defend was the distance to which a cannon shot could be fired, and should be a measure of its jurisdiction. This seemed to capture the imagination of many 18th century publicists and jurists, and was generally adopted. Since at that time the range of cannon was approximately a marine league, or 3 nautical miles,[6] this distance became the limit to which a coastal nation could exercise territorial jurisdiction. And thus originated the doctrine of the "3-mile limit." [7]

321. The 3-Mile Limit

The 3-mile rule became fairly well fixed in European jurisprudence, and during the 19th century Great Britain and the United States became the chief protagonists of the doctrine. Other maritime countries claimed wider belts—Norway and Sweden 4 miles, Spain 6 miles, Mexico 9 miles, and the Soviet Union 12 miles.[8] Thus far no international agreement has been reached on a uniform distance (*see* Part 3, 232). In the establishment of a rule of international law, two major principles must be respected: (1) the sovereignty of the coastal nation, and (2) the freedom of the high seas. The reconciliation of these two principles has been the stumbling block thus far. Perhaps the one point of agreement by all nations is that 3 miles is the minimum breadth,

6. The statute or land mile is equal to 5,280 feet or 1,609.35 meters. The nautical mile equals 1.151 statute miles, and a marine league equals 3.453 statute miles. The nautical mile—also called the sea mile or geographic mile—is the length of a minute, or 1/21,600, of a great circle of the earth. But since the earth is not a perfect sphere, several different values were used. In the United States, it was formerly 6,080.20 feet, or 1,853.248 meters, but on July 1, 1954, the international nautical mile of 6,076.10333 feet, or 1,852.0 meters, was adopted, following the proposal of the International Hydrographic Bureau in 1929. *Technical News Bulletin,* National Bureau of Standards (Aug. 1954). For a discussion of the genesis of the present accepted values of the statute and nautical miles, *see* Thomas, *Linear Measures in the Evolution of the Mile,* 4 Journal, Coast and Geodetic Survey 12 (1951).

7. The name of Cornelius van Bynkershoek, a Dutch jurist, is perhaps most frequently associated with the cannon-shot rule, and is attributed to a treatise published in 1702, in which he expressed the legal principle that "the territorial sovereignty ends where the power of arms ends." Recent research indicates, however, he was not the actual originator of the rule, but was, perhaps, the earliest jurist to record the existence of the rule and to popularize it. Walker, *Territorial Waters: The Cannon Shot Rule,* 22 The British Year Book of International Law 210 (1945). *See also* Kent, *The Historical Origins of the Three-Mile Limit,* 48 American Journal of International Law 537 (1954). There is also some question as to what the actual range of cannon was during the 17th and 18th centuries. Estimates range from about a mile and a half to about two and one-half miles. Dean, *The Second Geneva Conference on the Law of the Sea: The Fight for Freedom of the Seas,* 54 American Journal of International Law 759 (1960).

8. For a recent compilation (Feb. 8, 1960) of the various claims of nations to a marginal sea and to contiguous zones, *see* "Synoptical Table Concerning the Breadth and Juridical Status of the Territorial Sea and Adjacent Zones" (U.N. Doc. A/Conf. 19/4). (*See* Appendix J.)

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or, stating it differently, 3 miles is the one distance on which there is complete unanimity of opinion.[9]

It is sometimes stated that developments in the science of ballistics have outmoded the 3-mile limit for the marginal sea. But this seems to overlook the important historical fact that the marginal sea concept was carved out of the free seas doctrine. Whether it arose as a principle of defense or of neutrality, it crystallized as a limitation on the freedom of the seas doctrine, rather than as a residuum of the closed sea doctrine.[10] If technological developments are to be the criteria for the width of the marginal belt then it would be necessary to establish a belt so wide as to constitute a serious encroachment on the high seas, and we would soon be reverting to the medieval doctrine of the closed sea, not to mention the international complications that would ensue from perfection of continental and intercontinental ballistic missiles. In any case, the width of the belt has not kept pace with the increased range of coastal batteries nor with other modern implements of warfare, which would seem to support the presumption of its independent development through the years as a belt of limited width with economic and political origins rather than military.[11]

The doctrine of the free seas has been one of the keystones of American foreign policy. It is implicit in the position taken by Thomas Jefferson as early as 1793 when, as Secretary of State, he put forward the first official American claim for a 3-mile zone as the territorial limits of the United States.[12] This position has never been departed from. It has been reaffirmed on numerous occasions, and the United States has uniformly protested encroachments on this doctrine through extensions of the marginal belt, whether arrived at unilaterally or multilaterally.[13]

9. The International Law Commission, in its final report on the law of the sea, recognized the wide diversity of opinion that exists among governments respecting the breadth of the territorial sea. While several proposals were considered by the Commission, no single one received majority approval, and the Commission had to content itself with merely noting some of the difficulties that stand in the way of adopting a uniform distance (*see* Part 3, 1313).

10. JESSUP, THE LAW OF TERRITORIAL WATERS AND MARITIME JURISDICTION 3–5 (1927).

11. Dean, *supra* note 7, at 761. Citing Walker, *supra* note 7, at 231, he states that "The modern 3-mile limit sprang from 'pacific and economic roots' and thus in the nineteenth century came to supplant the 'old war rule' of cannon range, which was always linked to the law of prize rather than to issues such as the right of passage and fishing."

12. In *United States* v. *California*, 332 U.S. 19, 33 (1947), the Court cited the statement of Secretary of State Jefferson to support the holding that the Thirteen Original Colonies never acquired ownership of the submerged lands under the 3-mile belt.

13. For a reaffirmation of this doctrine by the Department of State during the Submerged Lands Act hearings (*see* Part 2, chap. 1), *see* Tate, *Tidelands Legislation and the Conduct of Foreign Affairs*, 28 DEPT. STATE BULLETIN 486 (1953). See also *Notes Verbale* of Feb. 3, 1955, and Mar. 12, 1956, from the permanent delegation of the United States to the United Nations. Although the United States proposed a 6-mile territorial sea at the 1958 and 1960 Conferences on the Law of the Sea (*see* Part 3, 21, 23),

3211. *Departures From 3-Mile Limit*

While adhering to the doctrine of freedom of the seas, maritime nations have quite generally, if not universally, exercised some authority on the high seas adjacent to their territorial waters. Such extended or extraterritorial jurisdiction is manifested principally in the fields of law enforcement and national security. Thus, in the United States, Congress, as early as 1799, passed an act directing revenue officers to board vessels bound for a United States port when within 4 leagues (12 nautical miles) of the coast (known as "customs waters"), to determine the character of the cargo.[14] This extended jurisdiction was also invoked in connection with enforcement of the National Prohibition Act, and a number of treaties were negotiated with foreign powers which provided for search and seizure of foreign vessels beyond the 3-mile limit.[15] And, in the Declaration of Panama, the United States, together with other American Republics, proclaimed a security zone 300 miles wide for the protection of neutral commerce of the Americas during World War II.[16]

These special cases of jurisdiction beyond the nation's territorial waters are but qualified departures from the 3-mile rule, and leave intact the two basic tenets of the freedom of the seas doctrine—the right of free navigation and the right of free fishing on the high seas. These rights are inviolate and belong to the peoples of all nations.

33. BASELINE IN INTERNATIONAL LAW

The threefold classification of the sea requires the determination of two boundary lines—the line that divides the inland waters from the marginal sea,

the proposal was made in the interest of reaching a compromise. Failure of the Conferences to reach agreement on any breadth of the territorial sea left the preexisting position of the United States intact (*see* Part 3, 233).

14. Act of Mar. 2, 1799 (1 Stat. 668). The Act of Aug. 4, 1790 (1 Stat. 156), also had a 4-league provision, but this applied only to vessels belonging in whole or in part to citizens or inhabitants of the United States. The Anti-Smuggling Act of 1935 (49 Stat. 517) enlarged this jurisdiction by providing for "customs-enforcement areas," not more than 50 miles from customs waters, which may be so designated by the President upon a finding that violations of American customs laws are taking place.

15. In 1924, the United States entered into a convention with Great Britain which allowed United States officials to board private British vessels outside the 3-mile limit for the purpose of ascertaining "whether the vessel or its personnel were endeavoring to import alcoholic beverages into the United States." But such rights could not be exercised at a greater distance from the coast than could be traversed in 1 hour by the suspected vessel. 43 Stat. 1761 (1924).

16. For a consideration of Public Law 212 (The Outer Continental Shelf Lands Act) as an exercise of extraterritorial jurisdiction by the United States, *see* Part 2, 21. For a discussion of the convention adopted at Geneva in 1958, recognizing a coastal State's jurisdiction in a zone contiguous to its territorial sea, *see* Part 3, 2215.

and the line that divides the marginal sea from the high seas. The first is known as the "baseline" and is not only the dividing line between inland waters and the marginal sea, it is also the line from which the outer limits of the marginal sea (*see* Part 3, 2211 B), the inner and outer limits of the contiguous zone (*see* Part 3, 2215(*a*)), and the inner limits of the continental shelf and the high seas are measured (*see* Part 3, 2225 and 223(*a*)).[17]

The fixing of a baseline is fundamental in determining how far seaward a coastal nation may exercise a given form of jurisdiction, be it in the realm of complete sovereignty or in the area of extraterritorial jurisdiction it may exercise in the regulation of its customs or in preventing infringement of its laws.

The normal baseline follows the sinuosities of the low-water mark, except where indentations are encountered that fall within the category of "true" bays, when the baseline becomes a straight line between the headlands (*see* 421). Such a line is to be distinguished from straight baselines (*see* 333 and fig. 24).

331. Rule of the Tidemark

Where the coastline is relatively straight, or where slight curvatures exist, there is general agreement that the baseline follows the sinuosities of the coast as defined by a tidal plane. This is known as the "rule of the tidemark" and has been traditionally followed by the United States in its international relations (*see* Part 3, 2218(*a*)). As opposed to the "headland theory" (*see* 332), this is the primary question involved. But the rule also raises a secondary question, namely, whether it follows the high-water mark or the low-water mark. And if the latter is assumed, is it to be determined by the spring tides, the neap tides, or the mean of all the tides?

At the 1930 Hague Conference (*see* 421), the Second Sub-Committee recommended that "subject to the provisions regarding bays and islands, the breadth of the territorial sea is measured from the line of low-water mark along the entire coast."[18] This was qualified by the provision that the low-water mark is to be that indicated on the charts officially used by the coastal State,

17. In the submerged lands cases, the baseline only was involved because the boundary between federal and state jurisdiction was the low-water mark and the seaward limits of inland waters (*see* 112). In the Submerged Lands Act an outer limit (the seaward boundaries of the states) was also involved (*see* Part 2, 11 (text following note 1)).

18. This was also adopted at the 1958 Geneva Conference on the Law of the Sea (*see* Part 3, 2211 A (*a*)). Some early writers supported the high-water mark as the baseline for measuring the territorial sea. The basis for this was probably that the line of high water was the dividing line between land and water on the nautical charts and using it as a baseline represented the least encroachment on the freedom of the seas doctrine.

provided it does not appreciably depart from the line of mean low-water springs.[19]

332. The Headland Theory

Opposed to the rule of the tidemark is the "headland theory," in which a sort of fictitious coastline (sometimes referred to as a political coastline) is superimposed on the geographical coastline but having no contact with the actual coast except at salient points (*see* Chap. 5, note 1).

The headland theory, in its broad application to a coast, would in reality be a reversion to the "King's Chambers" doctrine, proclaimed by James I in 1604, by which England claimed jurisdiction over an area formed by squaring off the British Isles.[20] This doctrine has long been abandoned.

The United States has uniformly rejected the headland theory. This was effectively stated by Secretary of State Bayard in a letter to Secretary of the Treasury Manning, dated May 28, 1886, of which the following is a pertinent extract:

"We may therefore regard it as settled that so far as concerns the eastern coast of North America, the position of this Department has uniformly been that . . . the seaward boundary of this zone of territorial waters follows the coast of the mainland, extending where there are islands so as to place around such islands the same belt. This necessarily excludes the position that the seaward boundary is to be drawn from headland to headland, and makes it follow closely, at a distance of three miles, the boundary of the shore of the continent or of adjacent islands belonging to the continental sovereign." [21]

This position of Secretary Bayard was reaffirmed in the letter of November 13, 1951, from the Acting Secretary of State to the Attorney General (*see* Part 3, 2218 (*a*) and (*d*)).

In its restricted sense, the headland theory is followed in the case of indentations in the coast that satisfy the criteria for a true bay (*see* 421 and 43). This

19. The Committee observed that different States employ different criteria to determine the line of low water on their charts but that these are slight and may be disregarded. However, in order to guard against abuse, the proviso was added.

20. Jessup (1927), *op. cit. supra* note 10, at 362. The chambers were formed by straight lines from one extreme landmark to another round the coast and not necessarily between the headlands of different bays.

21. I Moore, Digest of International Law 718–721 (1906). *But see* I Kent, Commentaries on American Law 30 (1832) where the following is stated: "Considering the great extent of the line of the American coasts, we have a right to claim, for fiscal and defensive regulations, a liberal extension of maritime jurisdiction; and it would not be unreasonable, as I apprehend, to assume, for domestic purposes connected with our safety and welfare, the control of the waters on our coasts, though included within lines stretching from quite distant headlands, as, for instance, from Cape Ann to Cape Cod, and from Nantucket to Montauk Point, and from that point to the capes of the Delaware, and from the south cape of Florida to the Mississippi."

was adopted by the 1958 Geneva Conference on the Law of the Sea (*see* Part 3, 2211 c(*a*)).[22]

333. The Straight Baseline

The "straight baseline" is a new development in international law. It had its inception in 1951 with the decision in the *Anglo-Norwegian Fisheries* case (*see* 513) in which the International Court of Justice upheld Norway's method of delimiting an exclusive fisheries zone by drawing straight baselines along the Norwegian coast above the Arctic Circle, independent of the low-water mark. This established a new system of baselines from which the territorial sea could be measured, provided certain geographic situations obtained. This system with certain modifications was approved by the 1958 Geneva Conference on the Law of the Sea (*see* Part 3, 2211 a(*b*)).

The term baseline (*see* 33) has tended to become synonymous with straight baselines, but this is erroneous. Even where a straight line is drawn across an indentation it does not fall within the category of "straight baselines." Such a line, where applicable, applies to a single coastal configuration and may be encountered along any coast. Straight baselines, on the other hand, constitute a *system* that is permissible only where the unique geography of a coast justifies a departure from the rule of the tidemark.[23]

22. Apart from such use in international law, the headland theory has also been applied domestically to demarcate the boundary between a principal waterway and a tributary waterway. *Opinions and Award of Arbitrators of 1877*, Maryland and Virginia Boundary Line. (*See also* 48 note 75.)

23. Another distinguishing characteristic between the two types of baselines is that in the case of a bay the waters enclosed are allocated to the inland waters of the coastal State, whereas in the case of straight baselines the waters enclosed, while inland, are subject to the innocent passage of foreign vessels (*see* Part 3, chap. 2, note 18 and accompanying text).

CHAPTER 4

Inland Waters Problem

It was noted in 331 that the United States has consistently taken the position that where a coast is relatively straight, or where slight curvatures exist, the baseline follows the sinuosities of the coast. Major indentations, however, present special problems of national interest, and it is well established in international law that such embayments form exceptions to the rule of the tidemark, the baseline following a headland-to-headland line, thus making the indentation a part of the inland waters of a nation. What was not so well established was the yardstick to be used in determining the dividing line between a slight curvature and a major indentation.

41. BOUNDARY AT BAYS

411. North Atlantic Coast Fisheries Arbitration

Probably the most cogent available evidence on the question of the boundary at bays, and what constitutes a "true" bay, is the exhaustive study made by the North Atlantic Coast Fisheries Tribunal in 1910, in the famous arbitration between Great Britain and the United States over the interpretation of Article 1 in the Convention of October 20, 1818, in which the United States renounced the right of its nationals to fish within "three marine miles of any of the coasts, bays, creeks, or harbours" of the British dominions in America.[1] Seven questions were referred to a tribunal selected from the panel of the Permanent Court of Arbitration at The Hague, the fifth one raising directly the problem of how the 3 mile-distance was to be measured at bays. Great Britain interpreted the provision to exclude American fishermen from all bays, regardless of size, contending that the word "bays" was used in a geographical sense and therefore included all the great bodies of water marked on maps and generally known as bays. In other words, in the case of such bodies of water the 3-mile distance was to be measured from a headland-to-headland line. The

1. 8 Stat. 249 (1818); 2 Miller, Treaties and Other International Acts of the United States 659 (1930).

United States took the position that the word "bays" in the treaty meant those smaller indentations which would naturally be classed with creeks and harbors, contending that only bays not more than 6 miles wide at the entrance (twice the 3-mile marginal belt) should be excluded. In its view, the renunciation in the Treaty of 1818 was a renunciation of a right to fish in British territorial waters and no more. Bays more than 6 miles wide, not being "territorial" waters, it contended, were not within the renunciation clause and American fishermen therefore had the right to fish in such waters.[2]

After an elaborate presentation by both parties, the tribunal rejected the United States position and made the following award:

> In case of bays, the three marine miles are to be measured from a straight line drawn across the body of water at the place where it ceases to have the configuration and characteristics of a bay. At all other places the three marine miles are to be measured following the sinuosities of the coast.[3]

The tribunal recognized that the decision, though correct in principle, and in its opinion "the only one possible in view of the want of a sufficient basis for a more concrete answer," was not entirely satisfactory as to its practical applicability. It therefore adjoined to the decision, as it was empowered to do under a special agreement, the following recommendation:

> In every bay not hereinafter specifically provided for[4] the limits of exclusion shall be drawn three miles seaward from a straight line across the bay in the part nearest the entrance at the first point where the width does not exceed ten miles.[5]

2. The United States did admit that larger bodies of water might be claimed by prescription, but denied the existence of any established principle of international law sanctioning in general a claim to bays more than 6 miles wide. The entire United States argument before the tribunal is printed in ROOT, NORTH ATLANTIC COAST FISHERIES ARBITRATION AT THE HAGUE (1917), under the editorship of Bacon and Scott.

3. *Award of the Tribunal*, 1 NORTH ATLANTIC COAST FISHERIES ARBITRATION 96–98 (1910).

4. The tribunal listed two groups of bays with specific limiting lines. In the first group the limits of exclusion were the limiting lines specified and included the Baie des Chaleurs, Bay of Miramachi, Egmont Bay, St. Ann's Bay, and Fortune Bay; in the second group the limits of exclusion were 3 marine miles from the specified limiting lines and included Barrington Bay, Chedabucto and St. Peter's Bays, Mira Bay, and Plancentia Bay. The reason for the distinction appears to be that in the first group the configuration of the coast and the local climatic conditions were such that fishermen, when within the geographic headlands, might believe they were on the high seas, therefore the limiting lines in such cases were drawn where the fishermen might recognize the bays under average conditions. The effect of these distinctions was to make the first group of bays territorial waters and the second group inland waters. *Id.* at 98.

5. Dr. Luis M. Drago, the member of the tribunal from Argentina, dissented from the majority opinion on the ground that the award lacked a suitable guiding principle. He contended for the incorporation of the 10-mile rule into the award, rather than "by simply recommending, without the scope of the Award . . . a series of lines, which practical as they may be supposed to be, cannot be adopted by the Parties without concluding a new treaty." Dr. Drago cited a series of British treaties and regulations, between 1839 and 1882, in which the 10-mile rule was incorporated. In his view, the Treaty of 1818 should be interpreted in the light of the later developments in this field which established the same limit of coastal jurisdiction, rather than by "referring it to international agreements of a hundred and two hundred years before when the doctrine of Selden's *Mare Clausum* was at its height." *Id.* at 102–112.

With regard to the special character of bays and their exclusion from the rule of the tidemark, the tribunal said: "admittedly the geographical character of a bay contains conditions which concern the interests of the territorial sovereign to a more intimate and important extent than do those connected with the open coast. Thus conditions of national and territorial integrity, of defence, of commerce and of industry are all vitally concerned with the control of the bays penetrating the national coast line. This interest varies, speaking generally, in proportion to the penetration inland of the bay." [6]

The award and recommendations of the tribunal were substantially accepted by the two countries in the Treaty of July 20, 1912 (37 Stat. 1634). For the United States, it represented a recession from its position that inland waters were limited by the 3-mile rule to bays 6 miles wide, but it was accepted as a proper limitation on the sweeping headland-to-headland doctrine advocated by Great Britain.

The net effect of the tribunal's recommendations was to limit inland waters to a 10-mile distance where the indentation is wider than 10 miles at the entrance. There was no provision as to the nature of the indentation other than that contained in the award regarding the "configuration and characteristics of a bay" (*see* text at note 3 *supra*). This left unsettled the important question of the kind of indentations that possess the configuration and characteristics to bring them into the category of inland waters over which a nation could exercise exclusive jurisdiction. This remained for future technicians to grapple with.

42. CONCEPT OF A BAY AS INLAND WATERS

The difficulty that would be encountered in the practical application of the principle laid down by the North Atlantic Tribunal in 1910 is illustrated by a consideration of the California coastline (fig. 1). Undoubtedly, indentations such as San Francisco Bay and San Diego Bay would possess the "configuration and characteristics" contemplated by the tribunal and would be inland waters. But would the same apply to Halfmoon Bay, to Monterey Bay, to Estero Bay, and to Santa Monica Bay? And if not, then where is the dividing line?

The term "bay," as actually applied in common usage, is so indefinite as not to be susceptible of precise definition which is at once inclusive and exclusive.

6. *Id.* at 94. The tribunal declined to accede to the contention of the United States that the 3-mile rule should afford a test of the measurement of what had been renounced, because "it has not been shown by the documents and correspondence in evidence here that the application of the three mile rule to bays was present to the minds of the negotiators in 1818, and they could not reasonably have been expected either to presume it or to provide against its presumption." *Ibid.* For a full discussion of this arbitration, *see* JESSUP, THE LAW OF TERRITORIAL WATERS AND MARITIME JURISDICTION 363–382 (1927).

A bay is a subordinate adjunct to a larger body of water; a penetration of that larger body into the land; a body of water between and inside of two headlands. The mere fact that a body of water is called a bay does not make it so in a geometric sense.

In theory, the question whether a bay is intraterritorial or extraterritorial—that is, whether inland waters or open sea—would seem to depend upon the extent to which the waters penetrate into the land, or, more precisely, upon the ratio of that penetration to the dimension of the entrance. This was recognized by the tribunal, but it perceived no formula for its determination. Can that ratio be expressed satisfactorily in mathematical terms?

421. Semicircular Method (United States Proposal)

An attempt to answer this question was made in 1930 when The Hague Conference for the Codification of International Law was convened.[7] From preliminary questionnaires, it was understood that most delegations were willing to go along with the 10-mile rule provided some method could be devised whereby slight indentations would not be assimilated into the inland waters of a littoral nation.

The United States delegation proposed a geometrical method that took into account the extent to which an embayment penetrated the land area. It was called the "semicircular method" because the basic consideration was the pattern of a semicircle. The method postulates that a semicircular bay having its diameter along the line joining the headlands is the theoretical bay which lies on the borderline between a closed and an open bay, that is, between inland waters and the open sea.[8]

The guiding principle of the method can best be illustrated by reference to figure 3. Suppose several hypothetical coastal indentations be considered, ranging from a completely landlocked bay at *A*, which would be the ideal bay, to a slight curvature in the coast, as at *B*, all based on a circle of fixed diameter. The circle is adopted as the theoretical bay because it is the simplest of geometric

7. Prior to the Conference, the Department of State sought the technical advice of the Coast and Geodetic Survey on matters relating to the delimitation of the marginal belt, a significant aspect of which was the determination of the status of an indentation of the coast. The then Director of the Survey, Capt. Raymond S. Patton (later Rear Admiral), studied the problem and prepared a memorandum entitled "The Three-Mile Limit" which was forwarded on Mar. 3, 1930, to the technical adviser to the American delegation. (The author assisted in this study.) Shalowitz, Legal-Technical Aspects of the Submerged Lands Cases 147, U.S. Coast and Geodetic Survey Publication (1954).

8. 3 Acts of the Conference for the Codification of International Law (League of Nations Publications V: Legal) 218 (1930) (hereinafter cited as Acts of Conference). The letter of acknowledgment from the technical adviser (*see* note 7 *supra*) indicates that the Coast Survey's proposal marked the inception of the "semicircular method." Shalowitz (1954), *op. cit. supra* note 7, at 156.

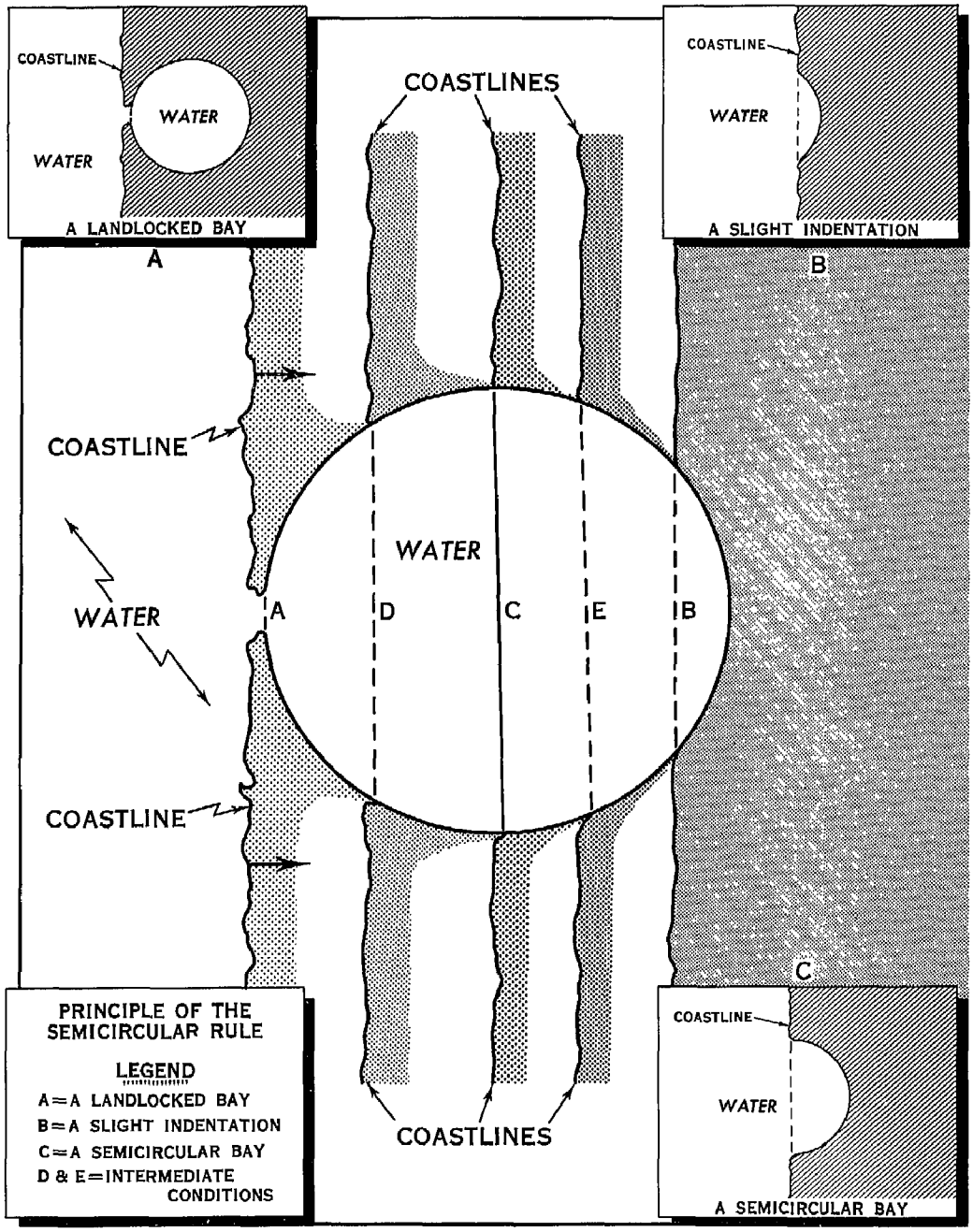

FIGURE 3.—Principle of the semicircular rule for determining the status of an indentation (inland waters or open sea).

figures that simulates a bay in nature. The bay terminating at *A* would be the extreme of a closed bay, being almost completely within the surrounding land area, and would be without question inland waters. The indentation at *B*, on the other hand, is so slight in relation to the full circle, as to be almost wholly without the land area. It would be the extreme of an open bay, and would without doubt be outside of the inland waters. In passing from *A*, the closed bay, to *B*, the open bay, there will be indentations that are more within the land area than without, such as at *D*, and there will be indentations that are more without the land area than within, such as at *E*. There will be one indentation, *C*, at the half-way point, which will be just as much within the land as without. This is the bay formed by the semicircle whose diameter is the distance between its headlands. (It is shown as an inset in the lower right-hand corner of the figure.) It will be the theoretical bay which is on the borderline between an open and a closed bay. This gives a yardstick for determining the status of a coastal indentation. Since bays in nature are seldom exactly circular, recourse is had to the theory of equivalence and the rule adopted that if the area of the bay in nature is greater than the area of the semicircle formed with the distance between the headlands as a diameter, the bay is a closed bay and the seaward boundary of inland water is the headland-to-headland line. If the area of the bay is less than the area of the semicircle, the bay is an open bay and the boundary line of inland water is the low-water mark following the sinuosities of the coast. (Area is a better unit of comparison than perimeter because the irregular form of the low-water line tends to lengthen unduly the latter.)

The application of the semicircular principle to a coastline is illustrated in figure 4. Curve *A* is a semicircle whose diameter is the line *DE* joining the two headlands of the indentation. If the shoreline of the indentation, whose status is to be determined, is curve *B*, it is readily apparent that area *DBE* is greater than area *DAE*. The indentation is therefore a closed bay and would be part of the inland waters of a country. But if the shoreline of the indentation is curve *C*, then area *DCE* is less than area *DAE* and the indentation is an open bay and outside of the inland waters. If the area is exactly equal to the semicircle, the indentation should be regarded as inland waters.

4211. *Use of Reduced Areas*

In applying the method to a coastline, it will be found that in a great many cases a visual comparison between the area of the bay in nature and the area of the semicircle will suffice to determine its status, as would be the case with a

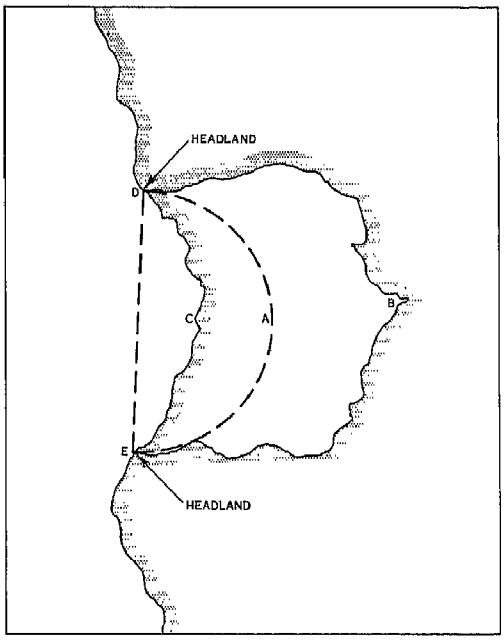

FIGURE 4.—The semicircular rule applied (United States proposal).

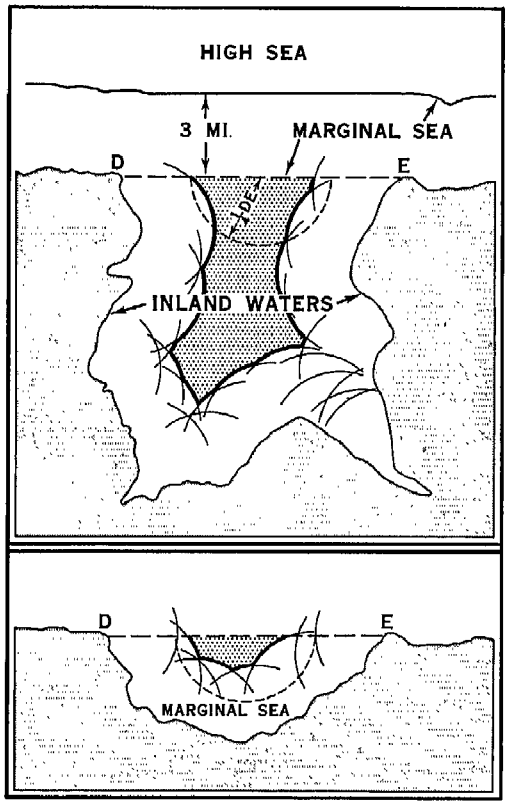

FIGURE 5.—Application of semicircular rule by use of reduced areas.

landlocked, or nearly landlocked, bay. There will be cases, however, that approach the borderline and for which a more exact comparison will be required. Often there will be minor indentations in a bay that should be ignored for practical purposes. In the case of estuaries there might be a question how far up the river to go in measuring the area. To avoid the latter difficulty and to generalize the shape of the bay so that a comparison of areas may be more readily accomplished, a technique using a reduced semicircle and a correspondingly reduced bay area had been proposed.[9]

The technique is illustrated in figure 5. A semicircle with a radius equal to one-fourth the distance between headlands is drawn across the entrance to the bay. With the same radius, arcs of circles are drawn from all points of the bay. Some of the arcs so drawn will be found to extend beyond the others.

9. Boggs, *Delimitation of the Territorial Sea*, 24 AMERICAN JOURNAL OF INTERNATIONAL LAW 551 (1930). This method of reduced areas was originally proposed by S. W. Boggs in 1930, then geographer of the Department of State. Because of this, the "Boggs Formula" has sometimes been erroneously applied to the "semicircular method" and to the "10-mile rule" for bays (*see* 43).

These constitute an envelope line and form, so to speak, a new or fictitious shoreline. (Envelope is used here in the sense that it is the continuous series of intersecting arcs which are farthest seaward of all possible arcs that can be drawn from the shoreline.) The area enclosed by this line and the line *DE* (*see* dotted area in fig. 5) will be less than the area of the whole bay and is therefore compared not with the full semicircle across the headlands but with the area of the reduced semicircle. If the enclosed area is greater than the area of the semicircle, as is the case in the upper diagram of the figure, the indentation is part of the inland waters and the seaward limit is a headland-to-headland line; if the area is less than the semicircle, as is the case with the lower diagram of the figure, the indentation is part of the open sea and the seaward limit of inland waters is the low-water mark following the sinuosities of the coast.

The use of reduced areas changes somewhat the ratio of the areas being compared, the change depending upon the extent to which the bay departs from a semicircle, but the basic principle of the method is retained. In the proposal of the United States delegation at The Hague Conference of 1930, the particular fraction of one-fourth was used for the radius, and this fraction was embodied in the Report of the Second Sub-Committee. It will be satisfactory for most shoreline conditions. In some cases a smaller fraction, such as one-fifth, one-sixth, etc., will be found more desirable in order not to generalize the shape of the bay too much (the diameter of the reduced semicircle would then be three-fifths, four-sixths, etc. of the distance across the headlands), or the use of reduced areas may be dispensed with altogether, since in the final analysis the underlying principle of the method is the ratio of the area of the whole bay to the area of the full semicircle across the headlands (*see* Part 3, 2211 c(*a*)). The use of reduced areas is but a convenient technique for making the comparison; it is not an integral part of the method.

Unless the latter premise is kept in mind, as well as the reason for development of the semicircular method, its application to certain indentations may lead to erroneous conclusions. For example, it has been contended that if the proposed technical method (using one-quarter the headland-to-headland distance as a radius for the arcs of circles within the bay) were applied to such a land-locked indentation as San Diego Bay it would have the effect of classifying the bay as part of the high seas.[10] (*See* fig. 6.) This could only result from a

10. Hearings (unpublished) before a subcommittee of the Committee on Interior and Insular Affairs to study the seaward boundaries of the United States, pursuant to H. Res. 676, 82d Cong., 2d sess. (1952). The author submitted a memorandum to the committee explaining the genesis and development of the semicircular method and its application to a coastline. This was embodied in the record of the hearings. H. Rept. 2515, 82d Cong., 2d sess. 3 (1952).

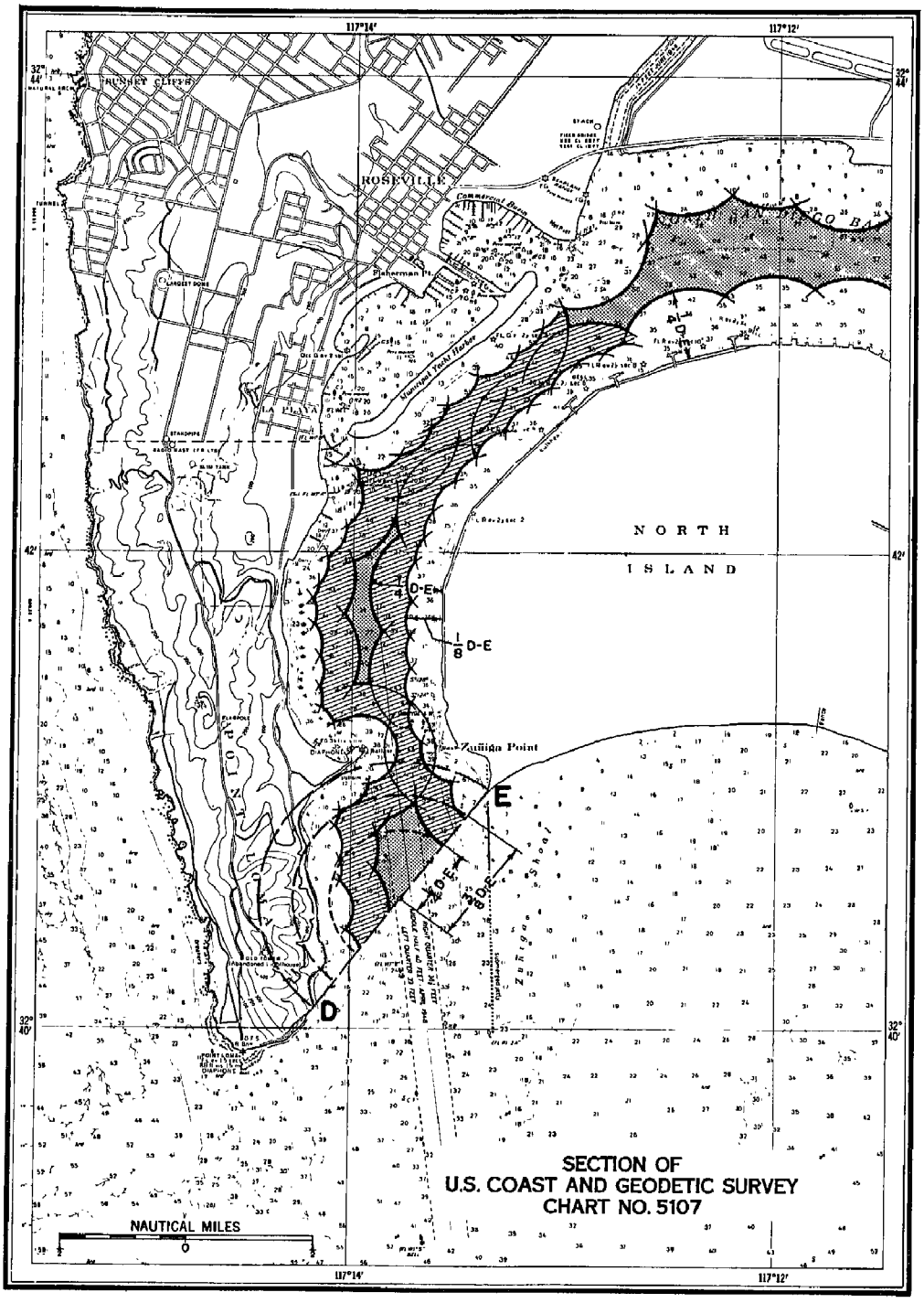

FIGURE 6.—Semicircular rule applied to San Diego Bay using reduced area method.

misreading of the basic principle of the method. First, it takes but a visual comparison to see that the area of the bay is greater than the area of the semicircle drawn from headland to headland, and therefore the bay is inland waters on that score. Secondly, if arcs of circles are drawn from the shores of the bay, with radius of one-quarter the distance between headlands, the arcs will, it is true, overlap in the narrow entrance channel and in the narrow portion inside the bay, and will not enclose any area, but the method does not preclude using other enclosed areas of the envelope line for comparison with the semicircle. All the enclosed areas must be considered, because the status of the entire bay is being determined and not just one portion of it. It is quite obvious that under this test the bay would be inland waters. Thirdly, it is not necessary, in the case of such a configuration, to limit the fraction of the headland-to-headland distance to one-quarter. If a smaller fraction, such as one-eighth is used (as shown in the figure), the arcs of circles within the narrow entrance channel will not overlap, and a continuous enclosed area between the arcs of circles and the headland line will result that is greater than the area of the corresponding semicircle, and the bay would have to be classified as inland waters.

But beyond this is the overriding consideration that the bay would be inland waters under the general principle laid down in the North Atlantic Coast Fisheries Arbitration (*see* text at note 3 *supra*), and no technical method is required to determine its status. The semicircular rule was devised to provide more specific criteria than were supplied by the arbitration; in no case should it operate as a contraction of the principle there established. Therefore, those indentations that possess the "configuration and characteristics," referred to in the arbitration, would be classified as inland waters anyway. It is only those for which it may be difficult to determine whether the "configuration and characteristics" are present that more specific criteria are proposed. In other words, the technical method begins where the arbitration left off.[11]

4212. *The Semicircular Method Applied*

The principle of the semicircular method has been applied in different contexts by various agencies of the Government. In 1930, the United States Tariff Commission applied it for determining the dividing line between the territorial sea and the high seas along the coasts of the United States in connection with a fisheries investigation authorized under Senate Resolution 314, 71st Congress, 2d session.[12] The Bureau of the Census also used the method

11. For the first published discussion of the United States proposal, *see* Boggs, *supra* note 9.

12. S. Doc. 255, 71st Cong., 3d sess. 2 (1931), and S. Doc. 8, 72d Cong., 1st sess. 1–2 (1931). The line was overprinted in red in the Coast Survey on copies of existing nautical charts from data furnished

in its consideration of the area of the United States and of the individual states as part of the 1940 census; [13] and in 1950, the Department of the Interior applied it for establishing an administrative line along the Louisiana coast to tentatively define the limits of federal and state jurisdiction under the Supreme Court's decree of December 11, 1950 (*see* 12).[14]

In summary, it should be emphasized that, considering the nature of the problem and the infinite variety of coastlines and indentations that might be encountered, no mathematically perfect method is possible. The semicircular method avoids an arbitrary solution and affords at least a rational approach to the inland waters problem. Many problems of interpretation will doubtless arise in applying the method to a complex coastline and it may be necessary to establish a set of secondary rules within the framework of the primary rule. But no complete body of rules can ever be devised to meet every possible condition. If, however, a rule of reason is followed there should be no difficulty even in the most complex of coastlines. (*See* Part 3, 2211 c.)

422. Segmental Method (French Proposal)

At The Hague Conference of 1930, the French delegation proposed the following compromise method for determining the status of an indentation: "In order that an indentation may be properly termed a bay, the area comprised between the curve of the coast and its chord must be equal to or greater than the area of the segment of the circle the centre of which is situated on the perpendicular to the chord in its middle, at a distance from the chord equal to one-half of the length of this chord and of which the radius is equal to the distance which separates this point from one end of the curve." [15]

This method is illustrated in figure 7, which is an identical coastline with that shown in figure 4, and to the same scale. In the figure, *OP* is the perpendicular bisector of *DE,* and *OD* is the radius of the arc *DAE.* Under the French proposal, the segment *DAE* becomes the borderline case. Since the area of the indentation *DCE* is greater than the area of the segment *DAE,* the indentation would be a "true" bay and would be classified as inland waters under this proposal. Under the United States proposal, it would be part of the open sea (*see* fig. 4). The indentation *DBE* would of course be inland

by the Tariff Commission and the Department of State. An incomplete set of these charts is available in the files of the Survey.

13. Proudfoot, Measurement of Geographic Area 33, U.S. Dept. of Commerce (1946).

14. This is the "Chapman line." For a discussion of its technical basis, *see* 731.

15. Acts of Conference, *supra* note 8, at 219.

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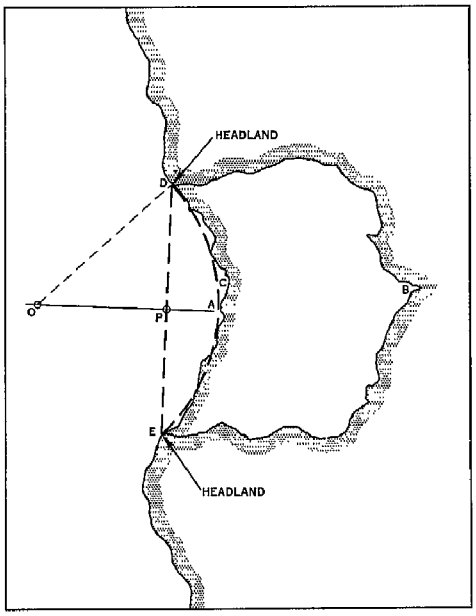

FIGURE 7.—The segmental rule applied (French proposal).

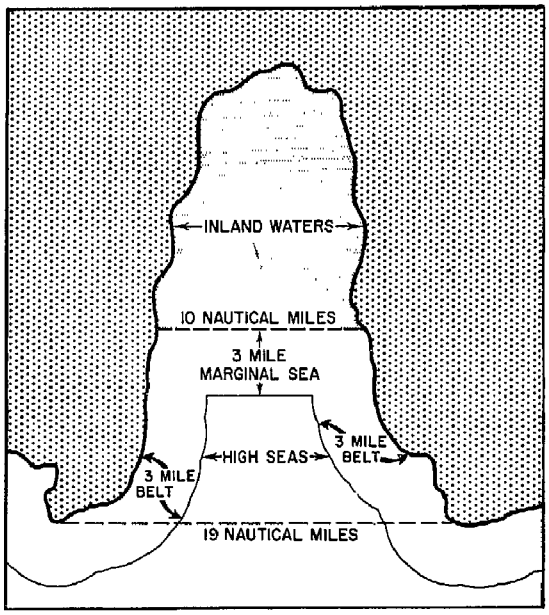

FIGURE 8.—Application of 10-mile rule to an indentation.

waters under either proposal.[16] Both proposals provide for a 10-mile limitation on bays, following the recommendation of the North Atlantic Coast Fisheries Arbitration (*see* 411), but this is a matter of political expediency and does not affect the geometric concept of inland waters. However, on this point, the French proposal would seem to fail in essence to reflect the wishes of most delegations to the 1930 Conference that they would agree "to a width of ten miles provided a system were simultaneously adopted under which slight indentations would not be treated as bays." (*See* 43.)[17]

16. As a commentary on the French proposal, it should be noted that no basic physiographic principle is discernible in the concept, and it presents no more than an arbitrary solution. Any one of a number of such segments could be selected as the criterion with equal propriety, whereas the United States proposal—the pattern of a semicircle—is a definite physiographic concept realistically associated with the land and water relationship.

17. Acts of Conference, *supra* note 8, at 218. The United States proposal and the French proposal were referred to the Second Sub-Committee of the Conference for consideration. The Committee reported both proposals to the Conference, but expressed no opinion on either one. *Ibid.* The Conference adjourned without taking any definitive action on the matter.

43. TEN-MILE RULE FOR BAYS

Closely related to the problem of determining the seaward limits of inland waters at indentations is the question whether there should be a limitation on the distance between headlands.

A strict application of the marginal sea concept to a coast, having in mind the freedom of the seas doctrine, would have carried the marginal belt into all indentations at a distance of 3 miles from their coastlines. Bays 6 miles or less at the entrance would automatically be included within the territorial limits of a nation, by virtue of drawing the 3-mile belt from each headland. But in the case of bays 7 or 8 miles wide, a narrow tongue of high seas (1 to 2 miles wide) would result within the bay flanked on each side by a 3-mile belt. Since the encroachment upon the marginal sea by fishing vessels is generally a grave offense, involving in many instances the forfeiture of the offending vessel, it has been thought expedient not to allow it where the extent of free waters, between the 3-mile lines drawn on each side of the bay, is less than 4 miles. Hence, the 10-mile rule developed, which limits the inland waters of a bay to where the entrance narrows to 10 nautical miles, unless the bay falls within the category of historic bays (*see* 45).[18]

Under this theory of the rule, the distance limitation on bays would depend upon the width of the marginal sea and would be equal to twice its width plus 4 nautical miles. Thus, countries claiming a 6-mile belt would have a 16-mile limitation on bays, those claiming 9 miles would have a 22-mile limitation, etc.

Another basis for the rule is that, equally with the 3-mile limit, it has resulted from the impact of the doctrine of the freedom of the seas on claims to maritime territory by coastal nations. Under this theory, the 10-mile limit is regarded as an essentially independent rule that has established itself empirically in international practice as the reasonable and practical limit for bays rather than by any process of deduction from the 3-mile limit.[19]

In applying the rule to a coastline, if an indentation is wider than 10 nautical miles, a straight line is drawn across the indentation at the first point nearest

18. JESSUP (1927), *op. cit. supra* note 6, at 356, where the letter of Judge John Bassett Moore setting forth the reasons for the rule is quoted.

19. The 10-mile rule has often been referred to as part of the semicircular rule. This is incorrect. The semicircular rule as a technical principle can be applied to any indentation no matter what the distance between headlands; the 10-mile rule as a limitation on inland waters is primarily of political rather than technical origin.

the entrance at which the width does not exceed 10 nautical miles, and the semicircular rule is then applied. This line would be the maximum seaward extent of inland waters. (*See* fig. 8.)[20]

The 10-mile rule was also considered by the International Court of Justice in the *Anglo-Norwegian Fisheries* case (*see* 513(*a*)).

44. THE CALIFORNIA CASE

It was against this background of historical facts, supported by the letter of November 13, 1951, from the State Department, that the Government, in the proceedings before the Special Master in the *California* case (*see* 2113), urged the adoption of the semicircular method together with the 10-mile limitation for the determination of what bays constitute inland waters under *Question* 2 of the Court's order of December 3, 1951 (*see* 2111). It was the contention of California that the limiting lines of inland waters for coastal indentations should be a headland-to-headland line, regardless of the distance between headlands, and that considerations of history, physical and geographic factors, and use and occupancy should be determinative of their status (inland waters or open sea).[21] For the southern California coast, it was California's primary contention that the channel areas constitute inland waters and therefore the federal-state boundary should follow a line from Pt. Conception along the outermost rocks on the ocean side of all the channel islands, thence to Point Loma (*see* figs. 1 and 13).[22]

441. Findings of the Special Master

The Special Master, after reviewing the United States position with regard to the "headland theory" and the background of the "10-mile rule" for bays, particularly as evidenced by the State Department letter of November 13,

20. Although one basis for the rule appears to be the elimination of narrow pockets of the high seas from the territorial sea of an indentation, thereby making the entire indentation territorial sea, the rule has generally been regarded as establishing the limits of inland waters of the indentation. Insofar as foreign fishing is concerned, the practical effect is the same, since both inland waters and the territorial sea are under the exclusive jurisdiction of the coastal nation. The literature is not clear on this point, but since a limit of exclusion of 3 miles outside the line is often referred to, it is reasonable to suppose that the 10-mile line marks the limits of inland waters. The 1958 Geneva Conference adopted a 24-mile closing line for bays in place of the 10-mile rule, and specified that the waters so enclosed were to be considered as internal waters (*see* Part 3, 2211 C(*c*)).

21. California invoked the *Anglo-Norwegian Fisheries* decision to negate the 10-mile limitation on bays (*see* 513(*a*)).

22. For a discussion of this aspect of the *California* case, and its relation to the *Fisheries* decision, *see* Chap. 5 note 1, 53 and 54.

1951 (*see* Appendix D), found that "subject to the special case of historical bays [*see* 45], the United States has traditionally taken the position that the baseline of the marginal belt is the low-water mark following the sinuosities of the coast, and not drawn from headland to headland, except that at bays, gulfs or estuaries not more than ten miles wide the baseline is a straight line drawn across the opening of such indentations, or where such opening exceeds ten miles in width, at the first point therein where their width does not exceed ten miles." [23]

With regard to the 10-mile rule, the Master found that it had had a considerable background, particularly in the usage of Great Britain and other countries bordering the North Sea with respect to fisheries; was incorporated in a series of British treaties between 1839 and 1887 with France, the North German Confederation, and the German Empire, as well as in the North Sea Fisheries Convention of 1882; formed the basis of an unratified treaty between Great Britain and the United States in 1888; [24] was incorporated in the Treaty of 1912 between the United States and Great Britain; and was supported by the United States at The Hague Conference of 1930.[25]

This finding of the Special Master is not inconsistent with the *Fisheries* decision where the Court held that "the ten-mile rule has not acquired the authority of a general rule of international law" (*see* 513(*a*)). The decision, however, does not stand for the doctrine that the adoption of such a limitation is contrary to international law; rather, it leaves the choice of the method of delimitation, under certain criteria recognized in international law, to the coastal State.[26] This was the position taken by the Department of State as evidenced by the letter of February 12, 1952, to the Attorney General (*see* Appendix D).[27]

As to the actual status (inland waters or open sea) of the indentations under consideration, the Master concluded that "No one of the seven particular coastal segments now under consideration for precise determination and adjudication is a bay constituting inland waters." [28] For determining the status of an

23. Report of Special Master 21, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952 (cited hereinafter as Final Report of Special Master). This report is reproduced as Appendix C, where the pagination in the original report is indicated for ready reference.

24. The U.S. Senate failed to ratify this treaty because it believed that a 6-mile limitation should be adopted. S. Misc. Doc. 109, 50th Cong., 1st sess. 19 (1888).

25. Final Report of Special Master, *supra* note 23, at 17.

26. This is implicit in the Court's statement that "in any event the ten-mile rule would appear to be inapplicable as against Norway inasmuch as she has always opposed any attempt to apply it to the Norwegian coast." Judgment of Dec. 18, 1951: I.C.J. Rept. 131 (1951).

27. This position was reaffirmed by the deputy legal adviser of the Department of State before a Senate Committee on Mar. 3, 1953. *Hearings before Committee on Interior and Insular Affairs on S.J. Res. 13 and other Bills*, 83d Cong., 1st sess. 1052 (1953).

28. Final Report of Special Master, *supra* note 23, at 3.

indentation, he recommended the acceptance of the semicircular rule "for the present purposes of this case," not as representing the present or traditionally definitive position of the United States, but rather "as an appropriate technical method of ascertaining whether a coastal indentation has sufficient depth [penetration into the land area] to constitute inland waters." [29]

4411. *Analysis of Findings*

In analyzing the Special Master's recommendations with regard to indentations, certain of his findings need clarification; for example, his use of the phrase "for the present purposes of this case." The reason for this limitation is that in the Master's view a question might arise as to the status of an indentation less than 10 miles wide but which does not penetrate the land area enough to qualify as a bay under the semicircular rule. This is because there is a modicum of difference between the technical criteria urged in this proceeding on behalf of the United States and the position as enunciated in the State Department letter of November 13, 1951 (*see* Appendix D), that for bays no more than 10 miles wide, "the base line of territorial waters is a straight line drawn across the opening of such indentations." Since this situation was not before the Master, he limited his finding to the present case.[30]

As a commentary on this, an inconsistency is noted between this conclusion and his summary recommendation that "*In either case* [headlands 10 miles or less at entrance or headlands greater than 10 miles apart] the requisite depth is to be determined by the following criterion:" (here follows the semicircular rule).[31] (Emphasis added.) Technically, if the semicircular rule is accepted as a geometric principle for the determination of inland waters and is applied to indentations wider than 10 nautical miles at the entrance in the manner heretofore set forth, then it should also be applied to indentations 10 miles or less at the entrance. The State Department letter of November 13, 1951, which sets forth the traditional position of the United States, reflects a situation that does not take into account the application of the semicircular rule. Once the rule is accepted, then it must in the interest of consistency apply to both cases, otherwise mere curvatures in the coast would become inland waters.

In applying the semicircular rule to bays, the Special Master cited the use of a radius equal to one-fourth the distance between headlands for determining

29. *Id.* at 26.

30. Crescent City Bay, which is 3.5 miles at the entrance and penetrates the land area for a distance of 0.9 mile, turns on the question of the designation of a harbor rather than on an application of the semicircular rule. *Ibid.* The Government excluded harbors from the suit (*see* 111).

31. Final Report of Special Master, *supra* note 23, at 3.

the relationship of areas. This is the "reduced area" rule (*see* 4211) formulated as a convenient technique for making a comparison of areas. As was previously shown, the use of the fraction "one-fourth" would be satisfactory for most shoreline conditions, but smaller fractions could be used or the reduced area method dispensed with altogether, since it is not an integral part of the semicircular rule. The Master's inclusion of the fraction "one-fourth" in his recommendation should therefore be taken as illustrative rather than restrictive.[32]

45. HISTORIC BAYS

A corollary to the inland waters problem, which also arose in the *California* case, is the question whether any of the indentations under consideration could be claimed as "historic bays." Historic bays are well-recognized exceptions to the rules applicable to ordinary bays; hence, where an indentation of the coast qualifies as a historic bay then neither the semicircular rule nor the 10-mile limitation applies—the indentation within its historic limits would be classified as inland waters. The classical examples of historic bays are Delaware and Chesapeake Bays in the United States and Conception Bay in Newfoundland.[33]

The theory of historic bays is said to be the assumption that the nation claiming sovereignty has established a prescriptive title to such waters through long assertion of rights and explict—or more often tacit—acquiescence by the rest of the world.[34] Such a claim may be established over bays of great extent;

32. A committee of experts which met at The Hague in Apr. 1953, under the aegis of the International Law Commission (*see* Part 3, chap. 1), to study problems in connection with the delimitation of the territorial sea, adopted, subject to the approval of the Commission, the following definition for a bay, as opposed to a mere curvature in the coastline: "A bay is a bay in the juridical sense, if its area is as large as, or larger than, that of the semicircle drawn on the entrance of that bay." (U.N. Doc. A/CN. 4/61/add.1, Annex 5.) This is the semicircular rule but without the use of reduced areas. The committee also adopted a 10-mile limitation on bays, stating: "The closing line across a (juridical) bay should not exceed 10 miles in width, this being twice the range of vision to the horizon in clear weather, from the eye of a mariner at a height of 5 meters." *Ibid.* The International Law Commission and the 1958 Geneva Conference adopted the semicircular rule for bays but without the "reduced area" provision (*see* Part 3, 2211 C(*a*)).

33. For an extended list of bays and gulfs throughout the world to which historic claims have been made, *see* JESSUP (1927), *op. cit. supra* note 6, at 383–439, and Memorandum Concerning Historic Bays, United Nations Conference on the Law of the Sea (U.N. Preparatory Doc. No. 1, A/Conf.13/1(1957)). On Apr. 27, 1958, the United Nations Conference on the Law of the Sea adopted a resolution calling on the General Assembly of the United Nations to arrange for the study of the juridical regime of historic waters, including historic bays, and to communicate the results to all States Members of the United Nations. 52 AMERICAN JOURNAL OF INTERNATIONAL LAW 867 (1958).

34. SMITH, THE LAW AND CUSTOM OF THE SEA 12 (1950). In strictness, however, a prescriptive right denotes one which grows out of conduct which in its initial stages might have been wrongful, whereas the assertion of dominion over a bay that is geographically a part of the domain of the littoral nation does not necessarily signify that the assertion is a violation of any legal obligation towards any nation or the society of nations. 1 HYDE, INTERNATIONAL LAW CHIEFLY AS INTERPRETED AND APPLIED BY THE UNITED STATES (2d ed.) 469 n.4 (1945).

the legality of the claim is measured not by the size of the area affected, but by the definiteness and duration of the assertion and the acquiescence of foreign powers.[35]

451. Constituent Elements Generally

The original purpose of the theory of historic bays was to exclude from the application of the general regime of bays, which was then being elaborated, certain bays whose status had already been settled by history. That is to say, its object was to ensure that, despite the tendency to restrict the area within any large bay which could validly be deemed internal waters, the status of those bays which had already been accepted as wholly internal, on essentially historical grounds, would remain unchanged.[36] Today, however, a much broader view is taken of the theory, and factors of a different nature are relied on.

Regarding the latter, two views are generally advanced to sustain the right to a bay on historic grounds: (1) long usage, with or without the acquiescence of other nations;[37] and (2) the vital interests of the coastal nation including such elements as geographical configuration, economic interests, and the requirements of self defense.[38] The most recent judicial pronouncement of the "vital interest" concept is the *Anglo-Norwegian Fisheries* case decided by the International Court of Justice in December 1951. Although the Court was ruling on a system of delimitation, and not on the territoriality of any particular bay, the theory of historic bays received considerable attention in the majority opinion and in the separate or dissenting opinions. The Court approved the Norwegian system of delimitation on the grounds, among other things, of the "rights founded on the vital needs of the population and attested by very ancient and peaceful usage."[39]

Insofar as the United States is concerned, its position regarding historic bays would seem to be predicated upon a consideration of both long usage and vital interests of the coastal nation. This is the burden of Attorney General Randolph's opinion as to the territoriality of Delaware Bay,[40] of the Court's

35. Jessup (1927), *op. cit. supra* note 6, at 382.

36. Memorandum Concerning Historic Bays, *supra* note 33, at 81.

37. There are two views regarding the conditions necessary to constitute "usage" as a root of historical title: usage *per se*, and usage evidenced by international acquiescence. The latter is the more prevalent view.

38. For a review of authorities relating to the constituent elements of the theory of historic bays, *see* Memorandum Concerning Historic Bays, *supra* note 33, at 81–91.

39. *United Kingdom* v. *Norway*, Judgment of Dec. 18, 1951: I.C.J. Rept. 142 (1951).

40. "The corner stone of our claim is, that the United States are proprietors of the lands on both sides of the Delaware, from its head to its entrance into the sea . . . These remarks may be enforced by asking, What nation can be injured in its rights, by the Delaware being appropriated to the United

holding in the case of Chesapeake Bay,[41] and of Secretary of State Root's statement in the North Atlantic Coast Fisheries Arbitration of 1910.[42]

452. The Time Element

As to the time element, no specific yardstick is provided. In the writings of publicists, in draft codes, and in judicial pronouncements, only terms of great generality are used, such, for example, as "immemorial usage," "continued and well-established," "for a considerable period of time," and the like. No minimum time of assertion of sovereignty has ever been stated. If prescription is the basis for the historic title, then it would seem the assertion must run at least for the time required for the claim to ripen into a prescriptive title. But if the assertion of sovereignty be considered as the basic requirement, then the time element must of necessity be secondary and each case would then be determined in the light of the special circumstances surrounding it. This would take into account such elements as the relative maturity of an area. Thus, in the United States, where recorded history goes back only a relatively short time, historic waters might be established on the basis of a shorter period than might be required in parts of Europe with a long recorded history.

453. Status of Historic Bays

Once an indentation is found to fall within the criteria prescribed for historic bays, the question arises as to its status. Is it to be assimilated to the territorial sea of the nation or is it a part of its inland or internal waters? The

States? And to what degree may not the United States be injured, on the contrary ground? It communicates with no foreign dominion; no foreign nation has, ever before, exacted a community of right in it, as if it were a main sea; under the former and present Governments, the exclusive jurisdiction has been asserted." 1 Opinions Attorney General 33 (1793); I Moore, Digest of International Law 735 (1906).

41. "Considering, therefore, the importance of the question, the configuration of Chesapeake Bay, the fact that its headlands are well marked, and but twelve miles apart, that it and its tributaries are wholly within our own territory, that the boundary lines of adjacent States encompass it; that from the earliest history of the country it has been claimed to be territorial waters, and that the claim has never been questioned; that it cannot become the pathway from one nation to another . . . and bearing in mind . . . the position taken by the Government as to Delaware Bay, we are forced to the conclusion that Chesapeake Bay must be held to be wholly within the territorial jurisdiction and authority of the Government of the United States." *The Alleganean: Stetson* v. *United States,* 4 Moore, International Arbitrations 4332, 4341 (1898). *See also* Jessup (1927), *op. cit. supra* note 6, at 388—391.

42. "There was not in 1818, and there is not now, any rule of law or any custom of nations under which the large bodies of water indenting the coast of a country are regarded as being within the jurisdiction of the country unless the country asserts her jurisdiction over them, unless the country claims them . . . There is no such sovereignty accorded over any bay, or creek, or inlet, or harbor that does not come within that normal zone [cannon-shot zone], unless the nation has affirmatively elected to take the bay, creek, or harbor into its jurisdiction, and asserted its right to take it into its jurisdiction, upon facts which, when analyzed, will be found always to go back to the same doctrine of protection." Jessup (1927), *op. cit. supra* note 6, at 369, 370.

distinction between these two classes of maritime areas is often obscured by defective terminology—for example, the use of the term "territorial waters" as synonymous with "internal waters." (*See* 31.) Although an analysis points without question to its designation as inland waters, this has not always been formulated with all the desirable clarity and there is even confusion in some of the references, due no doubt in part to confusion in terminology.

Following the analogy of the 10-mile rule, namely, that the line so drawn is the seaward limit of inland waters in the case of "ordinary bays" (*see* note 20 *supra*), it necessarily follows that in the case of "historic bays" the line marking the historic limits of the bay would be the seaward limits of inland waters. To hold otherwise, would have the anomalous effect of treating a portion of the bay under one rule as inland waters and under another rule as territorial or marginal sea. (*See* fig. 8.) [43]

454. The California Case

In the *California* case, the question arose whether any of the bays, which were held to be open bays under the semicircular method, could be sustained as inland waters on historic grounds, that is, as historic bays. Coupled with this was the question of determining the outer headlands of such bays, if their historic nature could be established.

In the proceedings before the Special Master, much testimony was introduced by California relative to the nature and use aspects of the bays (including law enforcement under its fish and game laws) to show its assertion or exercise of exclusive authority over them. It was the Government's contention that such claims to exclusive jurisdiction, even if established in California, were insufficient to establish a historic title because they must be predicated on an assertion of jurisdiction by the United States, rather than by a state.

On the legal side, California cited three decisions to support its claim that Monterey Bay, San Pedro Bay, and Santa Monica Bay were historic bays. The first involved the regulation of fishing under its fish and game laws; the other two were criminal actions. Because of their importance to California's viewpoint and because they were considered in the Master's final report, the decisions are summarized herewith:

(*a*) The first in point of time was *Ocean Industries, Inc.* v. *Superior Court*, 252 Pac. 722 (1927), in which California sought to enjoin the Ocean Industries Corporation from continuing its operations of catching and cleaning fish and extracting oil therefrom on a vessel anchored in Monterey Bay, 3½ miles from shore between the cities of Monterey and Santa Cruz (*see* fig. 1). (The bay is 19 miles across headlands and indents the coast about

43. On the possible right of innocent passage in historic bays, *see* 311 note 2.

9 miles.) The particular issue to be decided was whether the vessel was within a "bay" as used in the California Constitution so as to bring it within the territorial jurisdiction of California.[44] The court held that the place of anchorage was within the boundaries of California. It interpreted the word "bays" in the constitution to embrace the entire area of all the bays indenting the coast, regardless of size, and questioned the 6-mile limit on the headland rule in international law by reference to Conception, Delaware, and Chesapeake Bays. It held that Monterey Bay satisfied the definition of a bay given by lexicographers "as a body of water around which the land forms a curve; or a recess or inlet between capes or headlands."

(*b*) The second case, *United States* v. *Carrillo et al.*, 13 F. Supp. 121 (1935), involved San Pedro Bay and dealt with the violation of a federal statute by acts of piracy on the high seas. The alleged acts were committed on a ship anchored more than 3 miles from the mainland but landward of a line drawn between Point Fermin and Point Lasuen (now Huntington Beach) (*see* fig. 10). Based on ancient and modern maps, as well as maritime publications of the Government, the court held that San Pedro Bay was "that portion of the Pacific Ocean lying between the bluffs, now the site of the City of Huntington Beach, and until lately called Point Lasuen, on the east and Point Fermin on the west."[45] The vessel, it held, was therefore in American and California waters and the Federal court was without jurisdiction as to piracy on the high seas count.

(*c*) The final case, *People* v. *Stralla et al.*, 96 P. 2d 941 (1939), involved an indictment under the California Penal Code for the operation of a gambling ship anchored in Santa Monica Bay 4 miles from shore and approximately 6 miles landward of a line drawn between Point Dume and Point Vicente, the headlands of the bay (*see* fig. 13). The Supreme Court of California held that the vessel was anchored in the territorial waters of California and therefore came within the jurisdiction of the state court. The use of the word "bays" in the California Constitution was interpreted to include all bays without limitation as to the distance between headlands, and the fish and game code was interpreted in the light of this provision. The court found no established limitation in international law of the headland doctrine, citing the accepted status of Delaware, Chesapeake, and Conception Bays.[46]

4541. *San Pedro Bay*

As to the bays under consideration, none presented any special problems except San Pedro Bay. The Government had stipulated on a line running from Point Fermin to just east of Rainbow Pier at Long Beach. This line was accepted by both parties as the minimum limits of inland waters in the area.

44. The California Constitution of 1849 defined the state's western boundary, as follows: "Thence running west and along said boundary line to the Pacific Ocean, and extending therein three English miles; thence running in a northwesterly direction and following the direction of the Pacific Coast to the 42d degree of north latitude, thence on the line of said 42d degree of north latitude to the place of beginning. Also all the islands, harbors, and bays, along and adjacent to the Pacific Coast." The California Constitution was accepted by the Congress of the United States and California was admitted to the Union. Act of Sept. 9, 1850 (9 Stat. 452).

45. The court cited Coast Survey chart 5101 and Davidson's Pacific Coast Pilot of 1889. *But see* 4541.

46. The lower court had held that the place of anchorage was outside the boundaries of California on the ground that the constitutional provision as to "bays" must be interpreted as bodies of water that are semilandlocked, afford shelter from winds and swells, and have unquestioned historical background as an inland body of water. An *amicus* brief was filed by the U.S. attorney, under the direction of the Attorney General of the United States, supporting the position of California, particularly the interpretation of California's Constitution with regard to "bays."

The issue, according to the Government, was whether the area seaward of the stipulated line constituted a bay by reason of historic use, and that the burden of establishing such use was upon California. California contended that historically the sandspit at Newport Beach was the southeastern limit of the bay.

From a Coast Survey standpoint, the San Pedro phase of the proceedings was of greatest interest because it pointed up the use that is sometimes made of Bureau surveys, charts, and technical data in resolving legal-technical problems. A reference note in a sounding record, a statement in a Coast Pilot volume or in other Bureau publications, the placement of a name on a survey sheet or chart, or even the wording of a title on a survey sheet or chart sometimes becomes of paramount importance.

As developed by the testimony, there were in reality two phases to the San Pedro Bay question—the location of Point Lasuen, and the historic limits of the bay.

A. LOCATION OF POINT LASUEN

Long before the hearings before the Special Master began, a careful research into the cartographic history of Point Lasuen (*see* 2112(*d*)) was made at the request of the Justice Department. It was developed that the name originated with Captain George Vancouver, the English explorer, who, on November 25, 1793, while on his southbound voyage along the western coast of North America, anchored about 7 miles from shore in San Pedro Bay (*see* fig. 9). Here he took a noon latitude sight and a round of bearings on Point Fermin, Point Vicente, the northern and southern tips of Santa Catalina Island, and on the southeasternmost point of land. He also recorded a bearing on a point on shore which he named Point Lasuen, after Fermin Francisco de la Suen, the father president of the missions of Alta California.[47] The latitude sight was held fixed and the bearings plotted as a central point fix. This gave a good average position which was checked by Vancouver's dead-reckoning longitude, after applying a correction for present values derived from longitudes which he determined in San Diego and San Francisco Bays. From this position, the bearing which he took to Point Lasuen definitely placed it to the westward of present-day Huntington Beach, near the foot of Las Bolsas ridge (*see* fig. 10). This location of Point Lasuen was in agreement with the description given by Davidson.[48]

47. 2 VANCOUVER, A VOYAGE OF DISCOVERY TO THE NORTH PACIFIC OCEAN 465 (1798).

48. DAVIDSON, PACIFIC COAST PILOT 36, U.S. COAST AND GEODETIC SURVEY (1889). Davidson was one of the foremost scientists of the Coast Survey. During the last 27 years of his 50 years' service in the Survey, he was in charge of all operations on the Pacific coast. His intimate knowledge of the natural dangers and possibilities of the coast enabled him to prepare his Directory of the Pacific Coast, which went through several editions and culminated in his monumental Pacific Coast Pilot of 1889, the most complete

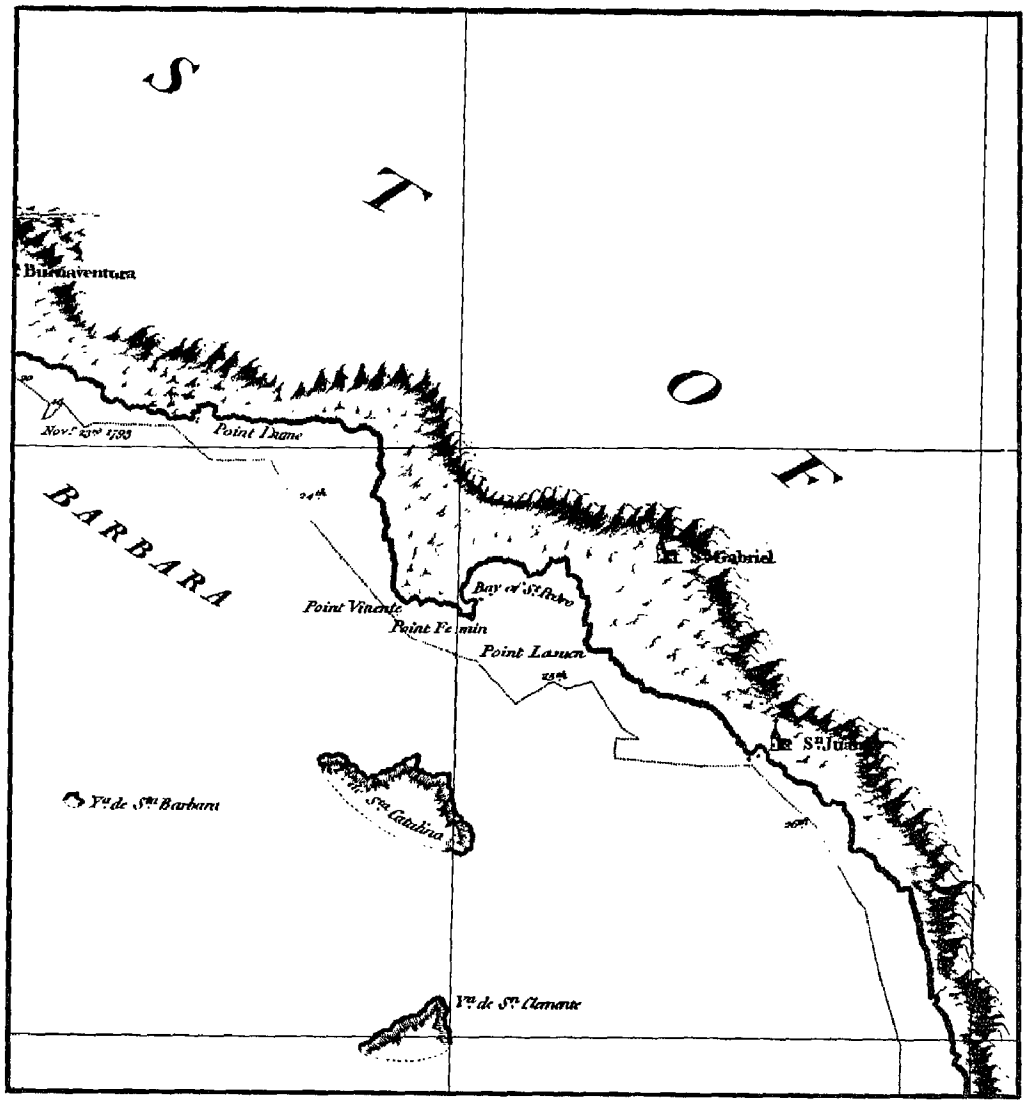

FIGURE 9.—Section of Vancouver's track chart of 1793 in vicinity of Bay of San Pedro.

As to the charting of the name, the research disclosed that it was first shown on the 1870 edition of Coast Survey chart 601 at a point between present-day Huntington Beach and Newport Beach and continued to be so charted until 1878. On the hydrographic survey of 1878 (Register No. H–1418), which was the first detailed survey of the area, *Lansuen Point* is shown at Newport

record of the coast ever to be published for the use of the mariner. The volume is based upon information which Davidson accumulated from the field surveys of the Bureau; from numerous views of headlands, points, islands, rocks, and landfalls; and from his own observations, experience, and study.

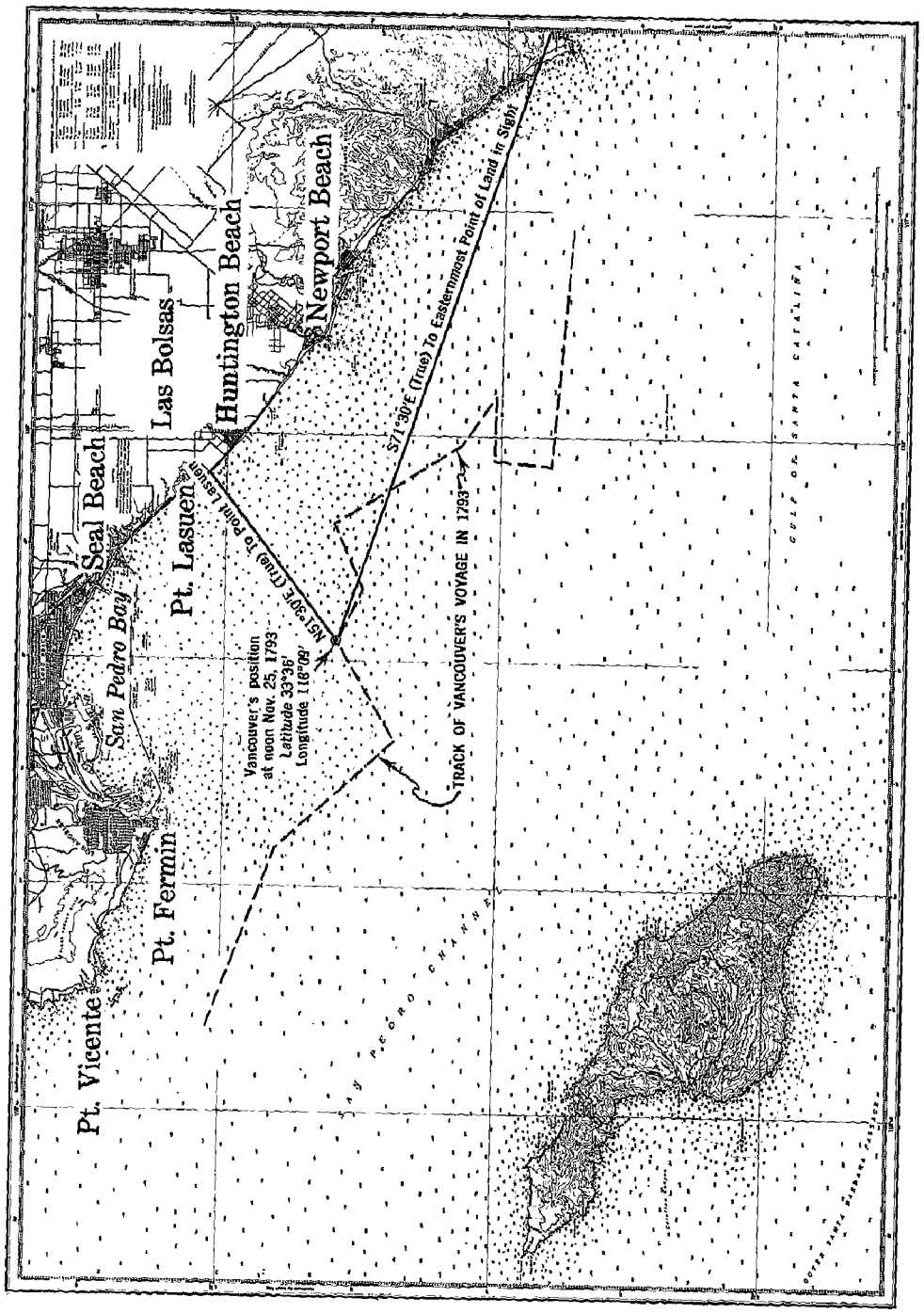

FIGURE 10.—Vancouver's anchorage position at noon Nov. 25, 1793, and bearing to Pt. Lasuen superimposed on Coast Survey chart 5142.

Beach, and is so charted on the 1890 editions of charts 671 and 5100. On the 1911 edition of chart 5100, the name Lansuen Point no longer appears at Newport Beach, but the name *Pt. Lasuen* is charted at the base of Las Bolsas ridge, following Vancouver's and Davidson's placement.[49] Chart 5102 of 1916 superseded chart 5100 and Pt. Lasuen was no longer shown, having been superseded by the name Huntington Beach which had developed in the meantime.[50]

California's theory with regard to the location of Point Lasuen was that while Vancouver's bearing placed it at the foot of Las Bolsas ridge, his bearing should have been taken to the sandspit at Newport Beach because that is a headland, being the first material change in direction in the coastline after leaving Point Fermin.[51] To support this view, California cited a somewhat vague statement from Vancouver's log which reads: "Towards its southeast part [San Pedro Bay] is a small bay or cove and a low point of land forming its east point, called by me Point Lasuen." This was interpreted to mean that San Pedro Bay extended southeasterly beyond what Vancouver named Point Lasuen, that is, to Newport Beach.[52]

In further support of its theory that Point Lasuen was situated at the sandspit at Newport Beach, California read into the record the statement from the 1889 Coast Pilot that "The water deepens rapidly after passing Point Lasuen, and a depth of one hundred fathoms, with blue and green mud, is within one and a quarter miles southward of the Newport bar, being in the deep submarine valley already described." [53] This statement is not too clear. Was Davidson thinking in terms of a very short distance, or was he thinking navigationally in terms of a few miles, which would place Point Lasuen definitely near present-day Huntington Beach? Reading this statement together with his statement that Point Lasuen "is the shore termination of the long, rolling, bare hillock called Las Bolsas," [54] the conclusion is inescapable that Davidson was thinking in terms of a few miles when he spoke of the water deepening rapidly "after

49. The authority for this change was a note on H–1418, dated Dec. 4, 1899, which stated: "This is an evident error and the name has been struck off the plate. See Pacific C. P. Ed. of 1889, p. 36. By order of Insp. of Charts. W.C.W." [W. C. Willenbucher].

50. Valuable oil reserves in the vicinity of Huntington Beach made the determination of the inland waters of San Pedro Bay a crucial question.

51. California also believed that the court in the *Carrillo* case (*see* 454(*b*)) erred in referring to Point Lasuen as being "the bluffs, now the site of the City of Huntington Beach," but the exact location of the point was immaterial in that case. Brief for the State of California in Relation to Report of Special Master of May 22, 1951, 77 (July 31, 1951), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951.

52. 2 VANCOUVER (1798), *op. cit. supra* note 47, at 466. The quoted statement is vague because it is not certain whether Vancouver meant the east point of the cove or the east point of San Pedro Bay. The latter would seem to be the better interpretation because he was apparently trying to perpetuate the name Fermin Francisco de la Suen. Since he called the west point of the bay, Point Fermin, it is fair to assume that when he said he named the east point, Point Lasuen, he meant the east point of the bay.

53. DAVIDSON (1889), *op. cit. supra* note 48, at 35.

54. *Id.* at 36.

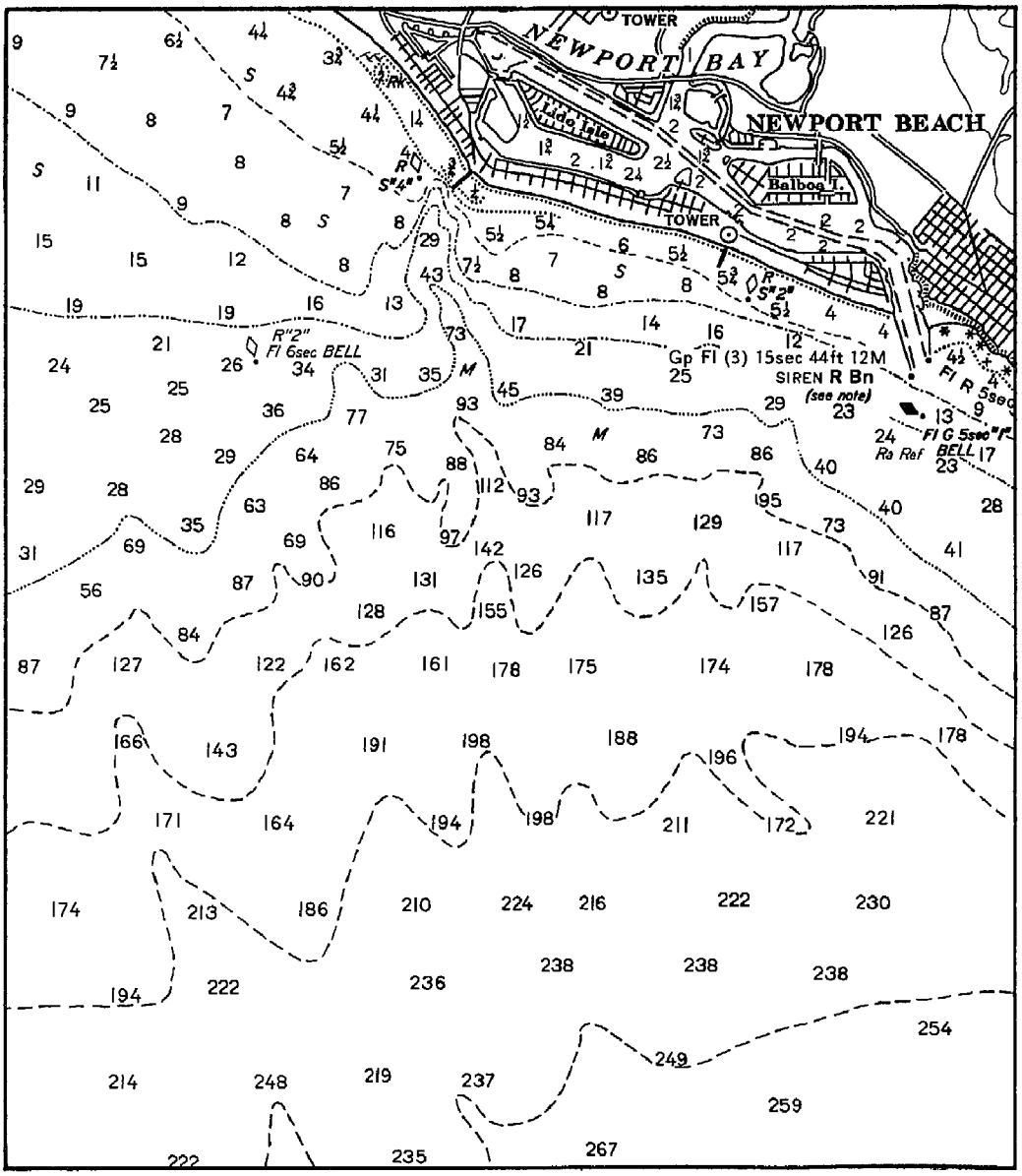

FIGURE 11.—Section of Coast Survey chart 5142 showing the submarine valley in the Newport Beach area.

passing Point Lasuen." Inasmuch as the head of the deep, submarine valley is exactly at Newport Beach, the quoted phrase would be a contradiction if Point Lasuen was at Newport Beach.[55] (*See* fig. 11.)

55. In the Government's theory of the case, the issue was not where Point Lasuen is or was, but what are the seaward limits of the inland waters of San Pedro Bay. The rebuttal testimony of the Government was directed at establishing that it was not at Newport Beach.

B. HISTORIC LIMITS OF SAN PEDRO BAY

The second phase of the San Pedro Bay question dealt with its historic limits, that is, its eastern or southeastern terminus, there being no dispute over Point Fermin, its western terminus. Here again the surveys and charts of the Coast Survey, from the earliest to the latest, became an important evidentiary link. In all but two cases the name "San Pedro Bay" appeared in the small curvature of the coast immediately north or northeast of Point Fermin, approximately in the vicinity of Long Beach.[56]

Another important facet of the Government's theory as to the limits of San Pedro Bay, was the title descriptions on the early Bureau surveys of the area. For example, on the hydrographic survey of 1878 (Register No. H–1418), which extends from Point Fermin to Newport Beach, the title reads, "Pacific Coast, From San Pedro Bay to Newport Bay." A fair interpretation of this designation would necessarily be that the survey ran from a place called Newport Bay to a place called San Pedro Bay with an intervening area between the two bays that was a part of neither. The title on the topographic survey of 1872 (Register No. T–1283), which extends from about 3 miles west of Long Beach to just east of Long Beach, is "Coast East of San Pedro Bay," showing even more restrictive limits for the bay.[57]

56. As technical consultant in the submerged lands cases, the author examined some 30 maps, surveys, and charts (Coast Survey, Geological Survey, General Land Office, and miscellaneous sources), beginning with the Vancouver map of 1793 and running to present-day Coast and Geodetic Survey charts 5142 and 5101, including 10 editions of the United States Coast Pilot. None of these showed or referred to San Pedro Bay as covering the area from Point Fermin to Newport Beach. The 1877 and 1878 editions of Coast Survey chart 601 show the name as extending from Point Fermin to approximately present-day Huntington Beach.

57. At the hearings before the Special Master, a point arose as to the relationship of the bulge at Newport Beach to the curvature in the coast immediately east of Point Fermin. It was contended by California that the configuration of the coast at Newport Beach constituted the first material change in the direction of the shoreline southeasterly of Point Fermin, and that it is the first and only natural physical feature southeasterly from Point Fermin which conforms to the definition of a headland as the terminus of a bay. This contention of California emanated from the article by the author entitled, "Cartography in the Submerged Lands Oil Cases," in which it was stated that "even after a rule [for determining a true bay] has been adopted, its application to the different configurations of a coast will still present the cartographer and the surveyor with many problems of interpretation. . . . For example, there is the question of the ascertainment of the termini at the headlands of a true bay." It is there stated that for this purpose we can define a headland generally as "the apex of a salient of the coast; the point of maximum extension of a portion of the land into the water; or a point on the shore at which there is an appreciable change in direction of the general trend of the coast." Shalowitz, *Cartography in the Submerged Lands Oil Cases*, 11 SURVEYING AND MAPPING 231 (1951). On cross-examination, the author stated that this statement must be read in the light of the character of the coast that is being considered. It would not apply to a straight shoreline, no matter how much of a change there is. It was pointed out that our coastlines are full of such small protuberances or projections that jut into the water from a straight shoreline. To consider these protuberances as headlands of a bay, they must bear a definite relationship to the curvature whose status is being determined. An examination of Coast Survey chart 5101 shows that the bulge at Newport Beach is no more than a small protrusion in an otherwise generally straight coast, or very slightly curving coast, and that the curvature in the coastline actually begins somewhere in the area of Seal Beach, becoming more pronounced to the west of Rainbow Pier at Long Beach (*see* fig. 10). For a transcript of this testimony, *see* SHALOWITZ (1954), *supra* note 7, at 51.

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4542. *Special Master's Findings*

In considering the question of "historic bays," the Special Master assumed that the establishment of a historical right to encroachment upon the open sea greater than that limited by the 10-mile rule for bays depended essentially upon an assertion of right by the interested nation. Therefore, the initial question with which he was confronted was whether there had been any effective assertion by the United States of exclusive jurisdiction over the five bays under consideration (*see* 45).

With the exception of the anomalous incident of the *amicus* brief in the *Stralla* case (*supra* note 46), the Master found no evidence of an exercise of exclusive authority by the United States over these waters. The question then became a matter whether an assertion or exercise of jurisdiction by the State of California was the same as an exercise by the United States, as contended for by California. But behind this question of constitutional law lay the factual question whether California had actually asserted or exercised exclusive authority over the areas. On the basis of the evidence submitted, the Master found that no explicit assertion of exclusive authority was ever made until 1949—2 years after the Supreme Court decision—when the Government Code of California declared that the boundary described in the Constitution of 1849 ran 3 English miles seaward from lines drawn between the headlands of bays (*see* note 44 *supra*).[58]

As evidenced by the three cases involving Monterey, Santa Monica, and San Pedro Bays (*see* 454), the Master held that these instances of assertion of right by California, involving control of fishing and enforcement of its criminal laws, "did not constitute an assertion of exclusive authority over these waters such as might be the occasion for objection by foreign governments or action by the United States in our international relations." [59] As to the decisions themselves, the Master held their rationale was in direct conflict with the position then taken and now taken by the United States in its international relations limiting the headland-to-headland doctrine to bays not more than 10 miles wide at the entrance.[60]

On the matter of the southeastern headland of San Pedro Bay, the Master stated: "In the *Carrillo* case Judge Stephens located the southeastern headland

58. 1949 California Statutes, Chap. 65. In California's view this was a re-interpretation of the 1849 Constitution based upon court construction of the provision.

59. Final Report of Special Master, *supra* note 23, at 35.

60. *Id.* at 36. Regarding the *amicus* brief in the *Stralla* case (note 46 *supra*), the Special Master recognized, as did counsel for the United States, that it was squarely opposed to the position now taken by the Government and to the traditional position of the State Department in our international relations. If to determine the true position of the United States required him to make a choice, the Master said, he would elect to put aside the *amicus* brief. *Ibid.*

at the point contended for by the United States. If, contrary to my conclusion, the Court should find that California has established its contention that San Pedro Bay constitutes inland waters, and if the Court further rejects the determination of Judge Stephens in the *Carrillo* case, then I would recommend that the contention of California as to the southeastern headland should be rejected, and the contention of the United States accepted, on the evidence submitted, particularly the testimony of Mr. Shalowitz for the United States." [61]

This statement of the Special Master is confusing. The first sentence must be considered an oversight for the reason that while in the *Carrillo* case the court identified the southeastern headland of San Pedro Bay as being at Huntington Beach, this was not the United States contention in the present proceedings. The United States attempted to show, by its rebuttal testimony, that Point Lasuen was *not* at Newport Beach, as contended by California, but was at present-day Huntington Beach, where Vancouver and Davidson had placed it. Beyond that, it maintained that "there is no substantial evidence that San Pedro Bay extends either to 'Point Lasuen' or to Newport Beach" and that "cartographically the name 'San Pedro Bay' has usually been confined to 'the small curvature of the coast either immediately north or northeast of Point Fermin, approximately in the vicinity of Long Beach.'" [62] That it was an oversight is corroborated by the Special Master's reference to the *Carrillo* case that "The position of the United States was the same there as it is here but the decision was against it." [63]

The Master's recommendation as to San Pedro Bay can therefore be summarized as follows: San Pedro Bay is not inland waters under the technical method proposed by the United States (*see* 441), nor is it a historic bay (*see* text at note 59 *supra*). Therefore, the seaward limits would be the stipulated line (*see* 4541), or the outermost harborworks if the latter fall within the recommendation of the Special Master as to such structures (*see* text at note 72 *infra*). If, on the other hand, the Court should find that San Pedro Bay does constitute

61. *Id.* at 36, 37. This recommendation needs clarification. The recommendation is quite clear as to his rejection of California's contention that the southeastern headland of San Pedro Bay is at Newport Beach. But his statement that Judge Stephens in the *Carrillo* case "located the southeastern headland *at the point contended for by the United States*" (emphasis added), is in conflict with the latter part of his recommendation that in the event the Supreme Court finds that San Pedro Bay constitutes inland waters on historic grounds and *rejects the determination of Judge Stephens* then his recommendation is that the contention of the United States be accepted. Clearly the Court could not reject and accept the same contention.

62. Reply Brief for the United States before the Special Master, 66–68 (June 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952.

63. Final Report of Special Master, *supra* note 23, at 34. In the *Carrillo* case, the United States contended that the crime was committed on the high seas because the vessel was anchored more than 3 miles off the mainland but shoreward of a line from Point Fermin to Huntington Beach (*see* 454(*b*)). (*See* fig. 10.)

inland waters on historic grounds, then in the Master's view the Court should take into consideration the determination of the limits of the bay in the *Carrillo* case, that is, the Point Fermin-Huntington Beach line. But, if the Court rejects the *Carrillo* line, then the Master recommends acceptance of the United States contention, that is, that the seaward limits of the bay extends from Point Fermin to approximately the vicinity of Long Beach (*see* text at note 61 *supra*).[64] The latter would of course be subject to the Master's recommendation as to harbor-works (*see* text at note 72 *infra*).

46. HARBORS AS INLAND WATERS

Another facet of the inland waters problem dealt with the question of harbors. The United States, in its brief before the Supreme Court in the *California* case, included harbors as part of the inland waters of California, and the Court in its opinion recognized them as such. The determination of what areas constitute harbors and their limits was part of *"Question 2"* which the Court referred to the Special Master for answer (*see* 2111).

Broadly speaking, a harbor is a place where ships may find shelter or refuge from the fury of the sea and the winds. There are natural harbors, such as the inner harbor of San Pedro, where the configuration of the coast provides the protection necessary; and there are artificial harbors, such as the outer harbor of San Pedro, where protection is afforded through the construction of harborworks or breakwaters.[65]

At The Hague Conference of 1930, the question of natural harbors was not considered. But as to artificial harbors, the United States proposed and the Second Sub-Committee recommended that the baseline of the marginal belt should be "the outermost permanent harbour-works."[66] The Government

64. Reply Brief for the United States before the Special Master, *supra* note 62, at 66–67.

65. According to Coast Survey terminology for purposes of standardizing its use in surveying and charting, a harbor is "a natural or artificially improved body of water providing protection for vessels, and generally anchorage and docking facilities." ADAMS, HYDROGRAPHIC MANUAL 54, SPECIAL PUBLICATION No. 143, U.S. COAST AND GEODETIC SURVEY (1942). According to U.S. Navy usage, it is "any protected water area affording a place of safety for vessels." NAVIGATION DICTIONARY 98, H. O. PUBLICATION No. 220 (1956). In legal terminology, it has been defined as "a haven, or a space of deep water so sheltered by the adjacent land as to afford a safe anchorage for ships." BLACK, LAW DICTIONARY (4th ed.) 847 (1951), citing *Rowe* v. *Smith*, 50 Am. Repts. 16 (1883) (Conn.); *The Aurania*, 29 Fed. 98, 103 (1886); and *People* v. *Kirsch*, 35 N.W. 157 (1887) (Mich.). "Port," according to Black, is a word of larger import than "harbor," since it implies the presence of wharves, or at least the facilities for receiving and discharging cargo. 1 FARNHAM, THE LAW OF WATERS AND WATER RIGHTS 507 (1904), gives the following definition for a harbor: "A harbor is a body of water so far surrounded by land as to provide safe anchorage for vessels, and provided with such natural or artificial advantages as to afford easy means for interchange of traffic between the shore and land. An indenture of the shore does not constitute a natural harbor, when, in its natural state, it merely furnishes vessels protection by the shelter of the upland."

66. Acts of Conference, *supra* note 8, at 200, 219.

still adhered to this principle that the completion of permanent harborworks carves the particular area out of the high seas and in that respect makes the area "inland water" *vis-a-vis* foreign nations. But insofar as the internal relations between the states and the Federal Government are concerned, it maintained, title to such area would not pass to the states under the rule that artificial changes in the shore do not affect title (*see* 6422 B).[67]

As to natural harbors, the United States contended that only those water areas could qualify as such if the natural configuration of the coastline afforded them the protection necessary for safe shelter of vessels.[68] It did not propose any specific lines for the various areas in question because the record was not sufficiently detailed to make that possible. Once general principles are available, their application to a particular coastline is a surveying and mapping operation. It was the Government's position that the line separating the inland waters of a harbor from the marginal sea "must be drawn at a point which will include that portion of the water which is enclosed in a bay or inlet and used by vessels as a place to anchor or dock to load or unload passengers or freight."[69]

Both as to natural harbors and harbors resulting from artificial construction, California contended for a much broader application of legal principles, and noted the rationale of the Supreme Court decisions in the submerged lands cases (*see* 6422 B). As an authoritative guide for determining the limits of inland waters at harbors it proposed the use of the Port Series prepared by the U.S. Army Board of Engineers for Rivers and Harbors and the U.S. Maritime Commission. Where harborworks exist, it proposed the "outermost-permanent-harbor-works" test as an appropriate standard for determining the limits of inland waters.[70]

The Special Master, both with regard to natural harbors and where harborworks have been constructed, followed California's viewpoint as being the more sound and the more reasonable one. With respect to the extent of inland waters at harbors, he believed that "the concept of a port or harbor necessarily includes anchorage area for vessels that load and unload without docking or vessels

67. Brief for the United States before the Special Master, 101 (May 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951.

68. With regard to the status of anchorages or roadsteads in general, the Government noted the recommendation of the Second Sub-Committee of the 1930 Hague Conference that roadsteads used for loading, unloading, or anchoring of vessels be included as part of the territorial sea, even if they extended beyond what would otherwise be the marginal belt. But they were not to be treated as inland waters. *Id.* at 105–106, and Acts of Conference, *supra,* note 8, at 219. The 1958 Geneva Conference adopted a substantially similar provision (*see* Part 3, 2211 E(*b*)).

69. Brief for the United States before the Special Master, *supra* note 67, at 105, citing *Rowe* v. *Smith* and *The Aurania* (*see* note 65 *supra*).

70. Brief for the State of California in the Proceedings before the Special Master, 137–138 (June 6, 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951.

that are waiting for dock space; just as the concept of a railroad terminal includes switching yards and waiting rooms." On the question of outer harborworks, he believed the position of the United States with regard to title in the submerged lands in such enclosed areas not passing to California would lead "to an anomalous and . . . unsound conclusion" by "attributing a double status to these water areas" (*see* 6422 B).[71] Since a breakwater is usually planned to include a reasonable and adequate anchorage for the port in question, he recommended that "in front of harbors the outer limit of inland waters should embrace an anchorage reasonably related to the physical surroundings and the service requirements of the port, and, absent contrary evidence, may be assumed to be the line of the outermost harborworks." [72]

47. BOUNDARY AT RIVERS

The question of the boundary of inland waters at the mouths of rivers raised no difference of opinion among the parties. This seems to have also been the case at the 1930 Hague Conference. It does not appear that the United States made any specific recommendation on this matter; however, the final report of the Second Sub-Committee of the Conference may be said to be an accurate reflection of the views expressed on the subject in the replies made by the various governments to the questions circulated by the Preparatory Committee for the Codification Conference. The report of the Committee contains the following: "When a river flows directly into the sea, the waters of the river constitute inland waters up to a line following the general direction of the coast across the mouth of the river, whatever its width. If the river flows into an estuary, the rules applicable to bays apply to the estuary." [73] The recommendation of the Special Master was substantially the same.[74]

Although the general principle is clear, the location of the two points from which the line across the mouth of a river is to be drawn presents certain

71. Final Report of Special Master, *supra* note 23, at 46, 47. To adopt the rule urged by the Government, he believed, "would be a particularly hard rule on a coast like that of California on which nature has afforded relatively little shelter." *Id.* at 47. This view of the Special Master seems to overlook the fact that neither the position of the marginal belt would be changed under the Government's contention, nor would the value of the areas as places of shelter be altered. The only thing involved would be the status of the title to the submerged lands in such areas.

72. *Id.* at 47–48. The 1958 Geneva Conference regarded the outermost permanent harborworks as forming part of the coast (*see* Part 3, 2211 E(*a*)).

73. Acts of Conference, *supra* note 8, at 220.

74. Final Report of Special Master, *supra* note 23, at 4. The 1958 Geneva Convention is to the same effect except that no mention is made of rivers that flow into estuaries (*see* Part 3, 2211 A(*c*)).

difficulties of a practical nature and apply equally well to the mouth of a bay. These are discussed in the following section.

48. TERMINI AT HEADLANDS

Both with respect to true bays and rivers, the line marking the seaward limit of inland waters is a headland-to-headland line. This is the general principle. But more specific rules are required. The problem of defining the actual limits of a body of water tributary to a larger body is not always a simple one. The solution lies in finding the exact place where the tributary waterway merges into the principal waterway. In the absence of established criteria regarding the limits of a specific body of water, a basic consideration is the physical configuration of the tributary waterway at its terminus. The headland principle is based on this consideration and has been applied internationally for ascertaining the limits of inland waters.[75] The more pronounced the physical features or headlands are, the more closely will the opinions of experts agree as to the boundary.

For establishing the precise boundary points or termini at headlands (referred to as "landmarks" by the Special Master in the *California* case) that will best establish the limiting line of inland waters, certain physical facts must be kept in mind.

Headlands are subject to almost limitless variations as to size, shape, and orientation. Therefore, any rule laid down must be general in character and may require exceptions in individual cases. In common usage, the word headland implies a land mass having considerable elevation, something that the navigator can see from offshore—a kind of landmark for him.[76] However, in the context of the law of the sea, elevation is not a pertinent attribute. What is important are the relationships between land and water which lie in a horizontal plane. A headland can then be defined generally as the apex of a salient of the coast; the point of maximum extension of a portion of the land into the

75. This is logical since the word "inland" connotes "within the land" (see *United States* v. *California*, 332 U.S. 19, 30, 34 (1947)) and therefore the limiting line of inland waters should be associated with the configuration of the coast at the body of water in question. The headland principle has also been applied domestically. *Grace* v. *Town of North Hempstead*, 152 N.Y. Supp. 122 (1915) involved the boundary between Manhasset Bay and Long Island Sound, and *Bliss* v. *Benedict et al.*, 195 N.Y. Supp. 690 (1922) involved the boundary between Westchester Creek and Long Island Sound.

76. It has been defined as "A precipitous promontory or cape" (NAVIGATION DICTIONARY (1956), *op. cit. supra* note 65, at 100); and as "A point or portion of land jutting out into the sea, a lake, or other body of water" (WEBSTER'S NEW INTERNATIONAL DICTIONARY (1961)).

water; or a point on the shore at which there is an appreciable change in direction of the general trend of the coast.[77]

The shores of the headlands are formed by two different groups of forces—those of the ocean and those of the estuary or tributary waterway. The points sought are where the shores resulting from these forces meet. Therefore, each terminus of the headland-to-headland line is taken as a point at the outermost extension of the headland from which it is drawn. There is frequently some

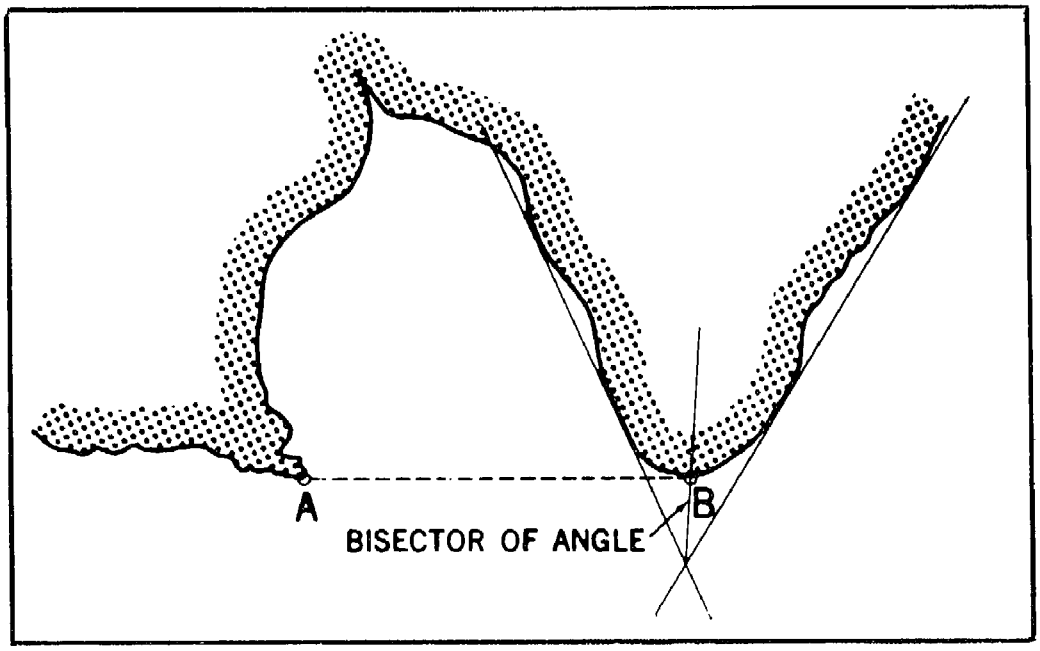

FIGURE 12.—Method of determining termini at headlands.

one characteristic point, some minor shore form, as a sandspit or cusp, which obviously is the point sought. (*See* point *A* in fig. 12.) Where the headland is of considerable extent with a gently rounded and featureless shore, a satisfactory solution may be reached by bisecting the angle formed by a line coinciding with the general trend of the low-water mark along the open coast, and a line coinciding with the general trend of the low-water mark along the bay or

77. A word of caution is necessary here in order that this definition of "headland" will not be interpreted to apply to small protuberances or projections in an otherwise straight coastline. For the purpose intended, that is, to determine the limiting line of inland waters at bays or rivers, these protuberances must bear a definite relationship to the curvature or waterway whose status is to be determined. These small projections in the shoreline come into play only after a particular indentation has been determined to fall into the category of a true bay or inland waters. (*See* note 57 *supra*.)

tributary waterway. Where this bisectrix intersects the low-water mark will be the point sought. (*See* point *B* in fig. 12.)[78]

78. This follows the recommendation of the Special Master, which in turn followed the view taken by the Government based on the Bureau's suggestion to the Department of Justice (*see* 2112(*f*)). Final Report of Special Master, *supra* note 23, at 4. The Master, however, did not recommend a definition for a headland. In applying this rule, it may be difficult at times to determine what is the general trend line of the low-water mark along a particular stretch of open coast or in the tributary waterway, or what length of coastline is to be used. But the observation of the International Court of Justice in the *Anglo-Norwegian Fisheries* case (*see* 51), and cited with approval by the Special Master, that "too much importance need not be attached to the few uncertainties or contradictions, real or apparent . . . in Norwegian practice," would seem to be appropriate here. *Id.* at 22.

CHAPTER 5

Offshore Islands Problem

In the case before the Special Master (*see* 2111), the Supreme Court directed that a recommendation be made as to the status (inland waters or open sea) of the channels and other water areas between the mainland and the islands off the southern California coast. This was a crucial question in the *California* case, for if the areas were declared to be inland waters it would automatically have eliminated all the bays within that area from operation of the Court's decision.[1]

In the consideration of this overall question two subordinate questions had to be dealt with: (1) the effect of the presence of islands at varying distances from the coast on the drawing of the baseline for the marginal belt, and (2) the status of the channel areas. These two aspects of the question posed by the Supreme Court, but framed in somewhat different contexts, were considered by the International Court of Justice, during the pendency of the proceedings before the Special Master, in the *Anglo-Norwegian Fisheries* case,[2] and in the *Corfu Channel* case.[3] Inasmuch as both cases were invoked in the *California* case to support the respective contentions of the parties,[4] and because of their impact on recent developments in the international law of the sea, these cases, particularly the *Fisheries* case, will be dealt with in some detail.

1. California had contended that the area enclosed by a line running from Point Conception around the seaward side of all the islands to Point Loma was inland waters (*see* fig. 13) and that the 3-mile marginal belt should be measured from that line as a "political" or "exterior" coastline, rather than from the physical coastline along the mainland. The significance of this was obvious, for practically all the producing oil wells along the California coast were within these limits. This area was referred to as the "overall unit area." (Two alternate lines, more restrictive than the first, were also contended for by California.)

2. *United Kingdom* v. *Norway,* Judgment of Dec. 18, 1951: I.C.J. Rept., 1951, p. 116 (hereinafter cited as the *Fisheries* case or as *Judgment*).

3. *United Kingdom* v. *Albania,* Judgment of Apr. 9, 1949: I.C.J. Rept., 1949, p. 4 (hereinafter cited as the *Corfu Channel* case).

4. California relied on the *Fisheries* case as conclusive that the marginal belt should be drawn from the outermost points of the islands along the coast, while the United States relied on the *Corfu Channel* case to uphold its contention that the channel areas are international straits and therefore cannot fall within the category of inland waters.

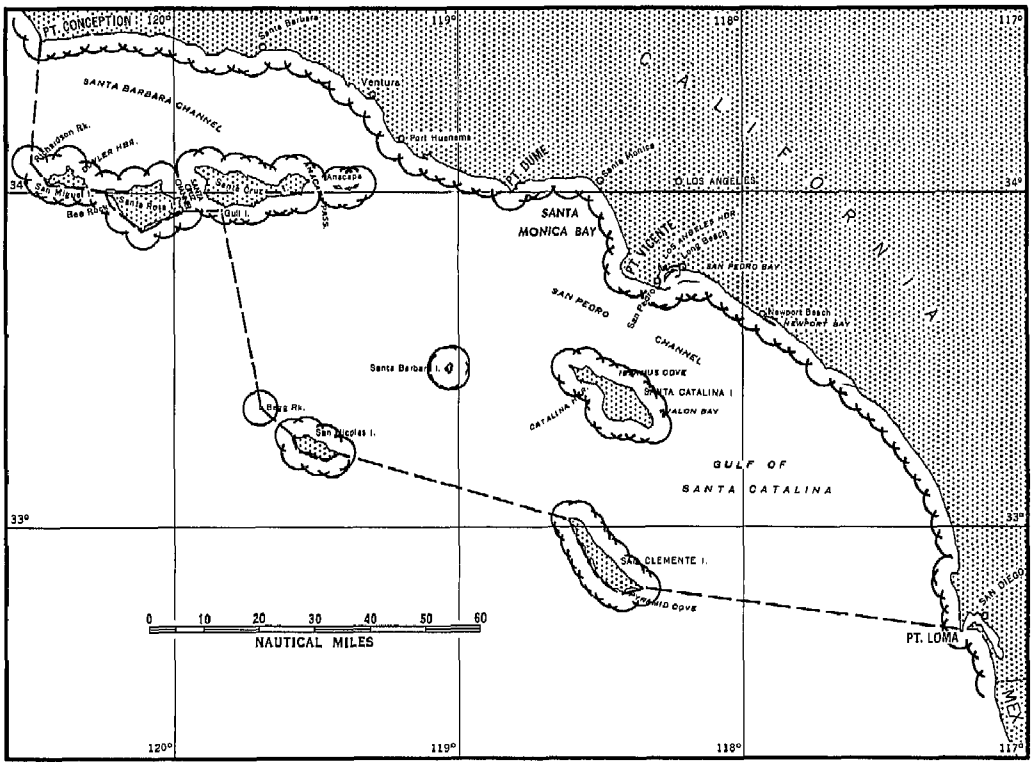

FIGURE 13.—Overall unit area contended for by California and delimitation of 3-mile marginal belt in vicinity of islands contended for by the Government.

51. ANGLO-NORWEGIAN FISHERIES CASE

The *Fisheries* decision will probably rank as one of the important judgments ever to be pronounced by an international tribunal on matters dealing with delimitation of the territorial sea. Cognizance was taken of its findings by the International Law Commission (*see* Part 3, 1311) and by the United Nations Conference on the Law of the Sea (*see* Part 3, 2211 A(*b*)).

511. THE FACTS

The *Fisheries* case was instituted on September 28, 1949, by the United Kingdom against the Government of Norway, in which it sought to have the International Court of Justice lay down the principles of international law applicable in defining the Norwegian fisheries zone off her northern coast north of latitude 66°28′48″ N., that is, north of the Arctic Circle.

The occasion for invoking the jurisdiction of the Court was the issuance of the Norwegian Royal Decree of July 12, 1935, as amended by a Decree of December 10, 1937, in which Norway laid down a series of straight baselines along the seaward projections of the outermost of the numerous islands, islets, and rocks that constitute the *skjaergaard* (literally, rock rampart) from which was delimited an exclusive fisheries zone of 4 miles.[5] (In one case (base point 21) the baseline was drawn to a rock bare only at low tide.) The points connected by the baselines were 48 in number, beginning at the final point of the Norwegian-Russian boundary in the Varangerfjord and extending northward around the North Cape and thence down the northwest coast to Traena, near the entrance to the Vestfjord. The water areas traversed by the baselines differ in dimensions, but in at least 11 instances the open distance between fixed points is 18 miles or more, the maximum distance being 44 miles across Lopphavet. (*See* fig. 14.) The enforcement of this Royal Decree, beginning in 1948, had resulted in the arrest and condemnation of British fishing vessels.

512. Principal Legal Issues

The basic issue before the Court was, therefore, the validity under international law of the Norwegian method of drawing straight baselines for defining a fisheries zone.[6] The United Kingdom's contention in summary was that international law does not give each State a right to choose arbitrarily the baselines for its territorial waters; that the main rule was that territorial waters were to be measured from the actual coastline (the low-water mark on permanently dry land); and that cases where a departure from the coastline is permitted are exceptions to the main rule, strictly limited by international law (e.g., a bay, when it follows the proper closing line of inland waters). The last takes into account the 10-mile limitation on nonhistoric bays (*see* 43).

Norway, on the other hand, contended that no general rule existed in international law that required the baseline to follow the coastline throughout;

5. Norway's 4-mile limit goes back to the middle of the 18th century when a 4-mile league was in use in Scandinavian States, about half a century before the 3-mile limit (1 marine league) entered international practice as the neutrality limit of the United States. For the purpose of the litigation, Great Britain acquiesced in Norway's 4-mile limit as a historic limit older than the customary 3-mile limit. Waldock, *The Anglo-Norwegian Fisheries Case*, 28 The British Year Book of International Law 114, 126 (1951).

6. The decision of the Court, however, does not limit itself to questions of fisheries zones only, for the Court said that "Although the Decree of July 12, 1935, refers to the Norwegian fisheries zone and does not specifically mention the territorial sea, there can be no doubt that the zone delimited by this Decree is none other than the sea area which Norway considers to be her territorial sea. That is how the Parties argued the question and that is the way in which they submitted it to the Court for decision." *United Kingdom* v. *Norway*, *supra*, note 2, at 125.

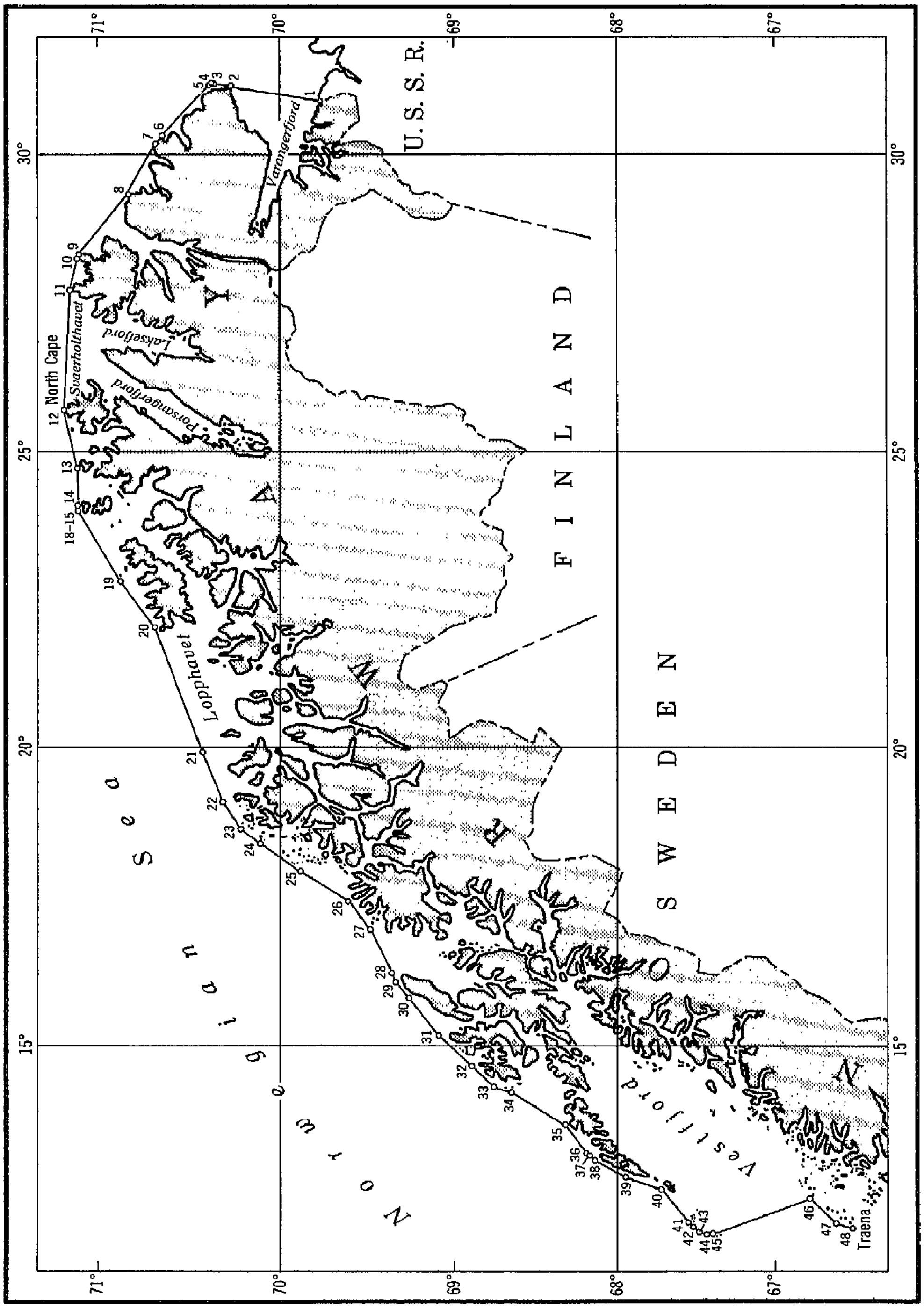

FIGURE 14.—Straight baselines laid down by Norway along its skjaergaard coast under decree of July 12, 1935.

that if such a rule did exist, it could not bind Norway, which had consistently refused to accept it; and that international law did not prohibit a coastal State from drawing straight baselines for its territorial waters from "headland to headland."

513. Judgment of the Court

By a vote of 10 to 2, the International Court upheld Norway's method of drawing straight baselines on the ground that it was part of a traditional Norwegian system which had been applied, without protest, to parts of the south coast of Norway in earlier decrees, beginning in 1812, and that this system was entitled to "reap the benefit of general toleration, the basis of an historical consolidation which would make it enforceable as against all States." [7]

The Court had no difficulty in finding that "for the purpose of measuring the breadth of the territorial sea, it is the low-water mark as opposed to the high-water mark, or the mean between the two tides, which had generally been adopted in the practice of States." [8] But its application to a coastline came in for some significant modifications.

Insofar as the locus in question was concerned (the northern coast of Norway), it seems clear that the Court rejected the "coastline rule." This is implicit from the following passage, which in point of scope is probably one of the most vital in the *Judgment:* "Where a coast is deeply indented and cut into . . . or where it is bordered by an archipelago such as the 'skjaergaard' along the western sector of the coast here in question, the base-line becomes independent of the low-water mark, and can only be determined by means of a geometric construction. In such circumstances the line of the low-water mark can no longer be put forward as a rule requiring the coastline to be followed in all its sinuosities. Nor can one characterize as exceptions to the rule the very many derogations which would be necessitated by such a rugged coast; the rule would disappear under the exceptions. Such a coast, viewed as a whole, calls for the application of a different method; that is, the method of base-lines which, within reasonable limits, may depart from the physical line of the coast." [9]

But the decision cannot be interpreted as giving nations *carte blanche* authority to use straight baselines for drawing the outer limits of their territorial

7. *Id.* at 138. "The general toleration of foreign States with regard to the Norwegian practice," the Court said, "is an unchallenged fact."

8. *Id.* at 128. This, the Court said, "is the most favourable to the coastal State and clearly shows the character of territorial waters as appurtenant to the land territory."

9. *Id.* at 128–129. The last three sentences of the quoted portion of the *Judgment* are from the Report of the International Law Commission, covering its Eighth Session (1956), Supplement No. 9 (A/3159), p. 14, which was provided by the Registry of the International Court of Justice from the authoritative French text. The translation in the printed English text became somewhat distorted by printing errors.

seas. On the contrary, the Court carefully circumscribed the conditions under which straight baselines may be drawn. For example, it said: (1) "the drawing of baselines must not depart to any appreciable extent from the general direction of the coast"; (2) "the real question raised in the choice of base-lines is in effect whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters"; and (3) "certain economic interests peculiar to a region, the reality and importance of which are clearly evidenced by a long usage," should not be overlooked.[10]

Throughout the *Judgment,* the Court laid great stress upon the geography of the Norwegian coast, which it considered exceptional. "Since the mainland is bordered in its western sector by the 'skjaergaard,' *which constitutes a whole with the mainland"* (emphasis added), the Court said, "it is the outer line of the 'skjaergaard' which must be taken into account in delimiting the belt of Norwegian territorial waters. This solution is dictated by geographic realities." [11]

The skjaergaard coast of Norway ends at North Cape. Eastward of the cape the coast is broken by large and deeply indented fjords. One of these is the sector of Svaerholthavet between basepoints 11 and 12, a distance of 38.6 nautical miles. From the head of the Svaerholthavet, a peninsula juts out for more than two-thirds of the penetration of the indentation to form two fjords (*see* fig. 14). The United Kingdom objected to drawing a straight baseline between points 11 and 12 on the ground that only fjords which fall within the concept of a bay as defined in international law could be claimed as internal waters on historic grounds. From the baseline to the tip of the peninsula is 11.5 miles as against 38.6 miles across the entrance—this the United Kingdom asserted does not have the character of a bay. But the Court held that "the fact that a peninsula juts out and forms two wide fjords . . . cannot deprive the basin of the character of a bay. It is the distances between the disputed baseline and the most inland point of these fjords, 50 and 75 sea miles respectively, which must be taken into account in appreciating the proportion between the penetration inland and the width at the mouth." (*Judgment,* at 141.)

10. *United Kingdom* v. *Norway, supra* note 2, at 133. The Court found these criteria to be present in the case of the skjaergaard coast of Norway (comprising about 120,000 islands, islets, and rocks), and therefore held that Norway's method of drawing straight baselines did not violate international law.

11. *Id.* at 128. The Court thus makes the unity of the islands with the mainland the determining factor. That is, while the Court also invoked economic considerations for the justification of the Norwegian baselines, it is evident that economic interests alone would not justify the application of the method of straight baselines where the geographic conditions are not satisfied. This paramountcy of the latter is the interpretation placed upon the *Fisheries* case by the International Law Commission (*see* Part 3, 2211 A(*b*)).

The point of importance is that the Court in holding the Svaerholthavet to have the character of a bay did so on the basis of its penetration into the land, in relationship to the distance across the mouth. This is the essence of the semicircular rule but somewhat differently applied and without regard to the 10-mile limitation (*see* 421). It should also be noted that the straight baselines east of North Cape are part of a whole system; it does not follow that if only that type of coast were considered the answer would necessarily be the same.

Besides the basic legal decision that the baseline need not follow the sinuosities of the coast, the Court made other pronouncements which modified to an extent previous understandings of the international law of the sea, among which were the following:

(*a*) *The 10-Mile Rule for Bays.*—The Court held that the 10-mile rule for bays had not acquired the authority of a general rule of international law (*Judgment,* at 131). In its view, there is no legal limit to the length of the baselines, and it accepted as valid a baseline 38.6 miles long across the Svaerholthavet on the ground that it had the character of a bay (*Judgment,* at 141). As a corollary to this major finding, the Court also held that where the conditions satisfied the criteria for straight baselines, they could be drawn across other sea areas, such as between the mainland and the islands and between the islands themselves without regard to length, provided there is no excessive deviation from the general principle.

(*b*) *Delimitation of the Maritime Belt.*—Although not directly involved in the case, since the issue was one of baselines, the Court, nevertheless, discussed at some length the methods available for delimiting the outer rim of the maritime belt. The conclusions of the Court in this regard are therefore in the nature of *dicta* and of persuasive authority only.[12]

The Court rejected the *tracé parallèle* method (following the coast in all its sinuosities) of delimiting a sea boundary as inapplicable to a coast like Norway, although it noted that the method might be applied to an ordinary coast without difficulty.[13]

As for the "arcs of circles" method, the Court said that while it is "constantly used for determining the position of a point or object at sea, it is a new technique in so far as it is a method for delimiting the territorial sea." (*Judgment,* at 129.)

12. *Id.* at 128–129. But it should be noted that once a system of straight lines is adopted as the baselines from which the maritime belt is to be measured, then any method of delimiting this belt must necessarily result in a straight line outer limit. Methods such as *tracé parallèle* or "arcs of circles" come into play only where the baseline follows the sinuosities of the coast (*see* Part 2, 1621).

13. *Id.* at 128. The *tracé parallèle* is also referred to as a replica line and is discussed in Part 2, 1621(*a*).

As with *tracé parallèle,* the Court did not hold it illegal, but merely that it was not obligatory by law and therefore not binding on Norway.[14]

5131. *Commentary*

In summary, it can be stated that the net effect of the *Fisheries* decision is to hold the method of straight baselines, used by Norway for delimiting its fisheries zone, as not contrary to international law. As a corollary to this holding, the Court found the coastline rule, or rule of the tidemark (*see* 331), that takes into account the sinuosities of the coast, not applicable to a coast like the northern coast of Norway, the geography of which is unique, if not exceptional.

While the decision is binding on the party litigants, it does not establish a precedent which other nations must follow. This is so because international law does not recognize the principle of *stare decisis* (let the decision stand), and Article 59 of the Court's Statute provides that "the decision of the Court has no binding force except between the parties and in respect of that particular case." [15] Yet, the Court does lay down certain principles of delimitation for the use of straight baselines, which could be highly persuasive in other situations. But, the decision does not stand for the doctrine that the coastline rule and the 10-mile limitation for bays are contrary to international law; rather, it leaves the choice of method of delimitation, under certain criteria recognized in international law, to the national State. This is implicit in the Court's statement that "the coastal State would seem to be in the best position to appraise the local conditions dictating the selection" (*Judgment,* at 131). It follows, *a fortiori,* that any method that exhibits a more liberal approach to the problem of baselines, *vis-a-vis* the family of nations, would not infringe the general law.[16]

The limitation which the Court placed on straight baselines, even in the case of a unique coast such as Norway's, is that they "must not depart to any appreciable extent from the general direction of the coast." (*Judgment,* at

14. The Court's observation that the arcs-of-circles method is a *new technique* would seem to imply a certain relativity to the word "new." The arcs of circles (also referred to as an envelope line) was embodied in the proposal of the United States delegation at the 1930 Hague Conference for the Codification of International Law, but this was not the origin of the method. It was well known long before 1930. In 1928, Great Britain suggested its use in connection with proposals for an agreement with Norway regarding territorial waters (23 AMERICAN JOURNAL OF INTERNATIONAL LAW (Special Supplement) 256 (1929)), and prior to that, in 1911, it was used for delimiting a 3-mile belt in The Firth of Clyde (FULTON, THE SOVEREIGNTY OF THE SEA 719 (1911)). The envelope line method of delimiting a seaward boundary and its geometric basis is discussed in Part 2, 1621(*c*).

15. Johnson, *The Anglo-Norwegian Fisheries Case,* 1 INTERNATIONAL AND COMPARATIVE LAW QUARTERLY 179 (1952).

16. From the standpoint of the international community and the freedom of the seas, the use of straight baselines is the least liberal, for it tends to assimilate the greatest sea area into the regime of internal waters.

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133.) This is an important finding and is the principal criterion which the Court applied in justification of the Norwegian system. Its underlying rationale is expressed by the Court to be that "the delimitation of sea areas has always an international aspect" and while "the act of delimitation is necessarily a unilateral act . . . the validity of the delimitation with regard to other States depends upon international law." (*Judgment,* at 132.) But the Court gives no guidelines for determining when a baseline conforms to this test. This is perhaps a basic weakness in the general-direction-of-the-coast principle. The Court recognized this in its observation that "however justified the rule in question may be, it is devoid of any mathematical precision. In order properly to apply the rule, regard must be had for the relation between the deviation complained of and what, according to the terms of the rule, must be regarded as the *general* direction of the coast. Therefore, one cannot confine oneself to examining one sector of the coast alone, except in a case of manifest abuse; nor can one rely on the impression that may be gathered from a large scale chart of this sector alone." (*Judgment,* at 141–142.)[17]

Geographically and cartographically, the application of the general-direction-of-the-coast rule becomes a matter of opinion and interpretation. It is doubtful whether two experts would interpret the phrase "to any appreciable extent" in the same way in applying the rule to a specific coastal situation. Even the term "general direction of the coast" is uncertain. Does it mean direction as determined by a stretch of coastline 1 mile, 2 miles, 5 miles, or more, in length? The Court's observation that reliance should not be placed upon "the impression that may be gathered from a large scale chart" would seem to infer that the geographical test is a subjective one, and that in appraising a particular situation a small-scale chart should be used so that the "impression" of the deviation from the general direction of the coast will be more favorable to the coastal State.[18]

In contrast to the rule laid down by the Court, the coastline rule, or rule of the tidemark, whether applied to a mainland coast or to an island coast, has the advantage of legal certainty and is susceptible of definite ascertainment,

17. The last clause of the above quoted passage is opposed to the statement of one of the majority judges (in a separate opinion) that the principle of conforming to the general direction of the coast should be "interpreted in the light of the local conditions in each sector with the aid of a relatively large scale chart." *United Kingdom* v. *Norway, supra* note 2, at 155.

18. Theoretically, the deviation of the outer line of a group of islands or rocks, or a single island or rock, from the general direction of the coast, is the same no matter what the scale of the chart is, because the direction and distance to such features from points on the coast would be the same, if the charts are accurately constructed. But the "impression" of deviation that one obtains from a small-scale chart would certainly be less pronounced than it would be if a large-scale chart of the same area were to be examined. One need but to examine various scale charts along the Atlantic or Pacific coasts, where offshore islands are located, to verify this.

albeit the delimitation of the outer rim of the maritime belt may be of a more complex nature.[19] On the other hand, the straight baseline rule is subject to interpretation in different situations.

Finally, the Court's discussion of the *tracé parallèle* and "arcs of circles" methods of delimiting the maritime belt seems irrelevant to an issue involving only baselines. The Court, at times, refers to "this method of the *tracé parallèle*" as if synonymous with a baseline that follows the sinuosities of the coast. This is confusing because they represent two different concepts. What the Court seems to have done was to use these methods of delimitation as a means of rationalizing its rejection of the coastline rule and its substitution of the straight baseline rule.[20]

52. CORFU CHANNEL CASE

The *Corfu Channel* case, *supra* note 3, arose out of damages sustained by two British warships which struck mines in 1946 while proceeding through the North Corfu Channel at a point within the territorial waters of Albania. Great Britain sued Albania in the World Court. The geographic circumstances of the case are important.

The strait of Corfu is approximately 40 nautical miles long and, with the exception of a few miles along the Albanian coast, is situated between the Greek Island of Corfu and the Greek mainland. (*See* fig. 15.) It has two narrow channels at its extremities, between which is a wider area. The North Channel is 1 mile wide at its narrowest point and less than 6 miles wide at other points. The South Channel is less than 5 miles wide. The strait is a link between the Adriatic and the Ionian Seas, although not the principal one. The incident occurred within the narrow North Channel.

The Court found Albania responsible for the damages sustained. In upholding the claim of Great Britain, the Court held that the North Corfu Channel

19. With its "Reply," the United Kingdom filed as Annex 35 a set of charts of the coast of northern Norway showing its conception of the coastline rule for the delimitation of the maritime belt by the arcs-of-circles method, due account being taken of those historic claims of Norway which the United Kingdom was prepared to concede.

20. *United Kingdom* v. *Norway, supra* note 2, at 129. The Court first equated the coastline rule with *tracé parallèle*. Finding the latter inapplicable to a coast like Norway, it substituted the straight baseline rule for the coastline rule. It next considered the "arcs of circles" method, the purpose of which it found to be to "secure the application of the principle that the belt of territorial waters must follow the line of the coast." But having rejected the latter, it was precluded from accepting the arcs-of-circles method. The first effect of the *Fisheries* decision occurred on July 18, 1952, when Norway extended the system of straight baselines to the remainder of its coast. ALEXANDER, A COMPARATIVE STUDY OF OFFSHORE CLAIMS IN NORTHWESTERN EUROPE 195 (1960) (sponsored by Research Foundation of the State University of New York and the Office of Naval Research).

FIGURE 15.—The Corfu Channel separates the Greek Island of Corfu from the mainland and connects the Adriatic Sea with the Ionian Sea.

was not part of the inland waters of Albania and stated the law thus: "It is, in the opinion of the Court, generally recognized and in accordance with international custom that States in time of peace have a right to send their warships through straits used for international navigation between two parts of the high seas without the previous authorization of a coastal State, provided that the passage is *innocent.*" [21]

It was Albania's contention that while the North Corfu Channel was a strait in the geographical sense, it was not an international highway because of its secondary importance and because it is used almost exclusively for local traffic. But the Court said that the test was not to be found in the volume of traffic passing through the strait nor in its greater or lesser importance for international navigation. The decisive criterion, it held, was "its geographical situation as connecting two parts of the high seas and the fact of its being used for international navigation." [22]

21. *United Kingdom* v. *Albania, supra* note 3, at 28.

22. *Ibid.* The decision in the *Corfu Channel* case was not overruled by the *Fisheries* case. Although it was contended by the United Kingdom that the Indreleia, a sailing route between the mainland of Norway and certain of its offshore islands, was a strait that constituted territorial waters, the International Court, without referring to the *Corfu Channel* case, held the Indreleia not to be a strait, "but rather a navigational route prepared as such by means of artificial aids to navigation provided by Norway." *United Kingdom* v. *Norway, supra* note 2, at 132.

53. OPPOSING VIEWS OF THE PROBLEM

California relied heavily on the *Fisheries* case to show the development of international law in this field and to show the validity of using straight baselines for the overall unit area (*see* note 1 *supra*) from which the 3-mile belt should be measured. It also contended that it would be in the national interest to place the international domain as far seaward as possible.[23] As for the *Corfu Channel* decision, California contended that if Corfu Island had been part of Albania, the North Corfu Channel could have been declared inland waters.

The burden of the Government's contention was that the past position of the United States was to measure its marginal belt from the physical shore of the mainland and, in the same manner, around each offshore island; and where a strait or channel between the mainland and an offshore island or islands connects two areas of open sea, the baseline follows the shore of the mainland and of each island.[24]

As opposed to California's view regarding the implication of the *Fisheries* case, the Government introduced the letter of February 12, 1952, from the State Department (*see* Appendix D), in which it was stated that the *Fisheries* decision had not altered the position of the United States with respect to the delimitation of its territorial waters, as set forth in its letter of November 13, 1951. In its view, the decision did not indicate that other methods of delimitation, such as those adopted by the United States, were not equally valid in international law, and that the decision left the choice of method, within the criteria set forth by the Court, to the national State.[25]

23. California introduced expert testimony to show that at sometime in the geologic past, perhaps 25 million years ago, the islands were connected to the mainland; that wave refraction tends to give the channel areas a sheltered character; and that historically (from the early 16th century) the use and development of the areas showed their protected nature.

24. In support of this position, the Government introduced the letter of Nov. 13, 1951, from the State Department (*see* Appendix D), which it contended was conclusive on the courts, in accordance with the well-established principle of American constitutional law that courts will accept executive determinations in the field of foreign affairs, determinations of territorial sovereignty being of that nature (citing *Vermilya-Brown Co.* v. *Connell,* 335 U.S. 377 (1948) and other cases). The Government also invoked the *Corfu Channel* decision, as dealing with an analogous geographic situation of a strait connecting two parts of the high seas.

25. To further offset the implication of the *Fisheries* decision, the Government introduced, in rebuttal, three charts of the World Aeronautical Chart series, chart 404 covering the lower California coast and charts 52 and 90 the skjaergaard coast of Norway. This was an impressive exhibit because the charts were on the same projection (Lambert conformal conic) and on the same scale (1:1,000,000), so that a visual comparison was sufficient to show the geographic difference between the two areas (*see* fig. 16). Oral testimony brought out the fact that the ratio of land to water area on the Norwegian coast (within the scope of the *Fisheries* decision) was 1 to 3½, whereas on the California coast (covering the area of the offshore islands), it was 1 to 29 (*see* 2112(*h*)).

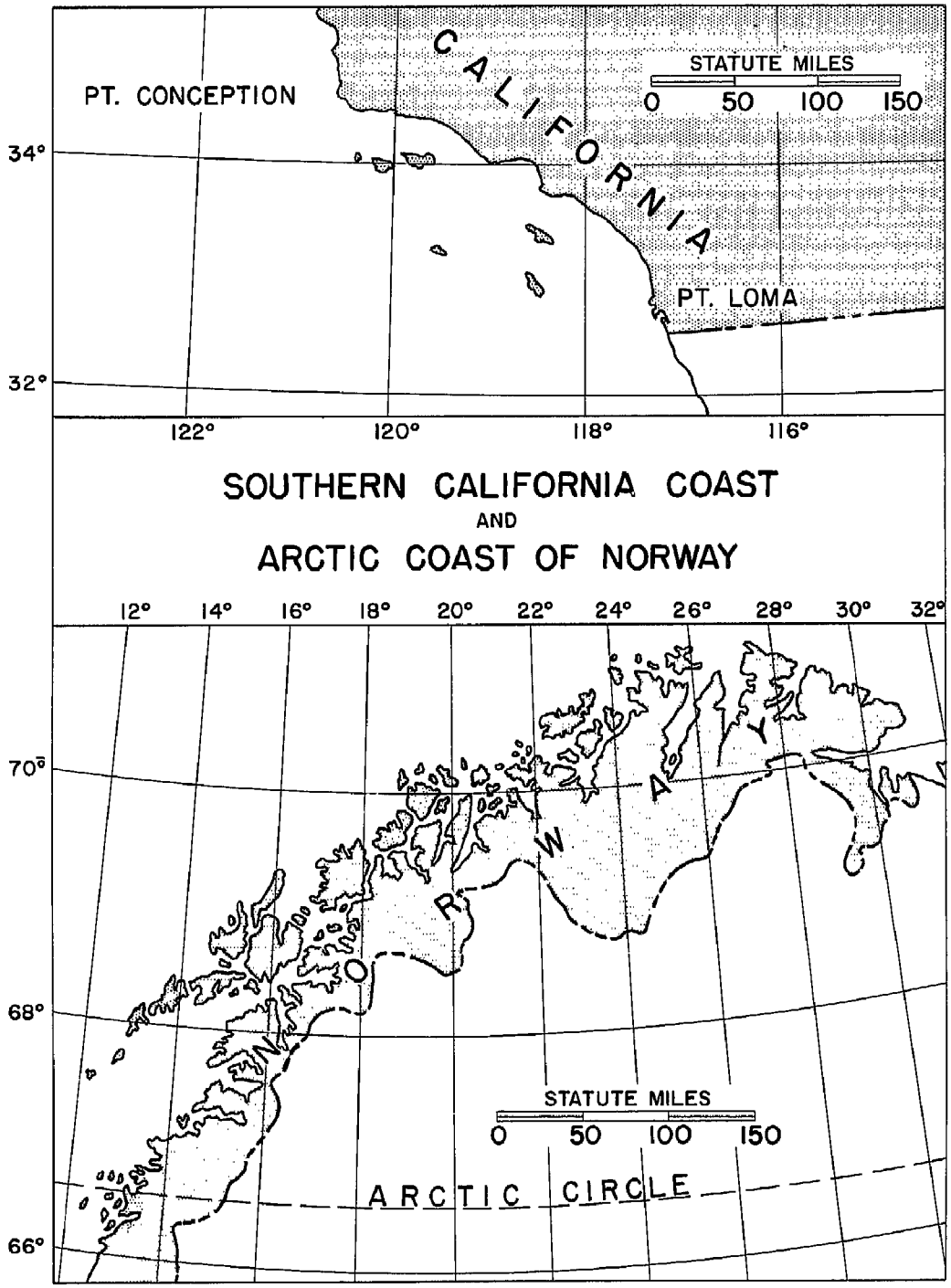

FIGURE 16.—Geographic comparison between the southern California coast and the Arctic coast of Norway.

54. FINDINGS OF THE SPECIAL MASTER

Such was the international law background and the contentions of the litigants which the Special Master had to consider in determining the status of the channel areas between the California mainland and the offshore islands.[26] He agreed with the Government's view that "the channels and other water areas between the mainland and the offshore islands . . . are not inland waters" and that "they lie seaward of the baseline of the marginal belt of territorial waters, which should be measured in each instance along the shore of the adjoining mainland or island, each island having its own marginal belt." [27]

He predicated this finding, first upon an absence in international law of any generally accepted rule fixing the baseline of the marginal belt; and, second, upon the traditional position of the United States that the baseline follows the sinuosities of the coast, except where interrupted by deep indentations.[28] He noted that this rule "in itself excludes the idea of drawing the coastline from headland to headland around offshore islands," as contended for by California, and he stated that placing a 3-mile marginal belt around each offshore island goes naturally with the fact that the "islands are part of the territory of the nation to which the mainland belongs." [29]

As to the effect of the *Fisheries* decision on the traditional position of the United States, the Special Master cited the supplementary letter from the Sec-

26. The islands are separated from the mainland by distances of 10 to 60 nautical miles, with depths in between as great as 1,000 fathoms (6,000 feet) (*see* Coast Survey chart 5101). Recommended sailing lines for seagoing vessels pass between the mainland and the islands. PACIFIC COAST PILOT 159, U.S. COAST AND GEODETIC SURVEY (1951).

27. Report of Special Master 2, 29, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952 (cited hereinafter as Final Report of Special Master). This view is supported by JESSUP, THE LAW OF TERRITORIAL WATERS AND MARITIME JURISDICTION 66–67 (1927). In *United Air Lines, Inc.* v. *Public Utilities Commission of California,* 109 F. Supp. 13, 16 (1952), a three-judge Federal court awarded a declaratory judgment and injunction against the Utilities Commission on the ground that under the Civil Aeronautics Act, the Civil Aeronautics Board and not the Commission had exclusive jurisdiction to regulate transportation activities of airlines between Santa Catalina Island and the mainland (*see* fig. 13) because "a substantial portion of these 30 miles lies over the high seas and is not within the State of California." On appeal to the Supreme Court, the decision was reversed on the ground that the case was not ripe for a declaratory judgment, but the high seas issue was not reached. *Public Utilities Commission of California* v. *United Air Lines, Inc.,* 346 U.S. 402 (1953).

28. As expressed in its diplomatic correspondence, the position of the United States relative to islands and straits may be summarized as follows: (1) Where islands or groups of islands lie off the coast, irrespective of their distance from the mainland, each island is to be surrounded by its own marginal belt; (2) where a strait between the mainland and offshore islands connects two seas having the character of high seas, the waters of the strait are not to be considered as inland waters and the marginal belt is to be measured as described under (1); and (3) where a strait is merely a channel of communication to an inland sea, the rules regarding bays apply (*see* 421 and 43). Letter of Nov. 13, 1951, from Acting Secretary of State to Attorney General (*see* Appendix D).

29. Final Report of Special Master, *supra* note 27, at 26–27. Although the outer rim of the marginal belt was not involved in this litigation, the Government introduced in evidence six Coast and Geodetic Survey nautical charts, covering the disputed areas, on which the federal-state boundary was delineated according to the Government's contention, and on which the 3-mile limit was delineated by the "arcs of circles method" in order to show the relationship of territorial waters to the high seas.

retary of State, dated February 12, 1952 (*see* Appendix D), in which it was stated that the decision of the World Court does not require the United States to change its position, and that the principles advanced by it in its international relations are not in conflict with the criteria set forth in the decision of the World Court (*see* text at note 25 *supra*).

Regarding the *Corfu Channel* decision, the Master held that the situation there cannot be distinguished from the California situation on the ground that different countries border the North Corfu Channel because the criterion is the geographical situation of the channel as connecting two parts of the high seas and the fact that it is a useful route for international maritime traffic.[30]

Finally, the Special Master considered the contention of California that the criteria it proposes for the overall unit area would best serve the national interest by placing the baseline as far seaward as possible.[31] He rejected that argument because, first, it was a question of foreign policy which belongs "in the domain of political power not subject to judicial intrusion or inquiry" (citing *C. & S. Air Lines* v. *Waterman Corp.*, 333 U.S. 103, 111 (1948)); second, there was no evidence presented by California to show that such policy would be for the best interest of the United States; and, third, the Department of Defense had stated that by having the outer limits of territorial waters follow closely the sinuosities of the coastline, greater freedom and range of its warships and aircraft are secured and thus better protects the security interests of the United States.[32]

Therefore, on the whole case as submitted, the Special Master recommended to the Court that "in its answer to *Question 1* it should find that, subject to the special case of historical waters, the channels and other water areas between the mainland and the offshore islands lying off the southern coast of California are not inland waters." [33]

30. Final Report of Special Master, *supra* note 27, at 29.

31. California also urged this with respect to the seaward boundaries of bays and the use of the mean of the lower low tides. Final Report of Special Master, *supra* note 27, at 40.

32. *Id.* at 40, 41. This statement was made in a letter, dated Apr. 25, 1952, from the Department of the Navy, on behalf of the Department of Defense, to the Chairman of the House Judiciary Committee, commenting upon H.J. Res. 373, 82d Cong., 2d sess. (1952) and strongly recommending against its enactment. Letter printed in Reply Brief for the United States before the Special Master, 80–84 (June 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952. The resolution would have declared "the boundaries of the inland waters of the United States to be as far seaward as is permissible under international law, and providing for a survey of such boundaries to be made by the United States Coast and Geodetic Survey in the light of the Anglo-Norwegian Fisheries Case." Extensive comments on the resolution were made by the Coast Survey. The resolution was never enacted into law.

33. Final Report of Special Master, *supra* note 27, at 29. Whether the channel areas are part of the marginal sea or part of the high seas would automatically be determined by drawing the 3-mile belt along the mainland and around the offshore islands in accordance with adopted criteria. If the channel is less than 6 miles wide the waters in between would be part of the marginal sea; if greater than 6 miles, a strip of high seas would result. In no case could the area become inland waters except by arbitrary adoption.

On the matter of the overall unit area being inland waters on historical grounds, the same factual situation must be present as is required for historical bays, namely, an assertion of exclusive sovereignty over the waters by the coastal State and an acquiescence by foreign governments (*see* 45). The failure by California to establish the bays within the overall unit area as historic bays has already been discussed in 4542. For the same reasons, the Master found the channel areas not to constitute historical waters. And he noted that the first explicit assertion by California over these water areas was made in 1949—2 years after the decision of the Court in the *California* case—which could not be controlling in the present litigation.[34]

34. *Id.* at 39. Much of the testimony presented by California in the proceedings before the Master dealt with the geography, the history, and the economic importance of the water area in dispute. This testimony, the Special Master held, "would in general be relevant to the question whether these areas present special characteristics such as would justify in international law an assertion of exclusive sovereignty." But since there had been no assertion by or on behalf of the United States, such testimony, he held, was "irrelevant to any issue here presented." *Ibid.*

CHAPTER 6

The Tidal Boundary Problem

The last of the three questions on which the Supreme Court sought recommendations from the Special Master in the *California* case dealt with tidal boundaries. This was because the Court used the term "ordinary low water mark" to define the federal-state boundary.[1] The specific question submitted to the Master was: "By what criteria is the ordinary low water mark on the coast of California to be ascertained?" (*See* 2111.) The word "ordinary" lacks the technical precision that is essential in the establishment of tidal boundaries and raises problems of interpretation that require an analysis of tidal phenomena insofar as they pertain to the characteristics of the tide encountered along the coasts of the United States. With respect to the case before the Special Master, it involved a consideration of the type of tide that exists along the California coast and a development of criteria by which the boundary line could be demarcated on the ground.[2]

61. OPPOSING VIEWS OF THE PROBLEM

In the interpretation of the term "ordinary low water mark," as applied to the California coast, cognizance must be taken of the fact that the tide there is of the mixed type with two low waters of unequal height occurring on most tidal days. The problem was, therefore, which of the lows would be more responsive to the term "ordinary low water mark"—the higher low, the lower low, or the mean of the two. The boundary line would be farther inshore or farther offshore, depending upon which is used.[3] (*See* fig. 17.)

1. In its decree of Oct. 27, 1947, the Supreme Court said that the United States has paramount rights in the submerged lands seaward of the "ordinary low water mark." *United States* v. *California,* 332 U.S. 804 (1947). The same terminology was used by the Court in *United States* v. *Louisiana,* 339 U.S. 699 (1950), and in *United States* v. *Texas,* 339 U.S. 707 (1950).

2. Had the Court used the word "mean" instead of "ordinary," no problem of interpretation would have arisen because "mean" is a technical term with definite significance in tidal terminology. SCHUREMAN, TIDE AND CURRENT GLOSSARY 23, SPECIAL PUBLICATION No. 228, U.S. COAST AND GEODETIC SURVEY (1949).

3. From a practical point of view, this question was not too important, at least insofar as the coast of California was concerned, for with the exception of Crescent City Bay, the effect on the boundary line would not be too great. But a principle of law was to be established for the guidance of engineers in marking the boundary, and the Coast Survey was to assist in establishing that principle.

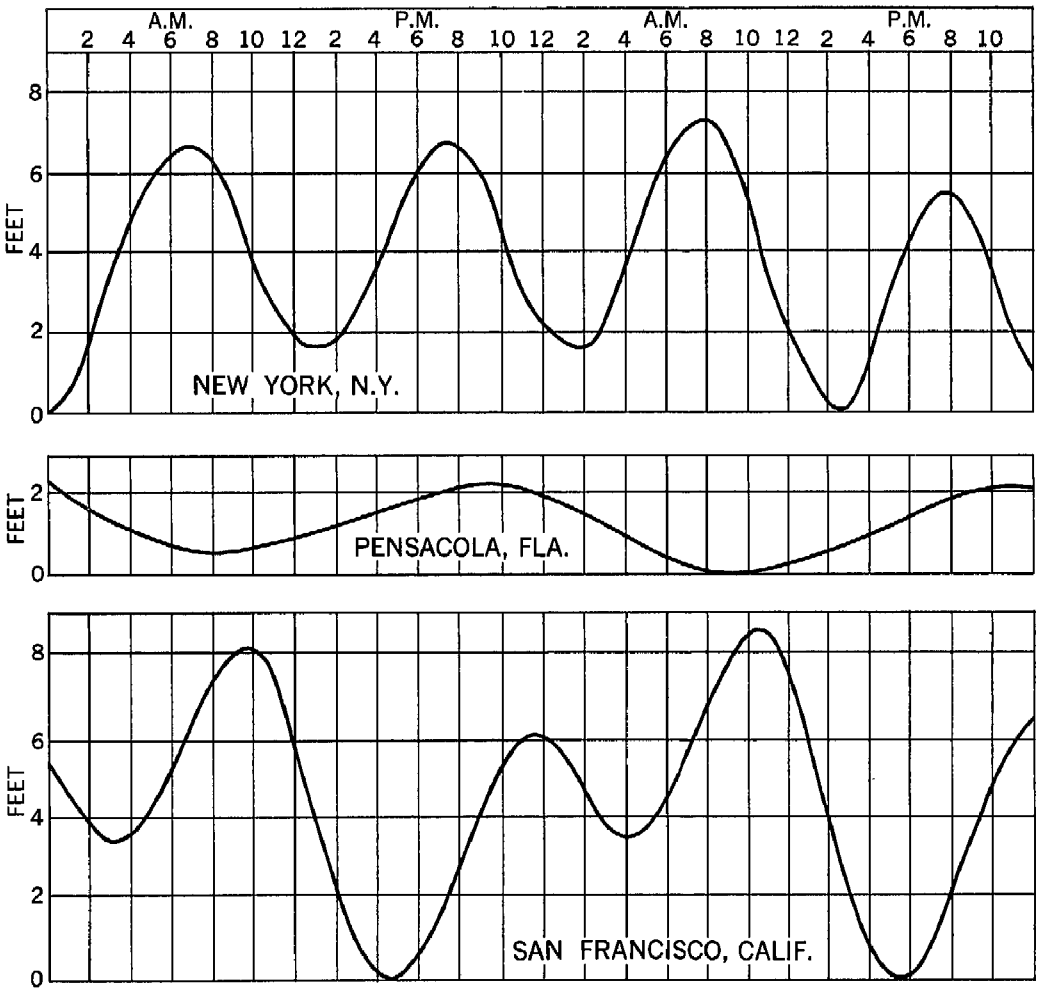

FIGURE 17.—Types of tide along the coasts of the United States. From observed tides of Jan. 15–16, 1961.

In the Government's view, both the low waters, averaged over the cyclical period of 18.6 years, should be used in arriving at the datum of ordinary low water from which the ordinary low-water mark could be ascertained (*see* 64). It rested its case upon the interpretation placed on the word "ordinary" by the Coast and Geodetic Survey, and upon the persuasive aid afforded by the Supreme Court in defining the cognate term "ordinary high-water mark" in *Borax Consolidated, Ltd.* v. *Los Angeles,* 296 U.S. 10 (1935) (*see* 6413).[4]

4. Brief for the United States before the Special Master, 151–161 (May 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951.

It was California's position that only the lower of the two low waters each day, averaged over the requisite period of time, should be used. This contention was predicated upon the fact that there was no rule in international law that required ordinary low-water mark to be interpreted as meaning the average of all tides, and that convenience and uniformity would both be served by adopting the same datum for the federal-state boundary as used for other purposes. It cited the use by the Coast and Geodetic Survey of the mean of the lower low waters as the datum for its hydrographic surveys and nautical charts on the Pacific coast (*see* 631), and the Corps of Engineers' use of the same datum in its work there.[5] And as in the case of the overall unit area, it also contended that adoption of the lower plane would better serve the national interest by placing the international domain as far seaward as possible (*see* 54).[6]

62. ASPECTS OF THE TIDE

To better understand the applicability or inapplicability of these diverse viewpoints, certain aspects of tidal phenomena will be clarified, particularly those that may be determinative in the selection of one datum over another. Emphasis will be placed on the specific problem that faced the Special Master in the *California* case, both from the standpoint of the arguments advanced by the contending parties and from the point of view of the legal criteria developed for the determination of the term ordinary high-water mark.

The phenomenon of the tide is far from being a simple one. The tidal effect of sun and moon upon the waters of the earth depends upon the relative positions of the three bodies at a particular time and a particular place. Considering then that the earth revolves on its axis once every 24 hours, and its journey around the sun takes 1 year; that the moon revolves around the earth once every 29½ days, and its orbit is inclined on the average 23½° to the earth's equator; that every body of water has its own period of oscillation, and responds differently to the tide-producing forces; and that all of these factors, together with the configuration of the land bordering the water areas, enter into the formation of the tide, there is present an almost limitless number of possible combinations into which these factors can unite to produce both differences at the same time

5. Sec. 5 of the River and Harbor Act of Mar. 4, 1915, 38 Stat. 1053, requires the use of the datum of mean lower low water for referencing channel depths in tidal waters tributary to the Pacific Ocean.

6. Brief for the State of California in the Proceedings before the Special Master, 140–143 (June 6, 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951.

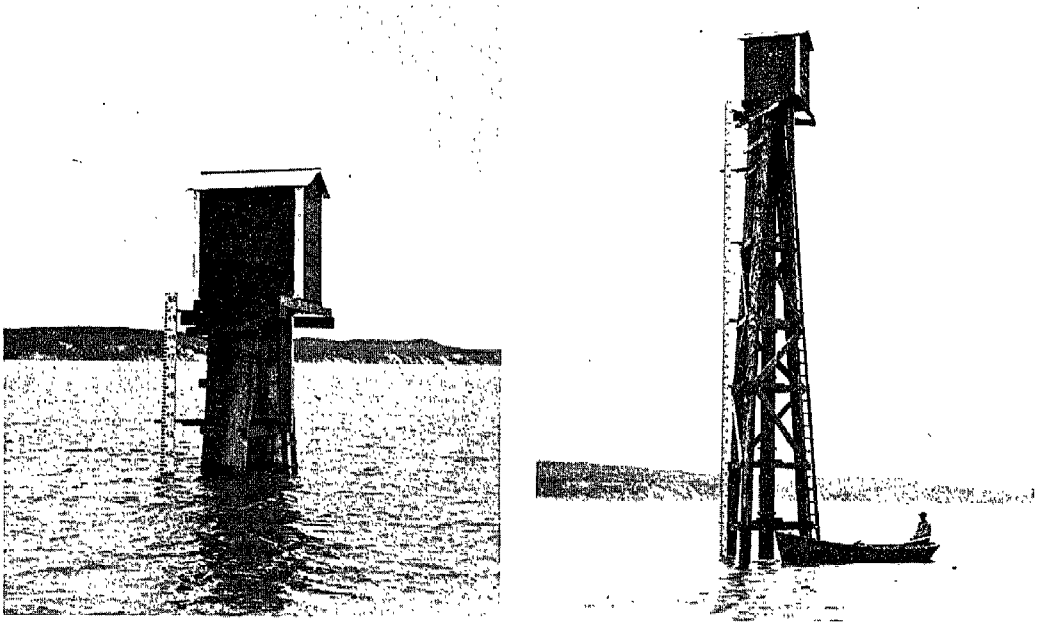

FIGURE 18.—High and low water at Anchorage, Alaska. The illustration shows a range of 34 feet, as compared with 2 feet at Pensacola, Fla. (*see* fig. 17).

at different places and differences at the same place at different times (*see* fig. 18).[7]

621. DIURNAL INEQUALITY

Along the Pacific coast of the United States, the mixed type of tide is the predominant one—two high and two low waters occur each tidal day, with marked differences between the morning and afternoon tides. This difference is called *diurnal inequality* and varies with the changing declination of the moon during a lunar month.[8] In general, the inequality tends to increase with an increasing declination, either north or south, and to diminish as the moon approaches the equator.

7. SCHUREMAN, MANUAL OF HARMONIC ANALYSIS AND PREDICTION OF TIDES 1–9, SPECIAL PUBLICATION No. 98, U.S. COAST AND GEODETIC SURVEY (1940).

8. For any particular day, the difference between the heights of the two high waters or the two low waters would be the measure of the respective inequalities. But the mean diurnal inequality (high water or low water) is one-half the average difference between the two high waters or the two low waters of each day over a 19-year period. To obtain the mean diurnal high-water inequality the mean of all high waters is subtracted from the mean of the higher high waters. Likewise, to obtain the mean diurnal low-water inequality the mean of the lower low waters is subtracted from the mean of all low waters. SCHUREMAN, *op. cit. supra* note 2, at 11.

The existence of diurnal inequality is an important factor in the determinations of the various vertical datums based on tidal definition, and makes necessary the distinction between the two high waters and between the two low waters of a day. Thus, of the former the higher is called the "higher high water" and the lower the "lower high water." Similarly, of the two low waters, the lower is called "lower low water" and the higher the "higher low water."

622. Spring and Neap Tides

Another variation in the rise and fall of the tide is related to the different phases through which the moon passes during a lunar, or synodic, month of approximately 29½ days. At new moon the sun and moon are in line and on the same side of the earth. The tidal forces are then in the same phase and work in conjunction to strengthen each other and bring about the large tides which have been designated "spring tides." At such times high water rises higher and low water falls lower than at other times. At the end of 7½ days the moon has passed through one-quarter of its journey and has reached quadrature. The tidal forces of sun and moon then act at right angles on the waters of the earth and are in opposition to each other, or in opposite phase. Each

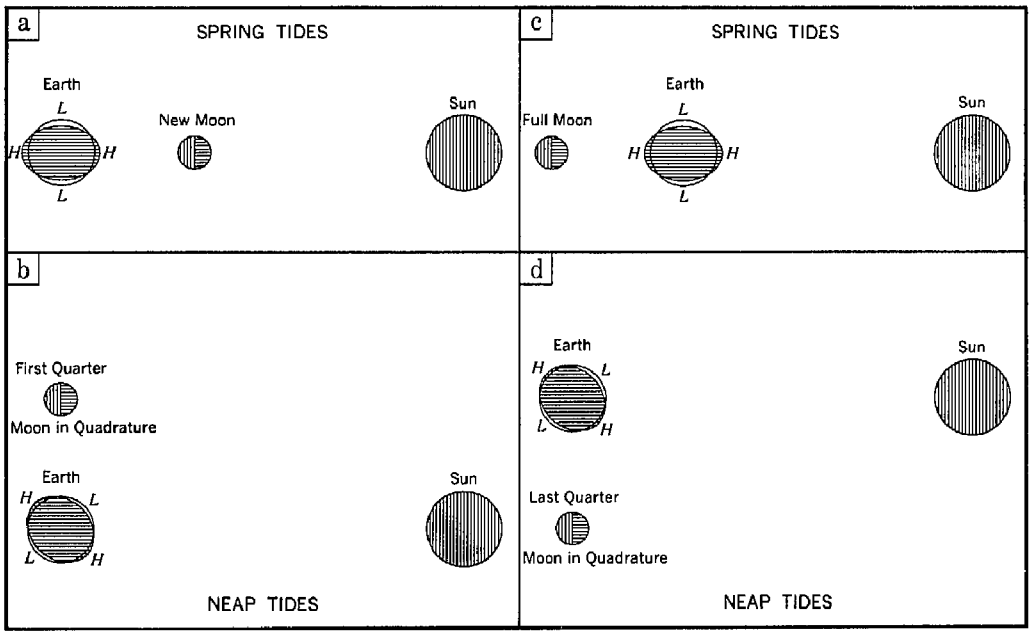

Figure 19.—Spring and neap tides during a lunar month.

force tends to minimize the force of the other body. The tide therefore does not rise as high nor fall as low as on the average. Because of their small range they have been designated as "neap tides." (*See* fig. 19.)[9]

After another 7½ days, the sun and moon are again in line but on opposite sides of the earth. The moon is then in its "full" phase and the tidal forces act the same as during new moon and spring tides again occur. At the end of another period of 7½ days, the moon has arrived at the third quarter of its course and is again in quadrature. The tidal forces again act in opposition as in the first quarter and neap tides result. At the end of a further period of 7½ days, the sun and moon are again in line and on the same side of the earth and another cycle begins.[10]

63. TIDAL DATUMS

Reference datums that have their origin in the rise and fall of the tides are the most satisfactory of all datums because they possess the advantages of simplicity of definition, accuracy of determination, and certainty of recovery. It is for these reasons that they are used in hydrographic surveying and nautical chart work, and in the demarcation of waterfront boundaries.

There is no one natural or basic tidal datum, although the datum of mean sea level is frequently so designated because it is the plane about which the tide oscillates. There are a number of datums which may be derived from tidal observations, the selection of the most satisfactory one being dependent upon the specialized purpose which the datum is to serve and the type of tide existing in a given locality.[11]

9. The origin of the terms "spring" and "neap" tides is stated by Wheeler to be "probably due to the fact that as the moon leaves the meridian of the sun in her orbital transit around the earth and approaches the quarters the tides begin to 'fall off,' or are 'nipped,' and neap tides ensue. As she leaves the quarters for the meridian they begin to 'lift,' or 'come on,' or 'spring up,' and when the meridian is reached spring tides ensue." WHEELER, A PRACTICAL MANUAL OF TIDES AND WAVES 49 (1906). Spring tides are also referred to as those occurring at the "full and change" of the moon. *Id.* at 36.

10. At most places spring and neap tides do not correspond exactly to the phases of the moon, but occur a day or two later; that is, spring tides do not occur exactly on the days of full and new moon, and neap tides do not occur exactly at the time of the moon's first and third quarters. This lag is known as the "phase age" and has different values in different localities. In New York Harbor, the phase age is 26 hours, while in Boston Harbor it is 38 hours. MARMER, TIDAL DATUM PLANES 5, SPECIAL PUBLICATION No. 135, U.S. COAST AND GEODETIC SURVEY (1951).

11. In its work along the coasts of the United States and in the interior of the country, the Coast and Geodetic Survey utilizes the following principal tidal datums: mean sea level, mean high water, mean low water, and mean lower low water. In addition, it recognizes the tidal datums of mean higher high water, and half tide level, or mean tide level, as of value to the engineer and for which the relationship to the other datums is determined. Information on the highest and lowest observed water levels is also usually available. Such levels are the result of tide and surge, and, strictly speaking, are not highest or lowest tides. They therefore cannot be classed in the category of tidal datums.

Along all coasts, the datum of "mean sea level" is used for referencing elevations of bench marks in the network of precise levels established by the Coast Survey throughout the United States and Alaska, it being the most practicable and the most stable datum for general engineering use. Similarly, along all coasts, the datum of "mean high water" is used as the plane of reference for the shoreline—the dividing line between land and sea—and for elevations of alongshore features on the topographic surveys and the nautical charts of the Bureau.

631. Hydrographic (Chart) Datums

For hydrographic surveying and for nautical chart work, a low-water datum, as a reference plane for soundings (water depths), is the most satisfactory because for the navigator the critical part of the tidal cycle is at the time of low water when depths are at a minimum. The controlling depth in a channel or over a shoal at this stage of the tide becomes important to the navigator, particularly where the controlling depth approaches the draft of his vessel. Any datum higher than low water would result in greater charted depths and might lead the navigator into a false sense of security. Another practical advantage of the use of a low-water datum is that corrections for the height of the tide, which the navigator obtains from the *Tide Tables* and which he must apply to the charted depth in order to find the depth of water for any given place and for any height of tide, will be predominantly additive; errors will be less likely to be introduced, since, as a general rule, it is a simpler matter to add a correction to a depth than to subtract it.[12]

But even low-water datums differ and the choice depends upon the type of tide that prevails in an area. Thus, on the Atlantic coast, where there are two tides a day of approximately equal range, successive low waters differ but slightly and the adopted chart datum is "mean low water," which is the average height of all the low waters over a 19-year period. On the Pacific coast and in Alaska, however, where the tide is of the "mixed" type, with two low waters in each tidal day but with marked variation in height between successive low waters, the chart datum of "mean lower low water" (the average of the lower low waters of each tidal day over a period of 19 years) is used.[13]

12. It is the practice in the Coast Survey to use the same datum in the *Tide Tables* for tidal predictions as is used for the nautical charts.

13. To use a higher datum along these coasts, such as "mean low water," would not serve the interests of the navigator. It is for this reason, and this alone, that the datum of mean lower low water was adopted by the Bureau for its hydrographic surveys and nautical charts along the Pacific coast and for Alaska. The advantages of using a mean lower-low-water datum over a mean low-water datum for Pacific coast charts are similar to those described above for low-water datums.

But the important point to keep in mind, insofar as chart datums are concerned, is that the topography of the sea bottom remains the same no matter what datum is used, and it cannot be said that the use of one datum instead of another results in greater accuracy in the charted depths.[14] The selection is dictated solely by the practical needs of navigation.

The term mean low water is therefore one of technical definition and is not necessarily related to the chart datum. It is the same wherever two high waters and two low waters occur each tidal day, and is derived by averaging all the low waters over a considerable period of time, a 19-year average giving the best determination.

64. DEMARCATION OF TIDAL BOUNDARIES

Boundaries determined by the course of the tides involve two engineering aspects: a vertical one, predicated on the height reached by the tide during its vertical rise and fall, and constituting a tidal plane or datum, such as mean high water, mean low water, etc.; and a horizontal one, related to the line where the tidal plane intersects the shore to form the tidal boundary desired, for example, mean high-water mark, mean low-water mark.[15] (*See* fig. 20.) The first is derived from tidal observations alone, and, once derived (on the basis of long-term observations), is for all practical purposes a permanent one.[16] The second is dependent on the first, but is also affected by the natural processes of erosion and accretion, and the artificial changes made by man. A water boundary determined by tidal definition is thus not a fixed, visible mark on the

14. This does not take into account the increased accuracy that naturally results from the use of a greater number of observations for the determination of a datum plane. For example, twice as many tidal observations are used in the determination of mean low water than for the determination of mean lower low water. This would be of importance, under certain shoreline conditions, in determining a tidal boundary, but not for hydrographic or chart work.

15. In California, as in almost all states, the boundary of upland bordering the sea is the ordinary high-water mark. In a few states, however, the general rule has been modified and the ownership of upland extends to low-water mark.

16. A period of 19 years is generally reckoned as constituting a full tidal cycle because the more important of the periodic tidal variations due to astronomic causes will have gone through complete cycles, and because the variations of a nonperiodic character resulting from meteorological causes may be assumed to balance out during this epoch. Averages obtained from two overlapping 19-year epochs, for example 1924–1942 and 1925–1943, exhibit an inconsequential difference; however, those obtained from two independent 19-year epochs, for example 1903–1921 and 1930–1948, may show a difference great enough to be of significance where precise determinations are required. For New York, sea level from the 1930–1948 series is 0.29 foot higher than from the 1893–1911 series; at Baltimore, the 1930–1948 series gives a value 0.26 foot higher than the 1903–1921 series; and at Galveston, the 1930–1948 series shows a value 0.39 foot higher than the 1909–1927 series. Hence, in referring to a particular datum it should be specified which 19-year series is used. MARMER (1951), *op. cit. supra* note 10, at 63–64, 104–105.

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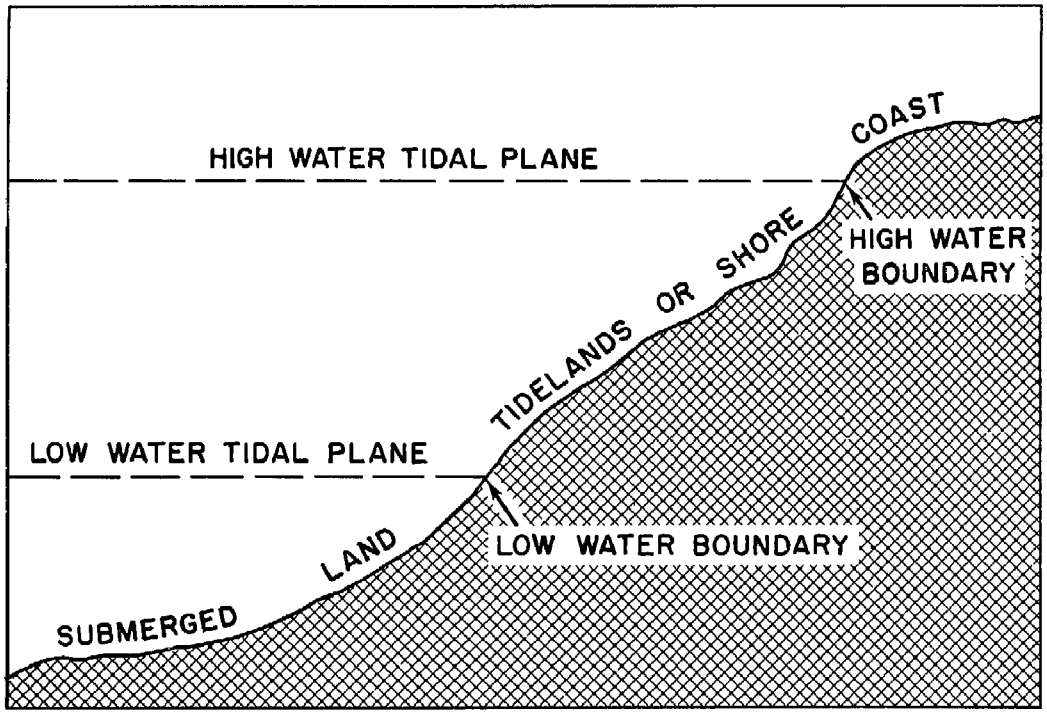

FIGURE 20.—The intersection of the tidal plane with the shore defines the tidal boundary.

ground, such as a roadway or fence, but represents a condition at the water's edge during a particular instant of the tidal cycle.[17]

641. ORDINARY HIGH-WATER MARK

In legal terminology, the term "ordinary high-water mark" is associated with the physical concept of "shore," and is traceable to the English common law. From the time of Lord Hale (1609–1676), it has been considered as settled law in England that the title and the dominion of the sea, and of the rivers and arms of the sea, where the tide ebbs and flows, and of all lands below high-water mark, are in the King. Such waters, and the lands which they cover,

17. In *Borax Consolidated, Ltd.* v. *Los Angeles,* 296 U.S. 10, 22 (1935), the Supreme Court notes this as the distinction between the upper limit of the shore at common law and under the civil law where, it says, "the shore extends as far as the highest waves reach in winter." In *Luttes* v. *State,* 324 S.W. 2d 167 (1958), the Supreme Court of Texas, in a comprehensive opinion, clarified the Spanish Law (the civil law) concept of seashore and held such interpreted references of *Las Siete Partidas* (the body of Spanish law written in the 13th century) as "covered with the water of the latter [the sea] at high tide, during the whole year, whether in winter or in summer," "their highest annual swells," "that part of the land covered by the highest swells in perennial agitation, during the winter as well as during the strong but customary summer storms," to be, in the light of modern conditions and the need for exact application, the line of mean higher high tide as determined from a 19-year period. *Id.* at 177, 181, 191.

either at all times, or at least when the tide is in, are incapable of ordinary and private occupation, cultivation, and improvement. Hence the title, or *jus privatum,* in such lands, belonged to the King as the sovereign, but was held by him as the representative of the people and was subject to the public right, or *jus publicum,* of navigation and fishing.[18] This includes the "shore," which according to the English courts is confined to the "flux and reflux of the sea at ordinary tides."[19] But what these tides were was left unsettled (*see* note 25 *infra*).

According to Lord Chief Justice Hale, one of the foremost jurists of 17th century England, there are three kinds of shores, that might be considered property of the King, depending on the kind of tides being considered:

> (1st.) The high spring tides, which are the fluxes of the sea at those tides that happen at the two equinoxials.
>
> (2d.) The spring tides which happen twice every month at full and change of the moon.
>
> (3d.) Ordinary tides or neap tides, which happen between the full and change of the moon.[20]

Of the first, Lord Hale says the shore encompassed by such tides does not belong to the King because such spring tides may overflow meadows and salt marshes which are the subjects of private ownership. Of the second, he says the lands covered by such fluxes are for the most part dry and maniorable which the other tides do not cover and should not belong to the Crown. He therefore concludes that the third type of tides, the neap tides, is what defines the shore.

This statement of Lord Hale is said to be the origin for the view that "neap tides" should be taken as the ordinary tides.[21] But a careful reading of Lord Hale's designation of "neap tides" shows that it is susceptible of two interpretations: (1) all the tides that occur between the full and change of the moon, and (2) only those tides that occur twice a month at the time of the first and third quarters when the moon is in quadrature.[22]

18. In *Shively* v. *Bowlby,* 152 U.S. 1 (1894), the Supreme Court exhaustively reviewed the law regarding public and private ownership of the shore, particularly in the Thirteen Original States.

19. *Blundell* v. *Catterall,* 5 B. & ALD. 268, 292 (1821). This case was cited by the Court in *Attorney-General* v. *Chambers, infra* note 23, at 213, for the holding that under the common law of England the upper limit of the shore is that reached by the *"highest* ordinary tides" (emphasis added) of the sea. This is evidently an error and "ordinary tides" must have been intended which would be in keeping with the subsequent discussion and final holding of the Court (*see* discussion *infra*).

20. HALE, DE JURE MARIS (By the Law of the Sea), Cap. VI; 1 Hargrave's Tracts 25 (1787).

21. *Borax Consolidated, Ltd.* v. *Los Angeles, supra* note 17, at 23.

22. R. G. Hall, in his "Essay on the Rights of the Crown and the Privileges of the Subject in the Sea-Shores of the Realm" (1830) (sometimes referred to as "Hall on the Seashore"), has accepted the first interpretation, for he amplifies Lord Hale's designation of "neap tides" as those which happen "twice in the twenty-four hours." These, he says, "take place daily, and more regularly" than the spring tides. *Id.* at 12. The second interpretation was accepted by the Court in *Attorney-General* v. *Chambers* (*see* note 23 *infra*).

6411. *At Common Law—Attorney-General* v. *Chambers*

The subject matter was thoroughly considered by the English courts in *Attorney-General* v. *Chambers*.[23] The Court stated that all authorities are in agreement that the Crown's right to the *littus maris* (the seashore) is confined to what is covered by "ordinary" tides. So the question for determination was, What is the meaning of the word "ordinary"? In the absence of specific authority,[24] the Court looked to the principle of the rule, as laid down by Lord Hale, which gives the shore to the Crown; that is, such land is not capable of ordinary cultivation or occupation and is in the nature of unappropriated soil, in contradistinction to the soil to the landward of the "shore," which is for the most part dry and maniorable.

But in applying that principle, the Court, interpreting Lord Hale's neap tides to mean only those which occur twice a month, reached the conclusion that the same reason that excludes the spring tides only from consideration should also exclude the neap tides because both tides "happen as often as each other." (*See* 622.) It therefore held the landward limit of the seashore to be "the line of the medium high tide between the springs and the neaps," that is, as defined by the medium tides of each quarter of the tidal period. This it believed afforded a good criterion because these tides more frequently reach and cover the shore than they leave it uncovered. For, it said: "For about three days it is exceeded, and for about three days it is left short, and on one day it is reached. This point of the shore therefore is about four days in every week, i.e., for the most part of the year, reached and covered by the tides." [25]

6412. *In American State Courts—Teschemacher* v. *Thompson*

Tidal boundaries are not new in American jurisprudence. The early grants, charters, and conveyances, which constitute the first links in the chains

23. 4 De G. M. & G. 206 (1854). This case involved the extent of ownership of a district abutting the seashore. It was charged that the seashore, which was vested in the Crown, "extended landwards as far as high-water mark at ordinary monthly spring-tides, or at all events far beyond high-water mark at neap tides, and up to the medium line of high-water mark between neap and spring tides."

24. The nearest approach to a determination of this question was the case of *Lowe* v. *Govett*, 3 B. & AD. 863 (1832), where certain recesses of the coast, covered by the high water of ordinary spring tides, but not by the medium tides between spring and neap tides, were held to be above ordinary high-water mark, showing that the Court considered "ordinary high-water mark" not as high as the limit of "high water at ordinary spring tides."

25. *Attorney-General* v. *Chambers, supra* note 23, at 214, 217. The Court, therefore, defined the "ordinary tides" of *Blundell* v. *Catterall, supra* note 19, as the medium high tides between the springs and the neaps. If spring tides alone were used, a strip of shore to seaward of the spring limit would be covered only twice during the month; the rest of the month it would be uncovered. Conversely, if neap tides alone were used, a strip of shore to landward of the neap limit would be uncovered only twice during the month; the rest of the month it would be covered. Neither one would therefore express any concept of being covered by ordinary tides.

of title on which present ownerships of lands along our seacoasts are based, contain expressions such as "high-water line," "high-water mark," "the line of ordinary high water," and similar expressions pertaining to low water. Such references are at best indefinite and reflect an oversimplification of a phenomenon inherently complex and variable (*see* 62). The result is that decisions interpreting such generalized expressions sometimes contain imperfections which suggest that appropriate scientific data were not always made available to the court. *Teschemacher* v. *Thompson* [26] is a case in point. The highest court of the State of California interpreted "ordinary high-water mark" as follows:

> The limit of the *monthly spring tides* is, in one sense, the usual high water mark; for, as often as those tides occur, to that limit the flow extends. But it is not the limit to which we refer when we speak of "usual" or "ordinary" high water mark. By that designation we mean the limit reached by the *neap tides;* that is, those tides which happen between the full and change of the moon, *twice in every twenty-four hours.*[27] (Emphasis added.)

This language is unclear and it is impossible to state with certainty what the court had in mind. It is scientifically inaccurate in its reference to spring and neap tides. The court refers to "monthly spring tides," when spring tides occur twice a month at the full and change of the moon; and it uses the word "neap," not in its accepted technical sense as those tides which occur twice a month when the moon is in its first and third quarters, but in some ambiguous sense to designate a plurality of tides between full and change. (*See* 622.) The court apparently thought, as Hall did, that all tides are either spring or neap; that the springs occur but once a month; and that all other tides are neap tides and differ but little among themselves, making them the "usual" or "ordinary" tides. The most that can be said for the decision is that the court was giving its own definition of neap tides as including all the tides that occur between the full and change of the moon, excepting the spring tides.[28] Even greater confusion results from the later case of *Otey* v. *Carmel Sanitary Dist.,* 26 P. 2d 308 (1933), in which the Supreme Court of California defined "ordinary high-water mark" as "the limit reached by the neap or twice-a-day tides."

26. 18 Cal. 11 (1861), 79 Am. Dec. 151.

27. *Id.* at 21. This is a carry-over of Lord Hale's ambiguous reference to "neap tides" and Hall's interpretation of that ambiguity (*see* note 22 *supra* and accompanying text). Both authorities are cited by the court. Although the court's definition of "ordinary high-water mark" was dictum, the decision having been expressly placed on other grounds, the rule has been followed in other California cases. *See,* for example, *Forgeus* v. *Santa Cruz County et al.,* 140 Pac. 1092 (1914), where the *Teschemacher* definition is cited as the prevailing rule in California.

28. Although the language is confusing, there is an indication here that the court would use both the lower high and the higher high water in determining "ordinary high water." On the matter of the court's definition of neap tides, it should be noted that under the American system of dual sovereignty, it is within the competence of each state to establish its own laws relative to tidal boundaries, and the decisions of its highest court are part of that law, but to designate all the tides between the full and change as "neap" cannot be reconciled scientifically and is contrary to long-established tidal terminology (*see* 622).

Another shortcoming of the early state decisions, which was also true of the English decisions, was the generality of the language used in defining tidal boundaries, whether the reference was to high-water mark or to low-water mark. This is traceable to two causes: (1) When waterfront property was cheap, there was no need for precision in locating the boundary between the shore and the upland; and (2) tidal knowledge, particularly as it pertained to the effect of periodic astronomic variations on datum-plane determinations, had not yet been fully developed (*see* note 16 *supra*).

6413. *In Federal Courts—Borax Consolidated* v. *Los Angeles*

Borax Consolidated, Ltd. v. *Los Angeles* (*see* note 17 *supra*), was a landmark case in the law of tidal boundaries. It established for the Federal courts not only the rule that is to be applied in the interpretation of the term "ordinary high-water mark" when construing a federal grant, but it also established the first precise standard for the demarcation of such boundary on the ground.

The case was important to the Coast Survey because it dealt almost exclusively with the subject of tides, and both appellate courts (the Circuit Court of Appeals and the Supreme Court of the United States) referred extensively to Coast Survey Special Publication No. 135, Tidal Datum Planes. It was the first time that the High Court took judicial notice of the Bureau's definition of mean high water.[29]

The specific question raised in the Supreme Court, relating to tidal boundaries, was the ruling of the Court of Appeals in instructing the lower court to recognize as the boundary between tidelands and upland "the mean high-tide line," thus rejecting the line of "neap tides" as contended for by the Borax company.

In discussing this instruction, the Court said that "by the common law, the shore is confined to the flux and reflux of the sea at ordinary tides"; that is, "the land between ordinary high and low-water mark, the land over which the daily tides ebb and flow. When, therefore, the sea, or a bay, is named as

29. Involved was the boundary between upland (land above high water) on Mormon Island in the inner harbor of San Pedro, held by the Borax company under a patent from the United States, and adjacent tidelands belonging to the City of Los Angeles under a grant from the State of California. The suit was instituted in a Federal district court by the city as a suit to quiet title to lands it was claiming as tidelands, under the Acts of 1911 and 1917 which granted it the tidelands and submerged lands situated below the line of mean high tide of the Pacific Ocean. It was dismissed on the ground that the limits of the federal grant could not be inquired into collaterally. *City of Los Angeles* v. *Borax Consolidated, Ltd.*, 5 F. Supp. 281 (1934). On appeal to the Circuit Court of Appeals, it was held that the question as to the location of the ordinary high-water mark, marking the boundary between the properties, was one for judicial determination. It therefore defined the meaning of "ordinary high-water mark," and remanded the case to the district court for retrial in accordance with this definition. *City of Los Angeles* v. *Borax Consolidated, Ltd.*, 74 F. 2d 901 (1935). An appeal was taken to the Supreme Court of the United States.

a boundary, the line of ordinary high-water mark is always intended where the common law prevails." [30]

In considering the question as to how the line of ordinary high water is to be determined, the Court adverted to Lord Hale's classification of shores (*see* 641), and to the ruling of the English court in *Attorney-General* v. *Chambers* (*see* note 23 *supra*) that the medium tide line must be treated as bounding the title of the Crown.[31] As to the use of neap high tides for determining ordinary high water, as contended for by the Borax company on the basis that the California court had so defined it in *Teschemacher* v. *Thompson* (*see* note 26 *supra*), and other cases (*see* 6412), the Court said that while "the construction of the state statute . . . is a question for the state courts," in determining the limit of a federal grant there was "no justification for taking neap high tides, or the mean of those tides, as the boundary between upland and tideland, and for thus excluding from the shore the land which is actually covered by the tides most of the time. In order to include the land that is thus covered, it is necessary to take the mean high tide line which, as the Court of Appeals said, *is neither the spring tide nor the neap tide, but a mean of all the high tides.*" [32] (Emphasis added.)

In upholding the instruction of the Circuit Court of Appeals, the Supreme Court defined more specifically how the mean of all the high tides was to be ascertained in order to achieve the requisite accuracy for delimiting the mean high-tide line. It said:

> In view of the definition of the mean high tide, as given by the United States Coast and Geodetic Survey, that "Mean high water at any place is the average height of all the high waters at that place over a considerable period of time," and the further observation that "from theoretical considerations of an astronomical character" there should be a "periodic variation in the rise of water above sea level having a period of 18.6 years," . . . in order to ascertain the mean high tide line with requisite certainty in fixing the boundary of valuable tidelands, such as those here in question appear to be, "an average of 18.6 years should be determined as near as possible." [33]

30. *Borax Consolidated, Ltd.* v. *Los Angeles, supra* note 17, at 22, 23 (citing *United States* v. *Pacheco*, 2 Wall. 587, 590 (69 U.S., 1865)).

31. The Court cited *East Boston Co.* v. *Commonwealth*, 89 N.E. 236 (1909); and *New Jersey Zinc & Iron Co.* v. *Morris Canal & Bkg. Co.*, 15 Atl. 227 (1888), as approving the doctrine of *Attorney-General* v. *Chambers*.

32. *Borax Consolidated, Ltd.* v. *Los Angeles, supra* note 17, at 26. Another objection on scientific grounds to the neap tide rule is that it cannot be a universal rule because while in many regions the principal variation in the rise and fall of the tide is related to the moon's phase, in other regions the greatest influence is due to parallax (distance of moon from the earth), and in still other regions the principal variation is related to the moon's declination (distance north or south of the equator). MARMER (1951), *op. cit. supra* note 10, at 6.

33. *Borax Consolidated, Ltd.* v. *Los Angeles, supra* note 17, at 26–27 (citing MARMER, TIDAL DATUM PLANES 76, 81, SPECIAL PUBLICATION NO. 135, U.S. COAST AND GEODETIC SURVEY (1927)). (In the 1951 edition of this publication, the corresponding references are at 86, 87.) (*See* 6413 A(*d*) for comments on this reference.) In *United States* v. *Washington*, 294 F. 2d 830 (Sept. 1961), the Circuit Court of Appeals applied the doctrine of the *Borax* case to define the limits of a grant by the United States along the coast of Washington. On appeal by the State of Washington, the Supreme Court of the United States refused to review the Circuit Court's ruling. 369 U.S. 817 (1962).

A. COMMENTARY

(*a*) While the question before the Supreme Court in the *Borax* case was the interpretation of "the line of mean high tide," as used in the grant by the state to the city (*see* note 29 *supra*), both appellate Courts used the word "mean" interchangeably with "ordinary." The references to *Attorney-General* v. *Chambers* (*see* note 23 *supra*), where the word "ordinary" as applied to tides was considered and defined, leaves no doubt that the Court believed the term "ordinary high-water mark" to be synonymous with "mean high-water mark." [34]

(*b*) The rule of the common law, as laid down in *Attorney-General* v. *Chambers, supra,* that the limit of the seashore is "the line of the medium high tide between the springs and the neaps" (*see* text at note 25 *supra*), is a close approximation of the more exact rule laid down by the Supreme Court in the *Borax* case. This is so because the spring tides occur with the same frequency as the neap tides and generally, though not always, one is as much above a medium plane as the other is below it, and therefore would cancel each other.[35] There is a practical value in the use of all the high tides (springs, neaps, and intermediates) for the determination of the plane of mean high water instead of only the high waters between springs and neaps. It is a simple matter to tabulate all the high waters for a given period and obtain an exact mean, but if the intermediate high waters only were to be used there would be a possible margin of error in the selection of the spring and neap high waters for exclusion, unless they are determined by harmonic analysis.

(*c*) Although diurnal inequality was not involved in the *Borax* case, the principle established should apply equally where the question is whether to use the mean of either of the two highs occurring each tidal day or the mean of all the highs. The two high waters of the day could be considered as corresponding to the spring highs and the neap highs of the month except that the former happen with greater frequency. If then the words "higher high waters" are substituted for "spring tides" and "lower high waters" for "neap tides," then using the language of the court, the following is arrived at: "the mean high tide line . . . is neither the higher high water nor the lower high water, but a mean of all the high waters." (*See* text at note 32 *supra.*) In this way, the land ac-

34. This conforms to Coast Survey usage. Although the term "ordinary high water" is not one which the Bureau has defined and standardized for survey operations and for technical engineering use, where the word "ordinary" is used in connection with tides, it is regarded as the equivalent of the word "mean." SCHUREMAN (1949), *op. cit. supra* note 2, at 26.

35. There are instances where the excess and deficiency are not the same, albeit the difference is small, and under certain conditions of foreshore slope may have a significant effect on the location of the mean high-tide line.

tually covered by the tides most of the time would be included as part of the shore, which is also the basis for the Court's decision in the *Borax* case.[36]

(*d*) The *Borax* case stands for the doctrine that *all* the high tides (spring, neap, and intermediate) not merely neap tides, are to be used for determining ordinary or mean high water (*see* text at note 32 *supra*). In this context, the doctrine is of general application. But the Court specified in addition that in order to determine mean high water at any place *all the high waters,* averaged over a period of 18.6 years or as near thereto as possible, should be used (citing the 1927 edition of Tidal Datum Planes (*see* note 33 *supra*)). Considered in this context, the decision must be regarded as of specific application, that is, as applying to areas where the type of tide is the same as that in the inner harbor of San Pedro—two high waters and two low waters during each tidal day.[37]

(*e*) The influence of the *Borax* decision is evidenced in the later California case of *Bolsa Land Co.* v. *Vaqueros Major Oil Co.,* 76 P. 2d 519, 522 (1938), where the District Court of Appeal, although affirming a finding of the trial court that the ordinary high-water mark means the intersection of the tidal plane with the shore and not the run or reach of the water or waves upon the shore, stated (after discussing the *Borax* case): "In the instant case it appears that the trial court erred in not taking into consideration all the tides in fixing the actual mean rise thereof." [38]

642. Ordinary Low-Water Mark

We come now to the basic tidal boundary problem involved in the *California* case, namely, the criteria to be used in defining "ordinary low-water mark" on the California coast. No judicial standard has thus far been developed for this tidal boundary. The principles developed by the courts and by publicists have applied mostly to high water because at common law that was the upper limit of the shore (property of the Crown) and in turn the boundary

36. By assuming a fictitious tide represented by mean high water, a portion of the land between lower high water and higher high water would be covered with water twice in every 24 hours, but only once every 24 hours if higher high water were taken as the limit of the shore, and would not be covered at all if the lower high water were taken as the limit. The limit of the shore would therefore be defined by the mean high-water line because that part of the land would be covered by the tides most of the time.

37. The reason for this is that where the tide is predominantly diurnal (one high and one low water each day) but with two high waters and two low waters on some of the days of the month, only the higher high waters and the lower low waters are used in computing mean values. This procedure was adopted in order to avoid an imbalance from the use of both low waters or both high waters (*see* Part 2, 1613 for a further discussion of this subject). To reflect this procedure and to make the definitions of mean high water and mean low water of universal application, the word *all* was omitted in the revised 1951 edition of Tidal Datum Planes (*see* Marmer (1951), *op. cit. supra* note 10, at 86, 104).

38. For procedural reasons the Court felt it unnecessary to remodel the findings of the trial court, particularly since the main issue involved had been determined.

of private ownership. In this country, it is the dividing line between the tidelands (land between high- and low-water marks), the property of the state, and the upland, the subject of private ownership. (*See* fig. 20.)

But insofar as the lower limit of the shore or tidelands was concerned, similar questions seldom arose because along navigable waters the shore and the submerged lands beyond the shore were in the same ownership—the Crown or the state—unless it had been granted away. There is thus a paucity of legal precedent on the question raised in the *California* case.[39] The case therefore involved a *de novo* consideration of applicable principles by the Special Master.

California's contention that the mean of the lower low waters should be used because that is the datum used by the Coast and Geodetic Survey for its hydrographic surveys and nautical charts along the Pacific coast and by the Corps of Engineers in its work there, would seem to be negatived by the fact that technically the plane of mean lower low water is as distinct a datum as the plane of mean higher low water (*see* 621 and 631), and that both are different tidal datums from the datum of mean low water.[40] Also, the selection of a datum for nautical charts is bottomed primarily on safety in navigation and is not necessarily related to a tidal datum for the determination of property boundaries.

Technically, the planes of low water and lower low water with respect to the fall of the tide are comparable to the planes of high water and higher high water with respect to the rise of the tide. Since the outer limit of the shore or tidelands is the ordinary low-water mark, if the reasoning of the *Borax* case with respect to ordinary high-water mark is followed, the limit would be

39. Neither the State of California nor the United States cited any direct legal authority to uphold their respective views. In *East Boston Co.* v. *Commonwealth,* 89 N.E. 236 (1909), where the question was what level was meant by the term "ordinary low-water mark" in a grant of flats under an order issued in 1640, it was held that "the word 'ordinary,' when applied to a high or low water mark, has generally been used in the sense of average by the courts of this country and of England" rather than "extreme low water" (citing cases in England, Massachusetts, Virginia, New Jersey, South Carolina, Connecticut, Rhode Island, and in the Federal courts). Because of the use of the word "ordinary," the court distinguished this grant from the colonial ordinance of 1647 extending the line of individual ownership as far as the tide ebbs, if not more than 100 rods from ordinary high-water mark, which "for reasons stated in decisions," the court said, "means the line of extreme low water shown at an ebb of the tide, resulting from usual causes and conditions." *Id.* at 237, citing *Wonson* v. *Wonson,* 96 Mass. 71 (1867). (This case dealt with the subdivision of flats within a cove.) It should be noted that the tide at Boston is of the semidaily type with small differences between morning and afternoon tides. In FARNHAM, WATERS AND WATER RIGHTS 227, 228 (1904), it is stated that shore is "that strip lying along tide water over which the tide flows between the line of ordinary high tide and the line of lowest tide." Citations are given to cases in Texas, Alabama, Rhode Island, Connecticut, Delaware, Massachusetts, and Washington, but only *Galveston City Surf Bathing Co.* v. *Heidenheimer,* 63 Tex. 559, 563 (1885), lends support to the above statement. No authority is, however, given by the Texas court for the use of "the line of the lowest tide" as the seaward boundary of the shore at common law, nor was the lower limit of the shore at issue. The court's statement is at variance with what is generally accepted as the common law definition of "shore," namely, that it is confined to what is covered by "ordinary" tides (*see* text following note 23 *supra*).

40. MARMER (1951), *op. cit. supra* note 10, at 122.

neither the line of lower low water nor the line of higher low water, but a line based on the mean of all the low waters (*see* 6413 and 6413 A(*c*)).[41]

6421. *Findings of the Special Master*

In his report to the Supreme Court, the Special Master found that "the ordinary low-water mark on the coast of California is the intersection with the shoreline (as it exists at the time of survey) of the plane of the mean of all low waters, to be established, subject to the approval of the Court, by the United States Coast and Geodetic Survey from observations made over a period of 18.6 years." [42] He predicated this finding on the consideration of property rights, stating that, from the point of view of a disputed real estate boundary line, there would "be no more reason to choose the mean of the lower low tides (as one interested claimant might suggest from self-interest) than to choose the mean of the higher low tides (as self-interest might likewise move the other claimant to suggest)." In the Master's view, "the middle way—the statistical mean of all the low tides over the cyclical period of approximately nineteen years—would seem to be the only choice of which neither contestant could justly complain." [43]

This equitable approach to the interpretation of the term "ordinary low-water mark," while achieving a correct result, fails to establish a sound guiding principle (*see* note 35 *supra*). If one claimant had contended for spring tides and the other for neap tides, the middle way would not necessarily be the correct answer. The problem is technical in nature and lends itself to a technical approach, the basis for which is the consideration that where a variation in any phase of the tide exists (i.e., high or low), each having equal significance in the tidal cycle, the mean of the heights is more representative of that level than any single height when taken alone. If this principle is applied to the low-water phase of the tide at San Francisco (*see* fig. 17), it is obvious that the mean of the two low waters occurring each tidal day is more repre-

41. Shore is defined as the land that is covered and uncovered by the flux and reflux of the tide. With respect to the upland (land above high water), it is the land that is covered by the flux of the tide, but in relation to the submerged lands (land below low water) it is the land that is uncovered by the reflux of the tide. Thus considered, the mean of all the low waters would uncover the shore a greater part of the lunar cycle than would either the spring low water or the neap low water or either the lower low water or the higher low water (*see* note 36 *supra*).

42. Report of Special Master, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952, at 4, 5. Ordered filed Nov. 10, 1952, 344 U.S. 872 (1952) (cited hereinafter as Final Report of Special Master).

43. *Id.* at 39–40. This he believed was also the effect of the *Borax* decision with regard to "ordinary high-water mark" (*see* 6413A(*c*)).

sentative of the technical concept of low water than is either higher low or lower low when considered alone. Or viewed in another way, a low water at San Francisco occurs every 12 hours (taking into account all the low waters), whereas a higher low water or a lower low water occurs only every 24 hours. It would therefore be technically correct to regard the mean of the two low waters as the "ordinary" or "usual" low water as distinguished from the higher low or lower low which could relatively be classed as the "extraordinary" or "unusual" low water. It is for this reason that the Survey considers the word "ordinary" when applied to tides as the equivalent of the word "mean." [44] The determination of "ordinary low water" at any place thus becomes a matter of determining "mean low water," which is defined as "the average height of the low waters at that place over a period of 19 years." [45]

There is one observation that the Special Master made in his recommendation on "ordinary low-water mark," which leaves the final decision somewhat uncertain. He says the testimony established that "to a man skilled in the art, the lay expression 'ordinary low water' would be taken to mean the same thing as the more exact technical term 'mean low water,' " but, he says, nothing has been brought to his attention to indicate that the Supreme Court, when it used the expression "ordinary low water," "purposely intended to choose the mean of all the low waters as distinguished from the mean of the lower low waters." In other words, in his view the question has not been judicially determined. He therefore based his recommendation on the basis of property rights.[46]

As to California's contention that the mean of the lower low waters is used on the Bureau's nautical charts along the Pacific coast, the Special Master noted that the reason for such use is that it is safer and therefore more serviceable to the navigator, citing the Director's letter of February 8, 1952, to the Solicitor General (*see* Appendix E). He recognized, however, that it would be more convenient for navigators, in approaching the coast and interested in locating the outer boundary of the marginal belt, to use the chart datum. But, he said, there was no evidence that the State Department had made any choice in our

44. SCHUREMAN (1949), *op. cit. supra* note 2, at 26.

45. MARMER (1951), *op. cit. supra* note 10, at 104.

46. Final Report of Special Master, *supra* note 42, at 43. This observation of the Special Master does not seem to take into account the fact that the word "ordinary" in connection with tidal boundaries has been used in judicial decisions from a very early date, both in England and in this country, and that the Supreme Court itself gave the first precise interpretation of the word "ordinary" with respect to "high-water mark" (*see* 6411 and 6413). A presumption would thus be raised in favor of the Court being cognizant of its applicability to "low-water mark," and that the question on which the Court sought recommendation from the Special Master concerned the actual method of locating the "mean low-water mark" along the California coast, particularly with reference to the date of establishment and to natural and artificial changes.

international relations.[47] In his view, the choice of mean lower low water is a matter of international policy for the political agencies of government to determine, rather than for judicial determination, as is the question whether moving the international domain farther seaward would best serve the national interest.[48]

6422. *Changes in Low-Water Line*

Coupled with the primary question of the meaning of ordinary low-water mark was the secondary question of the date of establishment of the low-water mark. California entered the Union in 1850. She then became vested with ownership of its tidelands. The question that presented itself was what effect should be given to changes in the low-water line, both natural and artificial, that have occurred since that date. This was necessary to be determined before the boundary could be established by actual survey.

A. FROM NATURAL CAUSES

It is an established principle of riparian law that where the sea or an arm thereof is a boundary, the doctrine of accretion and erosion is normally applicable; that is, gradual and imperceptible changes, brought about by accretion or reliction (a deposit of alluvial soil or recession of the water) or by erosion or submergence (a washing away of the soil or an encroachment of the water), operate to change the boundary of the riparian land.[49] In California, as in almost all states, the boundary of upland bordering on the sea is the ordinary high-water mark. In a few states, however, the general rule has been modified and the ownership of upland along the shore of the sea extends to low-water mark, but, where this is the case, the general doctrine as to natural accretion and erosion applies and the boundary shifts with changes in the low-water mark resulting from such natural causes.[50]

47. Because of the probable scale of the charts used, there would be little difference from a practical point of view whether the outer boundary of the marginal belt was measured from the mean low-water line or from the mean lower-low-water line. Assuming a vertical difference of 2 feet between the planes, a 1 percent slope, and a chart scale of 1:200,000 (the approximate scale of the present General Charts along the Pacific coast), the horizontal distance between the mean low-water line and the mean lower-low-water line would be about 1/80 of an inch at the scale of the chart, a hardly significant amount. This, of course, should not be confused with the ground intersection of these two planes with the shore, which was the problem before the Special Master.

48. *Id.* at 41–43. On the question of moving the international domain farther seaward in the interest of national security, *see* 54 at note 30 *et seq.*

49. *Oklahoma* v. *Texas,* 268 U.S. 252, 256 (1925). This has been held to be applicable in California. *Strand Improvement Co.* v. *Long Beach,* 161 Pac. 975, 977–978 (1916).

50. *Burke* v. *Commonwealth,* 186 N. E. 277, 279 (1933) (Mass.).

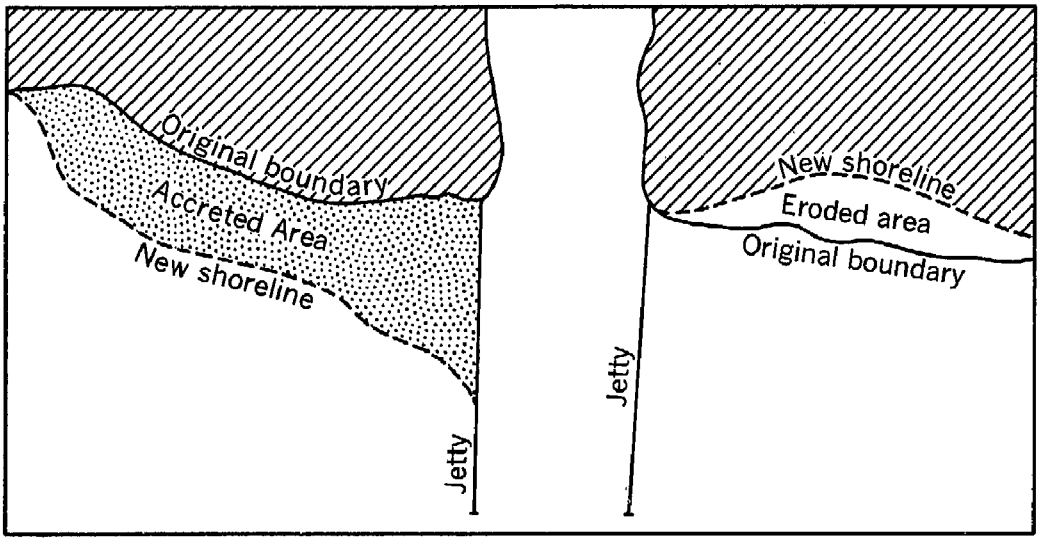

FIGURE 21.—Natural accretion or erosion resulting from artificial structures, such as jetties, shifts the riparian boundary according to federal law, but retains its original location according to California law.

Since the line to be determined in the *California* case was the line between state-owned tideland and the marginal sea, the State of California was, in this respect, a riparian owner of land abutting on the ocean. Hence, like other riparian boundaries, this line (ordinary low-water mark) would shift with those changes in the shoreline that are gradual and imperceptible and are the result of the natural processes of accretion and erosion.

The parties were in agreement on this general doctrine of riparian law and considered it applicable to the situation in California.[51]

(*a*) *Natural Causes Induced by Artificial Structures.*—A special problem is presented where artificial structures, such as jetties or breakwaters, have been erected into the marginal sea, and, thereafter, by gradual and imperceptible processes, natural accretions to the shoreline occur as a result of the artificial structures. As applied to California, two rules exist—the federal rule and the California rule. (*See* fig. 21.)

The rule applied in the Federal courts is to treat the changes in the shoreline in the same manner as those resulting from natural accretion or erosion and to

51. As a practical matter, many difficulties would arise if the line to be established were of some early date. Unless some cartographic determination existed showing the location of the mean low-water line as of the date in question that could be coordinated with present physical features, there would be no possible way of reestablishing such line on the ground. Many of the early surveys of the Bureau along the California coast, particularly in the more exposed areas, fail to show a low-water line.

hold that the adjacent riparian owner gains or loses from the change.[52] In California, however, a different rule is applied, with accretions so added being regarded as artificial in character, and, as against the state or its grantee, the riparian owner is not entitled to claim such accretions.[53] California's position in the present controversy happened to coincide with the federal rule, so the parties were in agreement that such accretions belong to California rather than to the United States, leaving no issue for the Special Master to resolve on this question.[54]

B. FROM ARTIFICIAL CAUSES

There remained for consideration the question as to what modification should be made in the low-water line as a result of changes due to artificial causes. It is a rule of riparian boundary law that changes brought about by artificial causes, such as the deliberate filling or dredging of an area, have no effect on the title to the area so filled or dredged.[55] The United States sought to apply this rule to the California coast. It contended that construction of such fills cannot of itself operate to transfer to the state title to the underlying lands; therefore, full dominion and power over the lands, minerals, and other things underlying such filled areas remained in the United States, and the boundary would have to be determined as of the date of the artificial construction (citing cases in the courts of California, New Jersey, New York, and Iowa).[56] California, on the other hand, contended that the rationale of the *California* decision, namely, that control of the marginal sea was essential to the fulfillment of the Federal Government's responsibilities in matters of national external sovereignty, leaves no doubt that what was contemplated were responsibilities in the marginal sea as it now exists, not in the area that might have existed in 1850 or at any other time since then.

52. *County of St. Clair* v. *Lovingston*, 23 Wall. 46, 66–69 (90 U.S., 1874); *Jackson* v. *United States*, 56 F. 2d 340, 342–343 (1932).

53. *Carpenter* v. *City of Santa Monica*, 147 P. 2d 964, 972–975 (1944).

54. Final Report of Special Master, *supra* note 42, at 44. The position of the United States on this was that since the case was in a Federal court and involved the ascertainment of a right asserted under federal law, it presented a federal question under authority of *Borax Consolidated, Ltd.* v. *Los Angeles*, 296 U.S. 10, 22 (1935). In addition, it believed that in the interest of uniformity one single rule should apply to all the coastal states even though in this instance the special rule of a particular state happens to be favorable to the United States. Brief for the United States before the Special Master, *supra* note 4, at 162–163.

55. This appears to be the rule in California. See *Patton* v. *City of Wilmington*, 147 Pac. 141, 142 (1915).

56. As to the improvements which may have been made on these filled areas, the United States took the position that it does not claim title to them nor did it propose to take over any such improvements. Final Report of Special Master, *supra* note 42, at 44–45. In the Government's view, two relationships were involved—the internal relation between the states and the Federal Government, and the relation between the Federal Government and foreign nations.

The Special Master accepted the position of California as the legally sound one. In his view, "the contention that the boundaries of the marginal belt are at one place as between the United States and an individual State and at another, different place as between the United States and a foreign nation, is unsound on the general principle underlying the judgments in the principal case [the *California* case] and the *Texas* and *Louisiana* cases."

This decision of the Master was influenced by the fact that in the construction of future artificial accretions the United States will have full control because of its control over navigable waters. This would give opportunity for appropriate negotiations and agreements between the state and the United States at the time the artificial change is approved.[57]

Therefore, on the whole question of tidal boundaries, the Special Master recommended that the ordinary low-water mark *as it exists at the time of the survey* be accepted as the boundary between federal and state jurisdiction, regardless of whether changes have resulted from natural accretion, from natural accretion induced by artificial structures, or from artificial accretion.[58]

57. *Id.* at 45–47. Except for the fact that a negotiated agreement would be reached, the same dual status, which the Special Master believed to be an unsound one, would result in the future where accretions were contemplated. But, in reality, it is not the boundaries of the marginal belt that are at two different places under the Government's view. There can be only one inshore boundary of the marginal belt—at the present low-water mark. That is one aspect of the *California* decision. The other is represented by the concept of property rights predicated upon the Court's holding that "California is not the owner of the three-mile marginal belt along its coast" (332 U.S. 19, 38). If it is not now the owner, then it never was the owner and that status would revert to the year 1850, when California became a state, unless the Supreme Court chose to set the cut-off date as of the date of its decision. In *United States* v. *Louisiana,* 339 U.S. 699 (1950), the Court set the date of accounting by Louisiana to the Government as of June 5, 1950, the date of its decision. 340 U.S. 899 (1950).

58. Final Report of Special Master, *supra* note 42, at 4.

CHAPTER 7

Overall Findings of the Special Master

71. SUMMARY OF FINDINGS

Insofar as the coast of California is concerned, the Special Master's answers to the three questions propounded by the Supreme Court, in its order of December 3, 1951 (*see* 2111), can be summarized as follows:

(1) The channels and other water areas between the California mainland and the offshore islands, within the area referred to as the "overall unit area" (*see* Chap. 5, note 1), are not inland waters. He found them to lie seaward of the baseline of the marginal belt of territorial waters, which should be measured in each instance along the shore of the adjoining mainland or island, each island having its own marginal belt.

(2) No one of the seven particular coastal segments recommended for immediate adjudication (*see* 2111) is a bay constituting inland waters, historically or otherwise.

(3) The ordinary low-water mark on the coast of California is the intersection with the shoreline (as it exists at the time of survey and without regard to natural or artificial changes since 1850) of the plane of the mean of all low waters, to be established, subject to the approval of the Court, by the United States Coast and Geodetic Survey from observations made over a period of 18.6 years (*see* 6421 and 6422).[1]

Additionally, the Special Master found:

(*a*) The extreme seaward limit of a bay is a line 10 nautical miles long (*see* 43 and 441). Whether a bay constitutes inland waters or not is to be determined by an application of the semicircular rule (*see* 421, 441, and 4411).

1. The Special Master noted that in recommending these answers, he had assumed that what was wanted was a judicial determination of applicable principles of law to serve as guides in the physical location of the line of demarcation between the state-owned tidelands and the federally-owned submerged lands, not the determination of what might or might not be a wise policy for the nation to adopt within this field for which the political, not the judicial, agencies of government are responsible. He found no validity in the argument that the Court in referring the questions to the Special Master carried the implication that he was to consider what might be a wise policy for the United States to follow within the limits of international law. In his view, the Court had already decided that the location of the exact coastal line is a justiciable matter. Report of Special Master 7, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952.

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(*b*) In front of harbors the outer limit of inland waters is to embrace an anchorage reasonably related to the physical surroundings and the service requirements of the port, and, absent contrary evidence, may be assumed to be the line of the outermost permanent harborworks (*see* 46).

(*c*) Where rivers empty into the sea, the seaward limit of inland waters is a line following the general direction of the coast drawn across the mouth of the river, whatever its width. If the river flows into an estuary, the rules applicable to bays apply to the estuary (*see* 47).

(*d*) The method proposed by the Government for determining the termini at headlands of tributary waterways, for pronounced or unpronounced headlands, should be adopted (*see* 48).

(*e*) The sandspit at Newport Beach is not the southeastern headland of San Pedro Bay either on geographic or historic grounds (*see* 4542).

711. Exceptions by the United States

The final report of the Special Master was submitted to the Supreme Court on October 14, 1952, and ordered filed on November 10, 1952 (344 U.S. 872), with instructions that exceptions, if any, to the report might be filed by the parties. Both the United States and California filed exceptions to certain of the recommendations and findings.

The primary exceptions raised by the United States related to the recommendations regarding harbors (*see* 71(*b*)), insofar as areas not protected, or partially enclosed, by natural formations be held inland waters as a part of a port or harbor; to the recommendation that the ordinary low-water mark be determined as it exists at the time of the survey (*see* 71(3)), insofar as it makes no exception for artificial changes made after California entered the Union; and to the failure to recommend that manmade changes in the shoreline should not affect rights as between the United States and California.[2]

Other exceptions, relating to boundary problems, were to the finding that the decree of the Court that the United States has paramount rights seaward of "ordinary low-water mark" was not a judicial determination that the area referred to is bounded by a line marking the mean of all low tides; and to the finding that the construction of artificial harborworks increases the area of inland waters outside of the naturally protected areas of ports and harbors, and that anchorages used in connection with such areas are *per se* inland water.

2. Exceptions of the United States to the Report of the Special Master Filed Nov. 10, 1952, 1–2, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952.

712. Exceptions by California

The primary exceptions raised by California, insofar as boundary questions were concerned, related to the Special Master's recommendations that the channels and other water areas between the mainland and the offshore islands are not inland waters; that no one of the seven coastal segments under consideration is a bay constituting inland waters on geographic or historic grounds; and that the "ordinary low-water mark" is the intersection with the shoreline of the plane of the "mean of all the low waters," rather than the plane of the mean of only the lower low waters.[3]

72. PRESENT STATUS OF SPECIAL MASTER'S REPORT

After the Supreme Court received the exceptions submitted by the United States and by California, the Court took no further action in the case. While the passage of the Submerged Lands Act in 1953 (Public Law 31) rendered moot the question of establishing the "ordinary low-water mark" as the federal-state boundary under the *California* case, the principles developed by the Special Master are equally applicable to the boundary problems raised by the act. The effect of Public Law 31, insofar as the boundary provisions are concerned, is merely to transplant the federal-state boundary from the ordinary low-water line and the seaward limits of inland waters to the seaward boundaries of the states. But the baseline from which these boundaries are to be measured is the same as the federal-state boundary under the *California, Louisiana,* and *Texas* cases.

Although Public Law 31 does not incorporate the recommendations of the Special Master, the boundary problems are similar to those dealt with in the *California* case (*see* Part 2, 1611). And while it is true that a boundary determination may be arrived at by agreement, even this method requires the establishment of certain criteria in order that a uniform and consistent approach may be achieved in the treatment of the entire coastline of the United States under the provisions of Public Law 31. The Special Master's report, and its applicability to specific segments of our coastline, represents the most exhaustive study made thus far looking toward a judicial determination of the inland waters and associated boundary problems.

3. Exceptions to Report of Special Master Dated Oct. 14, 1952, 6–10, United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1952.

73. APPLICATION TO LOUISIANA COAST

As in the *California* case, the decree entered by the Court in *United States* v. *Louisiana,* 340 U.S. 899 (1950), was couched in the same general terms and described the lands involved as "lying seaward of the ordinary low-water mark on the coast of Louisiana, and outside of the inland waters." But, whereas, in the former, stipulations were entered into between California and the Federal Government as to the exclusion of certain areas from the operative effect of the Supreme Court decision (*see* 211), and other controversial areas were referred to a Special Master (*see* 2111), no such stipulations were entered into in the *Louisiana* case. Instead, the Secretary of the Interior promulgated tentative arrangements, subject to future congressional action, for the continuance of operations under state leases seaward of the low-water line and outside the limits of inland waters.[4] In order that the area subject to federal jurisdiction be known, particularly for some of the complex areas along the Louisiana coast, a jurisdictional line was adopted seaward of which the submerged lands were under the jurisdiction of the Federal Government.[5] Because the line was promulgated during the tenure of Secretary of the Interior Chapman it came to be known as the "Chapman Line."

731. The Chapman Line—Its Technical Basis

The Chapman line was intended to represent graphically the ordinary low-water mark and the seaward limits of inland waters along the Louisiana coast.[6] Its description and plotting on the charts represented an effort to apply, as accurately as possible, the principles of delimitation advocated by the United States in the proceedings before the Special Master.[7] It was not a definitive line because the charts were based for the most part on 1933 surveys. It was

4. 15 Fed. Reg. 8835 (1950). Although the arrangements applied to the submerged lands off Texas and Louisiana, most of the producing wells were off the Louisiana coast.

5. Louisiana officials were advised of this and copies of Coast Survey charts 1115 and 1116 showing the line were furnished the Attorney General of Louisiana by the Solicitor General of the United States.

6. Figure 22 shows the line in the Atchafalaya Bay area, and figure 23 for the delta area, two of the more complex coastal areas of Louisiana.

7. These principles had been developed in international law or had been promulgated by the United States in its international relations. They involved the semicircular rule (*see* 421) and the 10-mile rule (*see* 43) for bays, and the rule for straits leading to inland waters. The latter situation did not arise in the *California* case. Along the Louisiana coast all islands are so situated in relation to the mainland and to each other as to enclose all waters landward of the islands as inland waters with the result that the islands constitute large segments of the coastline. *Mahler* v. *Norwich and New York Transportation Company,* 35 N.Y. 352 (1866). Also *see* Brief for the United States in Support of Motion for Judgment on Amended Complaint 177, United States v. Louisiana et al., Sup. Ct., No. 11, Original, Oct. Term, 1957. The openings between the numerous islands along the Louisiana coast constitute channels leading to inland waters and the rule as to bays becomes applicable (*see* Part 3, 2218(*c*)).

understood at the time that in general the line was being promulgated as the most landward line that the Government would claim for the federal-state boundary, but subject to modification, landward or seaward, in areas where the lack of up-to-date surveys prevented an accurate map delineation, and subject also to interpretive criteria to be developed in the *California* case.[8]

The delta area and the Atchafalaya Bay area were two segments of the coast where changes were suspected. The situation in Atchafalaya Bay was complicated by the existence of a shell reef in the entrance. For about 8 nautical miles to the northwestward of Point au Fer at the eastern end of the bay, the existing surveys showed the reef as awash to bare one-half to 1 foot at low water. For the rest of the reef (extending for about 14 miles to the northwestward) the surveys showed the reef as mostly submerged with 1 foot or less of water at low water, but with isolated spots awash or bare at low water. Without knowing the exact condition of the reef, in relation to both high and low water, at the time the Chapman line was drawn, the boundary line in the bay was drawn without regard to the existence of the reef (*see* Part 2, 1723 note 163). (*See* fig. 22.)

In the vicinity of Breton Sound (*see* fig. 23), the line was drawn from Bird Island near the delta to Breton Island, on the assumption that the water opening between was the true entrance to the sound. The northern part of the delta from Bird Island westward to Quarantine Bay forms the southern boundary of Breton Sound. The axis of the Chandeleur Islands merges smoothly into this southern boundary to make the two a geographic entity and to form a natural boundary for Breton and Chandeleur Sounds, thus making the line Bird Island—Breton Island the logical entrance to Breton Sound.[9]

7311. *Modifications Resulting From Special Master's Findings*

As noted above (*see* 731), the Chapman line is subject to modifications resulting from subsequent changes in the low-water line and in other physical

8. This is based on personal knowledge of the author who assisted the Department of Justice throughout the pendency of the boundary phases of the submerged lands cases. The Chapman line was first devised as a written description prepared by the Department of Justice with technical assistance from the State Department, the Bureau of Land Management, and the Coast and Geodetic Survey. Later, the line was drawn in the Survey on the 1200-series charts 1267, 1270, 1272–1279, at scale 1: 80,000 and from these as a base the line was transferred to the 1100-series charts 1115 and 1116, at scale 1: 450,000 (approximate). The line was not described by "metes and bounds" but rather as "along the ordinary low-water mark." This general type of description is usually considered sufficient for waterfront boundaries determined by tidal definition where the boundary shifts with changes in the low-water line. *Cf. New Jersey* v. *Delaware*, 295 U.S. 694, 696 (1935).

9. This is also borne out by the hydrographic survey (Register No. H–1000 (1869)), which is designated as "Hydrography of Southeastern Part of Isle Au Breton Sound" and extends to the line Bird Island—Breton Island. The survey to the south of this line (Register No. H–999), made in the same year, is designated as "Isle Au Breton Bay," indicating a differentiation from the waters of the sound.

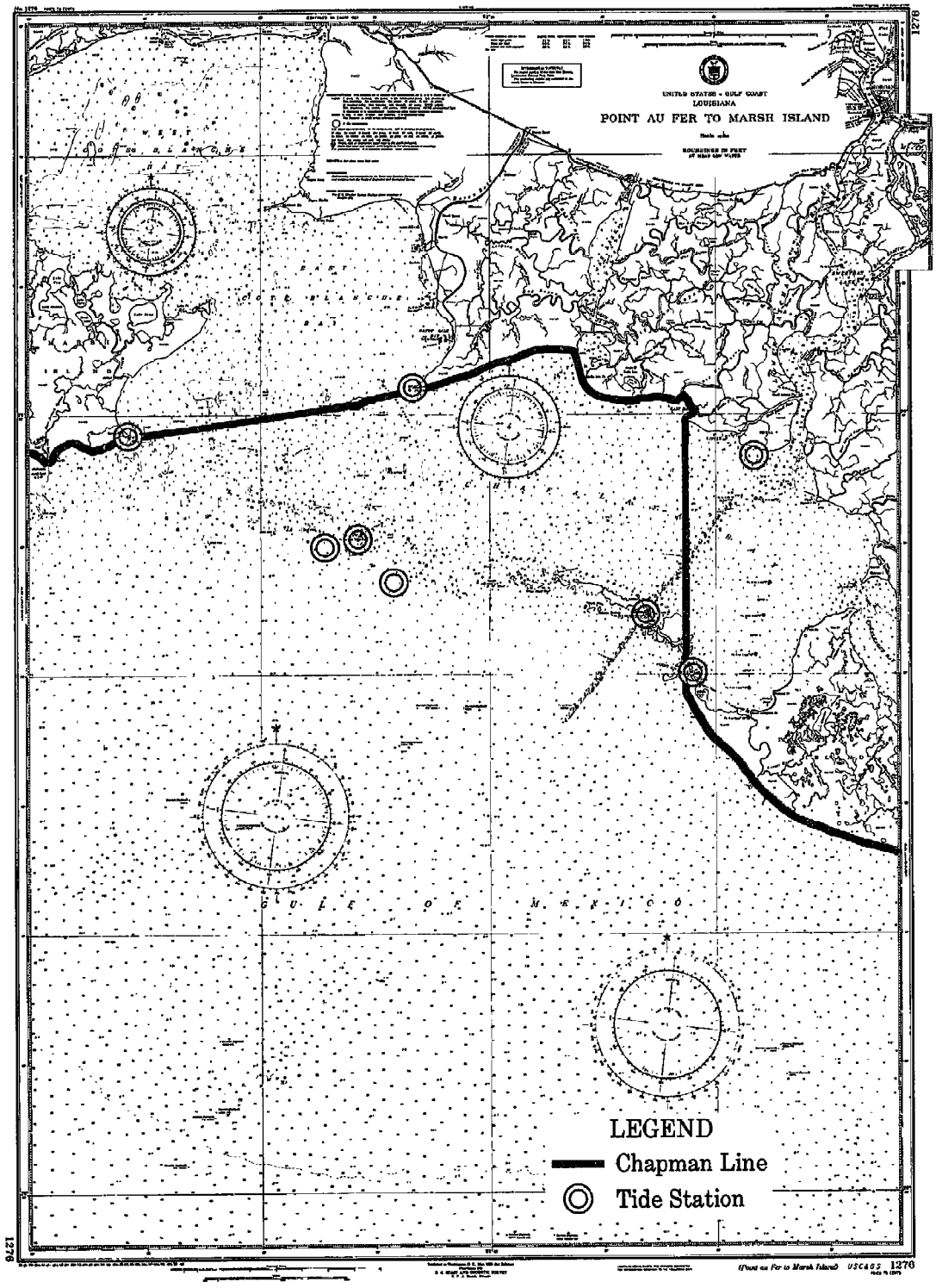

FIGURE 22.—The Chapman line in Atchafalaya Bay. The tide stations were established as part of the low-water line survey of the Louisiana coast (*see* Part 2, 1723).

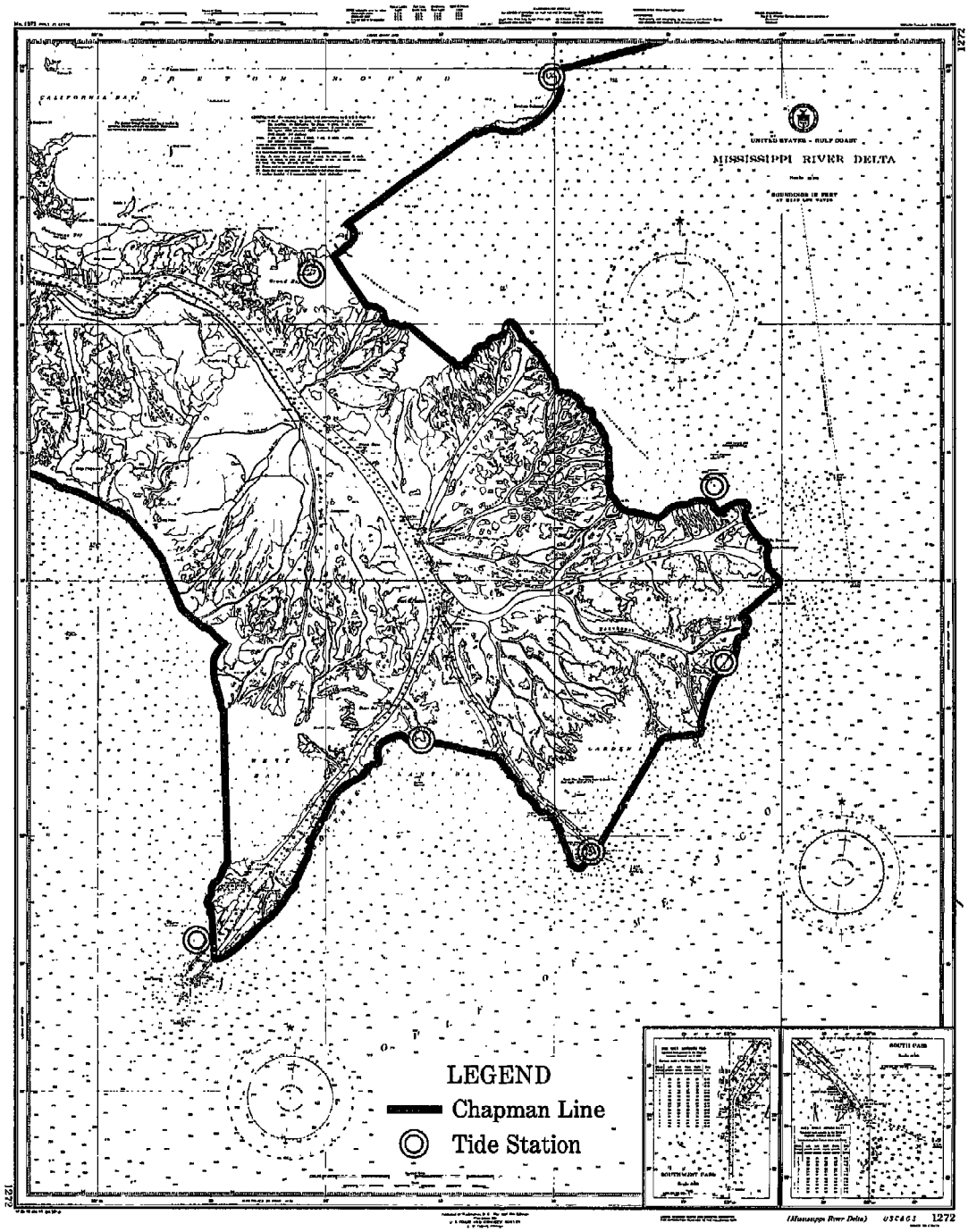

FIGURE 23.—The Chapman line in the Mississippi delta area. The tide stations (one station is just off the western limits of the chart) were established as part of the low-water line survey of the Louisiana coast (*see* Part 2, 1722).

features.[10] It is also subject to alteration if the Special Master's recommendations are applied. As previously indicated (*see* 711), the Master did not accept the Government's view that changes in the shoreline resulting from the erection of harborworks or the extension of artificially filled areas into the open sea did not alter the location of the boundary line. The Special Master concluded that in either case the boundary should be drawn on the seaward side of such structures.[11]

74. APPLICATION TO TEXAS COAST

The geography of the Texas coast was such that no problems arose regarding the delineation of the seaward limits of inland waters, at least insofar as defining a tentative jurisdictional line was concerned. Therefore, no line comparable to the Chapman line was drawn for Texas. Where applicable, the principles recommended by the Special Master for ascertaining the seaward limits of inland waters can be readily adapted to the Texas coast, in addition to the rule for straits leading to inland waters, which did not arise along the California coast (*see* note 7 *supra*).[12]

10. A low-water line, photogrammetric survey of the Louisiana coast was completed in October 1961 as a cooperative undertaking between the State of Louisiana, the Bureau of Land Management, and the Coast and Geodetic Survey (*see* Part 2, 17).

11. Southwest Pass (*see* fig. 23) is one of the areas where modifications in the Chapman line would be required as a result of the Master's recommendations. The line as drawn was based on the natural land formation (as near as could be determined) disregarding the jetties.

12. As along the Louisiana coast all the islands along the Texas coast are so situated in relation to the mainland as to enclose all waters landward of the islands as inland waters (*see* Coast Survey chart 1117). All the openings leading to such waterways are less than 10 nautical miles across and would be treated the same as openings to bays (*see* Part 3, 2218 (*b*) and (*c*)).

CHAPTER 1

Submerged Lands Act (Public Law 31)

11. GENERAL STATEMENT

On May 22, 1953, H.R. 4198 of the 83d Congress, 1st session, was signed into law, thus marking the culmination of earlier unsuccessful attempts at legislation dealing with state and federal rights in submerged lands. The resolution, which became Public Law 31 (identified as the Submerged Lands Act),[1] confirms and establishes the titles of the states to lands beneath navigable waters within their boundaries. The general scope of the act is described in its title as follows:

> To confirm and establish the titles of the States to lands beneath navigable waters within State boundaries and to the natural resources within such lands and waters, to provide for the use and control of said lands and resources, and to confirm the jurisdiction and control of the United States over the natural resources of the seabed of the Continental Shelf seaward of State boundaries. (*See* Appendix G.)

Although attempts to enact such legislation date back to 1937, passage of the Submerged Lands Act was actually triggered by the Supreme Court's historic decision in *United States* v. *California,* 332 U.S. 19 (1947), and its later decisions in *United States* v. *Louisiana,* 339 U.S. 699 (1950), and *United States* v. *Texas,* 339 U.S. 707 (1950), in which the Court enunciated the doctrine of federal, rather than state, paramount rights in the submerged lands of the open sea.

The effect of the act is thus to change the law which the Court laid down in the above cases, with respect to the submerged lands beyond the inland waters of the states,[2] and to give statutory confirmation to the jurisdiction and

1. 67 Stat. 29 (1953). The resolution is in essence the same as H. J. Res. 225, 79th Cong., 2d sess. (1946) and S. J. Res. 20, 82d Cong., 2d sess. (1952), both of which were vetoed, neither veto being overridden by Congress. In this publication, the term "Public Law 31" is used interchangeably with "Submerged Lands Act."

2. The committee, in reporting the resolution, stated: "The purpose of this legislation is to write the law for the future as the Supreme Court believed it to be in the past." S. Rept. 133, 83d Cong., 1st sess. 8 (1953).

control of the United States over the resources of the subsoil and seabed of the continental shelf (seaward of the state boundaries) as asserted under the Presidential Proclamation of September 28, 1945 (*see* 2221).[3] A necessary result of the act is to transplant the boundary between federal and state jurisdiction from the "ordinary low-water mark and the seaward limits of inland waters" to the "seaward boundaries of the states." The former, however, is still the baseline (*see* Part 1, 33) for measuring the seaward boundaries and therefore its essentiality of determination is not diminished as a result of passage of the act.

The act confers rights in three categories of cases: (1) lands under inland navigable waters, including the Great Lakes;[4] (2) tidelands;[5] and (3) lands

3. The Submerged Lands Act, however, does not set up the machinery for administering this area. This is provided for in Public Law 212, 83d Cong., 1st sess., known as the "Outer Continental Shelf Lands Act" (*see* Chap. 2).

4. Because of the existence of an international boundary in four of the Great Lakes (Ontario, Erie, Huron, and Superior), there was some doubt whether, under the doctrine of national external sovereignty, lands underlying these waters would fall within federal paramount rights. If such waters are inland, the rule of *Pollard* v. *Hagan*, 3 How. 212 (44 U.S., 1845), would apply and paramount rights would already be in the states (*see* Part 1, 111); if they are open sea, the rule of *United States* v. *California, supra,* could apply and the land would then be federal. To eliminate any uncertainty, a provision confirming and establishing titles in the states was included. S. Rept. 133, *supra* note 2, at 7, 60–61. In the Senate debate on the measure, the case of *Illinois Central Railroad Co.* v. *Illinois,* 146 U.S. 387 (1892), involving submerged lands under Lake Michigan, was cited to uphold both theories. The Supreme Court upheld the right of the State of Illinois to repeal a prior grant of submerged lands in Lake Michigan to a railroad on the ground that the state held such lands in trust for the people and could not abdicate such trust by making an irrevocable grant. This, the Court held to be the settled law in this country regarding sovereignty over lands covered by tidewaters. The states may use or dispose of any portion of such lands "when that can be done without substantial impairment of the interest of the public in the waters" (citing *Pollard* v. *Hagan, supra,* and *Weber* v. *Harbor Commissioners,* 18 Wall. 57 (85 U.S., 1873). In referring to the Great Lakes, the Court said: "These lakes possess all the general characteristics of open seas, except in the freshness of their waters, and in the absence of the ebb and flow of the tide. In other respects they are inland seas, and there is no reason or principle for the assertion of dominion and sovereignty over and ownership by the State of lands covered by tide waters that is not equally applicable to its ownership of and dominion and sovereignty over lands covered by the fresh waters of these lakes . . . We hold, therefore, that the same doctrine as to the dominion and sovereignty over and ownership of lands under the navigable waters of the Great Lakes applies, which obtains at the common law as to the dominion and sovereignty over and ownership of lands under tidewaters on the borders of the sea." In *United States* v. *Rodgers,* 150 U.S. 249 (1893), the Supreme Court, in interpreting the term "high seas" as used in 4 Stat. 121 (1825), said: "If there were no seas other than the ocean, the term 'high seas' would be limited to the open, unenclosed waters of the ocean. But as there are other seas besides the ocean, there must be high seas other than those of the ocean . . . The term 'high seas' does not . . . indicate any separate and distinct body of water; but only the open waters of the sea or ocean, as distinguished from ports and havens and waters within narrow headlands on the coast." *Id.* at 254. As applied to the Great Lakes, the Court said: "The Great Lakes possess every essential characteristic of seas. They are of large extent in length and breadth; they are navigable the whole distance in either direction by the largest vessels known to commerce; objects are not distinguishable from the opposite shores; they separate, in many instances, States, and in some instances constitute the boundary between independent nations; and their waters, after passing long distances, debouch into the ocean." *Id.* at 256.

5. Neither the tidelands (lands between high- and low-water marks) nor the submerged lands under inland navigable waters were affected by the decisions in the submerged lands cases (*see* Part 1, 111), nevertheless, proponents of the Submerged Lands Act were apprehensive regarding the Government's use of the term "qualified" in the *California* case, *supra* at 30, when referring to state ownership of lands under inland navigable waters, and included this provision as a safeguard against any future Government claims to these lands. S. Rept. 133, *supra* note 2, at 7. *See also* Clark, *National Sovereignty and Dominion Over Lands Underlying the Ocean,* 27 TEXAS LAW REVIEW 143 n.15 (1948) for a discussion of this aspect of the *California* decision.

under the open sea. Since the federal-state boundary under the act is seaward of the ordinary low-water mark and outside the inland waters of the state, the boundary problems likely to arise will be in this third category.

As an aftermath of the submerged lands cases, the Submerged Lands Act raises many boundary problems not unlike those considered by the Special Master in the *California* case, *supra* (*see* Part 1, 2111). A discussion of the pertinent provisions of the act, and the impact of the Master's recommendations on the boundary problems raised, are therefore appropriate in focusing attention on the legal-technical problems that still remain to be resolved before the seaward boundaries of the states and in consequence the boundary between federal and state jurisdiction in the area of the continental shelf can be ascertained with a measure of consistency, as well as with engineering and cartographic certainty.

12. PERTINENT PROVISIONS OF THE ACT

The Submerged Lands Act is divided into two titles: Title I deals with definitions of terms used, and Title II with lands beneath navigable waters within state boundaries.

In the following paragraphs, the pertinent provisions of the act are discussed insofar as they might relate to the activities of the Coast Survey in the present or in the future. They deal primarily with definitions of terms relating to boundaries and with boundaries proper and are based on the language of the act, the hearings before the Senate committee on S.J. Res. 13, the published report of the committee, and the debate on the Senate floor.[6]

121. Lands Beneath Navigable Waters

Section 2(a) defines the term "lands beneath navigable waters" as including lands within three different categories, as follows:

"(1) all lands within the boundaries of each of the respective States which are covered by nontidal waters that were navigable under the laws of the United States at the time such State became a member of the Union, or acquired sovereignty over such lands and waters thereafter, up to the ordinary high water mark as heretofore or hereafter modified by accretion, erosion, and reliction."

6. The Senate proceedings only are considered because they were the more extensive. Although the law as approved is H.R. 4198, actually everything but the title was stricken and S. J. Res. 13, 83d Cong., 1st sess. (1953) substituted. The latter was the measure passed by the Senate and the one that finally became law.

In explanation of this provision, it should be remembered that the basic consideration of the act is that the submerged lands must be under the *navigable* waters within the state boundaries. This applies to both inland waters and waters on the open coast. The section apparently applies to the inland waters of a state. Its purpose is to include not only those inland waters that are now navigable, but also those that were navigable at the time the state became a member of the Union or at any time thereafter that the state acquired sovereignty over them. The term "nontidal" is used in the act to separate inland water areas from areas on the open sea.[7]

"(2) all lands permanently or periodically covered by tidal waters up to but not above the line of mean high tide and seaward to a line three geographical miles distant from the coast line of each such State and to the boundary line of each such State where in any case such boundary as it existed at the time such State became a member of the Union, or as heretofore approved by Congress, extends seaward (or into the Gulf of Mexico) beyond three geographical miles."

This paragraph refers to the submerged lands under navigable waters beyond the inland waters of the states and includes the tidelands. It establishes a distance of 3 geographic miles from the coastline (coastline is subsequently defined) as the general offshore limit of the submerged lands that fall within the purview of the act. But it also provides that where the boundary of a state at the time it entered the Union, or as heretofore approved by Congress (that is, prior to the passage of the act), extended seaward beyond 3 geographic miles then the submerged lands to that distance fall within the operation of the act.[8]

"(3) all filled in, made, or reclaimed lands which formerly were lands beneath navigable waters, as hereinabove defined."

This paragraph extends the act to all lands, whether bordering on inland waters or on the open sea, that formerly were under navigable waters as defined in (1) and (2), above, and settles by statute what was left unsettled by the

7. S. Rept. 133, *supra* note 2, at 17, 18, and 99 CONG. REC. 2632 (1953). The use of this term to distinguish inland waters from waters of the open sea, or navigable from nonnavigable waters, is inappropriate inasmuch as inland waters can be tidal, and navigable waters can be nontidal. Some light on the import of this subsection may be gathered from the change in the law of navigability in the United States as enunciated by the Supreme Court in the landmark case of *The Genesee Chief* v. *Fitzhugh*, 12 How. 443 (53 U.S., 1851). Prior to this decision, the test of navigability of a body of water, at least insofar as the federal admiralty jurisdiction was concerned, was whether the tide ebbed and flowed there. In the *Genesee Chief*, the Court expressly overruled its former decisions and adopted the more liberal rule that the test of navigability was the actual navigable capacity of the waterway and not the extent of tidal influence.

8. But unilateral extension (without congressional approval) by a state of its seaward boundaries beyond 3 geographic miles would be ineffective to pass submerged lands to that distance. For example, Louisiana and Texas have extended their boundaries beyond 3 miles, but these have never been approved by Congress (*see* Part 1, 12 and 13). The paragraph must also be read together with Sec. 2(b) (*see* 122), which places a distance limitation seaward on the operative extent of the act.

Supreme Court in the submerged lands cases as to the effect on the boundary between federal and state jurisdiction where artificial changes in the low-water line had been made.[9] Although the low-water line under the act is merely a baseline for measuring the seaward boundaries, the effect of this provision is to shift the baseline seaward where fills had been made which in turn would shift seaward the state-federal boundary.[10]

Certain lands under navigable waters are excluded from operation of the act. These are defined in Section 2(f), as follows:

"(f) The term 'lands beneath navigable waters' does not include the beds of streams in lands now or heretofore constituting a part of the public lands of the United States if such streams were not meandered in connection with the public survey of such lands under the laws of the United States and if the title to the beds of such streams was lawfully patented or conveyed by the United States or any State to any person."

This section applies only to the public lands of the United States. The beds of certain streams are excluded from the act provided two conditions exist—the streams were not meandered in connection with the public survey and the title to the beds was conveyed by the United States or by a state. The existence of either of these conditions alone would not suffice to remove such lands from operation of the act.[11]

Section 3 sets forth the basic Government policy with respect to "lands beneath navigable waters within state boundaries" as defined in Section 2. The pertinent portion is Section 3(a) which is the granting clause upon which the rights of the states under the act are based. It provides as follows:

"(a) It is hereby determined and declared to be in the public interest that (1) title to and ownership of the lands beneath navigable waters within the boundaries of the respective States, and the natural resources within such lands and waters,[12] and (2) the right and power to manage, administer, lease, develop, and use the said lands and natural resources all in accordance with applicable State law be, and they are hereby, subject to the provisions hereof,

9. Normally, where the sea is a boundary only natural changes in the shoreline operate to change the boundary; artificial changes leave the boundary where it was prior to the change. The statutory declaration follows the recommendation of the Special Master in the *California* case, *supra* (*see* Part 1, 6422 B).

10. The act would seem to leave intact the normal rule regarding the effect on a boundary of natural changes resulting in accretion or erosion.

11. The theory back of this is to protect valid conveyances made prior to the passage of the act. But a patent or conveyance of land by the United States is not effective unless a survey has first been made, hence the conjunctive use of these two conditions.

12. The term "natural resources" is defined in Sec. 2(e) as including "oil, gas, and all other minerals, and fish, shrimp, oysters, clams, crabs, lobsters, sponges, kelp, and other marine animal and plant life but does not include water power, or the use of water power for the production of power."

recognized, confirmed, established, and vested in and assigned to the respective States or the persons who were on June 5, 1950, entitled thereto under the law of the respective States in which the land is located, and the respective grantees, lessees, or successors in interest thereof."

When read together with other sections of the act, this portion of Section 3 provides that the rights of ownership of lands and natural resources beneath navigable waters within the historic boundaries of the states are vested in and assigned to the states or persons holding thereunder on June 5, 1950 (the date of the Supreme Court decisions in the *Louisiana* and *Texas* cases (*see* 12)). It authorizes the states to administer, develop, and use the lands and natural resources beneath navigable waters.[13]

122. Seaward Boundaries of the States

Section 2(b) is the definitional section with respect to boundaries and provides as follows:

"(b) The term 'boundaries' includes the seaward boundaries of a State or its boundaries in the Gulf of Mexico or any of the Great Lakes as they existed at the time such State became a member of the Union, or as heretofore approved by the Congress, or as extended or confirmed pursuant to section 4 hereof but in no event shall the term 'boundaries' or the term 'lands beneath navigable waters' be interpreted as extending from the coast line more than three geographical miles into the Atlantic Ocean or the Pacific Ocean, or more than three marine leagues into the Gulf of Mexico."

This spells out the applicability of the act to the Great Lakes (*see* note 4 *supra*). It also provides for a recognition of seaward boundaries as they existed when states entered the Union, or as Congress has heretofore approved, or as Section 4 of the act extends or confirms (*see* below). However, it places a definite limitation on distance from the coastline to which the act will apply, namely: 3 geographic miles (1 marine league) for states bordering the Atlantic

13. Other portions of this section provide for the release of the right, title, and interest of the United States in the lands, improvements, and natural resources beneath navigable waters (Sec. 3(b)(1)); for the release of all claims of the United States for money or damages arising out of operations of states or persons holding thereunder on the lands beneath navigable waters (Sec. 3(b)(2)); for the United States to pay (with certain exceptions) to the respective states all moneys under its control which have been tendered to it under leases issued by the states (Sec. 3(b)(3)); and for the grants to the states being subject to the terms of state leases in force on June 5, 1950 (Sec. 3(c)). On this date, all coastal states were put on notice that the United States was possessed of paramount rights in submerged lands lying seaward of their respective coasts; the Submerged Lands Act forgives monetary claims arising out of the states' prior use of the lands so relinquished. But it does not affect claims derived since that date from lands not so relinquished.

and Pacific Oceans, and 3 marine leagues (9 nautical or geographic miles) for states bordering the Gulf of Mexico.[14]

Section 4 sets forth the basic philosophy of the act with respect to the seaward boundaries of the states and provides as follows:

> Sec. 4. SEAWARD BOUNDARIES.—The seaward boundary of each original coastal State is hereby approved and confirmed as a line three geographical miles distant from its coast line or, in the case of the Great Lakes, to the international boundary. Any State admitted subsequent to the formation of the Union which has not already done so may extend its seaward boundaries to a line three geographical miles distant from its coast line, or to the international boundaries of the United States in the Great Lakes or any other body of water traversed by such boundaries. Any claim heretofore or hereafter asserted either by constitutional provision, statute, or otherwise, indicating the intent of a State so to extend its boundaries is hereby approved and confirmed, without prejudice to its claim, if any it has, that its boundaries extend beyond that line. Nothing in this section is to be construed as questioning or in any manner prejudicing the existence of any State's seaward boundary beyond three geographical miles if it was so provided by its constitution or laws prior to or at the time such State became a member of the Union, or if it has been heretofore approved by Congress.

This section is somewhat loosely drafted as a result of changes made in committee and during the Senate debate. The word "hereafter" was struck from the section, as well as from Sections 2(a)(2) and 2(b), in order to limit the act to those extended boundaries that had been approved by Congress prior to the passage of the act. It approves and confirms the boundaries of all states at 3 geographic miles from its coastline or to the international boundaries where such are involved—in the case of the Original States it establishes the boundaries at 3 miles or to the international boundary for those bordering the Great Lakes (New York and Pennsylvania) without any further action on their part;[15] in the case of subsequently admitted states, it gives congressional authority for them to extend their boundaries, if they have not already done so, to such distances, and approves and confirms any claims indicating an intent so to extend their boundaries. These provisions are operational.

14. This limitation did not appear in the resolution as originally reported by the committee, but was added during the Senate debate in order to allay any apprehension that the act might be construed as authorizing states to extend their seaward boundaries in the future (with the consent of Congress) to distances far beyond the act's intent. 99 CONG. REC. 3549–3553, 4114–4116 (1953).

15. In the Senate debate, Senator Cordon, chairman of the subcommittee for the measure, stated that the provision was inserted in order to settle legislatively "the seaward boundaries of the Original 13 States." 99 CONG. REC. 2697, 2698 (1953). The reason for the specific spelling out of the Original States is stated in the report on the measure to be that "the Supreme Court decision in *United States* v. *California* [332 U.S. 19 (1947)], has been thought by some persons to cast doubt on whether the boundary of various eastern seaboard States extends 3 miles seaward from their coastlines." S. Rept. 133, *supra* note 2, at 11. This probably stems from the Court's finding that the Original States never owned the marginal belt (*see* Part 1, 112).

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But boundary claims of a state beyond 3 miles are not prejudiced by this section, the last sentence of which, in the nature of a saving clause, sets out the conditions under which a state's right to assert a claim for extended boundaries will be preserved; namely, if the claim is founded upon a provision in a state constitution or statute that existed "prior to or at the time such State became a member of the Union, or if it has been heretofore approved by Congress." [16]

Like Section 2(a)(2), Section 4 must also be read together with Section 2(b), which limits the operational effect of the Submerged Lands Act to 3 marine leagues for states bordering the Gulf of Mexico (*see* text at note 14 *supra*). But the act of itself does not operate to extend boundaries beyond 3 geographic miles on any coast, and neither does it prejudice the rights of a Gulf state to establish such extended boundaries.[17]

As to the method of perfecting claims for extended seaward boundaries, the act does not provide. Presumably it could be by adjudication or agreement.[18]

Although the act contains many references to seaward boundaries of the states, nowhere is it specified as to the method to be used for establishing such boundaries, cartographically or otherwise (*see* 162).[19]

123. What Is the Coast Line?

Repetitive references to "coast line" are made in Sections 2(a)(2), 2(b), and 4, and that is as far as the act goes toward determining the precise location

16. For an interpretation of this phraseology by the Supreme Court and its applicability to Gulf states, *see* 1541(*a*). There was some doubt whether the first part of this provision also applied to the Thirteen Original States or whether it was limited to subsequently admitted states only. Under colonial charters, some of the colonies claimed rather extensive sea boundaries. The Original Colonies *formed* the Union and thereby *became* members of it, and would seem to be covered. This view is supported by the colloquy during the Senate debate on the measure between Senator Cordon and others. 99 Cong. Rec. 2698 (1953). On the other hand, Senator Holland, the author of the measure, stated that this applies only to the State of Texas. 99 Cong. Rec. 3551 (1953). However, the limiting clause of Sec. 2(b) (*see* 122), which was added subsequent to these discussions, disposes of this matter and precludes any seaward extension by the Original States beyond 3 geographic miles.

17. It was stated by Senator Holland that all that is done under the measure is "to preserve in status quo the exact rights, whatever they may be, of the State of Florida and, likewise, of the State of Texas or any other State to be heard [in any forum where a State has a right to be heard] upon this question." 99 Cong. Rec. 2622 (1953).

18. It was stated by Senator Cordon: "It [determination of boundaries] is a matter for the courts to determine, or for the United States, through Congress and the legislative organizations of the several States, to reach an agreement upon. The pending bill does not seek to invade either province." 99 Cong. Rec. 2620 (1953).

19. Lateral boundaries between the states are also not provided for in the Submerged Lands Act because this is a matter of state rather than congressional concern. However, under the Outer Continental Shelf Lands Act, existing civil and criminal laws of the adjacent state are made to apply to the outer continental shelf and for this purpose the boundaries within the area are to be determined by extending the boundaries of the states "seaward to the outer margin of the outer Continental Shelf." This determination will thus depend upon the delimitation of the lateral boundaries of the respective states from shore to their seaward boundaries under the Submerged Lands Act (*see* 1622).

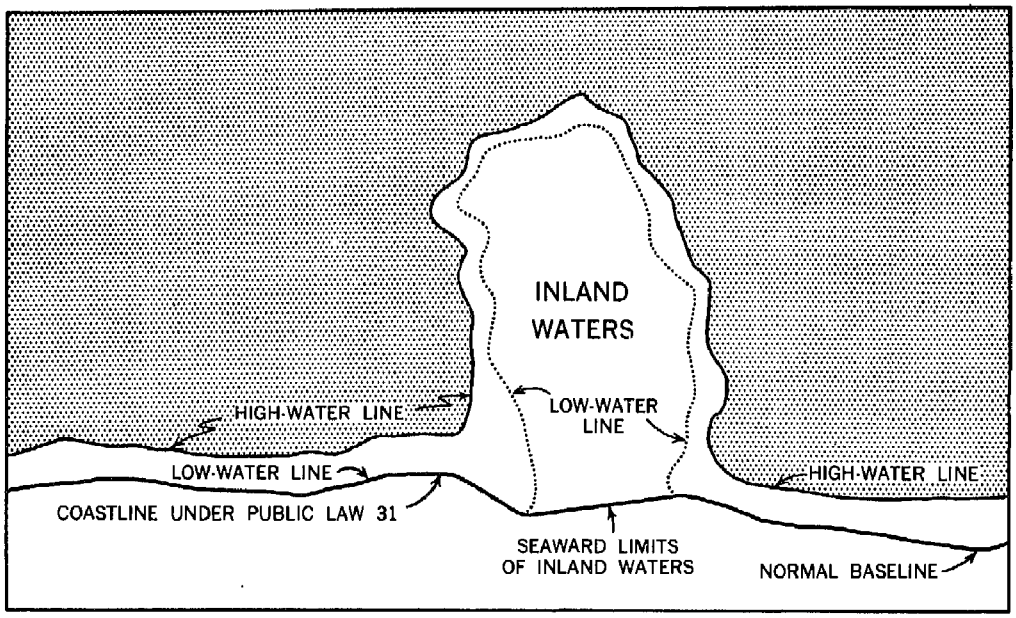

FIGURE 24.—Coast line under Public Law 31 (the Submerged Lands Act) is the line of ordinary low water and the seaward limits of inland waters. This is the normal baseline of the Geneva convention (*see* Part 3, 2211).

of the federal-state boundary. In the context of the Submerged Lands Act, the term is defined in Section 2(c), as follows:

"(c) The term 'coast line' means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters." (*See* fig. 24.)

This is a rather general definition of the term which in its application to a specific coast would raise many problems of interpretation.[20] In enacting Public Law 31, Congress declined to adopt the proposal that the definition of "coast line" be made more specific,[21] or that an actual line be laid down on a chart marking the seaward boundaries of the states.[22]

20. These will be considered in a later section of this chapter (*see* 161).

21. S. J. Res. 13, *supra* note 6, as originally introduced contained, in addition to the definition of "coast line" given in Sec. 2(c), a clause stating that inland waters were to include "all estuaries, ports, harbors, bays, channels, straits, historic bays, and sounds, and all other bodies of water which join the open sea." This language, however, was deleted in committee because of the belief that "the question of what constitutes inland waters should be left where Congress finds it." S. Rept. 133, *supra* note 2, at 18. Had this broad provision been approved it could have included every conceivable coastal indentation, and every channel and strait whether leading to inland waters or connecting two parts of the high seas, and would have, in effect, nullified the recommendations of the Special Master in the *California* case (*see* Part 1, 54).

22. The Attorney General had recommended that an actual line be drawn on a map separating the area of state jurisdiction from that of federal jurisdiction, the map to be filed with the act. *Hearings before Committee on Interior and Insular Affairs on S.J. Res. 13 and other Bills,* 83d Cong., 1st sess. 926 (1953).

In essence, the language of Section 2(c) is the same as that used by the Supreme Court in its decree defining the federal-state boundary in *United States* v. *California,* 332 U.S. 804, 805 (1947). And it was because of the generality of the language used that the Court later named a Special Master to make recommendations for defining the boundary more specifically (*see* Part 1, 2111). The applicability of these recommendations to the boundary problems raised by the Submerged Lands Act will be dealt with in succeeding sections.

13. OTHER PROVISIONS

Other provisions of Public Law 31, while not directly associated with boundary problems, are of indirect interest as shedding light on the purpose and scope of the act. These provide that the act shall not be construed as affecting or releasing any of the constitutional authority of the United States over the lands and waters falling within the purview of the act for purposes of navigation, flood control, or the production of power (Sec. 3(d)); shall not affect the laws of the states lying wholly or in part westward of the 98th meridian, relating to the ownership and control of ground and surface waters (Sec. 3(e)); shall not apply to those tracts of land, together with accretions, resources, and improvements, which the United States has acquired by the various methods of acquisition, or lawfully holds under the law of a state, or has been filled in, built up, or reclaimed by the United States for its own use, or any rights which the United States has in lands presently and actually occupied under claim of right (Sec. 5(a)); [23] and shall not apply to improvements constructed by the United States in the exercise of its navigational servitude (Sec. 5(c)).

The act provides for the retention by the United States of all its navigational servitude over the lands granted and the navigable waters for the purpose of commerce, navigation, national defense, and international affairs (Sec. 6(a)), and contains a saving clause whereby rights previously acquired under any law of the United States on lands subject to the act are not affected thereby (Sec. 8). It also provides for the protection of the rights of the United States to the natural resources of the continental shelf (outside state boundaries), which are declared to appertain to the United States, and confirms its jurisdiction and control over them (Sec. 9) (*see* 232).

The final section of the act is a separability clause and contains, in addition to the standard form of such clause, an additional clause indicating the specific

23. This section was inserted in order to give ample protection for properties of the United States which were not to be affected by the Submerged Lands Act. 99 CONG. REC. 2699 (1953).

intention of Congress to hold valid the basic granting provisions of the act, as embodied in Sections 3(a), 3(b), or 3(c), in the event some provisions included therein should be held invalid (Sec. 11).

14. SUMMARY OF PROVISIONS

In summary, the basic philosophy of the Submerged Lands Act, insofar as boundaries are concerned, is to recognize the seaward boundaries of the states as they existed at the time they came into the Union—referred to in the debate on the measure as their "historic" boundaries. Of itself, the act does not confirm any boundaries beyond 3 geographic miles from the coastline, nor does it undertake to define where those boundaries are or by what criteria they are to be established. This it leaves for future determination by the courts or by agreement. In pertinent part, the act establishes the following:

1. Relinquishes to the states the entire interest of the United States in all lands beneath navigable waters within state boundaries.

2. Defines the area in terms of state boundaries as they existed at the time a state became a member of the Union, or as heretofore approved by Congress, but not extending seaward from the coastline of any state more than 1 marine league (3 geographic miles) in the Atlantic and Pacific Oceans or more than 3 marine leagues (9 geographic miles) in the Gulf of Mexico.

3. Confirms to each of the original coastal states a seaward boundary of 3 geographic miles from its coastline, or to the international boundary in the case of the Great Lakes. For states admitted subsequent to the formation of the Union, it permits them to extend their seaward boundaries 3 geographic miles distant from their coastlines, or to the international boundaries in the Great Lakes, if they have not already done so, without questioning or in any manner prejudicing the existence of any Gulf state's seaward boundary beyond 3 geographic miles if it was so provided by its constitution or laws prior to or at the time such state became a member of the Union, or if it has been heretofore approved by Congress.

4. Reserves to the United States, for purposes of commerce, navigation, national defense, and international relations, all constitutional powers of regulation and control over the areas within which the proprietary interests of the states are recognized; and retains in the United States all rights in submerged lands lying beyond those areas to the seaward limits of the continental shelf.

5. Defines "coast line," for purposes of measuring the seaward boundaries of the states, wherever they may be, as "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters."

15. CONSIDERATION BY THE SUPREME COURT

The Submerged Lands Act has been before the Supreme Court on two occasions—the first on a challenge to its constitutionality, and the second on an interpretation of certain boundary provisions. Both were initiated in the

Supreme Court and did not come up by way of the Court's appellate jurisdiction, and both were decided on motions and briefs without the taking of testimony.[24]

151. Constitutionality of Act

On September 26, 1953, the State of Alabama filed suit in the Supreme Court, naming as defendants the States of Texas, Louisiana, Florida, and California, in their sovereign capacities, and the Secretaries of the Treasury, Navy, and Interior, and the Treasurer of the United States, in their individual capacities, to test the constitutionality of the act.[25]

The right of Congress to convey the offshore submerged lands to the bordering states was generally accepted as a valid exercise of authority vested under Article IV, section 3, clause 2, of the Constitution, which provides that "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." And this power of Congress where applicable has been held to be without limitation (*United States* v. *California, supra* note 15, at 27, citing *United States* v. *San Francisco,* 310 U.S. 16, 29–30 (1940)).

The picture began to change somewhat by the Court's emphasis in the *Texas* case on the inseparability of the *dominium* from the *imperium,* on the coalescence of property and political rights in the area of the marginal sea, and on the resulting diminution from the national sovereignty if Texas' claim of title to the submerged lands seaward of low-water mark were to be recognized (*see* Part 1, 13). This gave some color to the belief that here may be an area of national interest over which the power of Congress to legislate might not be without limit.[26]

24. This is the procedure that was followed in the *California* case, *supra* note 15 (*see* Part 1, 11). After the decision, the matter was referred to a Special Master to hold hearings and make recommendations for determining with greater particularity the federal-state boundary (*see* Part 1, 2111).

25. A similar suit was filed by the State of Rhode Island on Dec. 21, 1953, against the same defendants and raising essentially the same challenge to the constitutionality of the act. There was thus presented to the Court a challenge to Public Law 31 from the point of view of one of the Original Thirteen States, and of one of the subsequently admitted states. Both cases were instituted on motions for permission to file a complaint, so that this phase of the proceedings was in the nature of preliminary hearings to be followed by more extensive hearings if the motions were granted. The Court consolidated the two cases into one opinion (*see* 152). A suit was also filed in the Federal District Court for the District of Columbia on July 8, 1953, by the State of Arkansas against the Secretary of the Interior, the Secretary of the Navy, and the Treasurer of the United States. The essence of the complaint was that Congress had exceeded its powers under the Constitution and that the act was in violation of the trust under which the submerged lands of the marginal sea were held by the United States for the benefit of all the states. This case never came to trial and became moot when the Supreme Court decided the *Alabama* and *Rhode Island* cases (*see* 152).

26. The point of constitutionality was raised in a somewhat different context by the Attorney General of the United States when he appeared before the Senate Committee holding hearings on the Submerged Lands Act. In a prepared statement, he said: "My recommendation would mean, in legal terms, that

Alabama raised two principal objections to the validity of Public Law 31. First, that it was an invalid exercise of the power of Congress to dispose of the public lands of the United States, because the submerged lands and the natural resources were held in trust for all the states and not merely for the four defendant states;[27] and second, that it violated the equal-footing clause which guarantees equal rights to all states upon their admission to the Union. The latter was based on two grounds: (1) because the known valuable property interests were in the submerged lands off the coasts of the defendant states, Public Law 31, while appearing to give similar rights to the other coastal states, does not actually constitute equal treatment; and (2) because it permits certain coastal states along the Gulf of Mexico to perfect claims to the natural resources in the submerged lands and in the overlying waters for a distance of 3 marine leagues from the coastline, whereas Alabama would be limited to 1 marine league.[28]

152. The Decision of March 15, 1954

On March 15, 1954, the Supreme Court denied the motions of Alabama and Rhode Island for leave to file their complaints challenging the constitutionality of the Submerged Lands Act. In a brief, *per curiam,* opinion, the Court held, in effect, that the act is a valid exercise of the power granted to Congress under Article IV, section 3, clause 2, of the Constitution. In so doing, the Court said: "The power of Congress to dispose of any kind of property belonging to the United States is vested in Congress without limitation" (citing *United States* v. *Midwest Oil Company,* 236 U.S. 459, 474 (1915)), and that "Congress not only has a legislative power over the public domain, but it also exercises the powers of the proprietor therein" and "may deal with such lands precisely as a private individual may deal with his farming property." And it said further that the power over the public land is entrusted to Congress and

instead of granting to the States a blanket quitclaim title to the submerged lands within their historic boundaries, the Federal Government would grant to the States only such authority as required for the States to administer and develop the natural resources." *Hearings, supra* note 22, at 926. This, however, was not adopted by Congress.

27. In support of this position, Alabama cited by analogy the case of *Illinois Central Railroad* v. *Illinois, supra* note 4, as an indication of the criteria which the Supreme Court applied in determining whether a particular disposition of public property was a proper exercise of a public trust. The Court there held that a grant to a railroad company by the Illinois legislature of submerged lands extending for a considerable distance into Lake Michigan was invalid and hence revocable by a later Illinois legislature. Brief in Support of Motion for Leave to File Complaint and Complaint 43–44, Alabama v. Texas et al., Sup. Ct., Original, Oct. Term, 1953.

28. Brief, Alabama v. Texas et al., *supra* note 27, at 63–66. The limitation of 1 marine league as the boundary of Alabama was based on the assumption that it could not meet the conditions imposed by Public Law 31 for a seaward boundary beyond 3 miles. In *United States* v. *Louisiana et al.,* 363 U.S. 1, 82 (1960), Alabama was denied a seaward boundary more than 3 geographic miles (*see* 1545).

"it is not for the courts to say how that trust shall be administered. That is for Congress to determine." [29]

1521. *Commentary*

Although the decision upheld the general constitutionality of the Submerged Lands Act as a valid exercise of the power granted to Congress under the Constitution, the Court did not pass on the constitutionality of specific provisions of the act or the judicial construction to be placed upon the boundary provisions. [30]

The decision cleared up any doubt that may have previously existed regarding federal "ownership" of the submerged lands under the paramount rights doctrine of the *California* case; for if ownership did not exist, Congress would have been powerless to convey them to the states. And this lends color to the theory that under the paramount rights doctrine something more than property rights was involved, rather than less, as had been suggested.[31]

29. *Alabama* v. *Texas et al., Rhode Island* v. *Louisiana et al.,* 347 U.S. 272–273 (1954). In a more extended concurring opinion, Justice Reed stated that the power of Congress to cede property to one state without cession to all states had been consistently recognized, and that the challenged cession to the states did not affect the power and responsibility of the United States as sovereign to protect against enemies in the area or resources ceded. *Id.* at 275, 276. Justice Black, who wrote the majority opinion in the *California* case, and Justice Douglas, who wrote the majority opinion in the *Louisiana* and *Texas* cases, upholding federal paramount rights in the submerged lands seaward of low-water mark along the open coast, dissented from the summary denial by the Court of the right of Alabama and Rhode Island to file their complaints. In their view, if the original submerged lands cases presented a question suitable for judicial review, the present controversy also did and the two states should have been given full opportunity to challenge the act. *Id.* at 278, 283.

30. One aspect of the boundary problem was subsequently adjudicated by the Supreme Court in *United States* v. *Louisiana et al.,* 363 U.S. 1 (1960) (*see* 154).

31. *Alabama* v. *Texas et al., supra* note 29, at 273. Whatever the reasoning of the Court in the *California* case as to how the Government acquired its interest in the submerged lands, the effect of the decision was to invest it with a proprietary interest. Otherwise, the Government could not exercise "full dominion over the resources of the soil under that water area, including oil," as was stated by the Court in that decision. Even Justice Frankfurter, in his dissenting opinion, stated that "it [the majority opinion] implies that the Government has some proprietary interest." *United States* v. *California, supra* note 15, at 39, 45. The *Alabama* case, *supra,* confirms this view. In *United States* v. *Louisiana et al., supra* note 28, at 19, 20, and 64, the Court refers to the Submerged Lands Act as a *grant* by Congress. But even more significant is the Court's statement that "Since the Act concededly did not impair the validity of the *California, Louisiana,* and *Texas* cases, which are admittedly applicable to all coastal States, this case draws in question only the geographic extent to which the statute ceded to the States the federal rights established by those decisions" (*id.* at 7), and the further statement that "except as granted by Congress, the States do not own the lands beneath the marginal seas" (*id.* at 77).

Since passage of the Submerged Lands Act, but prior to the decision in *United States* v. *Louisiana et al., supra,* cases have arisen in the lower courts construing the act as conferring title in the states as from the beginning. Thus, in *People* v. *Hecker,* 179 Cal. App. 2d 823 (1960), the court said: "It is obvious from the language used in the act that Congress intended thereby only to declare that title to tidelands already vested in the state be 'recognized' and 'confirmed.' Thus, the court in *Superior Oil Co.* v. *Fontenot,* 213 F. 2d 565, in 1954, construed the act either as confirming title to tidelands in the state which it at all times had, or if it were regarded as conferring title, the title so conferred related back so as to confirm and maintain possession and title of the state as good from the beginning. The terms 'grant' or 'convey' are not employed in section 1311 [43 U.S.C., Chap. 29]; and considering the status

The decision also cleared up the question of the nature of the submerged lands. In the Court's view they fall within the category of "public land" and are part of the "public domain." But the Court's holding cannot be completely reconciled with the doctrine of national external sovereignty—the rationale of the submerged lands cases (*see* Part 1, 112)—which the Court did not overrule. And in the *Texas* case, the Court enunciated the additional doctrine of the inseparability of the *dominium* and the *imperium* and the coalescence of the two in the national sovereign (*see* Part 1, 13). The *Alabama* case must therefore stand for the principle that the power of Congress over the public domain is so complete as to enable it to separate ownership from sovereignty and dispose of the ownership. This raises a question as to the equal-footing doctrine enunciated by the Court in the *Texas* case (*see* Part 1, 13). If it was necessary for Texas to surrender all her property and political rights in the marginal sea in order to enter the Union on an equal footing with the other states, as the Court there held, how could she get back some of those rights and still remain on an equal footing with the other states? This was posed by Justice Douglas in his dissenting opinion in the *Alabama* case.[32]

153. Seaward Boundaries of Gulf States

A second milestone in the history of the Submerged Lands Act was reached when the Supreme Court on May 31, 1960, pronounced its decision in the case of *United States* v. *Louisiana, Texas, Mississippi, Alabama,* and *Florida,* 363 U.S. 1, 121 (1960) (cited hereinafter as *United States* v. *Louisiana et al.*).

of submerged lands prior to the act (*City of Oakland* v. *Buteau,* 29 P. 2d 177 (1934)), even as to them, the act could not serve as a grant as urged by appellant—but at most amounted to a quitclaim from the federal government to the states." These statements are definitely at variance with the construction placed upon the act in *United States* v. *Louisiana et al., supra,* at 77.

32. One possible explanation of this seeming contradiction would be that the Court in the *Texas* case had to find a rationalization for denying to Texas the control which as an independent republic she no doubt exercised over her marginal belt. If the principle of national external sovereignty was a valid one, then the conclusion was inescapable that it had to apply to every state whose shores were washed by the open sea, irrespective of any special status which a state may have enjoyed prior to its entry into the Union. To have carved out an exception in favor of Texas would have been an unexplainable incongruity and a challenge to the soundness of the *California* decision. The equal-footing doctrine seemed an adequate rationalization. It was a case of Texas *vis-a-vis* the rest of the coastal states. In the *Alabama* case, the principal issue was the constitutionality of the power of Congress to grant to the states the submerged lands in the 3-mile belt (this was the only specific grant made) and the grant was made to all coastal states; therefore, it was not a matter of equal footing. It was merely an extension of the *Pollard* inland water rule to the open coast (*see* 1541(*b*)). The Court was not considering claims to a wider belt in the Gulf, because the Submerged Lands Act merely allowed the Gulf coast states to establish claims to a wider belt—it did not grant such belt (*see* 1541(*a*)). The separation of the *dominium* from the *imperium* was apparently justified by the provision in Sec. 6 of the act that "The United States retains all its navigational servitude and rights in and powers of regulation and control of said lands and navigable waters for the constitutional purposes of commerce, navigation, national defense, and international affairs." This provision of the act was cited by Justice Reed in his concurring opinion. *Alabama* v. *Texas et al., supra* note 29, at 276.

Although the cases against the Gulf states were consolidated into one proceeding, a separate opinion is recorded for Florida in 363 U.S. 121. The specific issue raised in these cases was whether under the act any of the Gulf coast states were entitled to a grant of submerged lands greater than 3 nautical miles from the coastline.

The proceeding originated on December 19, 1955, with an action by the United States against the State of Louisiana, seeking to establish its right to the submerged lands and minerals underlying the Gulf of Mexico in the area beyond 3 geographic miles from the coastline of that state and extending to the edge of the continental shelf. The United States also sought an accounting for any sums of money derived by the state from that area after June 5, 1950.[33]

After various preliminary procedures involving a suit by Louisiana in a state court against officials of the United States Department of the Interior, an interim agreement between the United States and Louisiana for continued development of the area, and an *amicus curiae* brief by Texas, the Supreme Court ordered the suit against Louisiana broadened to include all states bordering on the Gulf of Mexico.[34]

The interim agreement entered into between the United States and the State of Louisiana on October 12, 1956, and filed with the Supreme Court, divided the submerged lands into four zones, with references to the Chapman line (*see* Part 1, 73 and 731). Zone 1 was the area lying seaward and within 3 geographic miles of the Chapman line; Zone 2 extended from the seaward limit of Zone 1 to a distance of 3 marine leagues from the Chapman line; Zone 3 was designated as the area extending from the seaward limit of Zone 2 to the seaward boundary line of the State of Louisiana as fixed and redefined by Act 33 of the Louisiana Legislature of 1954;[35] Zone 4 comprised the area seaward of the seaward line of Zone 3 to the edge of the continental shelf.[36]

33. This was the date of the Supreme Court's decisions in the *Louisiana* and *Texas* cases (*see* Part 1, 12).

34. In its order of June 24, 1957, the Court stated that "the issues in this litigation are so related to the possible interests of Texas, and other States situated on the Gulf of Mexico, in the subject matter of this suit, that the just, orderly, and effective determination of such issues requires that they be adjudicated in a proceeding in which all the interested parties are before the Court." *United States* v. *Louisiana,* 354 U.S. 515 (1957). For an account of the various proceedings and orders of the Court, *see* Brief for the United States in Support of Motion for Judgment on Amended Complaint, 3–5, United States v. Louisiana, Texas, Mississippi, Alabama, and Florida, Sup. Ct., No. 11, Original, Oct. Term, 1957.

35. This Act established Louisiana's coastline as coincident with the line established by the United States Coast Guard in Dec. 1953, for dividing the area along the Gulf coast where the Inland Rules of the Road apply from the area where the International Rules apply. 18 Fed. Reg. 7893 (1953).

36. The agreement recognized Zones 2 and 3 as the disputed area, Louisiana being granted exclusive supervision and administration as to Zone 1 and the United States as to Zone 4. The agreement provided for impounding all funds theretofore or thereafter accruing to the properties within the disputed area. (As of Jan. 31, 1962, some $350 million had accrued in this fund.) For a discussion of the federal-state agreement and the problems which it posed, *see* Lewis, *The State-Federal Interim Agreement Concerning Offshore Leasing and Operations,* 33 TULANE LAW REVIEW 331 (1959).

1531. *Opposing Views of the Act*

Both litigants were in agreement that the Submerged Lands Act granted rights to the states for a minimum distance of 3 geographic miles from the coastline. The point of difference was how far beyond 3 miles a Gulf coast state could claim.

Briefly, the Government contended that the act granted rights to a distance of more than 3 miles only to the extent that a Gulf state could show, in accordance with Section 2(b) of the act (*see* 122), either that it had a legally established seaward boundary in excess of 3 miles at the time of its admission to the Union, or that such a boundary was thereafter approved by the Congress prior to the passage of the act. It also contended that the act left it to the courts to ascertain whether a particular state had a seaward boundary meeting either of these requirements, and that the measure of the grant was a boundary which existed subsequent to a state's admission to the Union, and not one which existed only prior to admission [37]—in other words a boundary carrying the legal consequences of the event of admission. From this it concluded that since a state's seaward boundary cannot exceed the national maritime boundary, no state could have had a seaward boundary greater than 3 geographic miles (the extent of the national boundary at all relevant times), regardless of what it may have claimed prior to admission as a state. But, irrespective of the extent of the national boundary, the Government contended that none of these states ever had a valid seaward boundary in excess of 3 miles, even prior to admission, and that no such boundary was thereafter ever approved by Congress for any state.[38]

The states made several alternative arguments. On the one hand, they contended that the Submerged Lands Act *ipso facto* made a 3-league grant to all Gulf states, or at least that the act by its terms established the seaward boundary of some states, notably Texas and Florida, at 3 leagues. On the other hand, the states contended that if the extent of their boundaries "at the time" of admission was left to judicial determination, then the controlling question was what seaward boundary they had just prior to admission. But if the

37. The basis for this contention was that Secs. 2(a) and 2(b), the definitional sections, and Sec. 3(a), the granting section, being the operative provisions of the act, control the extent of the grant made to the states and neither of these make reference to boundaries *prior to statehood* but rather the definitional sections specifically refer to boundaries that existed *at the time of statehood*. In the Government's view, the broader language of Sec. 4, which refers to boundaries "prior to or at the time" of admission (*see* 122), was used for a different purpose and did not enlarge the grant, it being merely an explanation that certain boundary claims, not approved by Sec. 4, were not thereby disapproved. Brief for the United States in Support of Motion for Judgment, *supra* note 34, at 47–49.

38. It was necessary for the Government to advance this alternative theory, in the event the Court did not sustain its national-state boundary identity theory, insofar as its application to the Submerged Lands Act was concerned.

act contemplated a boundary as fixed by the event of admission, then the states contended that Congress fixed for them a 3-league Gulf boundary,[39] and that whatever may have been the extent of the national boundary at the time was an irrelevant factor. However, if the national maritime boundary was in any way relevant, then they contended it was in fact at all material times at 3 leagues in the Gulf.[40]

154. The Decision of May 31, 1960

In an elaborate opinion, delivered on May 31, 1960, the Supreme Court held that Texas and Florida are entitled to rights in the submerged lands extending for a distance in the Gulf of Mexico of 3 leagues from their coastlines, but that Louisiana, Mississippi, and Alabama are entitled to rights extending no more than 3 geographic miles from their coastlines.[41]

1541. *Preliminary Findings*

(*a*) *Statutory Interpretations.*—As a preliminary to its ultimate findings, the Court dealt first with issues common to all the Gulf states, and considered the statute on its face and the legislative history as revealed by the record, dat-

39. The particular claims of Texas, Louisiana, Mississippi, and Alabama depended upon their original admission boundaries and were treated by the Court in one opinion. The particular claims of Florida involved primarily its readmission boundary and were considered in a separate opinion. *United States* v. *Louisiana et al.*, 363 U.S. 1, 13 (1960). Louisiana maintained that the Act of Congress admitting it to the Union described the state as "including all islands within three leagues of the coast" (2 Stat. 701, 702 (1812)) should be read to mean that Congress fixed as the state's seaward boundary a line 3 leagues from its coast. The terms of this act were practically identical with those of the Louisiana enabling act passed the year before (2 Stat. 641 (1811)). The contentions of Mississippi and Alabama were based upon claims similar to that of Louisiana, namely, that they entered the Union with 6-league boundaries by virtue of the enabling acts and the acts of admission describing their boundaries as "including all the islands within six leagues of the shore" (3 Stat. 348 (1817) for Mississippi, and 3 Stat. 489, 490 (1819) for Alabama). Texas contended that as an independent nation immediately prior to its admission it had a 3-league maritime boundary which existed at the time it became a member of the Union in 1845, and Florida asserted that Congress approved its boundary as extending 3 leagues in the Gulf by approving the state's constitution, which set forth a 3-league boundary (25 Fla. Stat. Ann. 411, 413 (1868)), and readmitting the state to representation in Congress in 1868 (15 Stat. 73).

40. This was predicated in the main on the fact that Article V of the Treaty of Guadalupe Hidalgo between the United States and Mexico, consummated in 1848, states, "The boundary line between the two republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande." 9 Stat. 926 (1848).

41. *United States* v. *Louisiana et al., supra* note 39, at 64, 79, 82, and 129. A variety of views was evoked by these cases, as is evidenced by the six opinions written. Justice Harlan wrote the majority opinion for the *Louisiana, Texas, Mississippi,* and *Alabama* cases, in which Justices Frankfurter, Brennan, Whitaker, and Stewart concurred. Justice Black wrote a separate opinion, concurring as to Texas' rights but dissenting as to the denial of similar rights to the other states. Justice Douglas was the lone dissenter in this case, being of the belief that the Court applied a substandard test in the case of Texas, which if applied to Louisiana, Mississippi, and Alabama would also give them a 3-league boundary. In his view, the claim of Florida is fully established by the standard he would apply. Justice Black wrote the majority opinion in the *Florida* case which was concurred in by Justices Douglas, Frankfurter, Brennan, Whitaker, and Stewart, the last four writing a separate opinion. Justice Harlan was the lone dissenter in this case and wrote a separate opinion.

ing back to 1937. It held first that the terms of the act do not *ipso facto* grant the states submerged land rights of 3 leagues in the Gulf, and that the measure of the grant in excess of 3 miles depends entirely upon the location of a state's original or later congressionally approved maritime boundary, subject only to the 3-league limitation.[42]

On the question whether the requirement of Section 2 of the act as to a boundary which "existed at the time such State became a member of the Union" was satisfied merely by showing a preadmission boundary, or whether that requirement contemplated a boundary that carried the legal consequences of the event of admission, the Court held the statute on its face to be inconclusive. It therefore went back to the legislative history of the act.[43]

The Court reviewed the history of the various attempts in Congress to secure legislation vesting in the states the ownership of offshore submerged lands under an application of the *Pollard* inland water rule (*see* Part 1, 112) to the marginal sea.[44] It found that from the very outset proponents of such legislation believed that all states were entitled to at least 3 miles of coastal submerged lands, but the various bills contained no definition of "boundaries" and it was apparently assumed that the boundaries of all states extended at least 3 miles. However, when the decision in the *California* case cast some doubt on whether any of the Original States ever had a boundary beyond its coast, a new section was added, similar to the second and third sentences of Section 4 of the Submerged Lands Act, permitting each state which had not already done so to extend its boundaries seaward 3 miles. The upshot of this was to confirm each coastal state's boundary at 3 geographic miles which by the terms of the act carried with it rights in submerged lands to that distance from the coast.

As to rights in submerged lands beyond 3 miles, the Court found a clear understanding by Congress that the question turned on the existence of an

42. *Id.* at 13.

43. *Id.* at 13–16. In the Government's view, the effect of congressional action could not be ignored because to do so would be to measure the boundary of a state by what it was *prior* to the time it became a member of the Union, and "at the time" cannot mean "prior to the time." As an aid to construction of "at the time" in Sec. 2, the Government pointed to the disjunctive use of the phrase "prior to or at the time" in Sec. 4 (*see* 122), which in its view indicated that the use of the term "at the time" was intended to refer to the time after admission, otherwise the phraseology would be redundant. The states, on the other hand, contended that the meaning of "at the time" in Sec. 2 is explained or clarified by the last sentence of Sec. 4, so that a boundary "existed at the time such State became a member of the Union," as used in Sec. 2, is satisfied if "it was so provided by its constitution or laws prior to or at the time such State became a member of the Union," as used in Sec. 4. In other words, whatever the meaning of "at the time," the existence of a state constitutional or statutory 3-league provision prior to admission would conclusively establish the boundary contemplated by the act, irrespective of the character of congressional action upon admission.

44. The Court took into account the legislative history of all bills prior to enactment of the Submerged Lands Act, as directly relevant to the latter because the purposes and phraseology of such bills and the objections raised against them were substantially the same. *Id.* at 17 n.16.

expressly defined state boundary beyond 3 miles.[45] Hence, while a 3-mile boundary was expressly confirmed for all coastal states, their right to prove boundaries in excess of 3 miles was preserved by the language in Section 4 of the act. And from repeated expressions of the act's sponsors, it was clear to the Court that no boundary in excess of 3 miles was fixed for any coastal state, but that a state would have to establish the existence of such a boundary in judicial proceedings, and any individual expressions of views as to the location of particular state boundaries could not serve to relieve the Court from making an independent judicial inquiry and adjudication on the subject, as contemplated by Congress.[46]

The Court concluded that the two-fold test incorporated in the act—boundaries which existed at the time of admission and boundaries heretofore approved by Congress—indicated that congressional action surrounding the event of admission was relevant to the determination of present boundaries, and that the basic theory of the grant was to restore the states "to the ownership of submerged lands within their present boundaries, determined, however, by the historic action taken with respect to them jointly by Congress and the State." [47] It noted also that the last sentence of Section 4 (*see* 122) of the act was added for the specific purpose of assuring that the boundary claims of Texas and Florida would be preserved, the first part of the sentence being intended to refer only to Texas' claim to a 3-league boundary. That claim, however, was asserted to rest not only on its statute but also on the action of Congress in admitting it to the Union. "If any doubt could remain," the Court said, "that the event of admission is a vital circumstance in ascertaining the location of boundaries which existed 'at the time' of admission within the meaning of the Submerged Lands Act, it is conclusively dispelled by repeated statements of its proponents to that effect." [48]

From the legislative record, therefore, the Court found that preadmission boundaries alone (as contended for by the states) do not suffice to meet the requirements of the Submerged Lands Act.

(*b*) *The 3-Mile National Boundary.*—The Court considered two aspects of this question, both having to do with the effect of the act on our dealings

45. *Id.* at 24. The Court noted that Congress was aware that several states claimed such an extended boundary, and cited specifically the claims of Texas, Florida, and Louisiana.

46. *Id.* at 26, where the Court refers to statements by President Eisenhower, Attorney General Brownell, Secretary of the Interior McKay, and Senators Connally and Holland.

47. *Id.* at 28. In support of this, the Court cited the statement by Representative Willis of Louisiana regarding the nature of the inquiry it was contemplated the courts would have to make to ascertain the location of "historic boundaries," and his explanation of the term.

48. *Id.* at 29–30. The Court here cited the 1949 Senate Hearings, the 1953 Senate Hearings, and the Congressional Record.

with other nations—(1) permitting states to exercise rights in submerged lands beyond 3 miles, and (2) recognizing that the boundaries of some states might extend beyond 3 miles.[49]

The Court held that the purposes of the act were purely domestic and it saw no irreconcilable conflict between the executive policy relied on by the Government and the historical events claimed to have fixed seaward boundaries for some states in excess of 3 miles.[50] It concluded that, "consonant with the purpose of Congress to grant to the states, subject to the three-league limitation, the lands they would have owned had the *Pollard* rule been held applicable to the marginal sea, a state territorial boundary beyond three miles is established for purposes of the Submerged Lands Act by Congressional action so fixing it, irrespective of the limit of territorial waters." [51]

In further support of its conclusion, the Court held that the power to admit new states resides in Congress, from which springs the power to fix state land and water boundaries as a domestic matter. And if the *Pollard* rule is applied to the marginal sea—the premise on which Congress proceeded in enacting the Submerged Lands Act—such a boundary, the Court said, would be similarly effective to circumscribe the extent of submerged lands owned by the state beyond low-water mark, even to the limits of the continental shelf.[52]

This disposed of the Court's preliminary findings as to the meaning of certain boundary provisions of the act based on the legislative record. The next

49. As to the first, the deputy legal adviser of the State Department had given testimony before a congressional committee to the effect that exploitation of submerged lands involved a jurisdiction of a very special and limited character and was of such a nature as not to conflict with international law or the traditional position of the United States with respect to the extent of territorial waters. *Id.* at 30–31. As to the second, however, the State Department had repeatedly stressed that this country's consistent foreign policy would be violated if the bill recognized the effectiveness of the relied-on-historical events to fix boundaries beyond 3 miles, despite the State Department's refusal to recognize them. It had maintained that by virtue of federal supremacy in the field of foreign relations, the territorial claims of the states could not exceed those of the Nation. *Id.* at 31, 32.

50. *Id.* at 33. It was contended by the Government that the act left the ascertainment of state boundaries to be judicially determined, and because of federal supremacy in the field of foreign relations the judiciary must hold that the executive policy worked a decisive limitation upon the extent of all state maritime boundaries for purposes of the act. The Government supported its position respecting the Nation's adherence to the 3-mile limit by letters from the Secretary of State (printed in Brief for the United States in Support of Motion for Judgment, *supra* note 34, at 342–347). But the Court found it unnecessary for purposes of this case to decide whether the Secretary's letters would be conclusive upon the Court as to the existence of that policy.

51. *United States* v. *Louisiana et al., supra* note 39, at 35–36. It noted that a nation may extend its national authority into the adjacent sea to varying distances from its seacoasts and for various purposes—for example, for customs control, for enforcing sanitary measures, and for defense, such practices being recognized by international law. "A nation," the Court said, "which purports to exercise any rights to a given distance in the sea may be said to have a maritime boundary at that distance." *Id.* at 34.

52. *Id.* at 35. The Court found it unnecessary to decide at this time whether action by Congress fixing a state's territorial boundary more than 3 miles beyond its coast constitutes an overriding determination that the state, and therefore this country, are to claim that much territory against foreign nations. *Ibid.*

step was to ascertain what boundary was actually fixed for each of the defendant states in conformance with the criteria set by the Court.

1542. *The Texas Decision*

Texas, the only one of the defendant states which had the status of an independent nation immediately prior to its admission, contended that it had a 3-league maritime boundary which "existed at the time [it] became a member of the Union" in 1845. Whether that was so for the purposes of the Submerged Lands Act depended upon a proper construction of the congressional action admitting the state to the Union.

In considering the claims of Texas, the Court found it necessary to delve at length into its preadmission status and events following admission. The pertinent episodes of this history it found to be Texas' declaration of independence from Mexico on March 2, 1836 (1 Laws, Republic of Texas, 3–7); the act of December 19, 1836, passed by the Texan Congress to define its boundaries (referred to by the Court as the Texas Boundary Act);[53] the Convention of April 25, 1838, between the Republic of Texas and the United States, for establishing a boundary and the running and marking of same;[54] the joint resolution of Congress for the annexation of Texas;[55] and the Treaty of Guadalupe Hidalgo, which ended the war with Mexico and fixed the boundary between the United States and Mexico from the Gulf to the Pacific coast.[56]

In considering these several historical events, the Court found that the circumstances surrounding the passage of the joint resolution of annexation made it clear that it was the understanding of Congress that the "properly" and "rightfully" clause of the resolution (*see* note 55 *supra*) was intended neither

53. The boundaries were described in part as "beginning at the mouth of the Sabine river, and running west along the Gulf of Mexico three leagues from land, to the mouth of the Rio Grande, thence up the principal stream of said river" (1 Laws, Republic of Texas, 133 (1836)). *United States* v. *Louisiana et al., supra* note 39, at 36. The full text of the boundary act is given at *id.* 36–37. This act remained in force up to the time of admission of Texas on Dec. 29, 1845, and the state constitution expressly continued in force from that time forward all laws of the republic not repugnant to the federal or state constitutions or the joint resolution of annexation. *Id.* at 37–38.

54. The convention read in part as "that portion of the said boundary which extends from the mouth of the Sabine, where that river enters the Gulph of Mexico, to the Red river." 8 Stat. 511 (1838). (*See* 1545 A for discussion and significance of this convention by Justice Douglas.)

55. This was signed by President Tyler on Mar. 1, 1845, and provided "That Congress doth consent that the territory properly included within, and rightfully belonging to the Republic of Texas, may be erected into a new State, to be called the State of Texas . . . Said State to be formed, subject to the adjustment by this government of all questions of boundary that may arise with other governments." 5 Stat. 797 (1845).

56. The treaty was signed Feb. 2, 1848, and provided in part (Art. V) as follows: "The boundary line between the two republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande, otherwise called Rio Bravo del Norte, or opposite the mouth of its deepest branch, if it should have more than one branch emptying directly into the sea." 9 Stat. 926 (1848).

as a legislative determination that the entire area claimed by Texas was legitimately hers, nor to serve, independently of the "adjustment" clause, as a self-operating standard for measuring Texas' boundaries. The precise fixing of the boundaries was left to future negotiations with Mexico.[57] And the Court found that Texas, at least as to its land area, was admitted with undefined boundaries subject to later settlement. But this did not necessarily apply to Texas' seaward boundary. The Court noted in this respect that it was unable to find a single instance of significant advertence to the problem of seaward boundaries in the congressional debates on the resolution of annexation nor in a series of historical events involving boundaries that took place prior to annexation.[58] None of these referred to a seaward boundary, but rather to the mouth of a river (the Sabine River or the Rio Grande) or on the Gulf. The most significant of these historic events was the Convention of 1838, in which Texas reaffirmed the 1819 and 1828 Treaties with Spain and Mexico regarding the boundary (*see* note 54 *supra*). Yet two years earlier, in 1836, and 1 month after Texas made the proposal for annexation (*see* note 58 *supra*), for some inexplicable reason, the Court said, the Texas Congress passed the boundary act (*see* note 53 *supra*) which provided for a 3-league boundary in the Gulf of Mexico.[59]

From these circumstances, it was abundantly clear to the Court that "at the time Texas was admitted to the Union, its seaward boundary, though expressly claimed at three leagues in the 1836 Texas Boundary Act, had not been the subject of any specific concern in the train of events leading to annexation." And the Court said the controlling factor as to the boundary was the terms of the joint resolution of annexation. Although there was strong argument that the "properly," "rightfully," and "adjustment" clauses of the resolution (*see* note 55 *supra*) should be read as applying only to the land boundaries that were in dispute with Mexico and that the resolution was meant to validate any boundary asserted by Texas without protest, the Court said that since "the language employed in the Resolution is of general applicability . . . its language must be taken as applying to Texas' maritime boundary as well as to its land boundary." [60] But this does not mean, the Court pointed out, that because

57. *United States* v. *Louisiana et al., supra* note 39, at 44. Congressional attention at the time was focused primarily on the great political questions attending annexation, such as slavery and the possibility of involvement with Mexico, and the question of boundaries received little consideration. *Ibid.*

58. *Id.* at 47–49. These included treaties between the United States and Spain and Mexico in 1819 and 1828, the agreement between Texas and Mexico in 1836, the proposal by Texas in 1836 for annexation to the United States, and the Convention of 1838 between the United States and Texas.

59. *United States* v. *Louisiana et al., supra* note 39, at 48.

60. *Id.* at 50. It was urged that failure on the part of Congress or the Executive to protest Texas' claim to a 3-league maritime boundary constituted a validation of that claim upon admission.

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Texas' maritime boundary was not settled at the time it entered the Union, it was fixed at 3 miles from the moment of admission by virtue of the foreign policy of the United States which fixed the extent of territorial waters at that distance. The reason for this is, the Court said, that "boundaries contemplated by the Submerged Lands Act are those fixed by virtue of Congressional power to admit new States and to define the extent of their territory, not by virtue of the Executive power to determine this country's obligations *vis-a-vis* foreign nations." [61]

The inquiry then resolved itself into two questions: (1) Whether the 3-league maritime boundary asserted by the Republic of Texas embraced an area which was "properly included within, and rightfully belonging to" the Republic, and (2) whether such a boundary was ever fixed for the State of Texas pursuant to the power reserved by Congress to adjust "all questions of boundary that may arise with other governments." [62] As to (1) the Court said that the first clause of the resolution of annexation (the "properly" and "rightfully" clause), independent of the second clause (the "adjustment" clause), was not a self-executing standard for determining the land boundaries of Texas, which did receive consideration by the Congress. It would therefore be misleading to attempt to apply that clause alone as fixing the extent of Texas' maritime boundary, when that question was never considered. The Court therefore found it necessary to look to other events to determine where the Texas maritime boundary was fixed pursuant to the resolution of annexation.[63]

The Court noted that both supporters and opponents of annexation acknowledged that the United States would probably negotiate on the basis of the Texas boundaries, as declared in her boundary statute. And it was clear to the Court that Congress, although it purposely refused to settle the question, anticipated that the Texas Boundary Act should and would be insisted on to the greatest degree possible in negotiations with Mexico. To support this, the Court cited statements in Congress by Representatives and Senators speaking to the joint resolution. In addition, it cited several official statements by the Executive and others made subsequent to the passage of the annexation resolution which indicated that the United States would maintain the claims of Texas regarding her boundary. But there was nothing in these statements

61. *Id.* at 51. Although, in the exercise of its power, the Executive may limit the enjoyment of certain incidents of a congressionally conferred boundary, it does not fix that boundary. "If, as in the case of Texas," the Court said, "Congress employs an uncertain standard in fixing a State's boundaries, we must nevertheless endeavor to apply that standard to the historical events surrounding admission." *Ibid.*

62. The quoted clauses are from the joint resolution of annexation (*see* note 55 *supra*).

63. The Court noted that Congress' failure to carry into the annexation resolution the boundaries fixed by the 1836 Texas Boundary Act did not foreclose the possibility that the state's boundary might ultimately be fixed according to that statute. *Id.* at 52.

to indicate that the Executive, any more than the Congress, was interested in the seaward boundary of Texas as claimed in its 1836 Boundary Act. The settlement of that matter therefore remained for future events.[64]

The pertinent events began on April 15, 1847, when a commissioner was appointed to negotiate a peace treaty with Mexico, and culminated with the actual signing of the Treaty of Guadalupe Hidalgo on February 2, 1848. In the projet of the proposed treaty and in the final treaty the boundary line between the two republics was stated as commencing "in the Gulf of Mexico three leagues from land opposite the mouth of the Rio Grande." (*See* note 56 *supra.*)[65] The 3-league provision was reaffirmed 5 years later in the Gadsden Treaty of December 30, 1853, and subsequently in a long line of international conventions, and, the Court said, it has never been repudiated.[66]

"The Treaty [of Guadalupe Hidalgo]," the Court said, "unquestionably established the Rio Grande from New Mexico to the Gulf as the land boundary not only of the United States but also of Texas, since the Executive, acting pursuant to the power given by Congress to 'adjust' Texas' boundaries in dealings with other nations, pressed that boundary against Mexico on the theory that it embraced territory rightfully belonging to the State of Texas.[67] There is

64. *Id.* at 53–58. It was urged by the Government in explanation that the policy of the United States to claim only 3 miles of territorial waters was by this time firmly established. But the Court said "the Executive's responsibility for fixing the Texan boundary derived from a delegation of Congressional power to admit new States, not from the Executive's own power to fix the extent of territorial waters." These two powers can operate independently and only the first is determinative in the present case. While it might be expected, the Court said, that the Executive would take into account its own policy regarding territorial waters in fixing the congressionally mandated boundary, there is no suggestion from the data presented that such was actually the case. Rather, the evidence shows that the greatest concern of the President was "to maintain to the greatest extent possible the land boundaries claimed by Texas and disputed with Mexico, as anticipated by Congress." *Id.* at 57–58.

65. *Id.* at 58, 59. The Court noted that while there was considerable disagreement in the negotiations over the various land boundaries, the proposals of both parties never departed from the 3-league provision.

66. *Id.* at 60–61. The Compromise of 1850 by which the United States paid Texas $10,000,000 to relinquish its claim to a portion of New Mexico which the United States had acquired from Mexico under the Treaty of 1848, was the final step in the establishment of Texas' disputed land boundaries (9 Stat. 446 (1850)). In describing the boundary of Texas, the act states: ". . . thence on the said parallel of thirty-two degrees of north latitude to the Rio Bravo del Norte, and thence with the channel of said river to the Gulf of Mexico." The suggestion, the Court said, that the seaward boundary of Texas was thus fixed at the edge of the Gulf could not be maintained because this concluding phrase of the act describing the portion of Texas' boundary south of New Mexico was unnecessary, since Texas' western boundary south of New Mexico was already fixed by the Treaty of Guadalupe Hidalgo and there was nothing to compromise in 1850. This portion of the act could not therefore, without Texas' consent, affect the seaward boundary previously fixed for it. *Id.* at 59. The Court considered it noteworthy that the boundary commissioners appointed to survey the 3-league boundary in 1853 reported: "Lieut. Wilkinson, in command of the brig *Morris,* repaired at the appointed time to the mouth of the river and made soundings . . . to trace the boundary, as the treaty required, 'three leagues out to sea,'" and noted the contrast between this statement and the notes of the surveyors of the boundary between Texas and the United States established by the 1838 Convention (*see* note 54 *supra*). The Journal of the Joint Commission which conducted the latter survey stated: "[W]e established the point of beginning of the boundary between the United States and the republic of Texas at a mound on the western bank of the junction of the river Sabine with the sea." *Id.* at 60. *But see* 1548(*c*) for a discussion of the actual survey of 1853.

67. *Id.* at 61. This is on the basis of the Texas Boundary Act (*id.* at 36).

nothing to indicate that the extension of that boundary three leagues into the Gulf, pursuant to the very same Boundary Act, was treated on any different basis. The portion of the boundary extending into the Gulf, like the rest of the line, was intended to separate the territory of the two countries, and to recognize that the maritime territory of Texas extended three leagues seaward." [68]

It was contended by the Government that the Treaty of Guadalupe Hidalgo was of no significance in the present case because the line drawn 3 leagues out to sea was not meant to separate territory of the two countries, but only to separate their rights to exercise certain types of extraterritorial jurisdiction with respect to customs and smuggling.[69] But the Court held the boundary referred to in the treaty separated *territory* of the two countries, and that the Government's explanation is "no more than after-the-fact attempts to limit the effect of a provision which patently purported to establish a three-league territorial boundary, so as to bring it into accord with this country's international obligations." [70]

The Court therefore concluded that "pursuant to the Annexation Resolution of 1845, Texas' maritime boundary was established at three leagues from its coast for domestic purposes," and therefore is entitled to a grant of 3 leagues from her coast under the Submerged Lands Act.[71]

1543. *The Louisiana Decision*

In passing on the claims of Louisiana to a 3-league seaward boundary, the Court considered both preadmission and postadmission events. Louisiana's preadmission history was relevant only to the extent that it aided in construing the act admitting Louisiana to the Union. The postadmission events were for the purpose of showing by the state that the United States established a 3-league "national boundary" in the Gulf.

68. *Id.* at 61. The Court noted that although the Submerged Lands Act requires a state's boundary in excess of 3 miles to have existed "at the time" of its admission, the phrase was intended to define a present boundary by reference to the events surrounding its admission. It thus includes a boundary fixed pursuant to a congressional mandate establishing the terms of a state's admission, even though the final execution of that mandate occurred a short time subsequent to admission. *Id.* at 61–62.

69. *Id.* at 62. To support this, the Government relied on certain diplomatic correspondence which was intended to show that at most the boundary provision recognized the territory of the two countries as extending 3 leagues from the coast in only one area adjacent to the international boundary. *Ibid.*

70. *Id.* at 63, 64. The right of the Executive to limit the effect of a treaty provision in its dealings with other countries, is not doubted, the Court said, but not where the treaty touches upon relationships between the Nation and a state created by a congressional mandate. The original purport of the treaty must control.

71. *Id.* at 64. The Court intimated no view on the effectiveness of such a boundary as against other nations.

Louisiana's claims, like those of Texas, were based on the contention that it had a 3-league maritime boundary which existed "at the time" it was admitted to the Union in 1812. The act of admission described the boundaries of the state as "beginning at the mouth of the river Sabine." It then described the western, northern, and eastern boundaries "to the gulf of Mexico; thence, bounded by the said gulf, to the place of beginning, including all islands within three leagues of the coast." [72]

The crucial question before the Court was the interpretation of the phrase "including all islands within three leagues of the coast." Did it mean that Congress fixed the state's seaward boundary as a line 3 leagues from its coast, as contended by the state, or did it include only the islands themselves within that distance and not all waters within that distance as well, as contended by the Government? [73]

On the basis of the act of admission itself, the Court held, the language appears to support the view that Louisiana is not entitled to a boundary that includes the waters within 3 leagues of the coast, but rather no territorial sea whatever. The Court said: "The boundary line is drawn down the middle of the river Iberville '*to* the Gulf of Mexico,' not *into* it for any distance. The State is thence to be bounded '*by the said gulf*,' not by a line located three leagues out in the Gulf, 'to the place of beginning,' which is described as '*at* the mouth of the river Sabine,' not somewhere beyond the mouth in the gulf." (Emphasis by Court.)[74]

Louisiana's preadmission history was relevant only to the extent that it aided in construing the act of admission. The burden of the state's argument was that the boundaries fixed under the act of admission comprised the area of the Louisiana Purchase which in turn went back through cessions by France to

72. 2 Stat. 701, 702 (1812). The terms of this act were practically identical with those of the Louisiana enabling act, passed the year before. 2 Stat. 641 (1811).

73. It was conceded by the Government that all the islands which are within 3 leagues of Louisiana's shore are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters (this is based on the rule expounded in *Mahler* v. *Norwich and New York Transportation Co.*, 35 N.Y. 352 (1866)), and Louisiana would be entitled to the lands beneath those waters under the rule of *Pollard's Lessee* v. *Hagan*, 3 How. 212 (44 U.S., 1845). *United States* v. *Louisiana et al.*, *supra* note 39, at 67.

74. *Id.* at 67. The Court noted that similar language ("comprehending all islands within twenty leagues of any part of the shores of the United States") was used in the Treaty of Paris of Sept. 3, 1783 (8 Stat. 82), by which Great Britain recognized the independence of the United States, yet 10 years later President Jefferson, observing that claims to control of the sea beyond 20 miles had not been recognized among maritime nations, proposed that a 3-mile limit should be placed upon the extent of territorial waters. In the light of this, the Court held it to be inconceivable that the treaty intended to establish United States territorial jurisdiction over all waters within 20 leagues of the shore. The Court also noted the act defining the boundaries of Georgia, which claims 3 miles of marginal sea but "all the islands within 20 marine leagues of the seacoast." These examples were sufficient evidence to show that language claiming all islands within a certain distance of the coast is not meant to claim all the marginal sea to that distance. There appeared to the Court no reason for reading the Louisiana statute differently. *Id.* at 68, 69.

Spain and Spain to France to what was first claimed for France by La Salle in 1682, and that such area originally extended some 120 miles into the Gulf. But the Court found nothing in the documents submitted or the events on which Louisiana relied to indicate that its preadmission territory extended any distance in the Gulf. Rather it found that, consistently with the act of admission, it stopped at the coast and did not embrace any marginal sea.[75]

Louisiana also advanced the theory that about the time of its admission, the United States was claiming 3 leagues of territorial waters in the Gulf, and that the act of admission was framed with reference to that claim. But the Court said that even though it be assumed that under international law the United States could have claimed 3 leagues in the Gulf, it could not conclude that Congress meant to define Louisiana's boundaries by reference to such a rule. The terms of the act of admission seem to point strongly to the contrary.[76]

As to the postadmission events having any relevance to Louisiana's claims, the Court said that under the Submerged Lands Act, Louisiana's boundary must be measured at the time of her admission, unless a subsequent change was approved by Congress. And since the act of admission fixed the boundary at the shore, it was immaterial what boundaries were fixed for other states or what the executive policy was on the extent of territorial waters.[77]

75. *Id.* at 71. The area which includes the present State of Louisiana was first claimed for France by La Salle in 1682, as extending southward "as far as [the Mississippi's] . . . mouth in the sea, or Gulf of Mexico, about the twenty-seventh degree of the elevation of the North Pole." It was apparent to the Court that what La Salle was claiming was the mouth of the Mississippi, which he mistakenly thought was at the 27th parallel, or a distance of some 120 miles south of the mouth. Other documents also indicated that the river mouth defined the extent of the claim and that the territory included no marginal sea whatever. *Id.* at 71, 72.

76. *Id.* at 75. The Court also found it significant that only a few years later the act admitting Mississippi and Alabama to the Union described their boundaries as including all islands within 6 leagues of the shore (*see* 1544 and 1545). "If the three-league provision in Louisiana's Act of Admission was intended to reflect a policy of claiming three leagues of territorial waters, it is difficult to understand why Congress, so shortly thereafter, should have incorporated a six-league limit in an otherwise identical provision." *Ibid.*

77. *Id.* at 76. Louisiana had urged that certain of these events subsequent to admission must be considered in construing the act of admission—for example, (1) the 3-league boundaries fixed for Texas and Florida indicated an intent by Congress to treat Louisiana equally; (2) certain treaties entered into from 1819 to 1838 by the United States with Spain, Mexico, and the Republic of Texas; and (3) acts of sovereignty exercised by Louisiana over the marginal sea and seabed which were acquiesced in by the Government, indicating a practical construction of Louisiana's act of admission. As to (1) the Court said it indicated no consistent congressional policy and cited the acts of admission for Mississippi and Alabama shortly after Louisiana was admitted which according to Louisiana's own construction would be different than 3 leagues (*see* note 76 *supra*). Nor does the concept of equal footing require such a conclusion, for the Court said, while ownership of certain lands within state boundaries is an inseparable attribute of sovereignty, the geographic extent has nothing to do with political equality, and this applies especially to "maritime boundaries beyond low-water mark, since, except as granted by Congress, the States do not own the lands beneath the marginal seas." (Citing *United States* v. *California, supra* note 15, and *Alabama* v. *Texas et al., supra* note 29.) As to (2), the Court said, the language of the treaties refute this contention since they speak of beginning "on the Gulph of Mexico." As to (3), the Court said, they do not have the effect urged by Louisiana. They indicate only that until the 1930's the Federal Government may have believed that lands beneath the marginal sea may have belonged to the states. *Id.* at 76–78.

On the whole, therefore, the Court concluded that Louisiana was "entitled to submerged-land rights to a distance no greater than three geographic miles from its coastlines, wherever those lines may ultimately be shown to be." [78]

1544. *The Mississippi Decision*

In the light of the Court's limitation of Louisiana's rights under the Submerged Lands Act to a distance of 3 nautical miles from its coastline, it was natural for the Court to reach the same conclusion as to Mississippi. By the Act of March 1, 1817, Congress authorized the creation of the State of Mississippi, specifically setting out its boundaries, in part, as follows: "thence due south to the Gulf of Mexico, thence westwardly, *including all the islands within six leagues of the shore,* to the most eastern junction of Pearl river with Lake Borgne." (Emphasis by Court.) [79] This provision is similar, except for the distance, to the one in the Louisiana act of admission which the Court held did not mean to establish a boundary line that distance from shore including all waters and submerged lands as well as all islands. The Court found nothing in Mississippi's history to cause it to depart from this holding and concluded that "Mississippi is not entitled to rights in submerged lands beyond 3 geographic miles from its coast." [80]

1545. *The Alabama Decision*

The act admitting Alabama to the Union incorporated the enabling act, which described its boundary, in part, as follows: "thence, due south, to the Gulf of Mexico; thence, eastwardly, including all islands within six leagues of the shore to the Perdido river." This is essentially the same as was included in the acts admitting Louisiana and Mississippi. The Court therefore held that "Mississippi is not entitled to rights in submerged lands beyond 3 geographic

78. *Id.* at 79. It was urged by Louisiana, as part of the postadmission history explaining the act of admission, that its 1954 statute (Act 33 of 1954, La. Rev. Stat. 49:1) establishing the state's boundary at 3 leagues seaward of the line between inland and open waters was in conformity with regulations promulgated by the United States Coast Guard (*see* note 35 *supra*) and should be accepted as establishing Louisiana's coastline for the purposes of the Submerged Lands Act. But the Court said the consideration of this contention should be postponed to a later stage of the case (*see* 161). *Ibid.*

79. 3 Stat. 348 (1817). The Mississippi Constitution, approved by the act admitting the state to the Union on Dec. 10, 1817 (3 Stat. 472), contained an identical provision.

80. *United States* v. *Louisiana et al., supra* note 39, at 81, 82. Mississippi had urged that the draftsmen of the provision in the enabling act must have intended to include all waters and submerged lands within 6 leagues from shore because the waters are very shallow and the islands are constantly shifting. But the Court said this merely strengthens the conclusion that it was islands upon which the provision focused, and not waters where there were no islands. *Id.* at 82.

to Alabama and hence "is not entitled to rights in submerged lands lying beyond three geographic miles from its coast." [81]

A. JUSTICE DOUGLAS' DISSENT

Justice Douglas agreed with the majority of the Court that nothing was done at or subsequent to the act of admission to approve Texas' claim to a seaward boundary of 3 leagues from land unless it was the Treaty of Guadalupe Hidalgo. But he took an opposite view on the effect of that treaty on the boundary of Texas. That treaty established a boundary line between Mexico and the United States and he could not accept the view that the United States sat at that conference table negotiating for Texas and her boundary claim.[82]

The Treaty of Guadalupe Hidalgo, in Justice Douglas' opinion, had never been considered to have played any part in determining the Texas boundary question. He cited the case of *United States* v. *Texas,* 162 U.S. 1 (1896), where it was held that the boundary between the United States and Texas was not defined when she was admitted to the Union, but was settled by the Compromise of 1850. That compromise fixed the boundary of Texas as running with the channel of the Rio Grande "to the gulf of Mexico." [83] Thus, on the two occasions when the United States and Texas negotiated and agreed upon boundaries (the 1838 Convention and the 1850 Compromise) no extension of the Texas territory into the Gulf was recognized. From this, Justice Douglas concluded that the seaward boundary of Texas must have been so inconsequential as to require or receive no settlement, and therefore in terms of Section 4 of the Submerged Lands Act (*see* 122) the boundary of Texas reserved for later adjudication when Texas was admitted to the Union (*see* note 55 *supra*) was on its seaward side never approved by Congress to be 3 leagues from shore.

81. *Ibid.* The preadmission history of Alabama the Court found to be essentially the same as that of Mississippi.

82. *Id.* at 102. Justice Douglas found nothing in the history of the negotiations to indicate that the United States had moral or legal claim to the 3-league belt because of the earlier claim of Texas, nor did he find any suggestion that the United States claimed derivatively from the right of Texas, thus approving the claim made by Texas in her Boundary Act of 1836 (*see* note 53 *supra*). He cited treaties with Spain and Mexico made prior to Texas' admission and the Convention of 1838 between the United States and Texas (*see* note 54 *supra*), all of which referred to the "mouth of the river Sabine," and made no mention of a boundary 3 leagues in the Gulf (*see* text following note 58 *supra*). The agreement to fix the boundaries of Texas, he said, was not derived from Texas' unilateral act of 1836 but by the Convention of 1838 which required the seaward boundary to extend from "the mouth of the Sabine, where that river enters the Gulph of Mexico," pursuant to which a joint commission in 1840 surveyed and actually marked the boundary between the United States and the Republic of Texas at the mouth of the Sabine River. *Id.* at 102, 103.

83. *Id.* at 106–107. It was pointed out by Justice Douglas that drawing the line "to the Gulf of Mexico" was a far cry from drawing it to a point "three leagues from the shore." In the majority opinion, it was stated that this concluding phrase was unnecessary because Texas' western boundary south of New Mexico was already fixed by the Treaty of Guadalupe Hidalgo. *Id.* at 61.

He regarded as speculative the majority view that although the State Department in 1848 was wholly insensitive to the problem of a seaward boundary it was nonetheless trying to stand in the shoes of Texas and get Mexico to validate the old boundary claims of Texas. Much less speculative, in his view, was the explanation given to Great Britain in 1875, by the then Secretary of State, that the 3-league provision in the treaty with Mexico was prompted by the Act of March 2, 1799 (1 Stat. 668)—an act to regulate the collection of duties on imports and tonnage, and designed for the same purpose, that of preventing smuggling.[84] In support of this, Justice Douglas cited a series of treaties between Mexico and other countries concluded in the latter half of the 19th century indicating a practice of exercising extraterritorial regulation beyond the 3-mile limit with respect to customs and smuggling.[85]

"It seems apparent from this history," Justice Douglas said, "that the United States in negotiating the Treaty of Guadalupe Hidalgo was far from determining that the metes and bounds of our property on the seaward side of the Gulf ran to three leagues. The three-league provision in purpose and presumed effect had quite a different aim. It had no aim to assert derivatively a title that Texas had claimed. Its aim was merely to mark a zone where, so far as the two contracting parties were concerned, our law enforcement agencies could maintain effective patrols." [86]

B. JUSTICE BLACK'S DISSENT

Justice Black concurred in the majority opinion as to Texas but dissented as to the States of Louisiana, Mississippi, and Alabama. He based this dissent on his reading of the Submerged Lands Act and its legislative history. In his

84. *Id.* at 110–112. Section 54 of the act provided that "it shall be lawful for all collectors, naval officers, surveyors, inspectors, and the officers of the revenue cutters . . . to go on board of ships or vessels in any port of the United States, or within four leagues of the coast thereof, if bound to the United States . . . for the purpose of demanding the manifests . . . and of examining and searching the said ships or vessels."

85. *Id.* at 112–115. Justice Douglas observed that if the term "boundary" in the Treaty of Guadalupe Hidalgo meant "boundary" in the technical property sense, it would mark a line that separated the territory of the United States and Mexico and establish a territorial claim good against every country. But this theory, he said, is negatived by the explanation given to Great Britain shortly after the treaty was concluded that "the treaty can only affect the rights of Mexico and the United States," and by the protest made in 1935 by the United States against an extension by Mexico of its territorial waters from 3 to 9 nautical miles. *Id.* at 115, 116.

86. *Id.* at 116. He noted, in this regard, that the Gulf presents peculiar problems due to the shallowness of its waters, which were well documented in 1848. "These," he said, "are the persuasive facts behind the creation of the three-league belt by the Treaty of Guadalupe Hidalgo and by Mexico in the other treaties concerning the Gulf which she negotiated with other nations." Regarding the claims of Louisiana, Mississippi, and Alabama, he agreed that they have not met the burden of proof, if the degree of proof of ownership which is ordinarily required in title disputes is applied. "But if standards and requirements as lax as those used to grant Texas three leagues from shore are sufficient for her," he said, "they should be sufficient for these other three states." The standard which the Court applied to Florida is what he would have applied to Texas (*see* 1546). *Id.* at 118–119, 120.

view, Congress accepted the Supreme Court's holdings in the *California, Louisiana,* and *Texas* cases as declaring the then existing law—that these states had never owned the offshore lands—but believed that all coastal states were equitably entitled to keep all the submerged lands they had long treated as their own, without regard to technical legal ownership or boundaries.[87]

In referring to the constitutions of these three states defining their coastal boundaries as extending from one Gulf point to another "including all islands" 3 or 6 leagues from the shore or coastline, he said the legislative history of the Submerged Lands Act showed that these definitions were repeatedly called to the attention of Congress as a reason why the Gulf states should be granted 3 leagues or more.[88] Each constitutional definition, according to Justice Black, provided some color of title for each state's claim to a boundary extending at least 3 leagues from its coastline, especially since for more than 100 years the Gulf states exercised the only possession, dominion, and sovereignty over the submerged lands that was ever exercised at all. To grant to Texas and Florida ownership over 3-league marginal belts while denying it to their sister states bordering the Gulf, appeared to him fundamentally unfair and bound to frustrate the intent of Congress to settle the whole Gulf states controversy at this time.[89]

87. *Id.* at 85, 86. Justice Black makes the point that the statute neither defines the kind of "boundary" which is to measure Congress' grants to the Gulf states, nor particularizes the criteria for deciding it. He does not accept the Government's view that each state must show a "legal" or "legally accepted" boundary (the limit of territory) as of the date it came into the Union. To do so, in his opinion, would in effect be overruling the *California, Texas,* and *Louisiana* cases. In his view of the statute, it was the intent of Congress to allow the rights of the states to be determined under established equitable, rather than strictly legal, principles. In support of this he cited extracts from the Senate report on the measure as well as statements by various Senators during committee hearings and on the Senate floor. *Id.* at 89–92.

88. *Id.* at 96. In this connection, Justice Black stated: "From the beginning of the congressional hearings on the matter of the submerged lands, it has been clear to Congress that all the Gulf States' constitutional definitions of their boundaries have been a basis of their claims, without regard to the slight differences in language."

89. *Id.* at 97, 98. Justice Black stressed particularly the plight of Louisiana under the Court's holding. He stated that Louisiana had leased land out more than 3 leagues from its coastline as early as 1920 and that the income from the royalties had become a part of the very life of the state and constituted a large part of the support of its school system. He concluded that the action of the Court was incompatible with the kind of justice and fairness that Congress wanted to bring about by the Submerged Lands Act. *Id.* at 98–100. *But see* the concurring majority opinion of Justice Frankfurter (joined by Justices Brennan, Whitaker, and Stewart) in which he states that Congress did not determine the existence of a boundary for any state beyond 3 miles either explicitly or by implied approval of a claim presented to it in the course of the legislative process. "Nor," he said, "did Congress vest this Court with determination of a claim based on 'equity' in the layman's loose sense of the term, for it could not. Congress may indulge in largess based on considerations of policy; Congress cannot ask this Court to exercise benevolence on its behalf." *Id.* at 130. Following the Court's decision of May 31, 1960, several bills were introduced in the House and Senate to amend the Submerged Lands Act so as to establish the seaward boundaries of Alabama, Mississippi, and Louisiana as extending 3 marine leagues into the Gulf of Mexico and providing for the ownership and use of the submerged lands within such boundaries, effective as of May 22, 1953. In the 86th Cong., 2d sess., H.R. 12964 and S. 3851 were introduced; in the 87th Cong., 1st sess., H.R. 406 was introduced on Jan. 3, 1961, and H.R. 6605 on Apr. 25, 1961; in the 87th Cong., 2d sess., H.R. 10042 was introduced on Feb. 1, 1962. Thus far (Mar. 1962), the bills have not been acted on.

1546. *The Florida Decision*

The burden of Florida's claim to ownership of 3 leagues of submerged lands was based on two considerations: (1) its boundary extended 3 leagues or more seaward into the Gulf when it became a state, and (2) Congress approved such a boundary after its admission into the Union and prior to the passage of the Submerged Lands Act. The Court based its decision on Florida's second contention and it was unnecessary for it to decide the boundaries of Florida at the time it became a state.[90]

The decisive question before the Court was whether Congress approved the Gulf boundary of Florida at "3 leagues from land" when it approved the 1868 Florida Constitution which was written and adopted pursuant to the Reconstruction Acts passed the year before.[91]

The Court found that when Florida's Constitution was submitted to Congress it was much debated and, thereafter, on June 25, 1868, another act was passed authorizing the admission of Florida "to Representation in Congress" (15 Stat. 73). It also found that Congress not only approved Florida's Constitution which included 3-league boundaries, but Congress in 1868 approved it within the meaning of the 1867 Reconstruction Acts. This approval seemed to the Court to be precisely the kind of approval contemplated by the Submerged Lands Act.[92]

The Court held that the legislative record showed that Florida's Constitution was referred to the Committee on Reconstruction and copies were printed for the use of the House, and while it could not know, for sure, whether all or any of the Congressmen or Senators gave special attention to Florida's boundary description, it was sure "that this [Florida's] constitution was examined and approved as a whole, regardless of how thorough that examination may have been, and we think that the 1953 Submerged Lands Act requires no more than

90. *United States* v. *Florida,* 363 U.S. 121, 123 (1960). In the Submerged Lands Act, the two provisions are in the disjunctive (*see* 122), hence proof of only one was all that was required.

91. *Id.* at 123, 124. These acts required "examination and approval" of the constitutions as a prerequisite to readmission to congressional representation. The Florida boundary is described in Art. I of its 1868 Constitution (25 Fla. Stats. Ann. 411, 413). It provided in relevant part as follows: " . . . thence southeastwardly along the [Atlantic Ocean] coast to the edge of the Gulf Stream; thence southwestwardly along the edge of the Gulf Stream and Florida Reefs to and including the Tortugas Islands; *thence northeastwardly to a point three leagues from the mainland; thence northwestwardly three leagues from the land, to a point west of the mouth of the Perdido river; thence to the place of beginning.*" (Emphasis by Court.) The Florida Constitution of 1885 (25 Fla. Stats. Ann. 449) is its current constitution, and contains language identical to the above to describe its 3-league boundary.

92. *United States* v. *Florida, supra* note 90, at 125. The Government contended that the readmission enactments did not contemplate and Congress did not make a general scrutiny of all the provisions of the state constitutions, but only that they were duly adopted and were republican in form. It cited in support of this many references to debates. On the other hand, the Court noted that Florida pointed out many other remarks which indicated a much closer examination of the state constitutions.

this." [93] It, therefore, concluded that "the Submerged Lands Act grants Florida a three-marine-league belt of land under the Gulf, seaward from its coastline, as described in Florida's 1868 Constitution." [94]

A. JUSTICE HARLAN'S DISSENT

In Justice Harlan's view, neither the Court's opinion nor the concurring opinion set forth adequately the nature of the question left by the Submerged Lands Act to be decided. The further, and controlling inquiry, he believed, that must be made was whether the *legal effect* of such action was to establish a valid 3-league boundary for Florida. If not, Florida would not have owned the submerged lands to that distance under Congress' concept of the *Pollard* rule, and it would therefore be entitled to no better rights under the Submerged Lands Act.

Justice Harlan made a distinction between a state relying on a readmission boundary and one relying on an original admission boundary. In the latter case, according to his theory, since the fixing of a boundary is a necessary incident of Congress' power to admit new states, a state may, in the absence of an express fixation of its boundary by the act of admission, rely on "a presumed Congressional purpose to adopt whatever boundary the political entity had immediately prior to its admission as a State." [95] But not so in the case of a state readmitted to "representation in Congress" after the Civil War. Such a state renounced the Union with boundaries already fixed by Congress at the time of original admission. When it was restored to full participation in the Union, there was no reason to suppose its territorial limits would not remain the same.

After a painstaking examination of the legislative record, Justice Harlan could find no evidence that Congress intended to change, expressly or impliedly,

93. *Id.* at 127. The Court stated that those who wrote into the act the provision "heretofore approved by Congress" (*see* Sec. 4 in 122) had in mind Florida's claim based on its 1868 Constitution, and was "at least in part designed to give Florida an opportunity to prove its right to adjacent submerged lands so as to remedy what the Congress evidently felt had been an injustice to Florida." *Id.* at 127, 128.

94. *Id.* at 129. In his concurring opinion, Justice Frankfurter (joined by Justices Brennan, Whitaker, and Stewart) stated that there was no foundation in the Submerged Lands Act or its legislative history for the view that particularized, express approval of a state's boundary claim by a prior Congress was required to make a defined boundary the measure of the grant. In his view, Florida was directed to submit a new constitution for congressional approval as a prerequisite for the exercise of her full rights and resumption of responsibilities. To hold that it was necessary to find a formal, explicit statement, whether in statutory text or history, that the boundary claim was duly considered and sanctioned, in order to find "approval" of that claim, would in his opinion be attributing "deceptive sublety to the Congresses of 1867–1868." *Id.* at 132.

95. *Id.* at 134. In support of this, *New Mexico* v. *Colorado*, 267 U.S. 30 (1925), and *New Mexico* v. *Texas*, 275 U.S. 279 (1927), 276 U.S. 557 (1928), are cited.

Florida's seaward boundary from one not in excess of 3 miles to one of 3 leagues.[96] In his view, Florida's claim could only be sustained on the basis that Congress was under a duty to speak with reference to the state's boundary provision, failing which Congress' silence should as a matter of law be considered as acceptance. "To uphold Florida's claim on any such theory," he said, "would be novel doctrine indeed, particularly where property rights of the United States are involved." [97] The whole tenor of the reconstruction debates, according to Justice Harlan, clearly showed that the nature of the approval of the seceded states' constitutions was that they were properly adopted and were republican in their general structure.

He summed up his position by saying: "I believe the conclusion inescapable that all that Congress can properly be taken to have done in readmitting Florida was to declare that nothing in the State's new constitution disqualified its Senators and Representatives from taking their seats in Congress. While such action may in some abstract sense have constituted 'approval' of Florida's boundary provision, since it was included in its constitution, in my opinion it did not represent the sort of advertent, affirmative Congressional action which legally would have been necessary to effectuate an actual change in Florida's original admission boundary. It therefore did not 'approve' Florida's three-league boundary within the only sense contemplated by the Submerged Lands Act."

1547. *Summary of Court's Conclusions*

In pertinent summary, the following conclusions were reached by the Court:

1. As to Louisiana, Mississippi, and Alabama, a decree will be entered declaring the United States entitled, as against these states, to all the lands, minerals, and other natural resources underlying the Gulf of Mexico more than 3 geographic miles from the coastline of each such state, that is, from the line of ordinary low-water mark and outer limit of inland waters, and extending seaward to the edge of the continental shelf; and directing each such state

96. *Id.* at 135. Justice Harlan pointed out that the Act of June 25, 1868 (15 Stat. 73), readmitting Florida to the Union, afforded no basis for a claim that Congress approved the state's 3-league boundary provision because it in no way referred to boundaries, did not undertake to approve Florida's Constitution, and is entitled merely as "An Act to admit . . . Florida, to Representation in Congress," not as an act to admit it to the Union. *Id.* at 135–136.

97. *Id.* at 139. He cited *United States* v. *California,* 332 U.S. 19, 39–40 (1947) for his statement as to "property rights" (*see* note 31 *supra*).

to account to the United States for all sums of money derived from such lands subsequent to June 5, 1950.[98]

2. As to Texas and Florida, decrees will be entered declaring that the states are entitled, as against the United States, to the lands, minerals, and other natural resources underlying the Gulf of Mexico to a distance of 3 leagues from their coastlines, that is, from the line of ordinary low-water mark and outer limit of inland waters; declaring the United States entitled, as against Texas and Florida, to all such lands, minerals, and resources lying beyond that area, and extending to the edge of the continental shelf; and directing Texas and Florida to account to the United States for all money derived since June 5, 1950, from the area to which the United States is entitled.

3. Jurisdiction is retained by the Court for such further proceedings as may be necessary to effectuate the rights adjudicated, for example, more specifically to determine the coastline, fix the boundary, and dispose of all other relevant matters.

4. The motions of Louisiana and Mississippi to take depositions and present evidence are denied but without prejudice to their renewal in any further proceedings as may be required in connection with matters left open by the present decision. (This also applies to Alabama.)[99]

1548. *Comment on Decisions*

The following comments are for the most part in the nature of clarifications of some of the technical observations made by the Court that have not been covered in the principal discussion of the decisions:

(*a*) The Supreme Court in the *California* case (*see* Part 1, 112) refused to transplant the *Pollard* rule of state ownership of the tidelands and lands under inland navigable waters to the submerged lands of the open sea. The rationale of that decision was the national external sovereignty which the United States exercises over this area. And in the *Texas* case (*see* Part 1, 13), the Court held that once low-water mark is passed, the international domain is reached and

98. *United States* v. *Louisiana et al., supra* note 39, at 83. On June 5, 1950, the date of the Court's decision in the *Louisiana* and *Texas* cases (*see* text at note 2 *supra*), all coastal states were put on notice that the United States was possessed of paramount rights in submerged lands lying seaward of their respective coasts. The Submerged Lands Act of 1953 relinquished part of those lands to the states and also forgave any monetary claims arising out of the state's prior use of the lands relinquished. But the United States is entitled to an accounting for all sums derived since June 5, 1950, from lands not so relinquished. *Id.* at 83.

99. *Id.* at 84, and *United States* v. *Florida, supra* note 90, at 129. In so deciding, the Court was not unmindful of its liberality in original cases of allowing full development of the facts, but it believed that the conclusions to be drawn from the historical documents relied on by the states were so clear as to leave no issue presently involved open to dispute.

property rights become so subordinated to political rights as to "coalesce and unite in the national sovereign." It there declined to go along with the contention that the *imperium* (governmental powers of regulation and control) could still be exercised by the United States even if the *dominium* (proprietary rights) was in Texas. In interpreting the Submerged Lands Act, which it had previously held as a valid exercise by Congress of its unlimited power to dispose of any kind of property belonging to the United States (*see* 152), the Court holds that Congress in enacting the statute intended it as an extension into the open sea of the doctrine laid down in *Pollard*.[100]

(*b*) From the point of view of boundary delimitation, one of the significant aspects of the Court's decisions is its holding that the purposes of the Submerged Lands Act are purely domestic and that the historic boundaries of the states have nothing to do with the 3-mile national boundary as espoused by the United States in its international relations. This raises the important question whether under these conditions the practices followed by the United States in the delimitation of the marginal sea (an international concept) are applicable in defining the coastline and the seaward boundaries of the states under the act. This matter will be considered in connection with the supplementary boundary problems raised by the act (*see* 1611).

(*c*) In the *Texas* decision, the Court notes the 3-league boundary provision of the Treaty of Guadalupe Hidalgo, and cites the 1857 report of the boundary commissioners which states that "Lieut. Wilkinson [of the Coast Survey] . . . repaired at the appointed time to the mouth of the river [the Rio Grande] and made soundings . . . to trace the boundary, as the treaty required, 'three leagues out to sea' " (*see* note 66 *supra*). This carries the implication that the hydrographic survey extended for a distance of 3 leagues from the coast. Yet, in tracing the antecedents of the survey for the State Department in 1957, no documentary evidence could be uncovered in the Bureau archives to indicate any authorization for a survey farther into the Gulf than 1 marine league from shore. The records show that authority for the Coast Survey to undertake a survey of the Rio Grande and the offshore hydrography was based on letters of April 1, 1853, and April 9, 1853, exchanged between the Superintendent of the Coast Survey and the Chief Astronomer of the Boundary Commission, in which it was agreed that the work should extend "one marine league" from shore. The records also show that on April 1, 1853, instructions were issued by the superintendent for the hydrographic survey of the entrance and the approaches for a distance of "one marine league" from shore. The actual survey

100. In neither the *Alabama* case nor the instant case did the Court overrule any of its earlier submerged lands decisions (*see* 1521 for discussion of this aspect of the Submerged Lands Act).

(Register No. H-377) was made during August of 1853 and extends for a distance of 2 nautical miles or two-thirds of a marine league from shore.[101]

(*d*) In passing on Louisiana's claims based on the language in the act of admission, the Court notes that "In precise modern usage, the term 'shore' denotes the line of low-water mark along the mainland, while the term 'coast' denotes the line of the shore plus the line where inland waters meet the open sea." [102] This needs clarification. In technical usage, particularly in surveying and mapping, the term "shore" is understood to mean the strip of land bordering tidal waters that is covered and uncovered by the rise and fall of the tide—the land between the mean high-water and mean low-water lines, sometimes referred to as tidelands or beach.[103] The term "coast," on the other hand, is defined as a zone of land of indefinite width that borders the sea; it is the land that extends inland from the shore.[104] The important point is that both terms refer to "zones" not "lines." What the Court seems to be defining is "shoreline" and "coastline." [105]

101. This statement is based on the Memorandum of Aug. 29, 1957, furnished the State Department in response to a request for information on the precise location of the U.S.-Mexican boundary in the Gulf. The Memorandum also contains an extract from the Plan for the Conjoint Survey of the Rio Grande agreed to on Nov. 24, 1851, which gives some insight into the reasons for a 3-league line in the Gulf. It is stated that if more than one channel is found to exist, "all shall be sounded, so that the boundary line may be laid down along the middle of the deepest one. Soundings shall then be carried out from the mouth of this deepest channel to a distance of three leagues into the Gulf of Mexico, in order to show the best entrance for vessels into the river. Either party desiring it may extend these soundings to the said distance of three leagues out from the entrance of all the said channels, the result to be considered as for the benefit of the navigation of both countries." *But see* statement of the Court that "the conclusion is clear that what the line, denominated a 'boundary' in the Treaty itself, separates is territory of the [respective] countries. No reference to 'extraterritorial' jurisdiction is made in the Treaty, and no such concept can be gleaned from the context of the negotiations." 363 U.S. 1, 62 (1960).

102. *Id.* at 66 n.108. The pertinent language in the act of admission is "including all islands within three leagues of the coast." Similar language is used in the acts admitting Mississippi and Alabama but the term *shore* is used instead of *coast*. The Court considers the term coast to be used in a nontechnical sense to denote what is actually the shore. *Id.* at 67.

103. MITCHELL, DEFINITIONS OF TERMS USED IN GEODETIC AND OTHER SURVEYS 71, SPECIAL PUBLICATION No. 242, U.S. COAST AND GEODETIC SURVEY (1948). Legally, courts have many times used similar language to define the term shore. BLACK, LAW DICTIONARY (4th ed.) 1548 (1951), where citations are given to federal and state decisions. In *Borax Consolidated* v. *Los Angeles*, 296 U.S. 10, 22–23 (1935), the Supreme Court approved an instruction of the Circuit Court of Appeals which stated that by the common law, the shore is confined to "the land between ordinary high and low-water mark, the land over which the daily tides ebb and flow."

104. ADAMS, HYDROGRAPHIC MANUAL 55, SPECIAL PUBLICATION No. 143, U.S. COAST AND GEODETIC SURVEY (1942), and JOHNSON, SHORE PROCESSES AND SHORELINE DEVELOPMENT 160 (1919). Other definitions vary the point at which the actual coast begins but generally they are in harmony with the concept of being a zone of indefinite width (perhaps 1 to 3 miles) extending landward from the shore.

105. In its general technical sense, the term shoreline is synonymous with coastline and is defined as the line of contact between the land and a body of water. But in a particular context the term coastline may have a specialized meaning, as, for example, in the Submerged Lands Act, where it also includes the line marking the seaward limit of inland waters (*see* 161). (It is in this sense that the Court mistakenly uses the term "coast.") In tidal waters it is necessary to associate the term shoreline with a tidal datum, such as low water or high water. In the Coast and Geodetic Survey, the line delineating the shoreline on its surveys and charts approximates the mean high-water line. ADAMS, *op. cit. supra* note 104, at 55.

(*e*) The Court held that language claiming all islands within a certain distance of the coast is not meant to claim all the marginal sea to that distance, and on that basis denied to Louisiana, Mississippi, and Alabama sea boundaries greater than 3 geographic miles. It also said that under the Government's admission that all islands within 3 leagues of Louisiana's shore are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters, Louisiana is entitled to the lands beneath those waters under the terms of its act of admission, quite apart from the affirmative grant under the Submerged Lands Act. "Since the islands enclose inland waters," the Court said, "a line drawn around those islands and the intervening waters would constitute the 'coast' of Louisiana within the definition of the Submerged Lands Act." [106] Since the specific question of what constitutes the coastline of Louisiana, or of any other Gulf state, was not in issue in this litigation, the latter statement by the Court must be considered as *dictum* and subject to later adjudication based upon specific factual data developed. It is for this reason that the Court noted: "We do not intend, however, in passing on these motions, to settle the location of the coastline of Louisiana or that of any other State." [107]

155. Final Decree

Following the decision of May 31, 1960, the States of Louisiana, Mississippi, and Alabama sought leave to file petitions for rehearing on the ground that new information had been discovered to substantiate their claims to a 3-league boundary. But the Court while granting leave to file petitions denied a rehearing on October 10, 1960 (364 U.S. 856).[108]

106. 363 U.S. 1, 67 n.108. Although the Government in its brief used the words "all islands," following the phraseology in the act of admission, the key words must be considered "the waters between them [the islands] and the mainland are sufficiently enclosed to constitute inland waters." Islands not so situated would not enclose inland waters.

107. *Ibid.* The Court retained jurisdiction over the case for any further proceedings that may be necessary to effectuate the rights adjudicated. *Id.* at 84.

108. An 1844 map was sought to be introduced which purported to show extended boundaries for the three states. This map accompanied the 1844 Annual Report of the Commissioner of the General Land Office (S. Doc. 7, 28th Cong., 2d sess. 10) and shows the treaty limits made between 1783 and 1842 with Great Britain, Spain, and France. A line approximately 20 leagues (60 miles) from shore borders the whole Atlantic coast and the Gulf coast to Sabine Pass. Lateral lines from the shore to the 20-league line are also shown at the Georgia-Florida boundary, and at the Perdido and Sabine Rivers. The purpose of the map was apparently to show the sources of the different acquisitions in connection with data on the amount of public land sold and to be sold. The Court had previously declared that the provision in the Treaty of 1783, between Great Britain and the United States, which stated that it comprehended "all islands within twenty leagues of any part of the shores of the United States" could not have meant to establish United States territorial jurisdiction over all waters lying within 20 leagues of the shore. *United States* v. *Louisiana et al., supra* note 39, at 68.

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On December 12, 1960, the Court entered its final decree as to all five of the Gulf states (364 U.S. 502). This follows essentially the conclusions reached by the Court in its opinions (*see* 1547). It sets out the rights of the United States, as against the defendant states, to submerged lands underlying the Gulf of Mexico more than 3 geographic miles seaward from the coastlines of Louisiana, Mississippi, and Alabama, and more than 3 leagues seaward from the coastlines of Texas and Florida, and extending to the edge of the continental shelf; enjoins any of the states from interfering with such rights; reasserts the definition of "coast line" as used in the Submerged Lands Act (*see* 123); sets out the reciprocal rights of the defendant states to the submerged lands from their coastlines to where the rights of the United States begin; provides for an accounting to the United States for all money derived by any state, since June 5, 1950, from submerged lands allocated to the United States under the terms of the decree, whenever the coastline of any of the states shall be agreed upon or determined; and reserves jurisdiction to entertain such further proceedings as may be necessary to give force and effect to the decree.

16. SUPPLEMENTARY BOUNDARY PROBLEMS RAISED BY ACT

When the Supreme Court pronounced its decisions on May 31, 1960, it settled a significant but limited phase of the boundary problems raised by the Submerged Lands Act—the extent of the seaward ownership of submerged lands by the five Gulf states. This was the single issue before the Court. But it did not undertake to settle, in this proceeding, the actual location of the seaward boundary of any state. It merely retained jurisdiction over the case for such further proceedings as may be necessary to effectuate the rights adjudicated.[109]

Boundary problems arise primarily in two categories of cases: (1) those that involve a determination of the baseline from which the seaward boundaries of the states are to be measured (*see* Part 1, 33), that is, the "coast line" under the act; and (2) those that involve a determination of the seaward boundaries themselves.[110] The first category presents not only problems of delimitation

109. The Government very succinctly set forth these ancillary problems, when it said with respect to the Louisiana coast: "On a shelving and tortuous coast such as that of Louisiana, specific identification of the low-water mark and the outer limit of inland waters involves both difficult factual questions of physical observation at every disputed location and legal questions as to definition of terms and application of such definitions to particular physical situations. Resolution of these problems with respect to the entire Louisiana coast will be, at best, a protracted process." Brief for the United States in Support of Motion for Judgment, 159–160 (Feb. 1957), United States v. Louisiana, Sup. Ct., No. 11, Original, Oct. Term, 1956.

110. In the latter category are also included the lateral boundaries of the states.

but problems of interpretation as well; the second category presents problems of delimitation only.

161. The Coast Line Problem

It will be recalled that Section 2(a)(2) of the Submerged Lands Act establishes a distance of 3 geographic miles *from the coast line* of each state as the general offshore limit of state rights to submerged lands (*see* 121). And Section 2(b) places limits of 3 geographic miles and 3 marine leagues (9 geographic miles) *from the coast line* as the boundaries of states bordering the Atlantic and Pacific Oceans, and the Gulf states, respectively (*see* 122). Finally, Section 4 approves the boundary of each of the original coastal states at 3 geographic miles *from its coast line* (*see* 122).

These repetitive references to "coast line" and to "boundaries" are as far as the act goes toward determining the precise location of the federal-state boundary. Obviously, basic to this determination is an understanding of the technical meaning of the term "coast line," as it relates to various coastal configurations, from which the seaward boundaries are to be measured. Congress apparently recognized this, for it included, as Section 2(c) of the act, a general definition of that term.

Section 2(c) defines "coast line" as "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters." In this context, the term "coast line" is broader in scope than the term "shoreline," and includes not only an actual low-water shoreline, but also a "fictitious shoreline" which is the dividing line between inland waters and the open sea. (*See* fig. 24.)

This definition of "coast line" is the pivotal provision of the act, insofar as the location of state boundaries is concerned. While simple enough on its face, it specifies only generally the line from which the state boundaries are to be measured. But the definition does not provide adequate criteria for delimiting, with legal and technical certainty, the boundaries of the states. For example, would the seaward limits of inland waters, in the case of indentations, be a headland-to-headland line, or would the limits follow the sinuosities of the indentation? If the former, would there be a limitation on distance between the headlands? And how is the definition to be applied where islands fringe a coast at varying distances from the mainland? Would the boundaries of the states, whatever they are, be measured from the line of low water along the mainland coast or from the outer island coast? And the matter of "ordinary low water" will require interpretation inasmuch as the tide exhibits varying

characteristics along the different coasts of the United States. Finally, there is the question of defining the method by which the seaward boundaries of the states are to be delimited. Is a replica line, a conventional line, or an envelope line to be used, once an appropriate baseline has been agreed upon? These and other matters are left unsettled by the act.[111]

It is a cardinal rule of statutory construction that the intent of the legislative body, expressed or implied, governs the interpretation of language. This intent may be inferred from the legislative history of an act and from the circumstances surrounding its enactment. Implicit in the legislative history of the Submerged Lands Act is the desire on the part of the sponsors to change the law of federal paramount rights in the submerged lands of the open sea which the Supreme Court laid down in the submerged lands cases (*see* Part 1, 112). But equally implicit is the desire to leave the question of boundary determinations for future adjudication or agreement.[112] Within this framework, it is appropriate to develop interpretive guides based on historical precedents in the judicial, legislative, and executive fields.

1611. *Applicable Rules*

In this situation, it becomes necessary to determine in the first instance what rules are to be applied in interpreting these provisions—the rules developed in international law for delimiting the marginal sea, or other interpretive rules, if such should exist—in order that the federal-state boundary may be delineated with engineering certainty.[113] Had the Court limited the seaward extent of the grant to the national boundaries, there would be no question but what the rules developed in international law apply. But the Court said the grant to the states was a purely domestic matter and had nothing to do with the nation's territorial limits (*see* 1541). Does this rationale for approving state boundaries beyond the traditional 3-mile limit foreclose the use of international rules? The answer must be sought in the legislative history of the act and its interpretation by the Court.

111. In the resolution of these problems the Federal Government will be an interested party because federal jurisdiction under the Outer Continental Shelf Lands Act begins at the seaward limits of state jurisdiction as determined by the Submerged Lands Act (*see* 231).

112. *See* notes 18, 21, and 22 *supra*. The deletion of certain words from the original bill (*see* note 21 *supra*) is stated in the committee report on the measure not to constitute "an indication that the so-called 'Boggs Formula,' the rule limiting bays to areas whose headlands are not more than 10 miles apart, or the artificial 'arcs of circles' method is or should be the policy of the United States in delimiting inland waters or defining coastlines." S. Rept. 133, *supra* note 2, at 18. *But see* Part 1, 4211 in explanation of the Boggs formula.

113. For example, the semicircular and the 10-mile rules for bays, and the rule that low-tide elevations within the territorial sea generate their own territorial sea, are creations of international law (*see* Part 3, 2218(*b*) and (*d*)).

The legislative history makes clear that Congress was dealing with the pre-existing situation, that is, the situation brought about by the Supreme Court's decision that the Federal Government, and not the states, had paramount rights in the submerged lands seaward of the ordinary low-water mark and outside of inland waters, by virtue of its national external sovereignty. It was to correct this holding that the Submerged Lands Act was passed. This was repeatedly emphasized by proponents of the legislation. For example, in the committee report on the measure, it is stated: "The purpose of this legislation is to write the law for the future as the Supreme Court believed it to be in the past—that the States shall own and have proprietary use of all lands under navigable waters within their territorial jurisdiction, whether inland or seaward." [114]

It also appears that the Senate committee's action in striking from the bill certain language specifically defining inland waters (*see* note 21 *supra*) was taken at the request of the Department of State. The Department thought the definition too broad and preferred the limited definition of inland waters which the United States had traditionally followed, and the relation of that definition to its policy of freedom of the seas.[115]

There is also a striking similarity in the definition of "coast line" as used in the act and the phraseology used by the Supreme Court in the submerged lands cases to describe the line from which federal paramount rights are to be measured.[116]

From these statements and language alone it would seem reasonable to conclude that Congress in enacting the Submerged Lands Act understood the term "coast line" to be the same as the baseline from which the marginal sea of the United States is measured. This conclusion is supported by the Court's interpretation of the act. Throughout its discussion of the legislative history, the Court makes repeated references to "an application of the *Pollard* rule to the marginal sea," and in its concluding statement says: "We conclude that, consonant with the purpose of Congress to grant to the States, subject to the three-league limitation, the lands they would have owned had the *Pollard* rule been held applicable to the marginal sea." [117] If the *Pollard* rule had been

114. S. Rept. 133, *supra* note 2, at 8. This report accompanied S. J. Res. 13, which ultimately became the Submerged Lands Act.

115. *Hearings, supra* note 22, at 28. The Department's letter stated that "since the seaward limit of inland waters is the baseline whence the belt of territorial waters is measured, this by cumulative effect brings forward the outer limits of territorial waters."

116. In the Submerged Lands Act, "coast line" is defined as "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters" (*see* 161). In the *California* case, the Court in its decree stated that the Federal Government had paramount rights in the lands underlying the Pacific Ocean "seaward of the ordinary low-water mark on the coast of California, and outside of the inland waters." 332 U.S. 804, 805 (1947).

117. *United States* v. *Louisiana et al.*, 363 U.S. 1, 35 (1960).

held applicable in the *California* case, and California held to be the owner of the submerged lands underlying the marginal sea, the federal-state boundary would have been at the seaward limits of the marginal sea. And inasmuch as the marginal sea is a creation of international law (*see* Part 1, 312) its delimitation must be governed by rules developed in that branch of the law. It follows, therefore, that since the Court holds that the Submerged Lands Act is an extension of the *Pollard* rule to the marginal sea, the same rules should be applied for delimiting boundaries under the act.

Viewed in this light, there is no necessary conflict between the Court's holding the grant of submerged lands (defined in terms of state boundaries) to be one of domestic concern and applying principles developed in international law for delimiting the boundaries of such grant—one is substantive, the other is procedural. The least that can be said is that in holding the grant to be a domestic matter, the Court did not foreclose the use of international practices for delimiting the boundary provisions of the act. The application of principles developed in international law to the settlement of domestic boundary problems is not new in American jurisprudence. In the New Jersey-Delaware boundary dispute the Supreme Court applied the doctrine of the *thalweg* (an international law concept) to the settlement of the boundary between the two states in the lower Delaware River and in Delaware Bay.[118]

But beyond these reasons is the overriding one that if the rules developed in international law are not applicable then there are no guidelines for determining seaward boundaries, unless arbitrary rules are adopted. For example, the phrase "seaward limit of inland waters" is an integral part of the definition of "coast line," which in turn becomes the baseline from which seaward boundaries are measured, yet inland waters are not defined in the act.[119]

Accepting then the rules developed in international law as appropriate criteria for interpreting the boundary provisions of the act, we can now consider the specific problems raised by these provisions (*see* text at note 111 *supra*).

118. *New Jersey* v. *Delaware*, 291 U.S. 361, 378 (1934). The Court, through Mr. Justice Cardozo, said: "Up to the time when New Jersey and Delaware became independent states, the title to the soil under the waters below the circle was still in the Crown of England. When independence was achieved, the precepts to be obeyed in the division of the waters were those of international law." It should also be noted that in an earlier phase of *United States* v. *Louisiana et al., supra* note 39, Louisiana considered a determination of both the inner and outer boundaries of the *marginal belt* as essential to the adjudication of her rights under the Submerged Lands Act. Motion of Defendant, Interposing Plea to the Jurisdiction and Opposition to Plaintiff's Motion to Modify Decree, and Brief in Support Thereof, 23, United States v. Louisiana, Sup. Ct., No. 7, Original, Oct. Term, 1955.

119. It is sometimes thought that the lines established by the United States Coast Guard for separating areas of the sea where the Inland Rules of the Road apply from those where the International Rules apply define the limits of inland waters. This, however, is erroneous, and in *United States* v. *Newark Meadows Improvement Co.*, 173 Fed. 426, 428 (1909), it was held that such lines have no application other than "to inform navigators where the inland rules of navigation, as distinguished from the international rules, become applicable."

Except for the seaward boundary problem, these problems, while framed in a different context, are not unlike those considered by a Special Master in the *California* case (*see* Part 1, 2111), where he was called upon to interpret the language "lying seaward of the ordinary low-water mark on the coast of California, and outside of the inland waters." Although his recommendations have not been finalized by the Court, the low-water line as a federal-state boundary having become moot by the passage of the Submerged Lands Act, his findings nevertheless afford certain guidelines for resolving the boundary problems raised by the act. Therefore, absent any legislative guidance, the Master's findings, where applicable, will be drawn on in this discussion.[120]

1612. *Seaward Limits of Inland Waters*

Along a mainland coast, as distinguished from a coast fringed with islands, the coastline problem involves two facets—(1) the seaward limits of inland waters, and (2) the line of ordinary low water (*see* 1613). The first arises along an indented coast and resolves itself into a question of what indentations are to be considered mere curvatures in the coast, where the baseline for measuring the seaward boundaries would be the line of ordinary low water; and what indentations are to be considered as constituting "true bays" and thus become part of the inland waters of the state, the seaward limits of which would be a headland-to-headland line across the entrance.

It has been noted heretofore that the term "bay," as actually applied in common usage, is so indefinite as not to be susceptible of precise definition which is at once inclusive and exclusive of inland waters (*see* Part 1, 42). The nearest approach to a rational geometric definition is the semicircular rule. The geometric basis for the rule has been previously described and need not be

120. Since passage of the Submerged Lands Act in 1953, a United Nations Conference on the Law of the Sea was held at Geneva in 1958 and a Convention on the Territorial Sea and the Contiguous Zone adopted (*see* Part 3, 221). Delimitation rules were formulated which in some instances are amplifications of existing rules while in others are clear departures from what had been generally considered the rule of international law. In the latter category is the 24-mile closing line for true bays to replace the 10-mile rule (*see* Part 3, 2211 C(*c*)). As to the effect of the convention on the boundary phases of the Submerged Lands Act, it should be pointed out that although the United States Senate consented on May 26, 1960, to its ratification (*see* Part 3, 2271), the convention does not become operative until 30 days after the twenty-second nation has ratified it (*see* Part 3, 227 and 2272). And even when the convention does become operative, it does not seem that it could have retroactive effect on a grant made as of May 22, 1953. At best, it could have only prospective operation from the date the convention becomes effective. It follows therefore that the principles to be presently applied would have to be those that the United States has heretofore espoused in its international relations. These are set out in the letter of Nov. 13, 1951, from the Acting Secretary of State to the Attorney General and the letter of Feb. 12, 1952, from the Secretary of State to the Attorney General (*see* Appendix D). These were relied on by the Government in the proceedings before the Special Master in the *California* case. Brief for the United States before the Special Master, 33–36 (May 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951. For a comparison between these boundary criteria and the criteria adopted at Geneva, *see* Part 3, 2218.

repeated. Suffice it to say that the method postulates that a semicircular bay having its diameter along the line joining the headlands is the theoretical bay which lies on the border line between a closed and an open bay, that is, between inland waters and the open sea (*see* Part 1, 421).[121]

The Special Master in the *California* case adopted this geometric principle to determine which of the indentations along the California coast fell within the category of inland waters. He found the semicircular rule to be "an appropriate technical method of ascertaining whether a coastal indentation has sufficient depth [penetration into the land area] to constitute inland waters" (*see* Part 1, 441).

In addition to the semicircular rule, he also applied a 10-mile limitation on indentations, which he found the United States had traditionally supported in its international relations (*see* Part 1, 43 and 441).

A. WHERE ISLANDS FRINGE A COAST

Associated with the seaward limits of inland waters, and in turn an aspect of the "coast line" problem that will require interpretation, is the situation where islands fringe a coast at various distances from the mainland. Is a state's seaward boundary to be measured from the mainland coast or from the outer island coast?[122] The Submerged Lands Act of itself lacks the necessary criteria and no congressional intent can be inferred from the legislative history of the measure other than a desire to leave the question where Congress found it.[123]

The problem is analogous to that in international law of determining a baseline from which the marginal sea is to be measured, the baseline marking the seaward limit of the inland waters of a riparian nation. The Geneva Convention on the Territorial Sea and the Contiguous Zone (*see* Appendix I) permits the use of straight baselines in certain geographical situations—for example, where the coast is deeply indented, or there is a fringe of islands along the coast in its immediate vicinity (*see* Part 3, 2211 A(*b*)). But the United States has not heretofore recognized such baselines (*see* Part 3, 2218(*a*)), and the convention

121. Although the method was developed for application to delimitation problems associated with the international law of the sea, the principle being a geometric one makes it appropriate for use even where principles of international law are not involved—for example, in determining the status of a tributary waterway in relation to a principal waterway.

122. The islands off the southern California mainland is an example of such a geographic situation (*see* fig. 13).

123. In answer to a specific question from Senator Douglas of Illinois as to whether the continental mass or the outer points of the islands would be considered the coastline, Senator Cordon of Oregon, chairman of the subcommittee in charge of the floor debate, stated that he was "not prepared to discuss the application of any rule defining shorelines in a situation where islands exist off the main mass of land" and that the question "exists irrespective of the resolution." 99 CONG. REC. 2633, 2634 (1953).

does not become operative until ratified by 22 nations (*see* Part 3, 227 and 2272). In any case, the adoption of straight baselines by a country is permissive and not mandatory (*see* Art. 4, par. 1 of convention).[124]

In the *California* case, the Special Master considered the problem from the point of view of the traditional position of the United States in its international relations and found it to be that the baseline follows the sinuosities of the coast, except where interrupted by deep indentations. He noted that this rule in itself excluded the idea of drawing the coastline from headland-to-headland around offshore islands, and stated that placing a 3-mile belt around each offshore island goes naturally with the fact that the islands are part of the territory of the nation to which the mainland belongs (*see* Part 1, 54).

When the Chapman line was drawn along the Louisiana coast (*see* Part 1, 731), pursuant to the decision in *United States* v. *Louisiana,* 339 U.S. 699 (1950), the principle followed in drawing the baseline was that waters enclosed between the mainland and offlying islands which were so closely grouped that no entrance exceeded 10 nautical miles in width were considered inland waters.

In formulating principles for delimiting the "coast line," as defined in the Submerged Lands Act, an amplification of the above procedure was recommended so that it would be of general application, to wit: "The coast line should not depart from the mainland to embrace offshore islands, except where such islands either form a portico to the mainland and are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters, or they form an integral part of a land form." [125] The first part of the recommendation is based on the position of the United States as enunciated in

124. Within the author's knowledge there has neither been proposed nor developed thus far a geometric rule for determining the status (inland waters or open sea) of water areas between islands and the mainland coast similar to the semicircular rule for bays. It would be difficult to develop such a rule for general application because of the complex of geographical configurations that might be encountered and would not be limited as in the case of bays to a single form of configuration. It has been proposed that the semicircular rule for bays be applied for a determination of the limit of inland waters behind straight baselines (*see* Part 3, 2211 A(*b*) note 17).

125. Memorandum of Apr. 18, 1961, from the Director, Coast and Geodetic Survey, in reply to letter of Mar. 6, 1961, from the Solicitor General of the United States. The request set forth the problem of giving precise application to the rather general terms of the Supreme Court decision of May 31, 1960, and the decree of Dec. 12, 1960, which established the dividing line between federal and state property rights in the Gulf of Mexico at a distance of 3 geographic miles from the coastlines of Louisiana, Alabama, and Mississippi, and 3 leagues from the coastlines of Texas and Florida, and defined coastline as "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters." The Bureau's advice was sought in formulating principles on which to base the Government's position because "the questions involved [bays, inland waters, islands, ordinary low water, etc.] largely relate to matters within the particular competence of the Coast and Geodetic Survey." The Bureau's memorandum contained recommendations (including commentaries) on the principles to be established in defining "coast line" as it applied to various geographic configurations along the Gulf coast, particularly the Louisiana coast. Some of these recommendations are embodied in the discussion of the Geneva Convention on the Territorial Sea and the Contiguous Zone and the interpretation to be placed on some of the provisions (*see* Part 3, 221).

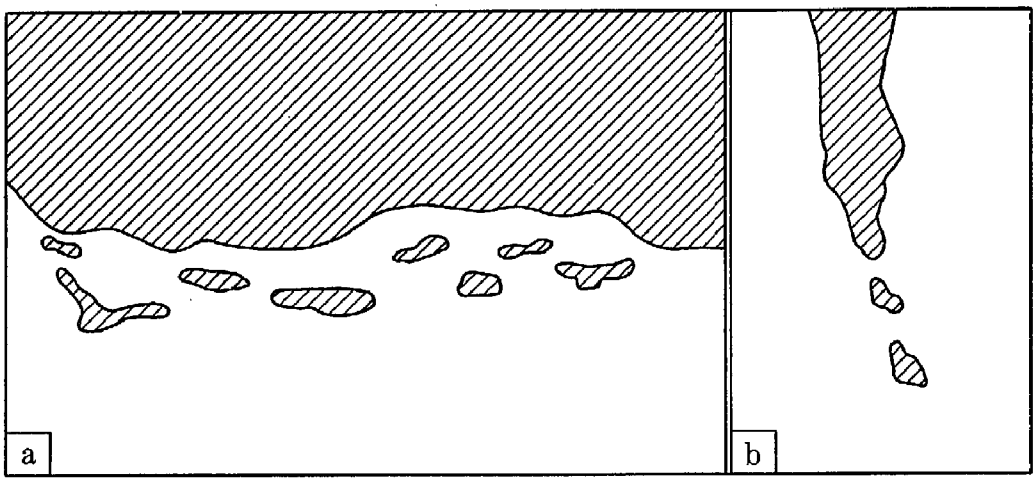

FIGURE 25.—Islands forming a portico to mainland (a), and islands as part of a land form (b).

the letter of Nov. 13, 1951, from the State Department to the Justice Department (*see* Part 3, 2218(*d*)). This was the position taken by the United States in the *California* case and which the Special Master upheld. Under this part of the recommendation, each island, whether isolated or part of a group, would carry its own territorial belt. The second part of the recommendation (the exceptional part) deals with situations characteristic of the Louisiana coast and did not arise in the *California* case. It was the basis for drawing the Chapman line. With regard to determining which islands are part of a land form and which are not, no precise standard is possible. Each case must be individually considered within the framework of the principal rule. (*See* fig. 25.)

1613. *The Line of Ordinary Low Water*

The second facet of the "coast line" problem is the determination of "the line of ordinary low water" as specified in the Submerged Lands Act. And here it must be noted that the act defines the coastline as "the line of ordinary low water along that portion of the coast that is in direct contact with the open sea and the line marking the seaward limit of inland waters." (*See* 123.) The commonplace understanding of this language would be that along that part of the United States where the open sea washes the coast, the "coast line" would have to be the line of ordinary low water, and the only departure from this would be where indentations exist that fall within the category of inland

waters in which case the seaward limits of such waters would constitute the "coast line" (*see* 1612).[126]

The first point that must be taken into account is the meaning of the term "ordinary" as applied to tides. As was shown previously (*see* Part 1, 6411), the word is traceable to the English common law and has been used rather extensively in American jurisprudence, both with respect to high water and to low water. In the Coast Survey, this term is not used in a technical sense but when applied to tides it is regarded as the equivalent of the word "mean."[127] In *Borax Consolidated, Ltd.* v. *Los Angeles,* 296 U.S. 10 (1935), the Supreme Court of the United States interpreted the word "ordinary" to be the same as "mean" when applied to the expression "ordinary high-water mark" along the California coast (*see* Part 1, 6413 A). The Special Master, in the *California* case, also interpreted the word "ordinary" to be the same as "mean" when applied to the term "ordinary low-water mark" along the California coast as used by the Supreme Court in the submerged lands cases (*see* Part 1, 6421).[128] As used in the context of the Submerged Lands Act, the word "ordinary" must therefore be considered to be the same as the word "mean" (*see* Part 1, 6421 (text at note 44)).

This raises the question of how the term "line of mean low water" or "mean low water" is to be interpreted along the different coasts of the United States. (Inasmuch as "line of mean low water" or "mean low-water mark" is simply the intersection of the plane of "mean low water" with the shore, the latter term will be used in the present discussion.)

In order to define "mean low water" for engineering use, the character of the tide in a given area or along a coast must be taken into account. There are three principal types of tide along the coasts of the United States—the semidaily, the mixed, and the daily. The semidaily, or semidiurnal (this is the more technical terminology), tide is the predominant type found along the Atlantic coast, the characteristics being two high waters and two low waters each day with relatively small inequality in successive high-water heights, or in successive low-water heights, or in both. No problem arises in determining mean low water from a series of tide observations at any such place. It is

126. The language of the act precludes the use of any other line in such situations—for example, straight lines from one salient point to another along a slightly curving coast—because such line could not be along the portion of the coast that is "in direct contact with the open sea." It should also be noted that the phraseology "the line of ordinary low water" and "the seaward limit of inland waters" is in the conjunctive and not in the disjunctive as an alternative.

127. SCHUREMAN, TIDE AND CURRENT GLOSSARY 26, SPECIAL PUBLICATION No. 228, U.S. COAST AND GEODETIC SURVEY (1949).

128. This was based on written and oral testimony furnished by the Coast and Geodetic Survey (*see* Part 1, 2113).

simply the average height of the low waters at that place over a period of 19 years.[129] (*See* fig. 17.)

Along the Pacific coast, the mixed type of tide prevails, with two high waters and two low waters each day. It is distinguished, however, from tides along the Atlantic coast in that the diurnal wave is more pronounced, with resulting larger inequality in successive high-water heights, in successive low-water heights, or in both. This inequality is known as diurnal inequality (*see* Part 1, 621). Whether the low-water inequality is small or large, mean low water is determined in the same manner as for a semidiurnal tide, that is, by averaging all the low waters (higher lows and lower lows) over a period of 19 years.[130] As in the case of the semidiurnal tide, the same procedure would be followed in determining mean low water even where under certain situations but one tide occurs in a day (*see* note 129 *supra*).[131]

The daily, or diurnal, type of tide is the predominant tide in the Gulf of Mexico, its name being derived from the fact that there is but one high and one low water in a tidal day. But within this area of predominantly diurnal tides, there are two stretches along the outside coast where the tide is mixed.[132] But even where the tide is diurnal (the places where the tide is always diurnal are uncommon), there are times during the month when the tide becomes semidiurnal and the tide curve exhibits two high and two low waters during the day. For purposes of classification, however, if the dominant feature of the tide at any place is diurnal, the tide at that place is designated as belonging to the diurnal type.[133]

129. MARMER, TIDAL DATUM PLANES 104, SPECIAL PUBLICATION NO. 135, U.S. COAST AND GEODETIC SURVEY (1951). Even where under certain rare astronomic situations but one tide occurs in a day (inconsequential in relation to the number of low waters that would be averaged for determining mean values) the same procedure applies.

130. In the *California* case, the Special Master was faced with the problem of deciding whether the higher low waters, the lower low waters, or all the low waters should be used in obtaining mean low water. (Along the California coast the low-water inequality is quite pronounced.) The Special Master recommended the use of all the low waters, even though he found nothing in the Supreme Court's decision to indicate that when the Court used the expression "ordinary low water" it intended to choose the mean of the low waters and not the mean of the lower low waters. He arrived at this conclusion on the basis of property rights. Where one claimant in a disputed boundary line might urge the use of the higher lows and another claimant the use of the lower lows, the middle way, or the use of all the lows, he believed, would be the just one. For a discussion of this aspect of the Special Master's findings, *see* Part 1, 6421.

131. This was the situation in *Borax Consolidated, Ltd.* v. *Los Angeles*, 296 U.S. 10 (1935), with respect to ordinary high water. The question there was primarily whether the neap tides only should be used in determining the tidal boundary of "ordinary high-water mark," and the Court held that neither the spring tide nor the neap tide is to be used, "but a mean of all the high tides." (*See* Part 1, 6413 A.)

132. These occur along the Florida coast: the first extends from Key West to Punta Rasa in San Carlos Bay, and the second includes the area from Indian Rocks near St. Petersburg to St. George Sound.

133. Pensacola, Fla., is such a case. When the moon is over the equator twice during the month, the tide curve exhibits semidiurnal characteristics. MARMER (1951), *op. cit. supra* note 129, at 16 and 17. At Galveston, Tex., the tidal situation is somewhat different. There are months during the year when the tide curve shows two tides a day for the greater part of the month. But because of the

If the procedure developed for determining mean low water where the tide is of the semidiurnal or mixed type were applied to the type of diurnal tide found in the Gulf of Mexico, it would be statistically unsound because of the imbalance created by the use of both low waters on days when the tide becomes semidiurnal. The tidal engineer has therefore developed a procedure whereby he considers the tide at such places as if it were always of the diurnal type. That is, he disregards the secondary tides completely, and on those days when there are two tides he uses but one low water a day, the lower of the two lows.[134] Since all low waters are used in obtaining mean values, except on those days when the tide becomes semidiurnal, the general definition of mean low water is still applicable (*see* text at note 129 *supra*).

1614. *The Time Element*

An important aspect of the "coast line" problem, not specifically settled by the Submerged Lands Act, is the time element. Is the seaward boundary of a state to be measured from the coastline as it existed when a state's boundary was approved by Congress (*see* text at note 47 *supra*), regardless of subsequent changes, or is it to be measured from the present coastline? [135] Coastlines are continually changing; in some localities accretions have been going on for many years, while in others eroding processes are exhibited.[136]

If Section 2(c) alone were considered (*see* 123), it could be assumed that the coastline as of the date of the act, rather than of a past date, was intended, for

interaction of the diurnal and semidiurnal forces, the secondary tides at such times become very small and almost vanish. While there may be a difference of 0.1 foot between a higher low water and a following lower high water—the criterion used in tabulating high and low waters—such a low water would not be determined with the same degree of accuracy as the lower low, especially when the effect of wind and weather is considered which could be large percentagewise in relation to the effect of such nonperiodic forces on the primary tides. Such tides would not have equal significance in the tidal cycle and therefore the mean of the two low waters would not better represent the plane of mean low water than the single lower low would, as previously stated (*see* Part 1, 6421).

134. The lower low water is used because from the point of view of tidal theory, it, rather than the higher low water, reflects the diurnal wave, as does the single low water on the other days. This places all the low waters selected for obtaining mean values on a comparable basis. It is sometimes stated that mean low water for the diurnal tide as thus obtained is the same as mean lower low water. This is theoretically true, since even in the Gulf there is a semidiurnal wave but it is masked by the stronger diurnal wave which is reflected on the tide curve as a single low water. From a practical engineering point of view, however, it would probably be better to avoid this analogy and consider the tidal plane derived in such cases as the plane of mean low water because the concept of a lower low water presupposes a higher low water and there cannot be a lower low where there is but one low. In any case, this theoretical lower low water should not be confused with the actual lower low water that is reflected on the tide curve in the case of the mixed type of tide.

135. This applies to both the low-water line along a straight coast and to the low-water line of indentations. In the latter case, if an early coastline applied, the status (inland waters or open sea) of the indentation would be determined by the geometric formula as applied to the then position of the low-water line (*see* text at note 107 *supra*.)

136. Along sections of the Louisiana coast, in the vicinity of the Mississippi Delta, the land has built out as much as 8 miles in the past 100 years (*see* fig. 26).

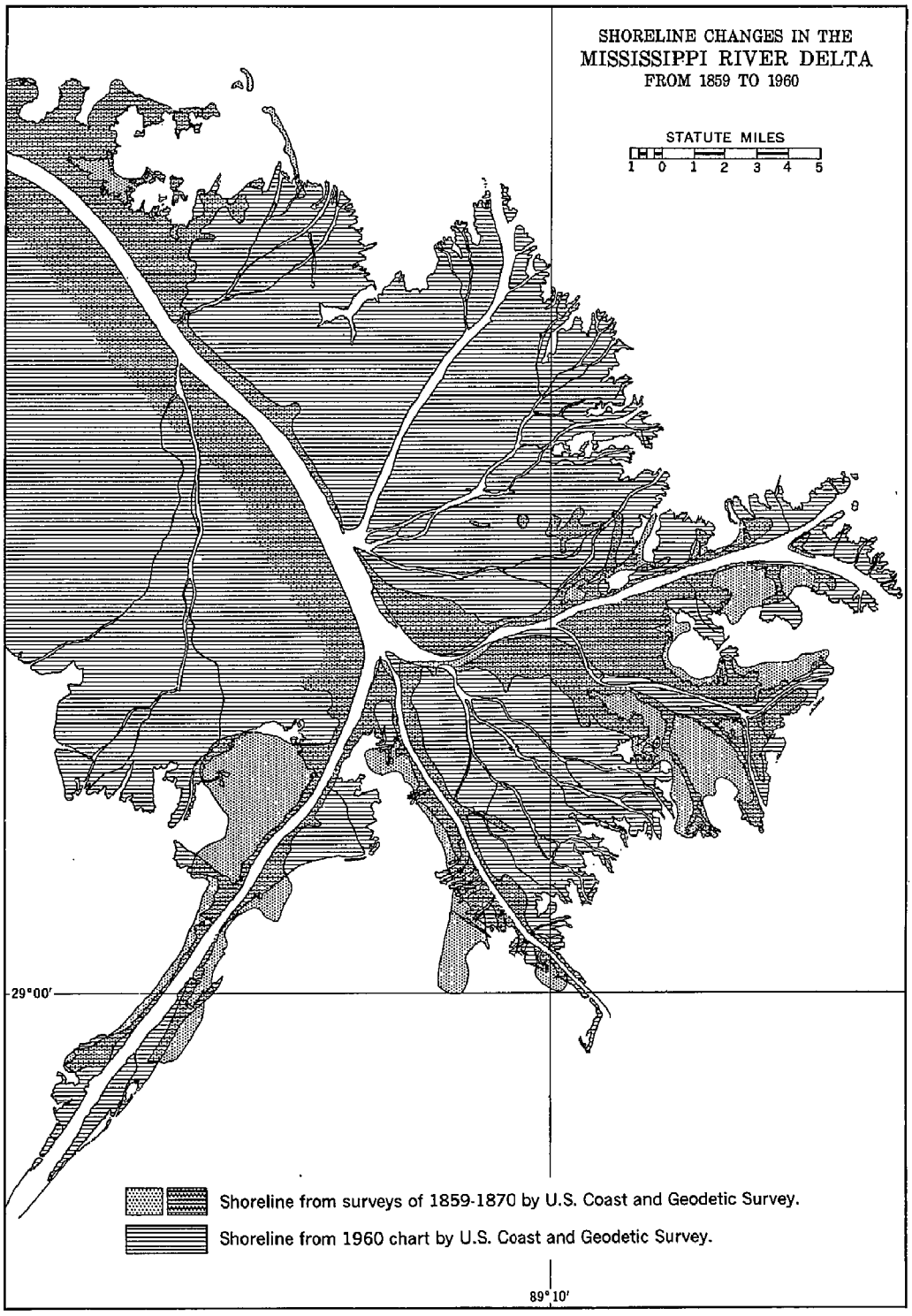

FIGURE 26.—Shoreline changes along Louisiana coast, 1859–1960.

a past coastline could not be "in direct contact" with the open sea where the coastline has shifted seaward or landward. Also, Section 2(b), with its reference to boundaries as "extending from the coast line," and Section 4, speaking of approving the extension of the boundary of any state admitted subsequent to the formation of the Union "to a line three geographical miles distant from its coast line" if it has not already done so (*see* 122), both carry the overtone of a *present* coastline. On the other hand, Section 2(a)(2) defines "lands beneath navigable waters" as all lands seaward "from the coast line of each such State and to the boundary line . . . as it existed at the time such State became a member of the Union" (*see* 121), and throughout the discussions on the measure, there are repeated references to "historic boundaries" and to "areas" of the states as they were when they came into the Union.[137] The legislative intent is thus left unclear.

Reading the act as a whole together with the discussions, however, it seems reasonable to assume that what the Congress wished to preserve for the states was the concept of a distance fixed as of the date of admission—3 miles, 6 miles, etc.—rather than the concept of a fixed line in the water.[138] Under this interpretation, the historic distance would be applied to the present coastline to fix the outer boundary of the state.[139]

Adoption of the theory of a *present* coastline is also supported by the reference in Section 2(a)(2) of the act to the "coast line of each such State" (*see* 121), rather than to the coastline as it existed when the state entered the Union. The throw back in time is only in reference to boundaries.

This theory of the Submerged Lands Act is in accord with the common law rule, which is the federal rule, that where the sea is a boundary the doctrine of

137. It was stated by Senator Cordon that "the philosophy of the joint resolution is limited to the areas of the States as they were when the States came into the Union," and that "the boundary lines of the States recommended by the committee majority are the lines as they were at the time the States entered the Union." 99 CONG. REC. 2620, 2696 (1953). And Senator Daniel, a co-sponsor of the resolution, stated: "The joint resolution does not undertake to fix the historic boundaries of any State, but it limits them all to the boundaries as they existed at the time each State entered the Union." *Id.* at 2976.

138. Most of the seaward boundary descriptions contained in the enabling acts or in the state constitutions are merely distance references from the coast. Specific locations of the seaward lines by metes and bounds or otherwise are almost uniformly absent. For a compilation of such provisions for states other than the Original Thirteen, see *Hearings before Committee on Interior and Insular Affairs on S.J. Res. 13 and other Bills,* 83d Cong., 1st sess. 1232 (1953). Some of the Original States seem never to have declared their seaward boundaries. For a discussion of the claims to seaward boundaries by the Thirteen Original States with a reference to their charters, constitutions, and statutes, *see* Brief for the United States in Support of Motion for Judgment, 93–109, United States v. California, Sup. Ct., No. 12, Original, Oct. Term, 1946.

139. This would seem to be supported by the Supreme Court's interpretation of the basic theory of the Submerged Lands Act, namely, to restore the states to the ownership of submerged lands within their *present* boundaries but determined by the historic action taken with respect to them jointly by Congress and the state. *United States* v. *Louisiana et al.,* 363 U.S. 1, 28 (1960), citing Representative Willis as to the meaning of "historic boundaries" and how they would be ascertained.

erosion and accretion is normally applicable and the boundary shifts with the change.[140]

If the theory of a past coastline were accepted, it could in extreme cases operate to deprive a state entirely of a contiguous water zone: for example, where the coastline has built out 3 miles or more (*see* note 136 *supra*). And, conversely, in the case of a heavily eroded coast the distance could be much greater than the limitation specified in Section 2(b) of the act (*see* 122). Such results could hardly have been intended by the proponents of the legislation.

From a practical point of view, the theory of a present coastline is the logical solution, for it would be an exceedingly difficult, if not impossible, task to determine the line of ordinary low water as of a distant past. Accurate surveys of our coast did not begin to become available until the middle of the 19th century and in many sections the low-water line has never actually been surveyed.

Ultimately, the Supreme Court may have to face squarely the question of what "coast line," in point of time, is applicable in the determination of the seaward boundaries of the states. Where a coastline has eroded it would be to a state's advantage to use a past coastline. On the other hand, where it has accreted it would be more acceptable to the state to use a present coastline. From the point of view of the Government, the reverse effect would be true in each situation. But whatever theory is adopted it would have to be consistently applied to an entire coast, irrespective of whether part has accreted and part eroded.[141]

162. The Seaward Boundary Problem

Thus far, there has been considered the resolution of problems with respect to the landward base—the coastline as defined in the Submerged Lands Act.

140. *Oklahoma* v. *Texas*, 268 U.S. 252, 256 (1925). This was recognized by both litigants in the proceedings before the Special Master in the *California* case. The Master went a step further and recommended that because the problem was one of defining the marginal sea, even where artificial fills had been made, the boundary be accepted as the low-water mark *"as it exists at the time of survey"* (*see* Part 1, 6422 B).

141. In an ancillary proceeding to the original suit filed by the United States against the State of Louisiana to adjudicate the extent of the latter's seaward boundary (United States v. Louisiana, Sup. Ct., No. 7, Original, Oct. Term, 1955, which was later supplanted by No. 11, Original), the Supreme Court on Dec. 12, 1955, granted Louisiana's application for leave to perpetuate testimony relating to the location of the state's shoreline (the high-water line) and its seaward boundary as they existed prior to or at the time it became a member of the Union in 1812. *In re State of Louisiana*, 350 U.S. 921 (1955). (Testimony was taken at Baton Rouge, La., on Dec. 27 and 28. At the request of the Attorney General of the United States, the author was present in an advisory capacity during the entire hearing.) The method used for fixing the 1812 shoreline was by an extrapolation from accurate surveys made subsequent to 1853. The validity of this method depends upon the assumption that the advance or retreat of the shoreline from 1812 to 1954 has proceeded at a uniform rate and has continued in the same direction. For an account of the hearing, the technique of extrapolation, and a discussion of the effect of the hearing on the need for a present survey of the shoreline, *see* Shalowitz, *Special Assignment for Department of Justice*, Special Rept. 88 of 1955 (Coast Survey archives).

Unlike the *California* case,[142] the act also poses delimitation problems associated with seaward boundaries.[143] These fall into two categories: (1) a determination of the outer boundaries of the states, and (2) a determination of the lateral boundaries between the states. As in the case of the landward base, there is nothing in the act, nor in its legislative history, that provides a guiding principle for the solution of these problems.[144] International law furnishes the necessary criteria, since the problems are the same as those of determining the outer limits of the marginal sea, and the boundary through the marginal sea of two adjacent countries.[145]

1621. *Exterior Boundaries*

Basically, the concept of a marginal sea is that of a belt of water of a fixed breadth throughout its extent. In the United States, this belt is considered to be 3 nautical miles wide. But this does not mean that the belt runs like a ribbon along the coast, of even width throughout every sinuosity. It does mean that all the water which is within the fixed distance from the baseline (the low-water line, subject to exceptions) is part of the marginal sea. Three processes of drawing these exterior boundaries have been mentioned in the literature: (a) a replica line, (b) a conventional line, and (c) an envelope line. In front of straight coastlines, all three procedures would produce the same result.

(*a*) *A Replica Line.*—This line (often called the *tracé parallèle*) results from lifting the low-water line bodily from its existing position, moving it seaward a distance equal to the width of the marginal sea, and laying it down parallel to its former position. Such a line will usually be extremely irregular, following all the sinuosities presented by the low-water line. This procedure has never been seriously advocated by geographers or cartographers. The reasons are obvious: it requires an actual charting of the line to be of value to the user; it must be drawn parallel to the general trend of the coast, which opens

142. The common boundary between federal and state jurisdiction in *United States* v. *California*, 332 U.S. 19 (1947), was the inshore limits of the marginal sea; therefore, the Special Master was not called upon to establish criteria for determining the offshore limits.

143. This is so because under the Outer Continental Shelf Lands Act (*see* 23), the beginning of federal jurisdiction will be determined by the seaward limits of state jurisdiction.

144. Senator Cordon, chairman of the subcommittee on S.J. Res. 13, 83d Cong., 1st sess. (1953), stated during the debate on the measure: "It [location of boundaries] is a matter for the courts to determine, or for the United States, through Congress and the legislative organizations of the several States, to reach an agreement upon. The pending bill does not seek to invade either province." 99 CONG. REC. 2620 (1953).

145. But the method of fixing the exterior limits of the marginal sea should not be confused with the problem of fixing the baseline from which the marginal sea is measured. While the location of the exterior limits is dependent upon where the baseline is fixed, the method by which the limits are fixed is not. How you fix the baseline and how, having fixed it, you delimit the exterior boundaries of the marginal sea are two separate problems.

the door to divers interpretations; it introduces refinements not justified by a seaward boundary 3 or more miles from shore; and, surprisingly, it only partially preserves the concept of a fixed distance from the low-water line.[146]

(*b*) *A Conventional Line.*—This may be any one of a number of lines. It is usually associated with straight lines, but may be a combination of lines: straight lines along a concave coast and curved lines (the *tracé parallèle* or the "envelope line") along a convex coast, for example. A conventional line may also encompass a series of connected straight-line segments related to major or minor headlands along a coast without regard to the adopted baseline for the seaward limits of inland waters. In the case of any conventional line, the actual delineation of the line based on any principles adopted becomes a matter of individual judgment, and considerable differences in the results may be obtained by even two experts. Probably the greatest value inherent in the conventional line is in the opportunity it affords for reaching a compromise between conflicting national interests. On the other hand, because of the wide choice of such lines along a given coast, one of its great drawbacks is that an actual charting of the seaward boundary is necessary to make the line of value to the user.

(*c*) *An Envelope Line.*—The preferred method of delimiting the exterior boundary of the marginal sea is by means of an envelope line. It is defined as a line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the marginal sea.[147] It is not a true envelope in a geometric sense,[148] but is so named because it forms a continuous series of intersecting arcs which are farthest seaward of all the possible arcs that can be drawn from the baseline with the same radius, and thus envelops, so to speak, all arcs that fall short of the most seaward arcs—for example, the arcs drawn from the heads of small indentations, as in figure 27. The result is that minor sinuosities in the baseline are not reproduced in the envelope line because by definition every point on such line must be a fixed distance from the *nearest* point on the baseline and at least that distance away from *every* point on the baseline. If the baseline is straight or a smooth curve, the envelope line will be of the same character; if the baseline consists of indentations with projecting

146. This can be visualized by reference to fig. 27. By shifting the low-water line seaward a fixed distance parallel to the general trend of the coast it will be found that there are points on the exterior boundary that will be less than the fixed distance from the nearest point on the low-water line, as, for example, near the ends of the figure.

147. The envelope line was embodied in the proposal of the United States delegation at the Hague Conference of 1930 (3 Acts of the Conference for the Codification of International Law, League of Nations Publications V: Legal 197), and was adopted by the Geneva Conference in 1958, on recommendation of the International Law Commission, which in turn acted on the recommendation of a committee of experts (*see* Part 3, 2211 B).

148. The word "envelope" is a mathematical term and denotes a curve forming a common tangent to a number of other curves arranged according to some fixed principle—hence, the term *courbe tangente* which is sometimes used to denote the envelope line.

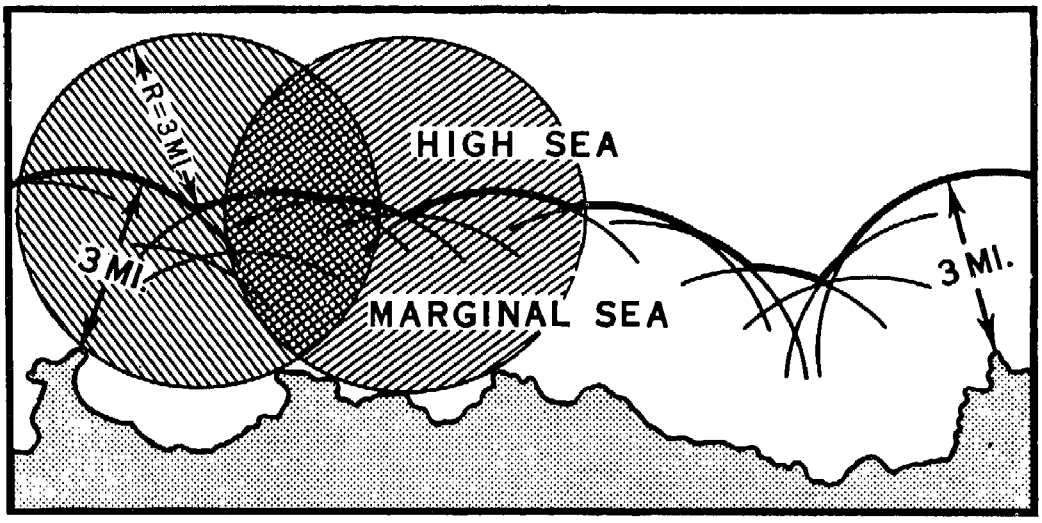

FIGURE 27.—The envelope line is the locus of the center of a circle rolled along the coastline with circumference always in contact with it.

points, the envelope line will not form a smooth curve but will consist of a number of intersecting arcs.[149]

Geometrically, the envelope line is the locus of the center of a circle the circumference of which is always in contact with the coastline, that is, with the low-water line or the seaward limits of inland waters. Although often referred to as the "arcs-of-circles method," because of the manner in which the line can be drawn (by swinging arcs from points along the coastline), it will occasion less confusion if thought of in its geometric sense, that is, as a derivative of the coastline. (*See* fig. 27.)

The principle of the envelope line is so definite and conclusive that under it only one line can possibly be drawn from a given coastline.[150] And even though no actual line is charted, a navigator would find no difficulty in determining whether he is within or without the marginal sea. Having plotted his position on his chart, he describes an arc to landward with a radius equal to the width of the marginal sea—if the arc cuts land (the low-water line) or inland waters, he is in the marginal sea; if it just touches such features, he is exactly on the boundary between the marginal sea and the high seas; and if it fails to touch at all, he is outside the marginal sea. (*See* fig. 28.)

149. It also follows that the greater the distance from the same baseline, the smoother will the envelope line be.

150. The reverse of course is not true. It can be shown that the same envelope line may result from different coastlines, but this does not detract from the efficacy of such line as a boundary.

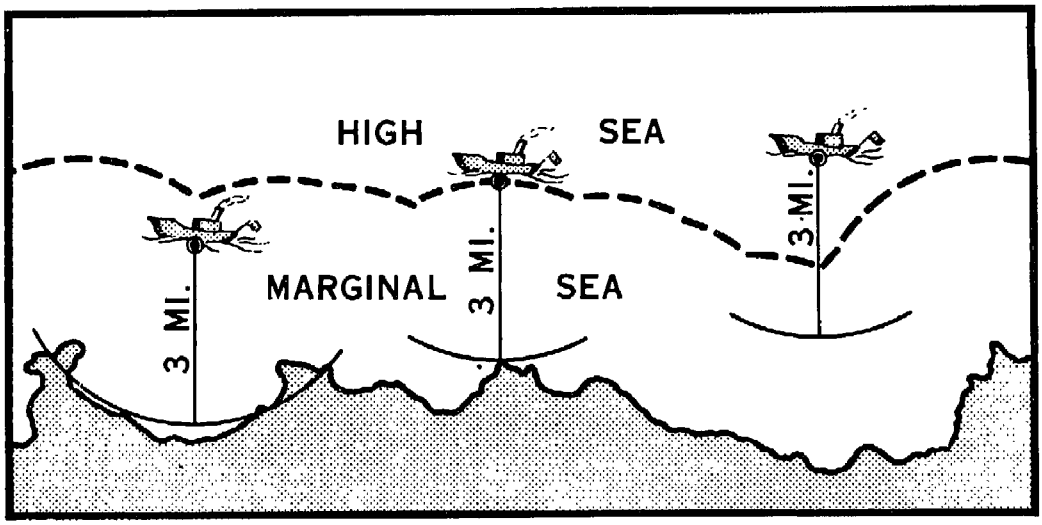

FIGURE 28.—The navigator can readily determine his relationship to the envelope line without such line being charted.

These practical advantages of the envelope line are so overriding as to more than offset the departures of the line from strict parallelism to the sinuosities of the coast. The envelope line adheres in essence to the rule of the tidemark (*see* Part 1, 331) because every point on it is a fixed distance from some point on the low-water line, even though *every* point on the low-water line is not a fixed distance from the envelope line.

Since the envelope line is geometric in origin, it, like the semicircular rule for bays, would seem to be appropriate for delimiting the seaward boundaries of the states under the Submerged Lands Act, quite apart from its use in international law.[151]

1622. *Lateral Boundaries*

Delimitation of the seaward lateral boundaries between adjacent states under the Submerged Lands Act poses the same problems as delimitation of the lateral boundaries between adjacent coastal nations through the marginal sea and the continental shelf. The objective in all such cases is to apportion the area in such manner as will be equitable to both nations or to both states. This principle of equity was embodied in the Presidential Proclamation of 1945 relative to the continental shelf contiguous to the coasts of the United States (*see*

151. Having established an envelope line at T-distance from the coastline, agreement might be reached between the parties concerned on a jurisdictional line consisting of a series of straight lines within the framework of the envelope line. Such treatment would be in the interest of simplified leasing procedures and better identification of leased areas.

2221). But to proclaim an abstract principle is one thing, and to formulate a working rule is quite another.

The simplest case of drawing a lateral seaward boundary would be where the coastline is relatively straight and the land boundary between two states reached the shore at right angles. An extension seaward of the last land frontier would be a logical solution. But this idealized condition is seldom found in nature and to apply the procedure just described could clearly result in an inequitable apportionment of the water area adjacent to the two states (*see* fig. 48). Other solutions must therefore be found.[152]

The Geneva Conference adopted the principle of equidistance as the guiding rule in the delimitation of boundaries through the territorial sea and the continental shelf. The basis for the rule and the method of constructing a boundary line between adjacent coastal nations and nations with coasts opposite each other are discussed in detail in Part 3, 2212 and 2224, and will not be repeated here. The principle being geometric in nature is applicable to the delimitation of the lateral boundaries between the states under the Submerged Lands Act (Public Law 31).

17. LOW-WATER LINE SURVEY OF LOUISIANA COAST

171. Purpose of Survey

To implement the application of Public Law 31 to the Louisiana coast, the State of Louisiana in 1957 entered into a cooperative arrangement with the Bureau of Land Management and the Coast and Geodetic Survey for the mapping of the low-water line along the entire Louisiana coast.[153] The mapping was to be accomplished by photogrammetric procedures in which the aerial photography was to be closely coordinated with actual tidal conditions as determined from a number of tide stations to be established in the area. The inland limits of the mapping were to be defined generally by the Chapman line location (*see* Part 1, 731).

Specifically, the purpose of the survey was to establish an accurate map location of the low-water line which could be used for delineating the "coast

152. For a discussion of some of those solutions, *see* Part 3, 2212.

153. The field work and the preparation of the maps were to be done exclusively by the Coast Survey. Prior to this (in 1954), 15 of the oil companies operating along the Gulf coast had entered into a cooperative project with the Coast Survey to establish the necessary control along the coast (much of the prior control no longer existed) for future mapping, and to tie in to the triangulation scheme the offshore platforms so that they could be used by the companies to carry control farther offshore if that should become necessary (*see* fig. 29). For a description of this project and the special problems encountered, *see* Gilmore, *Louisiana Coast and Offshore Triangulation*, 7 Journal, Coast and Geodetic Survey 22 (1957).

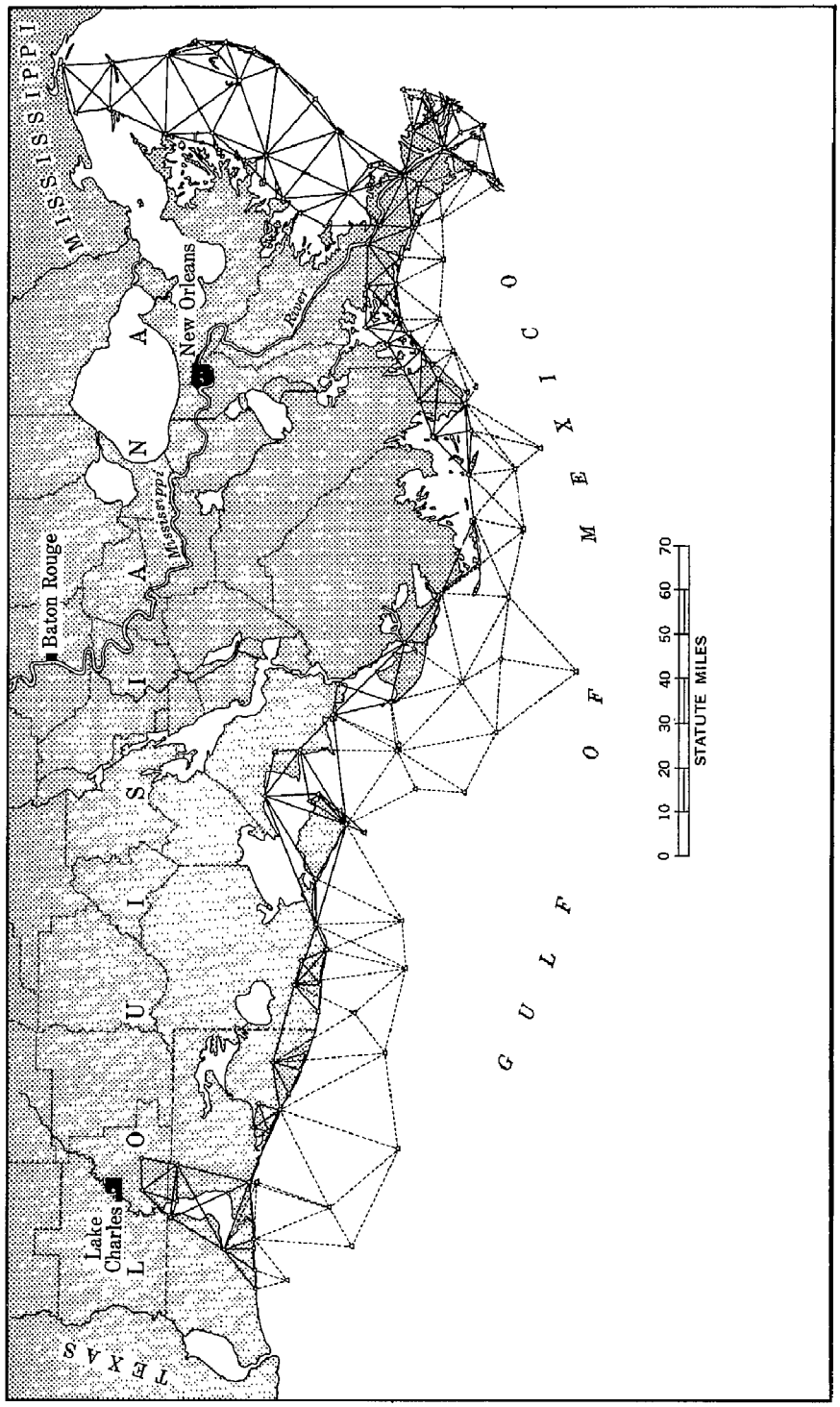

FIGURE 29.—Coastal and offshore triangulation along Louisiana coast.

line" under Public Law 31 (*see* 161) and from which the seaward boundary of Louisiana could be established. The survey is equally important to the Federal Government because under Public Law 212, federal jurisdiction begins where state jurisdiction ends (*see* 231).[154] This project, including the compiled maps, was completed in October 1961.[155]

172. The Mapping Project

The mapping project was undertaken in three stages, determined by the available photography and the nature of the coastline. Stage 1 included the areas east and west of the Mississippi delta and comprised the coastline of the islands facing Breton and Chandeleur Sounds, the coastline west of the Mississippi delta to Atchafalaya Bay, and from west of Marsh Island to the western boundary of Louisiana at Sabine Pass. Stage 2 included the Mississippi delta area, and stage 3 the Atchafalaya Bay area. The maps for the entire project were to be planimetric in nature and drawn at a scale of 1:20,000.

1721. *Area East and West of the Mississippi Delta*

The maps for this area were based on commercial photography flown in January and March of 1954 at tide stages ranging from 0.3 foot above to 0.7 foot below mean low water. Because of the nature of the coastline in this area, the slope of the foreshore, and the absence of possible dispute over the Chapman line (*see* Part 1, 731), it was possible to utilize the contact line on the photographs to interpolate a mean low-water line from the known height of the tide at which the various photographs were taken.

In compiling the low-water line for this portion of the coast, existing planimetric maps were utilized as base maps. Where necessary, modifications were made in the high-water line and in adjacent details from the 1954 photography. Forty-one maps were required for this portion of the project.[156]

154. For the Coast Survey, the project will provide basic tidal data along this section of the Gulf coast, and planimetric maps for the revision of nautical charts.

155. Although the Submerged Lands Act is unclear as to whether a "present" coastline is to be used as the baseline from which the seaward boundaries of the states are to be measured (*see* 1614), an accurate present survey would still be necessary, even if it should be held that Congress intended a "past" coastline. This is because very few of the early, or even later, surveys delineate a low-water line suitable for boundary determination. A present, accurate survey, of both the high- and low-water lines could be used for extrapolating a past low-water line by the method described in Coast Survey Special Rept. 88 of 1955 (*see* note 141 *supra*).

156. The maps are numbered consecutively from 1 to 41 beginning at the eastern boundary of the state. They are also identified by register numbers. All the maps carry a note similar to the following: "Prepared by the Coast and Geodetic Survey for the Bureau of Land Management and the State of Louisiana to show the approximate mean low water line along the Gulf Coast as interpolated and compiled from aerial photographs taken by Jack Ammann Corp., January 1954."

1722. *Mississippi Delta Area*

Although commercial photography flown in 1954 was also available for this area, the same procedure could not be followed as was used for the area east and west of the delta. The flatness of the area necessitated a more critical tolerance in the determination of the mean low-water line. The predominance of marsh and wild cane made this a most difficult area to survey and economically prohibitive insofar as ground surveying was concerned. The only practical solution was by means of aerial photogrammetry linked to an exact tidal datum.[157]

(*a*) *Establishment of Tidal Datum.*—Accurate coordination between the photography and the tide was essential to the mapping of the low-water line. A paucity of tide stations in the area made a tidal survey in advance of the photography a prerequisite. Eight tide stations were established in the area, so distributed to reflect changes in time and range of the tide along the different portions of the delta in order to insure an accurate mean low-water datum for every part of the coast (*see* fig. 23). Twelve months of tide observations were obtained at the local stations for comparison with a 19-year series at Pensacola, Fla., where the tidal characteristics are the same.[158] Indications are that the datum of mean low water was established with an accuracy of 0.1 foot vertically.

(*b*) *Photogrammetric Operations.*—To provide detail for the basic planimetric mapping, 9-lens photographs were taken during October 1958. These were especially suitable because of the relative scarcity of ground control and the difficulty of identifying such control on the aerial photographs. For mapping the low-water line, infrared photography, controlled from the tide stations after establishment of the mean low-water datum, was taken in December 1959.[159] (*See* fig. 30.)

157. Small inaccuracies in the low-water line resulting from this method could readily fall within the doctrine laid down by the Supreme Court in the boundary dispute between Arkansas and Tennessee along the Mississippi River. The Court said: "The thing to be done must be regarded. It is to locate the boundary along that portion of the bed of the river that was left dry as a result of the avulsion, according to the middle of the main navigable channel at the time the current ceased to flow therein as a result of the avulsion. Absolute accuracy is not attainable. A degree of certainty that is reasonable as a practical matter, having regard to the circumstances, is all that is required." *Arkansas* v. *Tennessee,* 269 U.S. 152, 157 (1925).

158. The tide in the delta area follows the diurnal pattern with one high and one low water occurring during the greater part of the month. Therefore, in computing the datum of mean low water at the various stations, the tides were reduced on a diurnal basis, using only the lower of the two low waters on the days when the tide became semidiurnal (*see* 1613). This follows the procedure used for establishing the plane of mean low water at Pensacola. Marmer, *The Tide at Pensacola,* 68 UNITED STATES NAVAL INSTITUTE PROCEEDINGS 1429 (Oct. 1942).

159. Infrared photography provided a sharp contrast between land and water and made possible an accurate delineation of the tidal contour.

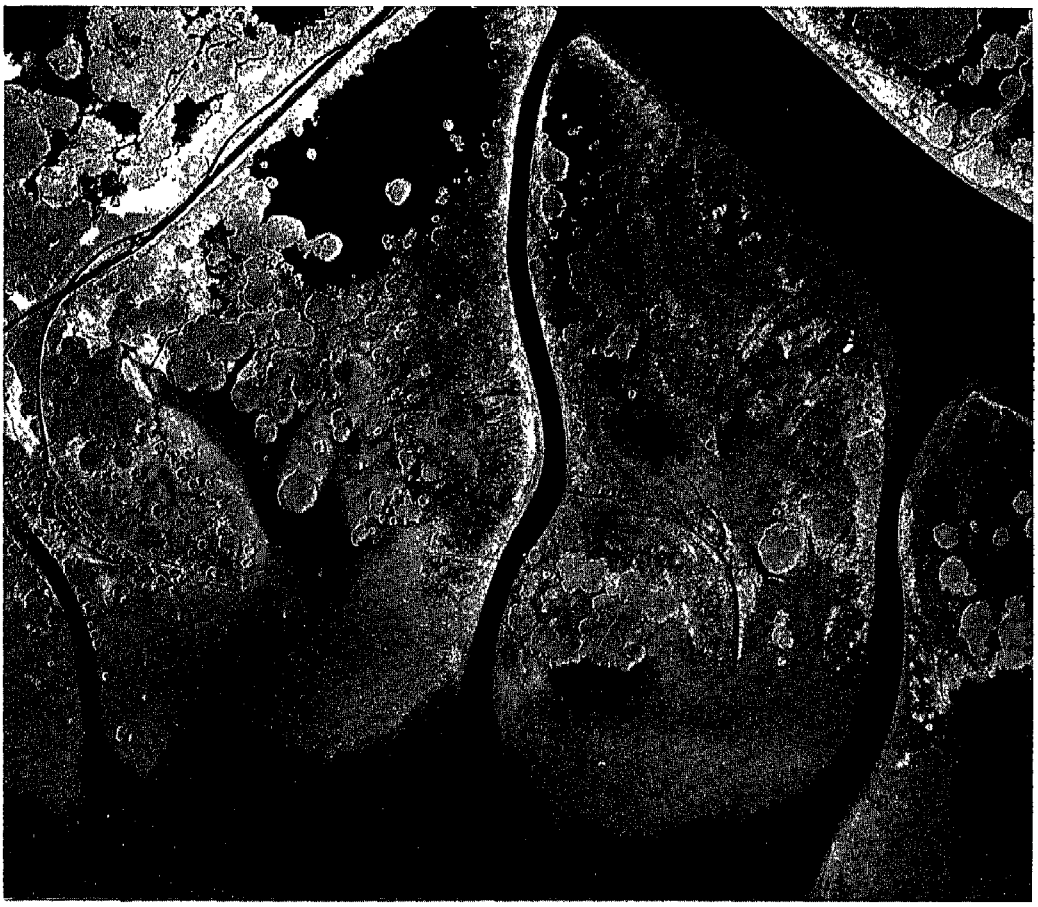

FIGURE 30.—Infrared photography provided a good contrast between land and water.

The outer coastline, with the exception of a small section of the west shore of the delta, was photographed when the tide ranged between mean low water and 0.3 foot below mean low water. All lines on the project were photographed from two to four times at tide stages varying between 0.2 foot above to 0.4 foot below mean low water, from which an interpolation of the actual mean low-water line was made.[160]

The photographs were compared with the shoreline at, or very nearly at, mean low water to check the interpolation made when the photographs were not taken at exactly mean low water. This inspection also served to detect small, off-lying, mean low-water reefs that might have been missed in the office

160. It was not possible to fly all the photography at exactly mean low water because this would have required more flying days than could be expected. The tides do not always go exactly to mean low water and stand there. They usually do not go as low as mean low water or they go below mean low water.

examination of the photographs, and to search out the mean low-water line in the few instances where it occurs just inside the edge of the wild cane.[161]

Fourteen maps cover the entire delta area and include full planimetric coverage to neat-line limits.[162]

1723. *Atchafalaya Bay Area*

This was the third stage of the Louisiana mapping project and was the last to be accomplished. It covered the area from Point au Fer westward to the western end of Marsh Island where it joined the area described in 1721. The Point au Fer Shell Reef, extending northwesterly from Point au Fer, and the south shore of Marsh Island were the two critical areas. It was necessary to know the condition of the reef with respect to both high water and low water because of its possible effect on the status of the bay as inland waters or open sea.[163] The exposed nature of the reef, its distance from land, its low elevation at low water, and its almost complete submergence at high water made it particularly difficult to survey even by photogrammetric methods. It is doubtful whether any practical ground method of surveying could have been utilized.

Along the south shore of Marsh Island there were a number of known reefs (mostly exposed at low water) some attached to the shore and some detached. These had only been surveyed approximately in the past and it was necessary that they be accurately delineated before the seaward boundary of the state could be drawn (*see* Part 3, 2211 D(*c*)).

Besides the overall control established along the Louisiana coast in 1954 (*see* note 153 *supra*), supplemental control was established in 1960 by a combination of triangulation and tellurometer traverse in order to position the

161. For a description and analysis of the field aspects of this project, the problems encountered, and the accuracies attained, *see* Jones and Shofnos, *Mapping the Low Water Line of the Mississippi Delta,* 20 SURVEYING AND MAPPING 319 (1960).

162. The maps are identified as Registers Nos. T–10944 to T–10957, inclusive. All maps carry the following note: "Prepared by the Coast and Geodetic Survey for the Bureau of Land Management and the State of Louisiana to show the mean low water line along the outer coast of the Mississippi River Delta area of the Gulf Coast as interpolated and compiled from infrared aerial photography and field examination by the Coast and Geodetic Survey in November and December, 1959."

163. The importance of knowing the condition of the reef with respect to high water is pointed up by an observation made by the Supreme Court in its decision of May 31, 1960 (*see* 154). The Court there said: "The Government concedes that all the islands which are within three leagues of Louisiana's shore and therefore belong to it under the terms of its Act of Admission, happen to be so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters. Thus, Louisiana is entitled to the lands beneath those waters quite apart from the affirmative grant under the Submerged Lands Act. . . . Furthermore, since the islands enclose inland waters, a line drawn around those islands and the intervening waters would constitute the 'coast' of Louisiana within the definition of the Submerged Lands Act." *United States* v. *Louisiana et al., supra* note 139, at 67 n.108. The present charted reef is within 3 leagues of the Chapman line (*see* Part 1, 731), hence the necessity of knowing its condition with respect to high water (*see* 1545 B, note 89).

reef across the bay where the land detail was insufficient for photogrammetric bridging.

(*a*) *Establishment of Tidal Datums.*—Tide conditions in the bay are somewhat unique and therefore more stations were required to coordinate the aerial photography with the tidal datums than would normally be required in such an area. Seven new tide stations were established at strategic locations (two within a half mile to a mile from the axis of the reef), so that each station controlled a rather restricted area (*see* fig. 22).[164]

The unique tidal conditions also made it infeasible to use the method of comparisons of simultaneous observations for deriving mean values, as was done in the delta area (*see* 1722). The procedure adopted was to obtain mean sea level in the bay by comparison with a 19-year series at Galveston. Harmonic constants for each tide station were then computed from a 29-day series by comparison with a 369-day series at Eugene Island. These showed the diurnal tide to be the dominant one in the area and therefore the datum reductions were made on a diurnal basis (*see* notes 133 and 158 *supra*).[165] The high- and low-water datums were determined with an accuracy of 0.1 foot vertically.

(*b*) *Photogrammetric Operations.*—Wide-angle single-lens, and 9-lens photography were used for bridging and for fixing the position of the reefs across the flight lines. All low-water mapping was done by infrared photography controlled from a base station where tide observations from the other tide stations were received at 15-minute intervals. It was thus possible to inform the aircraft what lines to fly and at what times.[166]

A field inspection was made of the mean low-water line using prints of the infrared photography. The purpose of this was to verify the low-water line visible on the photographs; to make certain that no small reefs were missed on the 1:20,000 scale photography; to mark for omission low-lying reefs just visible on the photography but just covered at mean low water; and to obtain elevations above water of low-lying reefs in order to complete mean low-water mapping regardless of a change in the preliminary datum of 0.1 or 0.2 foot, which might be either plus or minus. A careful program of inspection was

164. The only existing tide station in the area was at Eugene Island near the eastern end of the bay, but this was not representative of tidal conditions in the area because of the influence of the Atchafalaya River.

165. Preliminary datums were established from a 5-month series of observations and were later corrected for a 12-month series. This was done in order to fly the area during the winter of 1960–61, which was the only time mean low water occurred during photographic daylight. The alternative was to delay operations for 1 year. The final low-water datum did not vary by more than 0.1 foot from the preliminary value, and the high-water datum by no more than 0.2 foot.

166. All low-water photography was completed between Nov. 19 and 21, 1960. On the first day the tide barely reached mean low water; on the second day it reached exactly mean low water; and on the third day it went to 0.9 foot below mean low water.

worked out so as not to miss any of the many small reefs bare at low water. Panchromatic and color photography penetrated the water slightly and all indications of reefs shown on photographs were investigated, as well as all shoal indications on the nautical charts as possible reefs bare at low water. The area across the bay was inspected and reinspected several times in order to be certain of the mean low-water line. Not all inspection could be done at exactly mean low water because the tide changed rapidly—0.1 foot every 15 minutes. Inspection usually started 0.2 or 0.3 foot below mean low water.[167]

As noted above, a determination of the condition of the reef and shoals with respect to the datum of mean high water was essential for determining the status of the bay (whether inland water or open sea). It was not practicable to take high-water photographs during the period of operations in the winter of 1960–61 because high water rarely occurred during photographic daylight. Instead, an inspection was made of the area to detect points on the reefs that might bare at mean high water. Levels were then run on each one from the water surface to the top of the reef and referenced to a tide staff to determine its elevation with respect to mean high water. Another search of the area was made by helicopter in February 1961, to make sure that no small islets were missed. Mean high-water, infrared photography was also flown in May 1961.[168]

Five shoreline maps (with some planimetry back of the high-water line), compiled at scale 1: 20,000, cover the area.[169]

167. Field inspection was accomplished between Nov. 30, 1960, and Jan. 15, 1961, using a helicopter. The inspection unit knew at all times the exact stage of tide in relation to mean low water. Where the elevation of a reef was critical the helicopter was landed and the elevation above the water surface measured by hand level. Reference to the controlling tide station gave the elevation of the reef with respect to mean low water. Field inspection photographs show the date, time of inspection, and stage of tide for each unit area.

168. The elevations changed slightly as a result of a slight change in the datum value but no major change was made in the general status of the high-water reefs. For a complete discussion of the entire field project for this area, *see Shoreline and Mean Low-Water Line Mapping—Atchafalaya Bay, La.*, Special Rept. 2 of 1961 (Coast Survey archives).

169. The maps are identified as Registers Nos. T–11993 to T–11997, inclusive. All maps carry the following note: "Prepared by the Coast and Geodetic Survey for the Bureau of Land Management and the State of Louisiana to show the mean low water line as interpolated and compiled from infrared aerial photography and field examination by the Coast and Geodetic Survey in November and December 1960. Base map compiled from photography taken November 1960 and field inspection of December 1960 to February 1961."

CHAPTER 2

Outer Continental Shelf Lands Act (Public Law 212)

21. GENERAL STATEMENT

On August 7, 1953, H.R. 5134 of the 83d Congress, 1st session, was signed into law as Public Law 212 and identified as the "Outer Continental Shelf Lands Act."[1] The act provides for the jurisdiction of the United States over the submerged lands of the outer continental shelf, and authorizes the Secretary of the Interior to lease such lands for certain purposes. Thus, Congress for the first time asserted jurisdiction over the vast submarine area that fringes our coasts and over which the high seas flow.[2]

Public Law 212 asserts federal rights over the continental shelf of an extraterritorial nature and does not operate as an extension of national territorial limits, in the sense that the territorial waters define the national boundaries.

1. 67 Stat. 462 (1953). Although the law as enacted is H.R. 5134, its provisions are those of S. 1901, the latter having been substituted by a Senate amendment. 99 CONG. REC. 7264 (1953). H.R. 5134, as passed by the House, was in reality Title III of H.R. 4198 (Titles I and II applied to lands within state boundaries, and Title III to the outer continental shelf). Provisions for federal control over the continental shelf had been embodied originally as Title III in S.J. Res. 13, which became the Submerged Lands Act (*see* 12 note 6). By the time the resolution reached the Senate floor, Title III had been dropped because no satisfactory legislative solution could be devised for the complex problems posed by the continental shelf. Because of this action by the Senate and in order to expedite passage of a continental shelf lands act, the House separated Title III from its original bill (H.R. 4198) and designated it H.R. 5134. A separate bill (S. 1901) was thereafter passed by the Senate and took the place of everything in H.R. 5134 except the enacting clause. For a more extended treatment of the legislative history of the act, *see* Christopher, *The Outer Continental Shelf Lands Act: Key to a New Frontier*, 6 STANFORD LAW REVIEW 23, 28–31 (1953). (For pertinent excerpts from the act, *see* Appendix H.)

2. It has been estimated that the outer continental shelf of conterminous United States covers an area of 261,000 square statute miles, or about one-tenth the land area of the United States. S. Rept. 411, 83d Cong., 1st sess. 5 (1953). From computations made in the Bureau, the total area of the entire U.S. continental shelf (low water to 100 fathoms) is approximately 300,000 square statute miles, of which the Atlantic coast has 140,000; the Gulf coast, 135,000; and the Pacific coast, 25,000. The amount of this area within the 3-nautical mile limit is approximately 23,000 square statute miles, of which the Atlantic coast has 10,000; the Gulf coast, 8,000; and the Pacific coast, 5,000. The continental shelf of Alaska (low water to 100 fathoms) has been computed to be approximately 550,000 square statute miles.

The act asserts jurisdiction for a special purpose. This is evident from Section 3(a) of the act, which states: "It is hereby declared to be the policy of the United States that the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition as provided in this Act." [3] The basis for such assertion, the development of the shelf doctrine, its legal status, and its impact on the freedom of the seas doctrine will be considered before taking up specifically some of the pertinent provisions of the act.

22. DEVELOPMENT OF A CONTINENTAL SHELF DOCTRINE

The development of a continental shelf doctrine in international law is of comparatively recent origin, and may be said to have had its active inception with the realization that the continental shelf holds the key to a vast, new reservoir of natural resources which an ever-increasing world population will have to tap as its land resources are materially reduced or as they become entirely exhausted.[4] This, together with developments in technology, which made possible the location and actual recovery of offshore petroleum deposits, signalled the need for a legal regime to insure orderly and peaceful exploitation of these resources.

In terms of United States reserves, it has been estimated by geologists and petroleum engineers that the submerged lands of the continental shelf constitute the largest undeveloped source of oil under our control—14 billion barrels for the areas adjacent to California, Texas, and Louisiana.[5]

221. What Is the Continental Shelf?

What is the continental shelf and what are some of its physical characteristics? Every continent, and every offshore island, rests on a submarine base

3. Extraterritorial jurisdiction over a land or water area is a well recognized legal concept. The power of Congress to legislate for leased military bases in Bermuda, not under the sovereignty of the United States, was sustained by the Supreme Court in *Vermilya-Brown Co.* v. *Connell,* 335 U.S. 377, 381–385 (1948). The Court referred to other areas of legislative jurisdiction without sovereignty, such as the Canal Zone and Guantanamo Bay, Cuba.

4. It has been stated that the land involved in our ocean resources is probably more important to our future than was the Louisiana Purchase, and that they represent "a great range of mineral wealth and an almost incredible variety of animal and plant life." Statement of Dr. Harold F. Clark in *Hearings before Senate Interior and Insular Affairs Committee on S.J. Res. 13 and other Bills,* 83d Cong., 1st sess. 354, 356 (1953).

5. During the first 2 years of operation of the Submerged Lands Act and the Outer Continental Shelf Lands Act, the Federal Government had received 140 million dollars from leases of submerged lands off the coasts of Texas and Louisiana, and this represented but 3 percent of the area mapped as potentially oil-bearing. Statement by Secretary of the Interior McKay, *Washington Post and Times Herald,* Jan. 2, 1955, p. K–20.

which extends seaward from the shore for a varying distance. To this submerged extension of the visible continent has been given the name "continental shelf." More specifically, it may be defined as the submerged portion of a continent, which slopes gently seaward from the low-water line to a point where a substantial break in grade occurs, at which point the bottom slopes seaward at a considerable increase in slope until the great ocean depths are reached. The point of break defines the "edge" of the shelf, and the steeper sloping bottom the "continental slope." [6] Actually, there is no sharp break between the shelf and the slope, but a gradual merging of the one into the other, so that the junction of the two is a zone rather than a line. This is the true geologic-geographic concept. Conventionally, however, the edge of the shelf is taken at 100 fathoms (183 meters), but the world average is estimated at 72 fathoms.[7] In its juridical sense, it is that part of the shelf that lies seaward of the territorial sea and is so used in the Convention on the Continental Shelf adopted at Geneva in 1958 (*see* Part 3, 2221). In the context of the Outer Continental Shelf Lands Act, it is the part that lies seaward of the historic boundaries of the states (*see* 231).[8]

The continental shelf is thus a worldwide geomorphological feature and is not peculiar to any one continent or to one hemisphere, although its distribution over the world is unequal. Thus, along the coast of Chile there is practically no shelf, while along the Siberian coast it extends for hundreds of miles from shore.[9] The widest shelf in the world (750 miles across) is found in Barents

6. This is substantially the definition adopted in 1952 by the International Committee on the Nomenclature of Ocean Bottom Features (*see* Part 3, 2221 note 89). Although not specified, it is generally understood that the shelf begins at the seaward boundary of inland waters where true bays, ports, and rivers indent the coast. *See* statement of Secretary of the Interior in S. Rept. 411, *supra* note 2, at 4. The average slope on the shelf is less than two-tenths of 1 percent and the average slope of the continental slope increases to between three and a half and 6 percent. Pearcy, *Geographical Aspects of the Law of the Sea,* 49 ANNALS OF THE ASSOCIATION OF AMERICAN GEOGRAPHERS 11 (Mar. 1959).

7. SHEPARD, SUBMARINE GEOLOGY 143 (1948). This work, at pages 105–155, contains a detailed analysis of the topography of the continental shelves in various parts of the world, including their depth and breadth, based on a study of thousands of charts.

8. While this is the generally accepted definition of the continental shelf, the idea has been advanced that inasmuch as the bottom slopes seaward from the point of break at a considerable increase in gradient until a depth of 1,000 fathoms is reached, where there is again a fairly gradual slope to the great ocean depths, that broadly speaking the continental shelf could be considered as including both these physiographic concepts. If we approach the matter from seaward rather than from landward it would be the first well-defined rise from the ocean floor, which in the majority of instances would be the 1,000-fathom depth contour—at least insofar as the coastal areas of the United States are concerned (*see* fig. 31). From an oceanographic point of view there is a definite relationship between the two. Statement of Admiral Colbert in *Hearings, Navy Department Appropriation Bill* 758–759 (1941). This concept of the continental shelf corresponds to the term "continental terrace" which the International Committee on the Nomenclature of Ocean Bottom Features defined as "The zone around the continents, extending from low-water line to the base of the continental slope." BULLETIN, INTERNATIONAL UNION GEODESY AND GEOPHYSICS 555 (July 1953).

9. See world map accompanying Boggs, *National Claims in Adjacent Seas,* 41 THE GEOGRAPHICAL REVIEW 185 (Apr. 1951).

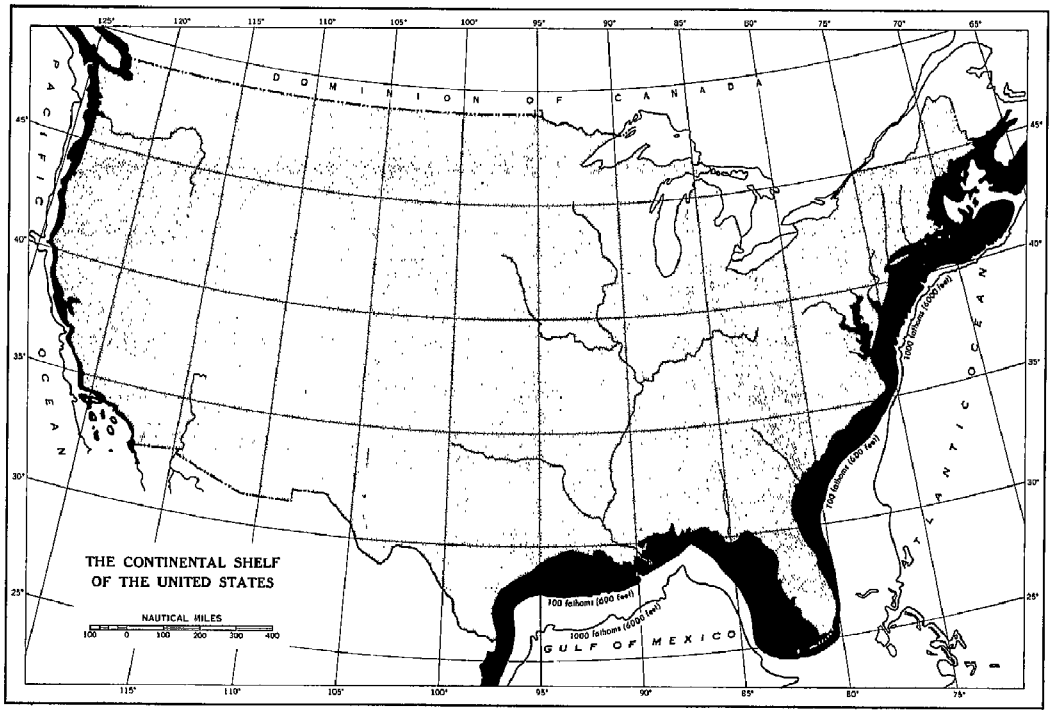

FIGURE 31.—100- and 1,000-fathom depth contours along the coasts of the United States.

Sea, which lies off the Arctic coast of Europe from Norway to Novya Zembla (Novaya Zemlya). The world average is 42 miles.[10]

Along the coast of the United States (fig. 31), the continental shelf varies from a width of about 1 nautical mile off parts of California to about 200 miles off Cape Cod. In the Gulf of Mexico, near the Texas-Louisiana boundary, it has a width of 120 miles. Figure 32 shows the bottom configuration of an area north of San Francisco Bay from the shore to oceanic depths. The closeness of the 100-fathom depth contours on the continental slope as compared with the distance from shore of the first 100-fathom contour is clearly discernible. There is actually a 600-foot drop in the first 14 miles from shore and a 10,000-foot drop in the next 21 miles.

The continental shelf should not be confused with the waters overlying it—one is a land mass, submerged it is true, but land nevertheless; the other is a water area, sometimes called the epicontinental sea. Figure 33 shows a profile of the shelf and slope for the area off the California coast shown in figure 32. The inset in the lower right-hand corner illustrates the relationship of the epicontinental sea to the continental shelf.

10. SHEPARD (1948), *op. cit. supra* note 7, at 139, 143.

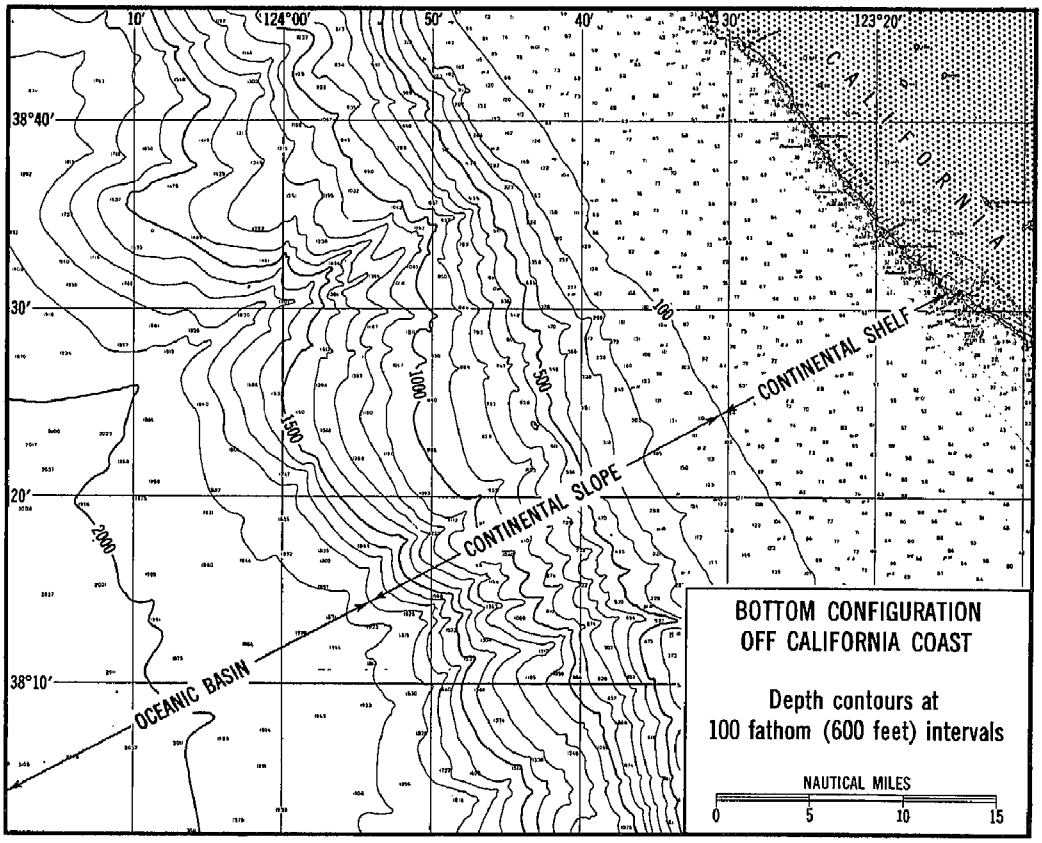

FIGURE 32.—Bottom configuration off California coast north of San Francisco Bay.

Figure 34 shows the remarkable submarine topography of the continental shelf and slope along the northeast coast of the United States. Many submarine canyons penetrate the shelf, the most pronounced being the one which marks the submerged gorge of the ancient Hudson River. The marked difference in the topography of the shelf as compared with the slope is in evidence, as is the drop to oceanic depths in the foreground.[11]

In considering the legal basis for a continental shelf doctrine, three characteristics of the shelf should therefore be kept in mind: (1) It is a land mass that underlies the marginal sea and the high seas; (2) it is a worldwide feature

11. Figure 34 is a photograph of a plastic relief model based on hydrographic surveys of the Coast and Geodetic Survey and contoured at 5-fathom intervals for the shelf and 25-fathom intervals for the slope. This detailed contouring was part of a special project undertaken cooperatively between the Survey and the Geological Society of America and published by the society in five charts, at scale 1:120,000, and an accompanying volume, as Special Paper No. 7. VEATCH AND SMITH, ATLANTIC SUBMARINE VALLEYS OF THE UNITED STATES AND THE CONGO SUBMARINE VALLEY (1939).

618325 O—62——14

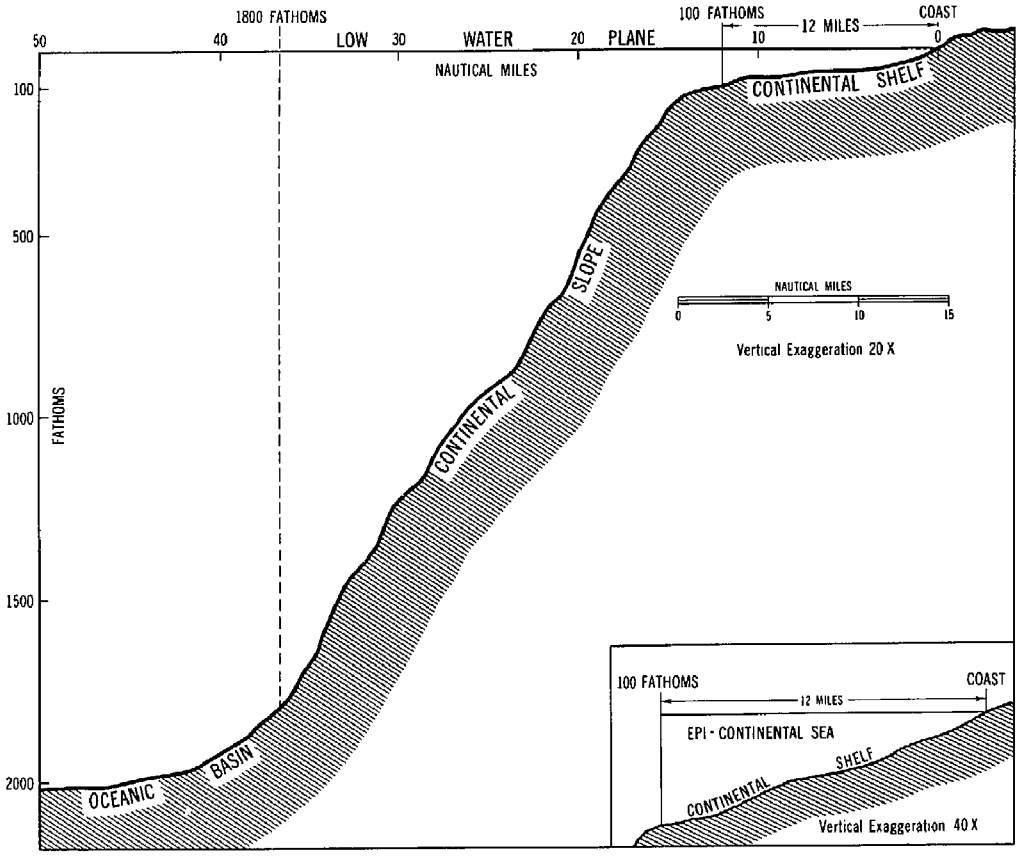

FIGURE 33.—Profile of shelf and slope along California coast at latitude 38°35′. (*See* fig. 32.)

that varies considerably in extent; and (3) it is the submerged extension of the continents.

222. LEGAL STATUS OF THE CONTINENTAL SHELF

The legal status of the seabed and subsoil of the marginal sea presents no difficulty because the coastal nation has full sovereignty over the superjacent waters. There is therefore no conflict with international law when a coastal nation drills for oil or exploits any other natural resources in or beneath its marginal sea. But beyond the marginal sea are the high seas, which are free to all nations and not within the sovereignty of any single nation. Does this mean that the same legal principle applies, or should apply, to the earth below these free waters? If not, what legal rationale is to be applied? This

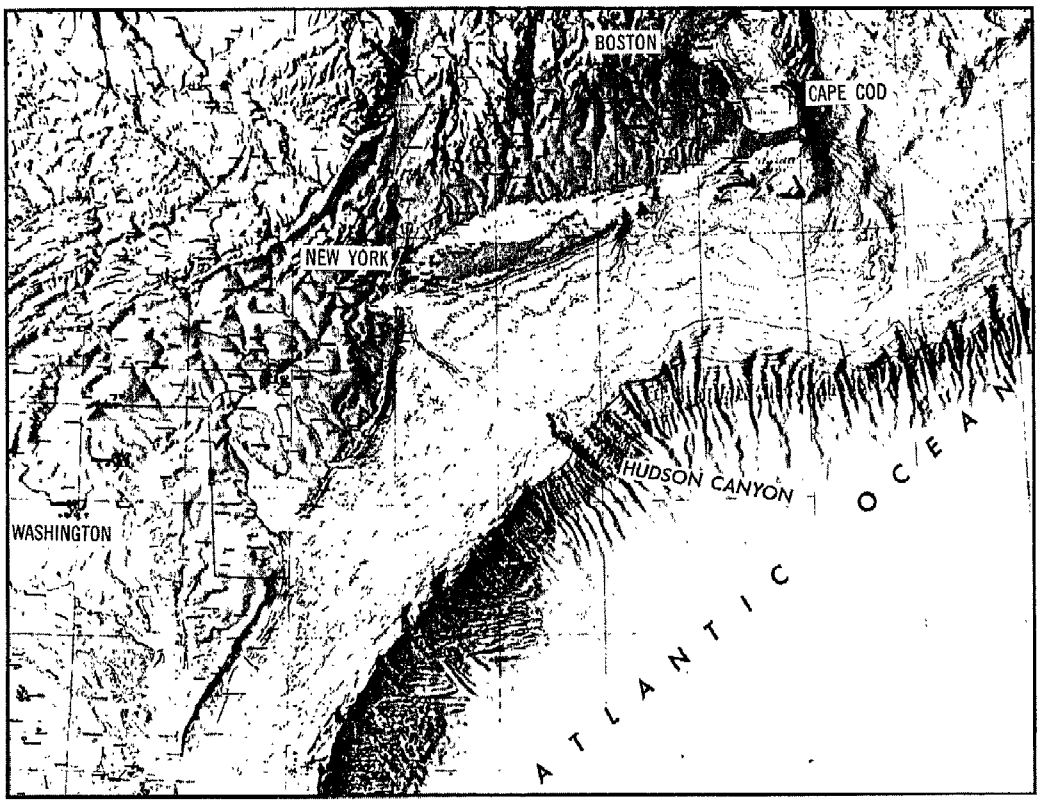

FIGURE 34.—Submarine topography of shelf and slope along northeast coast of the United States. (*After Veatch and Smith.*)

leads to a consideration of the claims of nations in this field, of the recommendations of the International Law Commission, and of the action of the 1958 Geneva Conference on the Law of the Sea.

2221. *The Presidential Proclamation of September 28, 1945*

Historically, the first step taken by coastal nations to appropriate the mineral resources beyond territorial waters was the Anglo-Venezuelan Treaty of February 26, 1942, relating to the submarine areas outside territorial waters in the Gulf of Paria, which separates the British Island of Trinidad from the mainland of Venezuela. The treaty was not an assertion of jurisdiction by either party over the continental shelf but rather an agreement by each party not to claim rights in the submarine areas on the other side of a dividing line between the two countries. It was merely a bilateral arrangement and no claims to

sovereignty were made against other nations, nor was the status of the superjacent waters in any way affected.[12]

The real impetus to present-day developments in the legal status of the continental shelf was the historic proclamation issued by President Truman on September 28, 1945, in which he announced to the world that "the Government of the United States regards the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control." [13] The preamble to the proclamation states that it is the view of the United States that such exercise of jurisdiction by the contiguous nation is reasonable and just, "since the continental shelf may be regarded as an extension of the land mass of the coastal nation and thus naturally appurtenant to it." The proclamation concludes with the statement that "The character as high seas of the waters above the continental shelf and the right to their free and unimpeded navigation are in no way thus affected." [14] (*See* Appendix F.)

Now when the United States lays claim to the natural resources of an area almost three times the size of France, as it did under the Truman proclamation, it is indeed a major development in international affairs.[15] But it was a reasonable assertion of rights based on the geologic unity of the shelf with the adjacent land, and was calculated to protect the mineral resources contiguous to our coast against appropriation by foreign countries. The proclamation was designed to initiate a change in international law by establishing a precedent which other nations could emulate. The difficulty was not with the proclamation but with the extravagant claims that followed in its wake.

Early suggestions that the proclamation violated international law were largely discounted by the chain reaction of claims which it precipitated among

12. COLOMBOS, THE INTERNATIONAL LAW OF THE SEA (4th ed.) 62 (1959). Although the term "continental shelf" was not used in the treaty, the term "submarine area" evidently was intended to refer to the continental shelf, since the whole of the area constitutes continental shelf in the geologic sense. Earlier isolated references to the continental shelf go back to the first part of the century—in a 1910 decree by Portugal regulating fishing vessels which were "coming to deplete the resources of . . . [the] narrow continental shelf," and in a 1916 assertion by Russia to ownership of certain uninhabited islands off the coast of Siberia because they formed "the northern continuation of the Siberian continental shelf." Hounshell and Kemp, *The Continental Shelf: A Study in National Interest and International Law*, 5 JOURNAL OF PUBLIC LAW 345 (Spring 1956), and Young, *Recent Developments with Respect to the Continental Shelf*, 42 AMERICAN JOURNAL OF INTERNATIONAL LAW 849 (1948).

13. Executive Proclamation No. 2667, 59 Stat. 884 (1945). It has been stated by Professors Clark and Renner of Columbia University that the proclamation constitutes "one of the decisive acts in history, ranking with the discoveries of Columbus as a turning point in human destiny." Clark and Renner, *We Should Annex 50,000,000 Square Miles of Ocean*, SATURDAY EVENING POST 16 (May 4, 1946).

14. Although the proclamation did not define the continental shelf, an accompanying press release described it as "submerged lands which is contiguous to the continent and which is covered by no more than 100 fathoms (600 feet) of water." 13 DEPT. STATE BULLETIN 484 (1945).

15. By this proclamation 760,000 square miles of underwater land (including the continental shelf of Alaska) was acquired by the United States. Ann. Rept. Dept. Interior VI, IX (1945).

other nations, particularly those of Latin America, many of the claims going far beyond the United States declaration in both purpose and scope. In a number of cases, the claim had been converted into one of actual sovereignty over the shelf, and at least five nations framed their claims to include the water areas above the shelf. Four nations established zones of resources control 200 miles wide, irrespective of the width of the shelf, and one declared such zone to be part of its national territory.[16] A substantial majority of the claims provided that there be no diminution of the traditional right of free navigation over the superjacent waters.[17]

These claims, including the United States claim, were all unilateral in nature and had no binding force on the international community other than the voluntary respect that nations chose to accord them, or as the nations involved were able to enforce. It was in this explosive situation that the United Nations, through its International Law Commission (*see* Part 3, 11), sought to bring order out of the existing chaotic condition.

2222. *Consideration by the International Law Commission*

The work of the International Law Commission (ILC) will be considered briefly here and will be limited to its development of the legal basis for a continental shelf doctrine which it set forth in its 1953 draft articles. The rest of its work on the law of the sea, as embodied in its final report, is dealt with in Part 3, chapter 1. The relationship of its recommendations to the conventions adopted at Geneva in 1958 are treated in Part 3, chapter 2.

After 3 years of detailed study and prolonged discussion, the Commission adopted draft articles in 1953 on the regime of the continental shelf.[18] It spelled out that a coastal nation exercises sovereign rights over the shelf for the purpose of exploring and exploiting its natural resources. It defined the shelf as "the seabed and subsoil of the submarine areas contiguous to the coast, but outside

16. In their joint Declaration on Maritime Zones of 1952, Chile, Ecuador, and Peru claimed 200 miles of exclusive fishing jurisdiction off their coasts; and the El Salvador Constitution of 1950 states that the territory of the Republic includes the sea within a distance of 200 miles, the airspace above, the subsoil, and the corresponding continental shelf. Dean, *The Second Geneva Conference on the Law of the Sea: The Fight for Freedom of the Seas*, 54 AMERICAN JOURNAL OF INTERNATIONAL LAW 763 (1960).

17. For a detailed statement on the various claims of the American States, *see* Young, *The Continental Shelf in the Practice of American States*, INTER-AMERICAN JURIDICAL YEARBOOK 27 (1950–1951). For an exhaustive treatment of the continental shelf including documents and a full bibliography, *see* MOUTON, THE CONTINENTAL SHELF (The Hague 1952).

18. Report of the International Law Commission, 5th Sess. 12 *et seq.* (1953) (cited hereinafter as Report of the ILC and recorded in Official Records, U.N. General Assembly, 8th Sess., Supp. No. 9 (1953) (U.N. Doc. A/2456).

the area of the territorial sea, to a depth of two hundred metres [109 fathoms or 654 feet]." [19]

In considering a legal basis for the rights of a coastal nation over the continental shelf, the Commission rejected the doctrine of *res communis* (the property of all nations) and the doctrine of *res nullius* (the property of no one and therefore capable of being appropriated by the first occupier) as impractical, once the continental shelf has become an object of active interest to coastal nations. It adopted instead the principle of *ipso jure* (by the law itself) and considerations of general utility as the bases for a coastal nation's rights. And these it considered to be independent of occupation, actual or fictional, and of any formal assertion of such rights. But the rationale on which the holding was based was the geographical unity of the submerged areas with the non-submerged contiguous land. The Commission thus adopted, to an extent, the geographical and geological test for the continental shelf as the basis for the juridical concept of the term, but it did not hold that the existence of a continental shelf in its geographical sense was essential to the exercise of the rights of a coastal nation.[20] Nor did it rule out the possibility of equitable adjustments of the general rule being made in certain geographic situations.[21]

19. The Commission had considered the adoption of a term other than "continental shelf," inasmuch as it departed from the strict geological connotation of the term, but because of its wide acceptance in the literature it seemed wise to retain it. Report of the ILC (1953), *supra* note 18, at 12, 13. The adoption of the 200-meter depth contour instead of the 100-fathom contour was due to the use of meters as a depth unit for nautical charts by the great majority of maritime nations. BOWDITCH, AMERICAN PRACTICAL NAVIGATOR 999 (1958). *See* also *The Metric System*, INTERNATIONAL HYDROGRAPHIC REVIEW 45 (Nov. 1925). As a practical matter the use of 200 meters in place of 100 fathoms will result in only a slight difference horizontally, inasmuch as this depth in general will fall on the continental slope.

20. This refers to areas such as the Persian Gulf where the submerged lands never reach a depth of 200 meters (the greatest depth in the gulf proper is 102 meters). This is often spoken of in the literature as not having a continental shelf in the true geologic sense, but rather as an inner shelf comprising shallow terraces which belong, geologically speaking, to the continental masses proper rather than to the part which geologists call the continental shelf. For a discussion of this aspect of the continental shelf, *see* MOUTON (1952), *supra* note 17, at 6–12. But the continental shelf begins geologically at the low-water line and is defined by the International Committee on the Nomenclature of Ocean Bottom Features as extending seaward to the depths at which there is a marked increase of slope to greater depths (*see* text at note 6 *supra*). All of the submerged area is thus part of the broad continental shelf which extends in the case of the Persian Gulf beyond the gulf for a distance of 60 nautical miles into the Gulf of Oman. Simply because the submerged area within certain geographical confines (to wit, the area constituting the Persian Gulf) never reaches the maximum limit of 200 meters does not mean there is no continental shelf there. Whatever the distinction geologically between inner shelves and the normal continental shelf, in the interest of avoiding confusion such distinction should not be carried over into the law. To apply a criterion based on the method of formation or origin would be an unwarranted limitation on the continental shelf doctrine.

21. This refers to submerged areas where the depth is less than 200 meters situated near the coast but separated by a narrow channel deeper than 200 meters from the part of the continental shelf adjacent to the coast. Such shallow areas would be considered as contiguous to that part of the shelf. Report of the ILC (1953), *supra* note 18, at 13. The 1953 draft articles differed in two important respects from the articles provisionally adopted by the Commission in 1951. "Sovereign rights" of the coastal nation was substituted for "jurisdiction and control," and the criterion of exploitability abandoned as a test of jurisdiction in favor of a fixed legal edge because of the belief that the exploitability rule did not satisfy the requirement of certainty which the Commission felt was essential in any legal concept. *Ibid.* In the final report of the International Law Commission, submitted to the United Nations in 1956, the exploitability rule was reinstated (*see* Part 3, 1312).

2223. *Convention Adopted at 1958 Geneva Conference*

The first United Nations Conference on the Law of the Sea, held at Geneva in 1958, adopted a Convention on the Continental Shelf in which the definition of the shelf and the rights exercised over it by the coastal nation are substantially the same as recommended by the International Law Commission in its final report (*see* note 21 *supra*). There is, however, one important difference. The convention specifically extends the term continental shelf to include the seabed and subsoil of submarine areas adjacent to the coasts of islands. Thus, a nation which is composed of one or more islands can claim exclusive rights to exploit the seabed and subsoil of its insular shelf or shelves. This concept was absent from the draft articles, but was covered in commentary (10) to Article 67 of the final report of the ILC.[22]

The Convention on the Continental Shelf was approved by the Conference by a vote of 57 in favor, 3 opposed, and 8 abstentions.[23] Although as of March 27, 1962, there were only 14 ratifications of the convention (*see* Part 3, 2272), there is little doubt that it will in the future have considerable influence on the developing international law in this field. Ratified or unratified, the legal status of the doctrine of the continental shelf seems assured in international law.

223. The Continental Shelf Doctrine and Freedom of the High Seas

The question might be asked, Does the new continental shelf doctrine represent a recession from the principle of freedom of the high seas? Theoretically, any restriction on the use of the high seas, no matter how slight, would be a recession from the principle. But practically, it becomes a matter of balancing interests. The "free seas" developed when navigation and fisheries were the primary economic interests associated with the open sea. The paramount consideration was the need of the international community. New interests have now arisen that are equally important to the community of nations. What yardstick is then to be applied in assessing the relative importance of the interests involved?

22. Except for the fact that the convention applies only to that part of the shelf which is outside the territorial sea, this corresponds to the term "island shelf" which the International Committee on the Nomenclature of Ocean Bottom Features in 1952 defined as "The zone around an island or island group, extending from the low-water line to the depths at which there is a marked increase of slope to greater depths. Conventionally its edge is taken at 100 fathoms (or 200 metres)." Bulletin, International Union Geodesy and Geophysics 555 (July 1953).

23. Whiteman, *Conference on the Law of the Sea: Convention on the Continental Shelf*, 52 American Journal of International Law 659 (1958).

The International Law Commission, while holding that the continental shelf doctrine is subject to, and within the orbit of, the paramount principle of freedom of the seas, nevertheless pointed out that "the progressive development of international law, which takes place against the background of established rules, must often result in the modification of those rules by reference to new interests or needs." It therefore formulated the general test of "unjustifiable interference" as the basis for invoking the full rigidity of the freedom of the seas principle. Under this test, the construction of installations on the continental shelf would be sanctioned in the interest of mankind, as long as the interference with free navigation can be justified. But such construction in narrow channels or in recognized sea lanes essential to international navigation is expressly prohibited.[24]

This then was the international situation regarding the continental shelf when Congress passed the Outer Continental Shelf Lands Act (Public Law 212) in 1953.

23. PERTINENT PROVISIONS OF THE ACT

Public Law 212 sets up a new federal policy for the development of the mineral resources of the outer continental shelf and fixes authority for administration and leasing of the submerged lands in such areas in the Secretary of the Interior. Although the act deals primarily with administration, and these will be touched on tangentially only, it nevertheless raises certain boundary problems that will have to be resolved before the administration of the submerged lands in the outer shelf can proceed in orderly fashion. These problems are linked to the Submerged Lands Act (*see* 11) by virtue of Section 9 of that act which confirms jurisdiction and control by the United States in that portion of the subsoil and seabed of the continental shelf lying seaward of the seaward boundaries of the several states as defined in Section 2. There is thus a conterminous federal-state seaward boundary, and Public Law 212 will be considered in that context.

24. Report of the ILC (1953), *supra* note 18, at 12, 13, and 15. The Commission believed that the extent of modification of established rules must be determined by the relative importance of the interests involved. To adopt a rule that exploration of the continental shelf must never result in any interference with navigation and fishing might defeat the very purpose for which the continental shelf doctrine was adopted. Interference, even if substantial, might in some cases be justified, whereas interference even on an insignificant scale would be unjustified if unrelated to reasonably conceived requirements of exploration of the shelf. What is reasonable must in the first instance be determined by the coastal State. *Id.* at 15.

231. Outer Continental Shelf

Section 2(a) of Public Law 212 defines the term "outer continental shelf" to mean "all submerged lands lying seaward and outside of the area of lands beneath navigable waters as defined in Section 2 of the Submerged Lands Act (Public Law 31, Eighty-third Congress, first session), and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control."

The first important point to be considered, insofar as this section is concerned, is that the act does not apply to the continental shelf as a whole but only to the outer portion, that is, seaward of the historic boundaries of the states.[25] In this respect, the act differs from the Truman proclamation in that the latter extended jurisdiction and control by the United States over the continental shelf seaward of the marginal sea, which is 3 miles. (Over the continental shelf under the marginal sea the United States already had full sovereignty.) But the proclamation was against the world, whereas Public Law 212 was between the coastal states of the Union and the Federal Government.

The precise seaward limit of the outer continental shelf is not defined by the act but merely identifies it with the subsoil and seabed that appertain to the United States. However, in the Senate report on the measure, it is made clear that the committee had in mind that the outer edge of the shelf is the point where the continental slope leading to the true ocean bottom begins and that this point is generally regarded as the depth of approximately 100 fathoms.[26] (*See* fig. 35.)

232. Jurisdiction Over the Outer Continental Shelf

Section 3(a) is a declaration of policy with regard to United States jurisdiction over the outer continental shelf. It provides that "the subsoil and

25. The historic boundary of a state as understood in the Submerged Lands Act is the boundary that existed at the time the state became a member of the Union, or as heretofore approved by Congress. For states bordering the Atlantic and Pacific Oceans these boundaries extend 3 geographic miles seaward (*see* 122); for states bordering the Gulf of Mexico, the Supreme Court has held that the boundary of Texas and Florida extends 9 geographic miles into the Gulf, while for Alabama, Louisiana, and Mississippi they extend only 3 geographic miles (*see* 1547). Federal jurisdiction under Public Law 212 would therefore not begin at a uniform distance from the coastline in the Gulf of Mexico.

26. S. Rept. 411, *supra* note 2, at 4. This follows generally the definition adopted in 1952 by the International Committee on the Nomenclature of Ocean Bottom Features (*see* note 6 *supra*) and is somewhat broader in scope than the Truman proclamation which set a definite limit of 100 fathoms (*see* note 14 *supra*). Under Public Law 212, United States' authority could be interpreted to include depths beyond 100 fathoms if that is where the shelf edge actually is. And where the actual shelf edge lies in depths less than 100 fathoms, the legislative intent could be interpreted to mean a minimum of 100 fathoms. When the Geneva Convention on the Continental Shelf becomes operative the matter of the outer boundary under Public Law 212 will become academic inasmuch as the convention adopted the 100-fathom depth curve as a minimum limit and beyond that if exploitation is feasible (*see* note 21 *supra*).

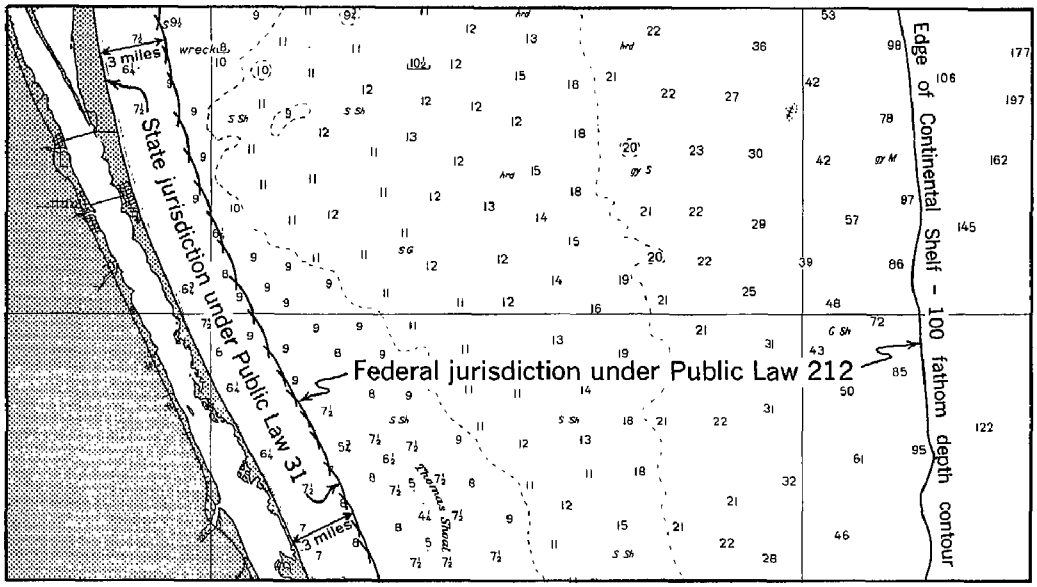

FIGURE 35.—Offshore federal and state jurisdiction under the submerged lands acts. State jurisdiction extends to 3 nautical miles from the coastline except for Texas and the west coast of Florida where it is 9 miles.

seabed . . . appertain to the United States and are subject to its jurisdiction, control, and power of disposition."

The subsection thus broadened the subject matter of the claim under the Presidential proclamation (*see* 2221) and under section 9 of the Submerged Lands Act (*see* 13) to include the "seabed and subsoil" of the continental shelf and not merely the "natural resources" therein. But the character of the rights claimed remain the same, that is, they are limited to "jurisdiction and control." [27] In the final report of the International Law Commission and in the Convention on the Continental Shelf adopted at Geneva in 1958, it is provided that the coastal State exercises "sovereign rights" over the continental shelf for the purpose of exploring and exploiting its natural resources (*see* Part 3, 2222).[28]

27. As originally introduced in the Senate, S. 1901 was also limited to "natural resources," but the broader language was substituted by the committee as a necessary step forward. *Id.* at 7.

28. In the hearings on the Outer Continental Shelf Lands Act, it was stated by the deputy legal adviser of the State Department that an assertion of exclusive jurisdiction and control over the natural resources is "for all practical purposes" tantamount to an assertion of exclusive jurisdiction over the seabed and subsoil and would give everything that was encompassed in the word "sovereignty" as long as it did not refer to the waters above. *Hearings before Committee on Interior and Insular Affairs on S.* 1901, 83d Cong., 1st sess. 585–586 (1953).

Section 3(b) expresses the unequivocal legislative intent to adhere to the traditional United States policy of freedom of the high seas, and provides that the "Act shall be construed in such manner that the character as high seas of the waters above the outer Continental Shelf and the right to navigation and fishing therein shall not be affected." This makes it clear that the jurisdiction asserted is a "horizontal jurisdiction" extending only to the seabed and subsoil, and in nowise affects the status of the superjacent waters.[29]

An aspect of this section that requires some clarification is the fishing rights that are preserved, particularly as read in the light of Sections 2(e) and 3(a) of the Submerged Lands Act. Section 2(e) of that act defines "natural resources" as including fish and other marine animal life, and Section 3(a) recognizes rights of the several states in the submerged lands within their historic boundaries and the natural resources in the waters above (*see* 121). Under the Supreme Court's interpretation of the act, the seaward boundaries of Texas and Florida extend for a distance of 9 nautical miles (3 marine leagues) in the Gulf of Mexico (*see* 1547). This is 6 miles seaward of the 3-mile belt of territorial waters which the United States adheres to in its international relations. There is thus an apparent contradiction between the preservation of free fishing rights in the waters above the outer continental shelf, as expressed in Public Law 212, and state control of fishing in the zone between 3 and 9 miles in the Gulf of Mexico, as expressed in the Submerged Lands Act. But the key to an explanation of this seeming contradiction is to be found in the holding of the Court in *United States* v. *Louisiana et al.*, 363 U.S. 1 (1960), that the purposes of the act are domestic in nature and not violative of the country's consistent foreign policy with respect to the 3-mile limit of territorial waters (*see* 1541(*b*)).

Public Law 212 gives legislative expression to the Presidential Proclamation of September 28, 1945 (*see* 2221),[30] and insofar as Section 3(b) is concerned it is a declaration to the world that the right of free fishing by foreign vessels in the outer continental shelf will not be impaired.[31] If this be so, then it could not

29. S. Rept. 411, *supra* note 2, at 2, 7. The use of the term "horizontal jurisdiction" in the committee report is not to suggest that the jurisdiction does not extend downward from the seabed.

30. *Executive Hearings before Senate Interior and Insular Affairs Committee on S. J. Res. 13 and Other Bills*, 83d Cong., 1st sess. 1416–1419 (1953).

31. While Sec. 3(b) refers to the "outer" shelf which, under Sec. 2(a) of Public Law 212 and Sec. 2(a) of the Submerged Lands Act, would be considered outside of state boundaries, the import of the section must be intended to preserve the right of free fishing and navigation outside of the territorial waters of the United States. If an exception should be read into the act, in this respect, with regard to the Gulf states it would be in derogation of what we have considered through the years a reciprocal right of American vessels to fish within 3 miles of a foreign coast. Note, for example, the protest lodged with the Mexican Government regarding interference with American shrimp fishers operating within 9 miles of the Mexican coast in the Gulf of Mexico but outside the 3-mile line. *Hearings, supra* note 4, at 1061.

have been the intent of Congress to curtail freedom of foreign fishing and navigation in the area between 3 and 9 miles in the Gulf, even though the committee report refers to "the waters seaward of State boundaries" as those whose character as high seas will not be changed by the act.[32] The term "outer" shelf, as used in Section 3(b) of Public Law 212 must therefore be construed internationally to mean that portion of the continental shelf which lies outside the territorial waters of the United States, that is, outside the 3-mile limit.[33]

233. Governing Laws

The question of what laws should be applied to the outer shelf did not present any easy solution. The United States, for the first time, was to establish a body of law for the protection, development, and administration of an area over which it was to have control of the seabed and subsoil but not of the superjacent water and airspace. The laws adopted are a combination of federal and state laws.[34] This body of law consists of (1) the Constitution and laws of the United States, and (2) the laws of the adjacent states.

Under Section 4(a)(1), the Constitution and federal laws are extended to the subsoil and seabed of the outer shelf and to all artificial islands and fixed structures erected thereon used in the exploration of the resources of the shelf to the same extent as if the outer shelf were an area of exclusive federal jurisdiction located within a state.[35]

By adoption, the state laws, other than taxation laws, in effect on the date of the act, are made part of the law of the United States under Section 4(a)(2), to the extent that they are applicable and not inconsistent with the act or with other federal laws and regulations of the Secretary of the Interior. Such laws are to be administered by federal officers and Federal courts, and to this extent

32. S. Rept. 411, *supra* note 2, at 7.

33. Insofar as concerns state control over fisheries in the waters of the Gulf between 3 and 9 miles, under the doctrine of *United States* v. *Louisiana et al.*, *supra*, the provision in Secs. 2(e) and 3(a) of the Submerged Lands Act can only apply domestically. Therefore, state control in such area falls within the well-recognized doctrine that in the absence of conflicting federal legislation, the regulation of coastal fisheries within state boundaries is under the control of the individual state. For a fuller discussion of the subject of coastal fisheries in its regulatory aspects, *see* Part 3, 2241 note 124.

34. For a discussion of the various proposals, *see* Christopher, *supra* note 1, at 37–41.

35. The one exception to the applicability of federal laws seems to be the Mineral Leasing Act of 1920, as amended (41 Stat. 437), and any other prior mineral leasing laws. The proviso in Sec. 4(a)(1) requires mineral leases on the outer shelf to be issued only under the provisions of Public Law 212. This follows the opinion of the Attorney General of the United States and the Solicitor of the Interior Department that the Mineral Leasing Act does not encompass the submerged coastal areas below low tide. *Hearings*, *supra* note 28, at 579–581 (1953).

original jurisdiction is conferred on United States district courts to deal with cases and controversies arising out of operations on the outer shelf (Sec. 4(b)). The respective state laws apply to the portion of the outer shelf (including artificial islands and structures erected thereon) that would lie within the area of the state if its boundaries were extended seaward to the outer margin of the shelf. The President is authorized to determine such projected state lines and to have them published in the Federal Register and to define each such area.[36]

It is important to point out in connection with the adoption of state laws for the area, that Section 4(a)(3) provides that such adoption "shall never be interpreted as a basis for claiming any interest in or jurisdiction on behalf of any State" in the outer shelf.[37]

234. Geological and Geophysical Explorations

Section 11 deals with geological and geophysical explorations on the outer continental shelf, and provides as follows: "Any agency of the United States and any person [38] authorized by the Secretary [of the Interior] may conduct geological and geophysical explorations in the outer Continental Shelf, which do not interfere with or endanger actual operations under any lease maintained or granted pursuant to this Act, and which are not unduly harmful to aquatic life in such area."

This section has had a long legislative history, certain aspects of which are essential to an understanding of the purpose and meaning of its provisions. Primarily, two questions are involved: (1) the meaning of the term "geological and geophysical explorations," and (2) the scope of the authorization provided.

(*a*) *Geological and Geophysical Explorations.*—Section 11, or the substance thereof, was inserted in the various House bills and in most of the Senate bills and had for its primary purpose a recognition of the right of any person to conduct geophysical explorations, preparatory to drilling for oil, without limitation as to area of exploration. The intent was to encourage exploration for locating mineral resources, and was the type of exploration that would lead to reasonable deductions as to the presence or absence of mineral deposits. In

36. These jurisdictional lines are an extension of the lateral boundaries of the states which are delimited in accordance with the principle of equidistance (*see* 1622). This principle should be followed in extending the lines to the outer shelf (*see* fig. 50).

37. This emphasizes the exclusive nature of the Federal Government's control over the outer shelf. A necessary consequence of this would seem to be that any extension of state control over any part of such shelf would have to be acquired by a specific grant from Congress.

38. The term "person" as used in the act includes "a natural person, an association, a State, a political subdivision of a State, or a private, public, or municipal corporation." (*See* Sec. 2(d) of the act.)

other words, exploration in the substructure of the earth using seismic or other methods. This is implicit in the legislative history of the act.[39]

Hydrographic surveying and its broader aspects oceanography would not fall within the purview of the act since they do not normally have for their purpose the location of mineral resources. The inclusion of the clause "and which are not unduly harmful to aquatic life in such area" would seem to bear out this interpretation of the legislative intent. Section 11 cannot therefore be considered as granting blanket authority to any federal agency to conduct such operations on the outer shelf.

(*b*) *Authorization.*—In H.R. 5134, the right of any person and any agency of the United States to conduct geological and geophysical explorations in the outer shelf was recognized without any prior authorization being required. In its comments on S. 1901, the Department of Justice noted the absence of a corresponding provision, and recommended its inclusion as a desirable provision, but with the further recommendation that H.R. 5134 be modified to the extent that the explorations conducted by a private person "be conditioned on securing a permit from the Secretary." [40]

It is reasonable therefore to conclude from this legislative history that any federal agency may conduct geological and geophysical explorations in the outer shelf without prior authorization from the Secretary of the Interior, but any "person" (as defined in the act) desiring to carry on such operations would first have to obtain authorization.[41]

39. In the House Judiciary Committee report on the original Submerged Lands Act (H.R. 4198), Title III of which related to the outer continental shelf (*see* note 1 *supra*), it was stated that "it is impractical and too expensive to develop and utilize specially trained exploration crews and special equipment . . . for work in the open sea unless relatively large areas are open for exploration" and that "any method of fencing off areas for exploration would retard competition and development." H. Rept. 215, 83d Cong., 1st sess. 19 (1953). S. 1901, which finally became Public Law 212 (*see* note 1 *supra*), originally had no corresponding provision. In the hearings on the bill it was recommended that a new section be added identical with Sec. 17 of H. R. 5134 (*see also* 234(*b*)). The explanation for the recommendation was that "Geological and geophysical explorations must be conducted before the prospective bidders know what areas they are interested in and the amount to offer for leases. If adopted, this amendment will result in the Government obtaining the maximum prices for the areas it decides to lease." *Hearings, supra* note 28, at 551.

40. S. Rept. 411, *supra* note 2, at 39. The full comment of the Department of Justice on this section was as follows: "The House bill (sec. 17) recognizes the right of any person, subject to applicable provisions of law, and of Federal agencies, to conduct geological and geophysical explorations that do not interfere with or endanger actual operations under any lease issued pursuant to the act. Such provision may be desirable, but might well be conditioned on securing a permit from the Secretary (in the case of private persons), rather than leaving it to the individual, as this seems to do, to decide what will interfere with or endanger operations. S. 1901 has no corresponding provision."

41. The question of authorization to private institutions, for conducting oceanographic research on the continental shelf, was raised at a special meeting on Aug. 29, 1959 (at which the author was present), sponsored by the Committee on Oceanography of the National Academy of Sciences (*see* Part 3, 2223 note 107). Two conflicting viewpoints were developed regarding the import of Sec. 11: (1) that Congress had no more in mind than exploration for mineral deposits and that Public Law 212 changed nothing with respect to oceanographic research on the shelf and what was permissible before enactment was permissible today; and (2) that the section was broad enough to apply to any operations on the shelf, whether it led to mineral exploration or not. No administrative or judicial interpretation has thus far (Aug. 1961) been given to the application of this section.

24. OTHER PROVISIONS

Other provisions of Public Law 212, while not directly associated with boundary problems, have a collateral interest from the point of view of the light they shed on the purpose and scope of the act.

Section 4(e) authorizes the U.S. Coast Guard to issue and enforce regulations with respect to lights, warning devices, and safety equipment for the promotion of safety of life and property on the structures erected on the outer shelf and in the adjacent waters; Section 4(f) extends the authority of the Secretary of the Army to prevent obstructions in the navigable waters of the United States to artificial islands and fixed structures on the outer shelf; and Section 5 places the administration of the shelf areas under the Secretary of the Interior with authority to prescribe rules and regulations to carry out the provisions of the act.

Section 7 anticipates that disputes are likely to arise as to whether certain areas are within the jurisdiction of a coastal state under the Submerged Lands Act or under the jurisdiction of the Federal Government under the Outer Continental Shelf Lands Act (*see* note 25 *supra* and accompanying text). The section provides for a temporary resolution of such controversies by authorizing the Secretary, with the approval of the Attorney General, to enter into agreements with a state to permit continued development of mineral resources in such areas, impounding the revenues until an ultimate determination is reached.[42] (*See* fig. 36.)

Section 9 controls the disposition of revenues received from leases on the outer continental shelf for the period from June 5, 1950 (the date of the Supreme Court decisions in *United States* v. *Louisiana* and *United States* v. *Texas* (*see* Part 1, 12)) to the date of enactment of Public Law 212, and thereafter, and provides for their deposit in the Treasury of the United States and credited to the United States as miscellaneous receipts. The committee report spells out that no part of such revenues are to be earmarked for any coastal state nor for any specific purpose.[43]

Finally, there is a "saving clause," which protects any rights in the outer shelf that may have been acquired under any law of the United States prior to the effective date of the act (Sec. 14); and the usual separability clause which leaves unaffected the remainder of the act, in the event that any section, sentence, clause, phrase, or individual word is held invalid (Sec. 17).

42. Such an agreement was entered into between the United States and the State of Louisiana on Oct. 12, 1956 (*see* 153, text at notes 35 and 36).

43. S. Rept. 411, *supra* note 2, at 13–14. The committee considered but did not adopt proposed amendments to dedicate the revenues to national security purposes first and then as grants-in-aid to education. *Id.* at 2–3. This, however, was approved by the Senate, but failed to win approval of the Senate-House Conference Committee. The conference report was ultimately accepted by the Senate. 99 CONG. REC. 10500 (1953). A minority report to S. 1901 was filed by Senator Long of Louisiana, one of the grounds of his objection being the denial to the states of any portion of the revenues which might be derived from the outer shelf. S. Rept. 411, *supra* note 2, at 65.

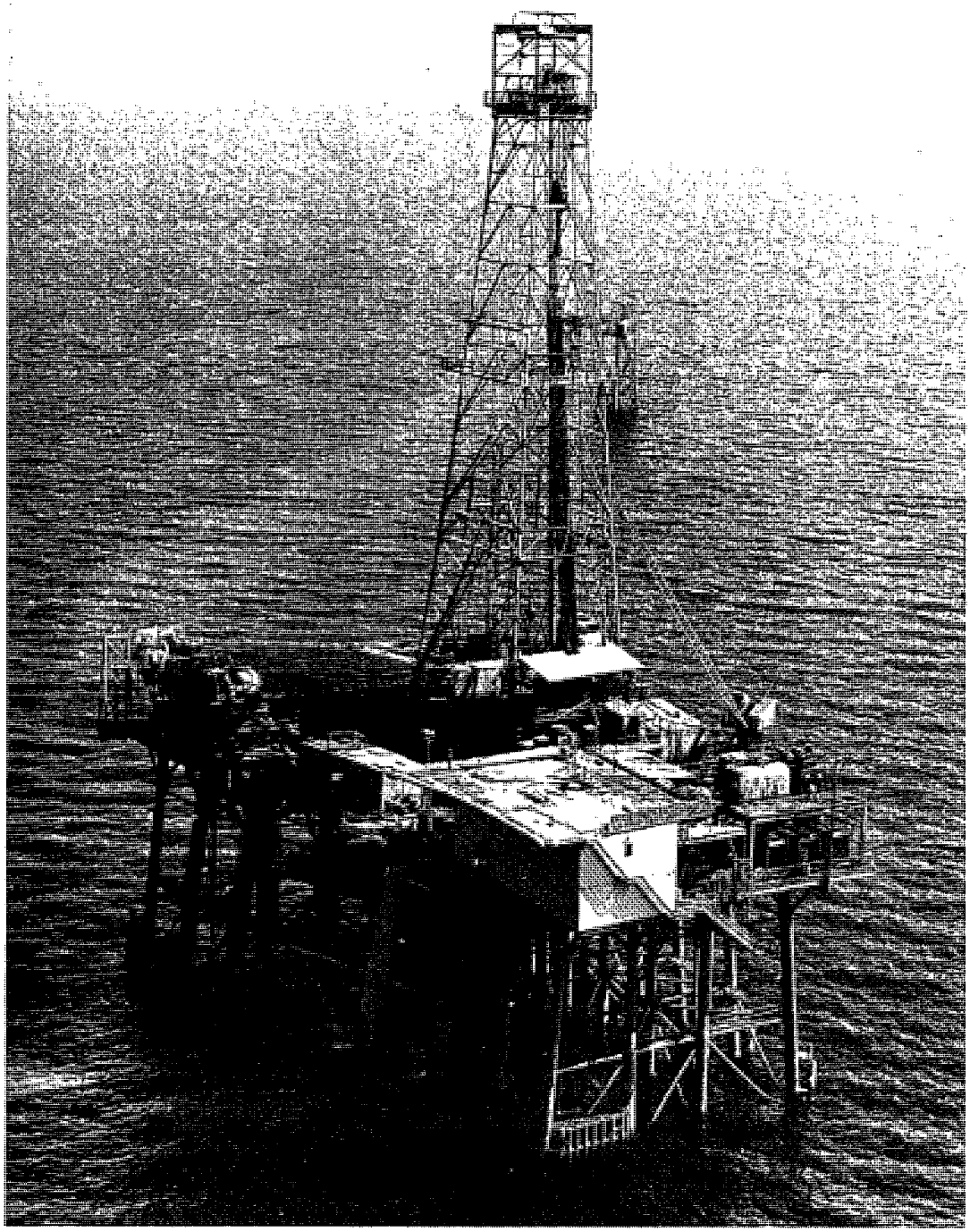

FIGURE 36.—Self-contained combination drilling and production platform on the outer continental shelf in the Gulf of Mexico, approximately 20 miles from shore in 100 feet of water. (*Courtesy, J. Ray McDermott & Co., Inc.*)

CHAPTER 1

The International Law Commission

In this and the next chapter, only those aspects of the work of the International Law Commission (ILC) and the Geneva Conferences that deal with boundary and associated problems will be considered. The work of the ILC must be regarded as preparatory in nature only since its final recommendation was for convening an international conference of plenipotentiaries to examine the law of the sea, and to embody the results of its work in one or more international conventions.[1]

The frame of reference for the Geneva Conferences was the final report of the ILC, and many of the articles adopted at Geneva follow literally the phraseology of the draft articles of the Commission. In order, therefore, to avoid extensive repetitions the Commission's report will be dealt with not as a separate entity, article by article, but through the conventions adopted at Geneva, emphasizing where departures exist or where no action at all was taken—for example, on the breadth of the territorial sea.

There is little doubt but what the work of the International Law Commission and the 1958 Geneva Conference represents the greatest advance in the development and codification of the international law of the sea since the 1930 Hague Conference for the Codification of International Law was convened.

II. ORIGIN AND ORGANIZATION

Article 13 of the Charter of the United Nations requires the General Assembly to "initiate studies and make recommendations for the purpose of . . . encouraging the progressive development of international law and its codification." The machinery established by the General Assembly for carrying out

1. Report of the International Law Commission, 8th Sess. 3 (1956) and recorded in Official Records, U.N. General Assembly, 11th Sess., Supp. No. 9 (1956) (U.N. Doc. A/3159) (cited hereinafter as Report of the ILC (1956)).

this task took the form of the International Law Commission, which was established under General Assembly Resolution 174 (II) on November 21, 1947. Under the statute, the Commission is charged with the codification and development of international law.[2]

The Commission is composed of 21 eminent international lawyers and jurists—no two of which are nationals of the same State—elected by the General Assembly from a list of candidates submitted by the governments of members of the United Nations.[3] The term of office of each member is 5 years.

12. PREPARATORY WORK OF THE COMMISSION

The Commission, at its first session in 1949, selected as topics for consideration both the regime of the high seas (including the contiguous zone and the continental shelf) and the regime of the territorial sea, the former being given priority.

Consideration of the regime of the high seas was begun in 1950 and was completed in 1956 after the Commission had published two drafts on the high seas based on six reports by a Special Rapporteur and comments by governments.

Work on the regime of the territorial sea was begun by the Commission in 1952 on the basis of a report by the special rapporteur which dealt in particular with questions of baselines and bays. In 1954, provisional articles were promulgated to governments which reflected the observations of a group of experts on certain technical aspects of the problem.[4] At its eighth session, in 1956, the Commission examined the replies from governments and drew up its final report on the regime of the territorial sea and the regime of the high seas, incorporating a number of changes suggested by the replies.[5] This formed the background and framework for the Conferences on the Law of the Sea in 1958 and 1960 (*see* 22 and 23), and paved the way for an orderly consideration of the many problems that were to be dealt with.

2. In Art. 15 of the statute, the expression "codification of international law" is defined as "the more precise formulation and systematization of rules of international law in fields where there already have been extensive State practice, precedent and doctrine"; whilst the expression "progressive development of international law" is defined as "the preparation of draft conventions on subjects which have not yet been regulated by international law or in regard to which the law has not yet been sufficiently developed in the practice of States."

3. Prior to 1956, the Commission was composed of only 15 members, but this was changed by General Assembly Resolution 1103 (XI), Dec. 18, 1956. Johnson, *The Preparation of the 1958 Geneva Conference on the Law of the Sea,* INTERNATIONAL AND COMPARATIVE LAW QUARTERLY 124 (Jan. 1959).

4. Report of the ILC (1956), *supra* note 1, at 3.

5. *Id.* at 4–12.

13. FINAL REPORT

The final report of the Commission is in two parts, the first dealing with the territorial sea and the second with the high seas. Part I is subdivided into a general section, a section on the limits of the territorial sea, and a section on the right of innocent passage. Part II is subdivided into sections on the general regime of the high seas, contiguous zone, and continental shelf.

There are 73 articles in all, each accompanied by a commentary which in some cases is quite extensive.[6] The commentaries are sometimes merely of a clarifying nature and confined to a statement of the route by which the Commission arrived at its conclusions; in other cases they contain matters more substantive in nature.

In preparing this set of rules, the Commission found difficulty in distinguishing those that were merely a restatement of existing international law, thus belonging to the category of "codification," from those that were proposals for the creation of new law and, therefore, belonging to the category of "progressive development" of the law (*see* 11). Several of the rules the Commission found did not wholly belong to either category. Under the circumstances, in order to give effect to the project as a whole, it proposed an international conference of government representatives to examine the law of the sea (*see* note 1 *supra* and accompanying text).

131. Summation of Rules Adopted

From the standpoint of shore and sea boundaries, the pertinent rules adopted by the ILC are those dealing with the territorial sea and the continental shelf. A summation only of these rules will be given in this section and will be considered against the background of established American practice. A fuller treatment is included in Chapter 2.

1311. *The Territorial Sea*

The pertinent portions of this part of the Commission's report deal with baselines, bays, islands, drying rocks and shoals, and breadth and outer limits of the territorial sea. The Commission supports the rule of the tidemark (the

6. Art. 20 of its statute requires the Commission, when engaged in the codification of international law, to attach commentaries to its drafts. Such commentaries must contain (a) adequate presentation of precedents and other relevant data, including treaties, judicial decisions, and doctrine; and (b) conclusions relevant to: (i) the extent of agreement on each point in the practice of States and in doctrine; (ii) divergencies and disagreements which exist, as well as arguments invoked in favor of one or another solution. Johnson, *supra* note 3, at 127.

low-water line) as the baseline for delimiting the territorial sea in the case of a normal coastline. Where circumstances necessitate a special regime, as where the coast is deeply indented or is fringed with islands, the Commission upholds the use of straight baselines in accordance with the criteria laid down in the *Anglo-Norwegian Fisheries* case (*see* Part 1, 513). Straight baselines may not, however, be drawn to and from drying rocks and shoals (those that bare at low water but are covered at high water). No limitation is placed on the length of baseline, nor on the distance from the coast.

On the matter of bays, the Commission recommends the "semicircular rule" (*see* Part 1, 421), advocated by the United States at the 1930 Hague Conference, as an appropriate criterion for determining the status of indentations (whether inland waters or open sea), but extends the "10-mile rule" (*see* Part 1, 43) by providing a 15-mile limitation as the closing line for an indentation that exceeds this distance at the entrance. The Commission suggested no specific relationship between this distance and the breadth of the territorial sea. It took account, however, of the fact that the 10-mile rule dated back to a time when a 3-mile territorial sea was generally accepted, and inasmuch as there is a tendency to increase the breadth of the territorial sea, the extension seemed justified to the Commission.

The proposal with regard to islands along a coast represents substantially American practice in this field, that is, every island has its own territorial sea.[7] No specific provision is made for the treatment of groups of islands or archipelagoes along a coast because of the complicated nature of the problem and the lack of technical information on the subject.

The provision as to drying rocks and shoals reflects American practice. They carry no territorial belt of their own if situated outside the territorial sea; if wholly or partly within, they are treated the same as islands, the net effect of which is to introduce bulges in the outer limit.

1312. *The Continental Shelf*

In formulating its draft articles on the continental shelf, the Commission was faced with a *de facto* and highly explosive situation arising from the unilateral and divergent claims of maritime nations over the natural resources of this submerged portion of the continents of the world (*see* Part 2, 2221).

7. In a commentary on this proposal, the Commission specifically spells out that elevations of the seabed that are above water at low tide only (including installations built on such an elevation and permanently above water) are not to be included in the category of islands. Report of the ILC (1956), *supra* note 1, at 17.

The Commission spells out that a coastal nation exercises sovereign rights over the continental shelf for the purposes of exploring and exploiting its natural resources. It defines the term continental shelf, as used in the draft articles, as referring to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 meters (approximately 100 fathoms).[8]

1313. *The Breadth of the Territorial Sea*

The most controversial aspect of the territorial sea is its breadth. It was the stumbling block at the 1930 Hague Conference, and no single resolution proposing an appropriate breadth was even put to a vote. Since that time, the area of agreement has been further diminished by new claims to large areas of the high seas. The Commission recognized the wide diversity of opinion that existed among governments regarding this, and the same diversity was noted within the Commission. While several proposals were considered, no single one received majority approval.[9] It, therefore, contented itself with merely noting some of the difficulties that stood in the way of adopting a uniform distance, and drafted, in its final report, the following Article 3:

> 1. The Commission recognizes that international practice is not uniform as regards the delimitation of the territorial sea.
>
> 2. The Commission considers that international law does not permit an extension of the territorial sea beyond twelve miles.
>
> 3. 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 breadth when that of their own territorial sea is less.
>
> 4. The Commission considers that the breadth of the territorial sea should be fixed by an international conference.[10]

It is important to note that the Commission gave no support to the claims of nations to extend the territorial sea to a breadth which jeopardizes the prin-

8. The final report of the Commission differs in one important respect from the draft articles promulgated in 1953. While maintaining the limit of 200 meters as the normal limit corresponding to present needs, the Commission is of the opinion that where exploitation of the subsoil is practical there is no justification in applying a discriminatory legal regime to such regions. It therefore subjoined to the main proviso the language "or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas." This exploitability or competence test has the advantage of flexibility and had the support of the United States in the earlier drafts. *Id.* at 41–42.

9. Among the proposals suggested were that each nation be free to fix its own territorial sea in accordance with the real needs of that State, and where the breadth adopted could be shown justified by such needs the limit would be in accordance with international law; that the Commission adopt a rule that any limit between 3 and 12 miles was legal; that the breadth be 3 miles but that a greater distance be recognized if based on customary law; and that a State be allowed to fix a breadth greater than 3 miles, but not to enforce it against any State which had not adopted an equal or greater breadth. *Id.* at 13.

10. *Id.* at 12. Such a conference was held in 1958 and in 1960, but no agreement was reached (*see* 2217 and 232).

ciple of the freedom of the high seas, and while it stated that the upper limit under international law is 12 miles, it was unable to fix a limit between 3 and 12 miles. It was the view of the United States, as transmitted by *notes verbale* of February 3, 1955, and March 12, 1956, that there is no valid legal basis for claims to territorial waters in excess of 3 miles, that international law does not require nations to recognize a breadth of territorial waters beyond that distance, and that 3 miles is the proposal most consistent with the principle of freedom of the seas and has the greatest sanction in history and practice.

For delimiting the outer boundary of the territorial sea, the Commission adopted the "envelope line" every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea (*see* Part 2, 1621(*c*)).

132. United Nations Action

The report of the International Law Commission was exhaustively debated by the Sixth (Legal) Committee of the General Assembly, after which the Assembly adopted Resolution 1105 (XI) on February 21, 1957, instructing the Secretary-General to convoke an International Conference and to invite appropriate experts to advise and assist the Secretariat in preparing the Conference.[11] The General Assembly referred to the Conference the report of the ILC as the basis for its consideration of the problems involved in the development and codification of the law of the sea. It also referred to the Conference the relevant verbatim records of the General Assembly.[12]

11. General Assembly, 11th Sess., Official Records, Supp. No. 17 (A/3572). The resolution states that the General Assembly "*Decides,* in accordance with the recommendation contained in paragraph 28 of the report of the International Law Commission covering the work of its eighth session, that an international conference of plenipotentiaries should be convoked to examine the law of the sea, taking account not only of the legal but also of the technical, biological, economic and political aspects of the problem, and to embody the results of its work in one or more international conventions or such other instruments as it may deem appropriate."

12. In addition, the Conference had available documents of a legal, technical, and scientific nature. Among these were a memorandum concerning historic bays; a comparison between the law of the air and the ILC draft articles; two surveys of the geographical and hydrographical features of straits which constitute routes for international traffic, and of bays and estuaries, the coasts of which belong to different States; a study of certain legal aspects of the delimitation of the territorial waters of archipelagoes; and two technical studies concerning the continental shelf. Johnson, *supra* note 3, at 140–141, where citations to these studies and documents are given.

CHAPTER 2

United Nations Conferences on the Law of the Sea

21. GENERAL STATEMENT

The United Nations Conferences on the Law of the Sea, usually referred to as the First and Second Geneva Conferences, were convened at Geneva for the purpose of acting on the draft rules adopted by the International Law Commission and for considering matters on which the Commission was unable to reach agreement, for example, the breadth of the territorial sea (*see* 13).

The First Conference was in session from February 24 to April 27, 1958, and was attended by representatives of 86 States. Although the Conference brought to light a wide variety of conflicting interests between States, it was possible to reconcile many of these conflicts and to achieve a wide area of agreement on such substantive matters as the right to the use of the high seas, the right of passage through international straits and territorial waters, and the right of each coastal State to exploit the resources of its continental shelf. These areas of accord were further reflected in the adoption of rules for defining the limits of inland waters, for the drawing of baselines, for determining the status of indentations, and for delineating the outer limits of the territorial sea and boundaries through the territorial sea and the high seas. This, however, does not mean that the rules are so specific that they are susceptible of application, without further amplification, to the complex coastal configurations likely to be encountered throughout the world. In certain cases serious problems may still be raised in the interpretation and implementation of the rules adopted. These will be dealt with in succeeding sections.

Two major issues which were extensively debated at the Conference—the breadth of the territorial sea and fishing rights within a contiguous zone—were left unresolved because no proposal received the required two-thirds majority.[1]

1. It should be noted, nevertheless, that from the standpoint of delimitation the breadth of the territorial sea is a political rather than a technical problem. Whatever its width, the same method of delimitation will be applicable.

To further consider these questions, the Conference adopted a Resolution requesting the General Assembly to study the advisability of convening a second international conference of plenipotentiaries. This was approved by the General Assembly on December 10, 1958.[2]

The Second Conference on the Law of the Sea convened at Geneva on March 17, 1960. In contrast with the varied agenda of the First Conference, the Second Conference was limited to only two questions. After 6 weeks of debates between the 3-milers, who were willing to compromise on a 6-mile territorial belt, and the 12-milers, the Conference adjourned without any definitive action being taken. When the final vote was taken in plenary session on April 26, 1960, the compromise proposal failed by one vote from gaining the required two-thirds majority.

22. THE FIRST GENEVA CONFERENCE (1958)

The First Geneva Conference on the Law of the Sea was the first major attempt at codification since the abortive efforts of the League of Nations in 1930. But unlike the 1930 Conference, the Geneva Conference did adopt a number of conventions, even though agreement could not be reached on the breadth of the territorial sea.[3] There is another important distinction between the two Conferences. While both emerged from efforts of a world organization to codify international law, the 1930 Conference was largely a lawyer's conference, although the conferees did have before them a report by the League of Nations' Committee of Experts for the Progressive Codification of International Law. At the Geneva Conference, the national delegations included not only experts on law but on problems of fishery, on geography, oceanography, and other sciences.[4]

The rules of procedure of the Geneva Conference required a two-thirds majority for the adoption of any substantive proposal, while procedural decisions needed only a simple majority to become effective.

Four conventions emerged from the Conference and are now subject to ratification by the States. These are: (1) Convention on the Territorial Sea and the Contiguous Zone (U.N. Doc. A/Conf.13/L.52); (2) Convention on

2. U.N. Doc. A/Res/1307 (XIII).

3. The 1930 Hague Conference for the Codification of International Law was concerned exclusively with the territorial sea. A failure to agree on its breadth caused the entire Conference to founder (*see* Part 1, 421).

4. Jessup, *The United Nations Conference on the Law of the Sea,* 59 COLUMBIA LAW REVIEW 235 (1959).

the Continental Shelf (U.N. Doc. A/Conf.13/L.55); (3) Convention on the High Seas (U.N. Doc. A/Conf.13/L.53); and (4) Convention on Fishing and Conservation of the Living Resources of the High Seas (U.N. Doc. A/Conf. 13/L.54). In addition, the Conference adopted an Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes (U.N. Doc. A/Conf. 13/L.57).[5]

In evaluating the accomplishments of the Conference, the question might be raised whether the Conference was a success or a failure, considering the fact that no agreement was reached on the important question of the breadth of the territorial sea. On this the Acting Secretary of State, in his letter to the President submitting the agreements reached for transmission to the Senate, made the following significant remarks: "Had the Conference only agreed on the other rules in the convention on the territorial sea, particularly those on straight baselines, the right of innocent passage, and the contiguous zone, it would have been well worth while. But it did a great deal more. The conventions on the high seas and the continental shelf, while largely expressive of existing international law and practice, nevertheless by much needed codification give agreed form and certainty to the law. The convention on fisheries conservation lays down rules of law based on sound conservation principles which should do much to assure the preservation and increase of an important source of the world's food." [6]

221. Convention on the Territorial Sea and the Contiguous Zone

This convention contains 32 articles, and from the standpoint of sea boundaries is the most important of all the conventions adopted. Apart from the first two articles which provide that the sovereignty of a State extends beyond its land territory and its internal waters to a belt of sea adjacent to its coast and described as the territorial sea, and that its sovereignty extends also to the airspace over the territorial sea as well as to its bed and subsoil, the substantive articles of the territorial sea part of this convention fall into two main groups: those dealing with questions of delimitation and those dealing with questions of passage. The first group will be dealt with in some detail, being more germane to the subject matter of this publication; the second group will be dealt with generally for a broader understanding of the problems of delimitation.

5. Because of the historic nature of the conventions adopted at the First Geneva Conference, and the likelihood that future reference will be made to them by the Bureau, the substantive articles of each convention are included as Appendix I to this publication.

6. Message from the President of the United States Transmitting Four Conventions on the Law of the Sea and an Optional Protocol, Executives J to N, Inclusive (Senate), 86th Cong., 1st sess. 4 (1959).

The provisions of the convention do not affect existing conventions or other international agreements between States that are parties to them (Art. 25).

2211. *Delimitation of the Territorial Sea*

Articles 3 to 13, inclusive, deal with delimitation of the territorial sea and are embodied in Section II of the convention, entitled "Limits of the Territorial Sea." In delimiting the territorial sea, two boundary concepts are involved—an inner one (known as the baseline), and an outer one which is dependent upon the inner boundary and upon the adopted breadth of the territorial sea. In both cases, technical principles are involved and are applicable irrespective of where the outer boundary is located. These principles and the basis for them will be discussed in this section.

A. BASELINES

Baselines play an important part in sea boundaries. Not only are they associated with the boundaries of the territorial sea but they mark the outer limits of a State's national or internal waters, such as bays, rivers, and other bodies of water that fall within this classification (*see* Part 1, 311). In addition, the baseline becomes the line from which the boundaries of the contiguous zone and the inner limits of the continental shelf and the high seas are measured. The term baseline is sometimes loosely used to refer to straight baselines, but as will be seen this is erroneous. Straight baselines form a distinct category and the convention recognized this by adopting two articles on baselines—one dealing with what might be termed the normal baseline, and the other dealing with straight baselines. In either case, it is the line (straight, curved, or sinuous) that is taken to be the inner limit of the territorial sea. Its specific placement thus becomes basic in determining how far offshore a State may exercise a particular type of jurisdiction.

(*a*) *Normal Baseline.*—Article 3 lays down the rule that the low-water line along a coast, as marked on large-scale charts of the coastal State, is the normal baseline for measuring the breadth of the territorial sea. (*See* fig. 24.) It is known as the rule of the tidemark, and is essentially the same as was recommended by the International Law Commission (ILC) in Article 4 of its final report.[7] The merit of a high-water baseline as against a low-water line was also

7. Report of the International Law Commission, 8th Sess. 13 (1956), and recorded in Official Records, U.N. General Assembly, 11th Sess., Supp. No. 9 (A/3159) (cited hereinafter as Report of the ILC (1956)). In its commentary to this article, the Commission stated that according to international law in force, the extent of the territorial sea is measured either from the low-water line, or from straight baselines independent of the low-water mark if brought within the *Judgment* of the International Court of Justice in the *Anglo-Norwegian Fisheries* case (*see* Part 1, 513).

debated by the Conference but the latter prevailed and had the support of the technical experts as giving the coastal State the right to measure the breadth of the territorial sea from the outermost land which is above water at low tide.[8] The lack of greater definiteness in the low-water datum also stems from the ILC recommendation, which followed the recommendation of a committee of experts, the purpose being to permit the coastal State to use the datum that best conforms to its rules of property or the datum used on its published charts.[9]

(*b*) *Straight Baselines.*—The rules regarding the use of straight baselines are among the most important in the convention. As was discussed in Part 1, chapter 5, the application of the method of straight baselines to the "skjaergaard" coast of Norway was the principal issue in the *Anglo-Norwegian Fisheries* case. There, the International Court of Justice in a historic decision upheld Norway's method of delimiting an exclusive fisheries zone by drawing straight baselines, independent of the low-water mark, along the seaward projections of the outermost of the numerous islands, islets, and rocks that constitute the so-called "rock rampart" of the Norwegian coast above the Arctic Circle. This method of delimitation results in the inclusion within internal waters and within the territorial sea of stretches of water that would be part of the territorial sea or part of the high seas if the traditional method of following the rule of the tidemark were used. Although the Court circumscribed the conditions under which straight baselines may be drawn, it was essentially an application of the method to particular circumstances and left some doubt as to the exact conditions under which the same method could be applied in other circumstances, thus making the limits of the rule difficult of ascertainment.[10] (*See* fig. 14.)

It was against this background that the Conference considered this complex and controversial problem. The rules pertaining to the use of straight baselines are embodied in Article 4 of the convention. Except as hereinafter noted, the language is substantially the same as adopted by the ILC and provides that the method of straight baselines joining appropriate points may be used in drawing

8. Pearcy, *Geographical Aspects of the Law of the Sea,* 49 ANNALS OF THE ASSOCIATION OF AMERICAN GEOGRAPHERS 6 (Mar. 1959).

9. This is based on personal correspondence with the United States representative on the committee of experts that met at The Hague in Apr. 1953, under the aegis of the ILC, to study problems concerned with the delimitation of the territorial sea. As to the possibility of abuse by a nation in selecting a particular low-water datum, the ILC was of opinion that the generality of the provision "is hardly likely to induce Governments to shift the low-water lines on their charts unreasonably." Report of the ILC (1956), *supra* note 7, at 13.

10. This problem was thoroughly considered at several sessions of the International Law Commission. It interpreted the Court's judgment as expressing the law in force and drafted Art. 5 on the basis of this judgment but with certain clarifications, in order to give greater precision to the criteria adopted by the Court. The most important of these concerned the paramountcy of geographic conditions of a coast over a State's economic interests. Report of the ILC (1956), *supra* note 7, at 14.

the baseline for the territorial sea in localities where the coast is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity (par. 1). This sets out the criteria that must be met to justify the use of such baselines. It is important to note that this is placed in paragraph 1 of Article 4 and indicates the priority intended to be given this provision. As a corollary to this principle, it is provided in paragraph 4 that where straight baselines are justified by these criteria, account may be taken, in determining particular baselines, of economic interests peculiar to the region concerned, the reality and the importance of which are clearly evidenced by long usage. This makes it clear that economic interests are not *per se* a justification for the use of straight baselines, thus correcting a common misinterpretation of the effect of the *Anglo-Norwegian Fisheries* case, namely, that it indicated the existence of an economic interest as sufficient in itself to justify the use of straight baselines. But where the geographical criteria laid down by paragraph 1 are present, then the existence of economic interests in a particular region may properly be allowed to influence the drawing of certain individual baselines. The practical effect of this is that the existence of these interests may justify a rather liberal interpretation of the conditions governing the method of drawing individual baselines. But the geographic criteria must be met in the first instance.[11]

The reference to "fringe of islands" along the coast, in paragraph 1, shows an intention to limit the use of straight baselines to coasts resembling the coast of Norway. The mere existence of islands off a coast is not a ground for using straight baselines. What must be present is a continuous fringe of islands sufficiently solid and close to the mainland to form a unity with it. Also the use of the words "In localities where etc.," in the same paragraph implies that a State would not be justified in using straight baselines along the whole of its coast merely because the geographic conditions warranted the use of baselines along one particular section.[12]

Another facet of the straight baseline question pertains to the manner in which the baselines must be drawn where the use of such baselines is permissible. Paragraph 2 of Article 4 lays down the conditions that must be fulfilled,

11. Fitzmaurice, *Some Results of the Geneva Conference on the Law of the Sea,* INTERNATIONAL AND COMPARATIVE LAW QUARTERLY 77 (Jan. 1959). At the Conference it was argued by some that the initial choice of whether or not straight baselines could be used might be made on economic as well as geographical considerations. Had this point of view prevailed, it would have made possible a far broader application of the principle to coasts much more regular than the Norwegian, thus encroaching further on the freedom of the high seas. But both the International Law Commission and the Geneva Conference were of the opinion that the meaning of the Court's judgment in the *Fisheries* case was that only exceptional circumstances should permit the use of straight baselines. The rules adopted are a distinct advance and a contribution to clarity on the question. Dean, *The Geneva Conference on the Law of the Sea: What Was Accomplished,* 52 AMERICAN JOURNAL OF INTERNATIONAL LAW 617–618 (1958).

12. Fitzmaurice, *supra* note 11, at 78.

to wit: They "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." Similar phraseology was used by the Court in the *Fisheries* case and in the recommendations of the International Law Commission, but no specific guidelines are contained in either document for determining when a baseline conforms to this test. The "general direction of the coast" rule, as adopted by the Conference, is therefore subject to the same basic weakness as was pointed out in the discussion of the *Anglo-Norwegian Fisheries* case in Part 1, 5131. On the other hand, because of the diversity of coastlines, it is doubtful whether any specific formula can be arrived at that will automatically distinguish one group of islands that departs appreciably from the general direction of the coast from another that conforms to the rule. Perhaps the solution lies in studying each case separately on the basis of the general criteria adopted by the Conference but using the skjaergaard coast of Norway as the limiting condition for conformity to the criteria. (*See* Part 1, 513 note 11 and 53 note 25.)

Finally, it is provided in paragraph 3 that baselines shall not be drawn to and from low-tide elevations,[13] unless lighthouses or similar installations which are permanently above sea level have been built on them. In the *Fisheries* case the Court allowed Norway to draw some of its baselines to low-tide elevations. The ILC in its draft rules barred the use of such features as connecting points between straight baselines and specified in its commentary that only rocks and shoals permanently above sea level may be used for this purpose.[14] The provision adopted by the Conference is a compromise solution and meets the objection of the ILC regarding the necessity for visibility of the base points (*see* fig. 37).[15]

In applying the rules adopted, an essential question will be the maximum permissible length of baselines. In the *Fisheries* case, the Court did not recognize any mathematical limits to the length of individual lines but approved straight baselines of varying lengths, the longest in that particular situation being 44 miles. The ILC, acting on the recommendation of a group of experts,

13. Low-tide elevations are rocks or shoals that bare at low water but are covered or awash at high water. In the ILC report they are referred to as drying rocks and drying shoals.

14. The reason given for this requirement is that otherwise the distance between the baselines and the coast might be extended more than is required to fulfill the purpose for which the straight baseline method is applied, and, in addition, it would not be possible at high tide to sight the points of departure of the baselines. Report of the ILC (1956), *supra* note 7, at 15.

15. It has been suggested that the provision is ambiguous because it fails to specify whether it applies only to installations in place at the date of the convention, or whether it also includes future installations. If the latter, the possibility of abuse arises. Fitzmaurice, *supra* note 11, at 86. If a distinction is to be made, the date when the convention comes into force would seem to be the rational date (*see* 227), rather than the date of its adoption. This could be a considerable period of time (*see* 2272).

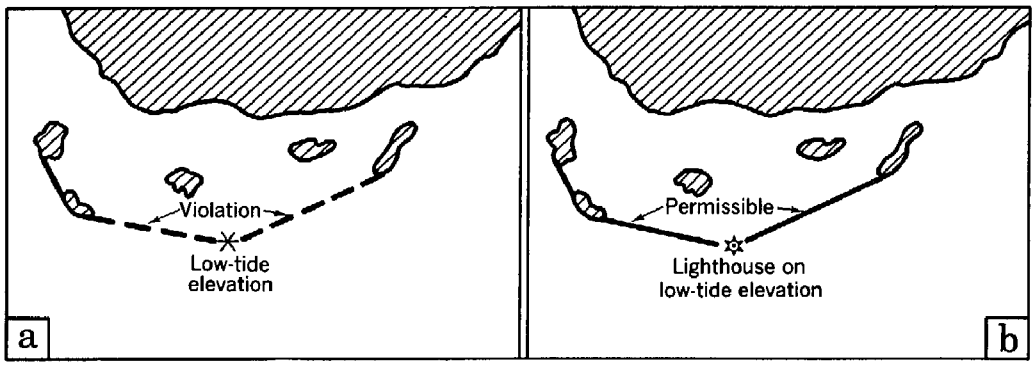

FIGURE 37.—Where straight baselines are permissible they may not be drawn to low-tide elevations (a) unless installations always above water are built on them (b).

sought to incorporate in its draft rules a maximum length of 10 miles for a straight baseline and a maximum distance of 5 miles from the coast for any point on such line. But in the final consideration of this rule all mention of length and distance from the coast was deleted.[16] At the Conference, a finite limit was adopted in Committee, but this did not obtain a two-thirds majority, and no maximum is provided.[17]

The method of straight baselines is relevant not only to the determination of the outer limit of the territorial sea but to a determination of the status of the waters lying to the landward of the baseline. In applying such baselines to a coast, waters may be enclosed which formerly were part of the territorial sea or the high seas. Following the analogy of baselines across the mouth of a bay, the Court in the *Fisheries* case attributed to the waters landward of the straight baselines the status of "internal waters," that is, as much subject to the sovereignty of the coastal State as its rivers and lakes. The legal consequence of this is that no right of innocent passage would exist through the area inside the baselines. This was not acceptable to the Geneva Conference, and while it

16. Report of the ILC (1956), *supra* note 7, at 14. Objections were raised by some governments that specifying any distance was arbitrary and not in conformity with the Court's decision.

17. It has been suggested that an answer to the problem of length may be found in terms of the relationship existing between the extent of waters closed off by territorial limits measured from the straight baselines and those measured from the low-water line on the basis that the significant point about straight baselines is not the possibility of excessive length *per se*, but rather on the relationship between the extent of water closed off by such baselines and the amount closed off by following the low-water mark. With this in mind, the following formula has been proposed for limiting straight baselines: "A straight baseline is justified providing that the water area lying between the baseline and the outer territorial limits measured from the low-water mark along any twenty-four miles of baseline is equal to or less than the area contained in a semicircle, twenty-four miles in diameter, measured from the straight baseline." ALEXANDER, A COMPARATIVE STUDY OF OFFSHORE CLAIMS IN NORTHWESTERN EUROPE 209–215 (1960) (sponsored by Research Foundation of the State University of New York and the Office of Naval Research). The analogy to the semicircular rule for bays, although an incomplete one, merits further consideration.

followed the Court in characterizing such waters as internal waters (Art. 5, par. 1), it provided that where the establishment of straight baselines has the effect of enclosing as internal waters areas previously considered part of the territorial sea or the high seas, the right of innocent passage shall exist in such waters (par. 2).[18]

(*c*) *Baseline at Rivers.*—Article 13 of the convention provides that where a river flows directly into the sea, the baseline is a straight line across its mouth between points on the low-tide line of its banks. This is in conformity with the recommendation of the ILC. Although not specified, this must be presumed to apply to any width across the mouth because of the peculiar internal nature of such waters.[19] No provision is made for rivers that empty into estuaries, although the ILC recommendation called for the application of the rules for bays, as did the Second Sub-Committee of the 1930 Conference. It would seem that whether expressed or not the rules relating to bays would be directly applicable from the nature of the configuration.

B. OUTER LIMIT OF THE TERRITORIAL SEA

Article 6, of the convention, specifies that the outer limit of the territorial sea is a line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.[20] This defines what is known as an "envelope line" because it is formed by the most seaward arcs of all those drawn from all points on the coastline. This line is fully described and illustrated in Part 2, 1621 (*c*).

This provision is identical with the recommendation of the International Law Commission, which in turn followed the recommendation of a committee of experts as the line most likely to facilitate navigation in the vicinity of the territorial limits of a nation. In any case, the Commission felt that nations should be free to use such line without running the risk of being charged with a breach of international law on the ground that the line does not follow all the sinuosities of the coast.[21]

18. This is essentially what was embodied in the draft articles of the ILC but without the limitation that the waters must have normally been used for international traffic. Report of the ILC (1956), *supra* note 7, at 14. Under the terms of the convention any such newly created internal waters, whether used for international traffic or not, would be subject to the right of innocent passage, thus further limiting the scope of the *Fisheries* decision in favor of preserving the freedom of the high seas.

19. In the Report of the Second Sub-Committee of the Second Committee of The Hague Conference of 1930 for the Codification of International Law it was specifically stated that a straight line is drawn across the mouth of the river, *whatever its width.*

20. No finite distance is mentioned because the Conference was unable to agree on what the breadth of the territorial sea should be. But whatever the width, the same principle will be applicable.

21. Report of the ILC (1956), *supra* note 7, at 15. For a discussion of other lines sometimes suggested for delimiting the territorial sea, *see* Part 2, 1621.

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C. THE PROBLEM OF BAYS

Whether a bay or indentation is part of the inland waters of a coastal State or part of the open sea is in reality a special case of the baseline problem (*see* 2211 A). For if the indentation is part of the inland waters then the baseline for drawing the outer limit of the territorial sea is a straight line across the entrance, and if it is part of the open sea then the baseline follows the low-water line.[22] (*See* fig. 24.)

Article 7 of the convention sets out the definition of a bay, as distinguished from a mere curvature, and provides certain rules by which the distinction may be ascertained. Except for the maximum length of closing line across a true bay (*see* 2211 C(*c*)), the article is essentially the same as that recommended by the International Law Commission in its draft articles.[23]

Before considering the specific rules adopted for bays, two limitations on the overall applicability of the article should be noted. The first is that it relates only to bays the coasts of which belong to a single State (par. 1). In other words, if a bay is formed by the coasts of two or more adjacent States, the rules for bays would not apply, and no closing line could be drawn across the bay. In such cases, each State bordering on the bay has a belt of territorial waters fronting its portion of the coast of the bay, the rest of the bay being part of the high seas.[24] (*See* fig. 38.) The other limitation on the applicability of the article is in the case of historic bays (par. 6). Where a State is able to establish an exceptional claim to a particular bay by reason of long, continuous usage and acquiescence by other States, the rules as to bays are waived (*see* Part 1, 45 and fig. 39).[25]

(*a*) *Definition of Bay.*—Paragraph 2 of Article 7 defines a bay as "a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast." This sets forth the important concept of landlocked waters,

22. The straight baseline drawn across the entrance of a true bay should not be confused with the system of straight baselines, although both result in a closing off of water areas that have the status of inland waters (*see* 2211 A(*b*)). The distinction between the two is that a bay may occur along a coast to which the straight baseline system does not apply because it fails to satisfy the criteria set out for such baselines, while straight baselines might enclose indentations that would not satisfy the rules set out for true bays. That is the reason why bays and straight baselines are treated in separate articles in the convention. Fitzmaurice, *supra* note 11, at 80.

23. Report of the ILC (1956), *supra* note 7, at 15.

24. Even by agreement between the bordering States such a bay cannot be closed off as inland waters so as to deny access to vessels of other States not party to the agreement. Fitzmaurice, *supra* note 11, at 82–83.

25. Par. 6 also notes that the rules for bays would not be applicable in any case where the straight baseline system is applied. This would necessarily follow from the fact that such a system is broader in concept and more inclusive in scope than the concept of a bay, which is limited to a single geographic feature.

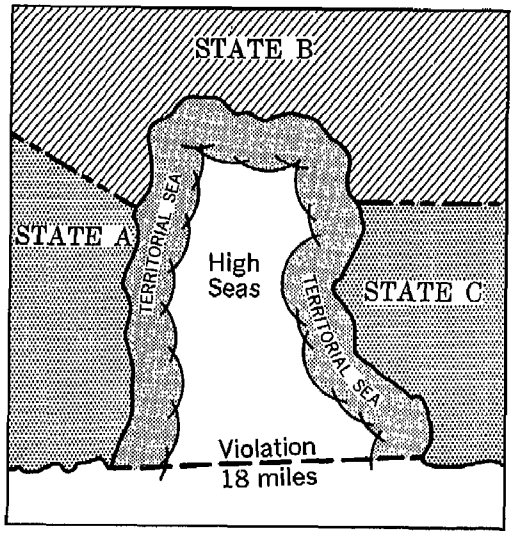

FIGURE 38.—No closing line is permissible across a bay formed by the coasts of two or more States to deny access to other States.

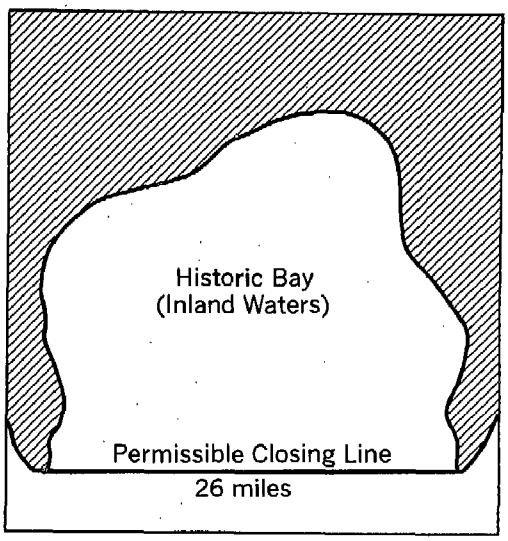

FIGURE 39.—The 24-mile closing line limitation does not apply to historic bays. No limitation on width of opening is required.

or waters situated within the body of the land, for an indentation to qualify as a bay. But of itself it provides no criteria for determining how landlocked an indentation must be in order to remove it from the category of a mere curvature. In effect, it would be little better than the "configuration and characteristics" rule promulgated by the tribunal in the North Atlantic Coast Fisheries Arbitration (*see* Part 1, 411).

To make the definition more specific, a second criterion was added in paragraph 2, namely: "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." [26] This is the semicircular rule, the genesis and development of which has been previously discussed (*see* Part 1, 42, 421).[27]

In the application of the semicircular rule to an indentation containing pockets, coves, or tributary waterways, the area of the whole indentation (including pockets, coves, etc.) is compared with the area of a semicircle. If the indentation meets the test, a closing line is drawn across the headlands. But

26. This provision originated with the report of the committee of experts (*see* note 9 *supra*), and was adopted by the ILC to repair the omission by The Hague Codification Conference of 1930. The added provision was also necessary to prevent the system of straight baselines from being applied to coasts whose configuration does not justify it, on the pretext of applying the rule for bays. Report of the ILC (1956), *supra* note 7, at 15 (commentary (1)).

27. It should be noted that neither the Conference nor the ILC adopted the "reduced area" rule for bays, the latter acting on the advice of the committee of experts (*see* Part 1, 4211).

if it fails to satisfy the test and the indentation becomes open sea, the semicircular rule should still be applied to any of the tributary waterways for the purpose of determining their status as inland waters.[28]

(*b*) *Area of a Bay.*—Since the semicircular rule is based on a comparison of areas, additional rules are required to avoid uncertainties in applying the principal rule to different coastal situations. This is provided in paragraph 2 of Article 7. For a simple indentation, with one mouth, the area is that lying between the low-water mark around the shore and a line joining the low-water marks of its natural entrance points. And in computing the area, islands within the indentation are included as if they were part of the water area. In such a case, the semicircle is drawn on the diameter joining the natural entrance points. But, where islands exist in the entrance, a complication arises and the convention provides that "the semi-circle shall be drawn on a line as long as the sum total of the lengths of the lines across the different mouths."[29] This is not free of ambiguity and raises the question whether the sum of the widths of the several entrances may exceed the length of the closing line (*see* (*c*), below), or whether it must be kept within that limit.

For an answer to this question, it is appropriate to examine the basis for the rule in the report of the International Law Commission. In commentary (2) of Article 7, it is stated that the Commission's intention in using the total length of the lines drawn across the different mouths "was to indicate that the presence of islands at the mouth of an indentation tends to link it more closely to the mainland, and this consideration may justify some alteration in the ratio between the width and the penetration of the indentation." In such a case, the Commission notes, an indentation which, if it had no islands at its mouth, would not fulfill the necessary conditions, is to be recognized as a bay. Clearly, this indicates an intent to liberalize the rule for bays in

28. This is a reasonable interpretation and is based on the concept of a bay as inland waters, that is, it has the character of inland waters because it is situated within the body of the land (*see* Part 1, 42). If that is so, then any waterway that is tributary to another waterway and is situated within the body of the land by the semicircle test should have the character of inland waters. One difficulty that arises in including tributary waterways as part of the area of the indentation whose status is to be determined, is that the status may depend upon how far up the tributary one goes in computing the area. This may require the adoption of an additional rule limiting the width of such waterways to a fixed amount beyond which it would not be considered a part of the primary waterway. An alternative solution would be to first apply the semicircle test to the tributary waterways: if they become inland waters a closing line is drawn across them and the primary waterway is then subjected to the test; if they do not become inland waters they would then be included as part of the area of the main indentation for the purpose of determining its status by the semicircular rule.

29. This is identical with the draft rule adopted by the ILC. In most cases, a visual comparison of areas will probably be sufficient to determine whether an indentation satisfies or fails to satisfy the semicircular rule. In close cases, a measurement should be made by planimeter.

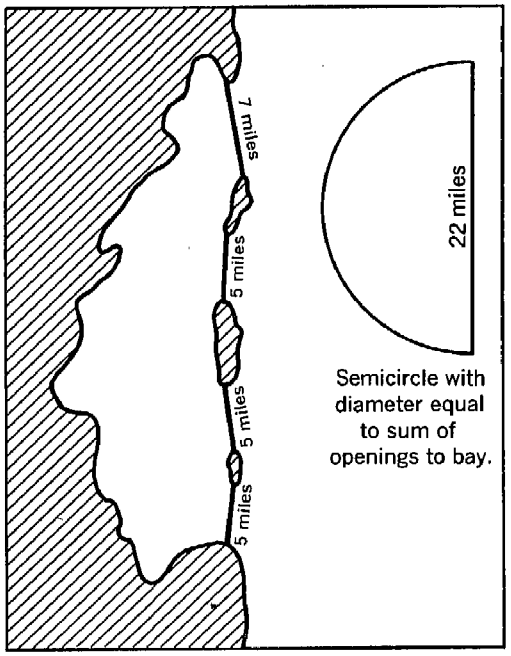

FIGURE 40.—The closing line of a multi-mouthed bay cannot exceed 24 nautical miles as measured across water entrances between the islands.

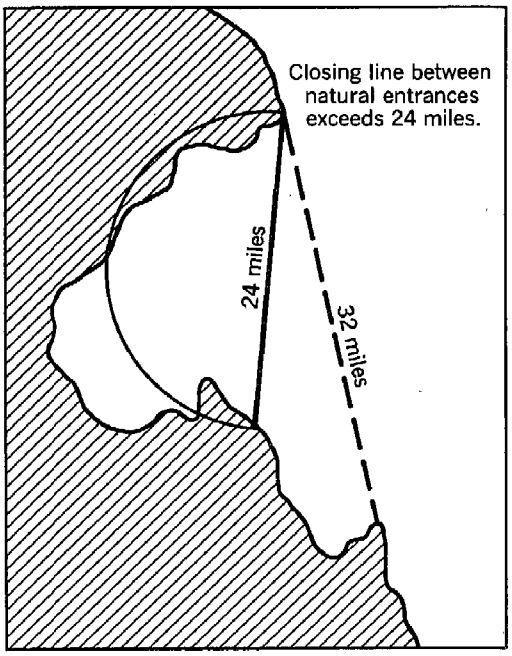

FIGURE 41.—24 miles is the maximum closing line allowable. Where the distance between headlands exceeds this amount a closing line is drawn within the bay.

such situations. This liberalization is accomplished by not using the full width of the bay, for purposes of applying the semicircular rule, but only the water distances across the several entrances, omitting the island expanses. The semicircle in such cases would be drawn on a diameter no greater than the closing line adopted for bays (*see* (*c*), below), thus reducing the diameter of the semicircle and altering the ratio of width to penetration so as to result in an indentation becoming a bay that might not meet the test if the full width from headland to headland were to be used. Under this interpretation, no opening could exceed 24 nautical miles (the closing line adopted by the Conference), nor could the sum of all the openings exceed such distance. If it did, the indentation could not qualify as a bay on the basis of islands at the entrance but would have to be tested by the rule for indentations wider than the closing line (*see* (*c*), below). (*See* fig. 40.)

Another basis for the suggested interpretation is predicated on an overall consideration of Article 7 of the convention. The provision with regard to the

use of the semicircular rule for single-mouthed bays and for multi-mouthed bays is contained in paragraphs 2 and 3 of the article, without any mention of a maximum closing line. It is in paragraph 4 that mention is first made of a maximum closing line (this applies also to the ILC report) and such limitation, it would seem, should be considered applicable to both situations.[30]

(*c*) *Closing Lines.*—One of the most significant departures from existing international law is the provision for a 24-mile closing line for bays (Art. 7, par. 4). Prior to the decision in the *Anglo-Norwegian Fisheries* case (*see* Part 1, 513), the United States and other important maritime countries had regarded the 10-mile closing-line rule as established international law (*see* Part 1, 441). The Court's holding that the rule had not acquired the authority of a general rule of international law left the legal situation in doubt. Adoption of the 24-mile closing line removes that uncertainty.[31] (*See* fig. 41.)

This limitation on the closing line of a bay finds application in the case of indentations wider than 24 miles at the mouth, and for such situations the convention provides (Art. 7, par. 5) that "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." The purpose of the rule seems simple enough, but its application to an indentation raises an important question of interpretation—that is, whether the semicircular rule is to be applied to the whole indentation only, to the portion enclosed by the closing line, or to both.

30. This interpretation of the rule seems reasonable. The only other interpretation would be to permit each opening to be a maximum of 24 miles, but this would operate to defeat the intent to liberalize the rules in such situations. For, in the case of an indentation with three openings, each 24 miles wide, a semicircle with a diameter of 72 miles would have to be used (a more stringent requirement), as against a diameter of 24 miles under the other interpretation, and would result in the elimination of many areas from the status of inland waters.

31. Once the convention becomes operative, claims to wider indentations will have no sanction in international law, unless they can be brought within the doctrine of "historic waters" (*see* Part 1, 451). In 1957, Peter the Great Bay, which is 115 miles across at its mouth, was declared to be inland waters by the U.S.S.R. The United States protested this claim. 38 DEPT. STATE BULLETIN 461 (1958). The ILC in its draft articles adopted a 15-mile closing line for bays. Although not prepared to establish a direct relationship between the length of the closing line and the breadth of the territorial sea, it took note of the fact that the origin of the 10-mile rule dated back to a time when the breadth of the territorial sea was much more commonly fixed at 3 miles than it is now. Therefore, in the light of the present tendency to increase the breadth of the territorial sea, the Commission felt that an extension of the closing line to 15 miles was justified and sufficient. Report of the ILC (1956), *supra* note 7, at 15, 16. Adoption by the Geneva Conference of a 24-mile closing line is one of the major departures from the recommendations of the ILC. It has been stated that the 24-mile rule was promulgated by the U.S.S.R. delegation as being double the breadth of the territorial sea proposed by that delegation. It later appeared that there were insufficient votes for a 12-mile territorial sea, but the rule for bays was left at 24 miles. Sorensen, *Law of the Sea,* No. 520 INTERNATIONAL CONCILIATION 238 (Nov. 1958) (Carnegie Endowment for International Peace). The United States would have preferred the 10-mile rule for bays, as traditionally advocated in its foreign relations. *Hearing before Committee on Foreign Relations on Executives J to N, Inclusive,* 86th Cong., 2d sess. 92 (Question 29) (1960).

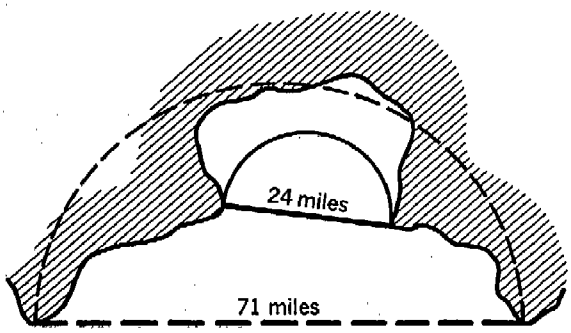

FIGURE 42.—The semicircular rule is applied to the indentation where it narrows to 24 miles, and not to the entire width. Its status does not arise until the limiting line is drawn.

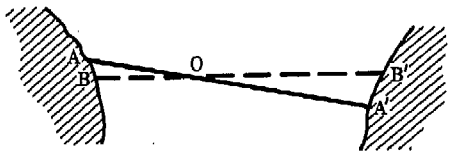

FIGURE 43.—Line *AOA'* encloses a greater water area than line *BOB'* and is permissible under the Geneva convention.

As paragraph 5 is worded, the inference could be drawn that the semicircular rule is first applied to the whole indentation; if it becomes a true bay by the test, the 24-mile line is then drawn within the bay without any further application of the semicircular rule. There is a measure of logic in this interpretation, since the semicircular rule is geometric in concept whereas a closing-line limitation is arbitrary in nature, and it could be reasoned that once an indentation has met the semicircle test it should suffice. But the difficulty with this interpretation is that if the situation were reversed and the whole indentation did not satisfy the test, it could automatically exclude an area within the 24-mile line from becoming inland waters even though it qualified as a bay (*see* fig. 42). This would not seem reasonable.

The more reasonable interpretation of paragraph 5 would be that only the portion of the indentation enclosed by the closing line must satisfy the semicircle test. The basis for this is that where an indentation has a greater width at the entrance than the permissible closing line, the question of its status does not arise until the limiting line is drawn. That this was also the thinking of the committee of experts (*see* note 9 *supra*), is borne out by the definition it adopted for a bay and by the 10-mile limitation it recommended. In its definition, it stated: "A bay is a bay in the juridical sense," and in adopting the 10-mile limitation on bays, it said: "The closing line across a (juridical) bay should not exceed 10 miles in width." [32] Identifying the term bay with the word "juridical" in the last sentence indicates that the portion of the indentation across which the closing line will be placed must satisfy the legal fiction of a

32. Shalowitz, *The Concept of a Bay as Inland Waters,* 13 SURVEYING AND MAPPING 439 (1953).

true bay, that is, satisfying the semicircular rule, otherwise it would not be a bay in the legal sense.[33]

The recommendation of the Special Master in the *California* case also supports this view. In his findings for bays, it is stated: "In either case [indentations not more than 10 miles wide at the entrance and those more than 10 miles] the requisite depth [penetration into the land] is to be determined by the following criterion:" (Here follows the semicircular rule for bays.) This contemplates the test for inland waters to be applied to the area enclosed by the closing line.[34]

The provision with respect to the closing line being drawn within the bay so as to enclose the maximum area of water possible, with a line of that length (Art. 7, par. 5), is intended to take care of those situations where more than one closing line is possible (see fig. 43).[35] This provision is wholly independent of the need for headlands in such cases. And where pronounced headlands are available but enclose less water they are not required to be used in drawing a closing line across the bay.[36] It should be emphasized, however, that the closing-line rule of itself does not create a bay, but rather the existence of a configuration to which the rule can be applied. The point selected as the headland must bear some relationship to the indentation under consideration. It would not be any point along the coast that falls within the closing-line distance.[37]

33. Support for this interpretation is also to be found in the Bases of Discussion submitted by the U.S. delegation at the 1930 Hague Conference where the semicircular rule was first proposed (*see* Part 1, 421). The illustration which accompanied the U.S. proposal clearly shows that the semicircle test is applied to the closing line, even though the full indentation meets the test. Acts of the Conference for the Codification of International Law (League of Nations Publications V: Legal) 198 (1930). *See also* Boggs, *Delimitation of the Territorial Sea*, 24 AMERICAN JOURNAL OF INTERNATIONAL LAW 546 (1930), where the method is discussed and the semicircle is shown constructed on a 10-mile closing line.

34. Report of Special Master, United States v. California, Sup. Ct., No. 6, Original, Oct. Term 3 (1952).

35. This was spelled out in Art. 7, par. 3 of the draft rules of the ILC. Report of the ILC (1956), *supra* note 7, at 15.

36. This follows from the fact that the 24-mile rule is an arbitrary limitation and not based on geographic characteristics and such characteristics should not be read into it. To require the line to be drawn between headlands would be incompatible with enclosing a maximum area of water, since it would be pure coincidence for both conditions to be satisfied. This view finds support in the North Atlantic Coast Fisheries Arbitration (see Part 1, 411), where it is provided that the 3 marine miles shall be drawn "from a straight line across the bay . . . at the first point nearest the entrance where the width does not exceed ten miles," bypassing completely the question of headlands inside the bay; in commentary (5) to Art. 7 of the draft rules of the ILC, where it is stated that "the closing line will be drawn within the bay at the point nearest to the sea where the width does not exceed that distance [15 miles]," without any mention of headlands; and in the Bases of Discussion submitted by the American delegation at the 1930 Hague Conference with regard to bays wider than 10 miles (in the example submitted the 10-mile line is drawn without regard to headlands).

37. A similar problem, in a slightly different context, was dealt with in *United States* v. *California*, with regard to the southeastern headland of San Pedro Bay (*see* Part 1, 4541 B). In the hearings before the Special Master, it was pointed out that the bulge at Newport Beach is no more than a small protrusion in an otherwise generally straight coast, or slightly curving coast, which bore no relationship to the curvature whose status was to be determined (*see* fig. 10).

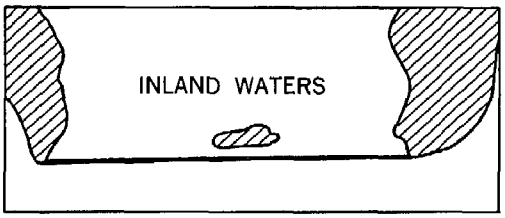

FIGURE 44.—Closing line of bay does not connect with the island.

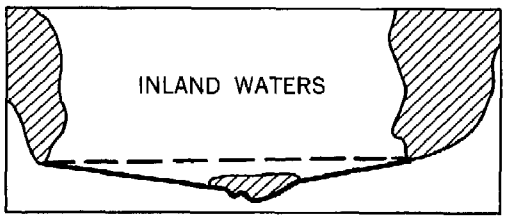

FIGURE 45.—Closing line of bay encompasses the island.

Another facet of the closing-line rule that requires interpretation is where islands are situated close to the entrance of an indentation that satisfies the semicircular rule for bays. How is the closing line to be drawn where an island lies to the landward of the line joining the headlands? And what is the treatment for an island lying to seaward of such line? Neither situation is provided for in the convention or in the draft rules of the ILC. A reasonable interpretation would be to draw a direct line between headlands for the first case (*see* fig. 44), but to the island from each headland for the second case (*see* fig. 45).[38]

D. ISLANDS AND LOW-TIDE ELEVATIONS

Another important facet in the process of delimiting the territorial sea is the treatment of islands and low-tide elevations. An island, whether within or without the territorial sea, carries its own belt of territorial waters, whereas a low-tide elevation generates such a belt only if it lies wholly or partly within the territorial sea (*see* text at note 51 *infra*). It therefore becomes necessary to be clear as to the meaning of these terms in the technical sense. (*See* figs. 46 and 47.)

(*a*) *Definition of Island.*—Article 10 of the convention defines an island as "a naturally-formed area of land, surrounded by water, which is above water at high-tide." This definition is essentially the same as that recommended by the International Law Commission but with one important difference—where-

38. The basis for this interpretation is the observation of the ILC that the presence of islands at the mouth of an indentation tends to link it more closely to the mainland (*see* text following note 29 *supra*). It would seem to follow that where a choice of lines exists that line be selected that encloses the greatest area of inland waters. This is consistent with Art. 7, par. 5 of the convention which calls for a closing line to be drawn that encloses the maximum area of water possible, and with par. 3 of the article which allows islands within an indentation to be considered part of the water area. The rule proposed would still leave unresolved the question of how far seaward from the headland line islands could be in order to be incorporated under the rule. The best solution would be to consider each case on its merits and apply a rule of reason. A more restrictive rule for the second case would be to join the island to each headland only if some part of the island is on a direct headland-to-headland line. This would also be in the interest of least encroachment on freedom of the seas.

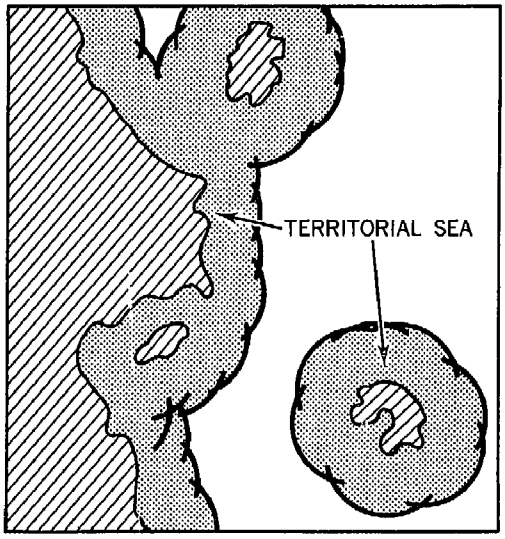

FIGURE 46.—An island within or without the territorial sea of the mainland generates a new territorial sea.

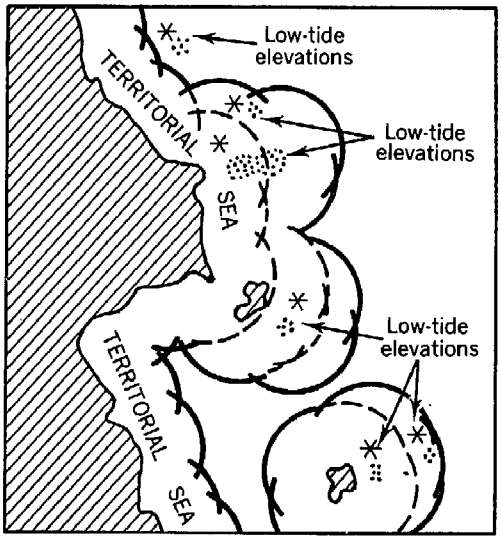

FIGURE 47.—Effect on outer limits of the territorial sea of low-tide elevations (rocks and shoals awash) at various locations.

as, the ILC definition left open the question whether artificially formed islands, such as spoil banks resulting from dredging operations, fall within the scope of the draft rules, the Geneva convention definitely excludes such formations.[39]

To fall within the definition, the land must be surrounded by water and must be above water at high tide. On the face of it, this would seem to raise the question whether it must be surrounded by water at high tide only or also at low tide. But a little reflection will show that insofar as the territorial sea is concerned it must be surrounded by water at all stages of the tide.[40] Although not specifically provided for, it must be assumed that neither habitability, shape, area, nor texture is a necessary ingredient of an island for the purpose of delimiting the territorial sea.[41]

39. Except for the term "naturally formed," the definition follows substantially the one given in JEFFERS, HYDROGRAPHIC MANUAL 247, PUBLICATION 20–2, U.S. COAST AND GEODETIC SURVEY (1960). For surveying and mapping purposes, it is obvious that the manner in which an island was formed would be immaterial. *See also* MITCHELL, DEFINITIONS OF TERMS USED IN GEODETIC AND OTHER SURVEYS 41, SPECIAL PUBLICATION NO. 242, U.S. COAST AND GEODETIC SURVEY (1948).

40. The reason for this is that if it were not also surrounded at low tide it would be within the low-water line of the mainland coast, and since that line is the baseline for drawing the territorial sea, the question of islands would not arise. It could only arise where the low-water line around the island is completely detached from the mainland low-water line. That could only occur where the area of land under consideration is surrounded by water at low water. The fact that within the low-water line there is an area of land exposed at high tide does not affect the drawing of the territorial sea boundary.

41. The matter of habitability, or occupancy, arose at the 1930 Hague Conference. The United States there took the position that separate bodies of land which were capable of use should be regarded as islands, but the Second Sub-Committee did not accept the capability-of-use principle and adopted instead

Islands have been considered in other contexts and may be defined somewhat differently from that adopted by the Geneva Conference. For example, for the purpose of determining the ownership of new islands formed in a navigable stream, it has been held that land surrounded by water only in times of high water is not an island within the rule that the state takes title to such lands.[42]

For mapping and charting purposes, the following definition has been used: A body of land extending above and completely surrounded by water at the mean high-water stage; an area of dry land entirely surrounded by water or a swamp; an area of swamp entirely surrounded by open water.[43]

(*b*) *Groups of Islands.*—Paragraph 2 of Article 10 provides that "the territorial sea of an island is measured in accordance with the provisions of these articles." The Conference thus took no stand on the question of the treatment of groups of islands, or archipelagoes as they are sometimes called, and it must be assumed that each island of such a group will be governed by the rule laid down in paragraph 2, that is, each will have its own territorial sea measured in the ordinary way according to the provisions of the convention adopted, and are not to be enclosed by a series of straight baselines.[44] The significant difference between these two treatments would be that in the case of straight baselines, the water areas behind such lines would be inland waters,

a definition similar to that given in Art. 10 except that no reference was made to "naturally-formed" areas. Acts of Conference, *supra* note 33, at 200, 219. That texture is no criterion would follow the rule laid down in the case of the American ship *The Anna,* which was seized by a British privateer in the Gulf of Mexico at a place more than 3 miles from the mainland but approximately 2 miles from small, mud islands composed of earth and driftwood off the mouth of the Mississippi River. It was held that they were the natural appendages of the coast and "whether they are composed of earth or solid rock, will not vary the right of dominion, for the right of dominion does not depend upon the texture of the soil," even though it was contended that they were "not of consistency enough to support the purposes of life, uninhabited, and resorted to, only, for shooting and taking birds' nests." *The Anna,* 5 Rob. 373, 385 c, d (1805).

42. *Payne* v. *Hall,* 185 N.W. 912, 915 (1921) (Iowa). The inference here is that it must also be surrounded by water at low water; hence, a piece of land that bares at high water but is connected to the main shore by a strip of land that bares at low water would not be considered an island in Iowa for the purpose stated. And to the same effect is *McBride* v. *Steinweden,* 83 Pac. 822, 824 (1906) (Kans.), where it was held that to constitute an island in a river the same must be of a permanent character, not merely surrounded by water when the river is high but permanently surrounded by a channel of the river and not a sand bar subject to overflow by a rise in the river and connected with the bank when the water is low.

43. EDMONSTON, NAUTICAL CHART MANUAL 77, U.S. COAST AND GEODETIC SURVEY (1956). This definition is geared to the charting needs of the Bureau. It has also been adopted by the U.S. Geological Survey for use on topographic quadrangles.

44. Art. 4 of the convention, which permits the use of straight baselines under certain circumstances, applies to islands along the coast and in its immediate vicinity, but not to midocean groups of islands. At the Conference, proposals that would have approved the application of straight baselines to such islands were submitted for consideration but withdrawn before being voted on. Sorensen, *supra* note 31, at 240.

whereas under the individual island rule, the waters would be either territorial or high seas.[45]

This question of groups of islands cannot be considered as settled. The International Law Commission, while recognizing the importance of the question, was unable to reach a decision because of disagreement on the breadth of the territorial sea and because of a lack of technical information on the subject. It pointed out, however, that the rules with regard to straight baselines may be applicable to groups of islands lying off the coast.[46]

(*c*) *Low-Tide Elevations.*—Article 11 of the convention defines a low-tide elevation as "a naturally-formed area of land which is surrounded by and above water at low-tide but submerged at high-tide." Such elevations are the same as "drying rocks" and "drying shoals," the nomenclature used by the International Law Commission.[47] As was pointed out above, the important distinction between an island and a low-tide elevation, insofar as the law of the sea is concerned, is that an island, no matter where situated, carries its own territorial belt, while a low-tide elevation generates such a belt only if it lies within the territorial sea. (*See* figs. 46 and 47.)

Low-tide elevations fall in the category of submerged lands rather than tidelands, for the latter presupposes a high-water line at the upper boundary. Therefore, unless a low-tide elevation is connected to the mainland (or to an island), or is within the corresponding territorial sea, no territorial sea can be drawn around it.

A situation may exist where a low-tide elevation is partly within and partly without the territorial sea as measured from the mainland or an island. In such cases, the convention provides that "the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea." [48]

45. If the islands are fairly close together, for example less than 6 miles apart where a 3-mile rule prevails, the individual territorial seas will overlap, but where they are more than 6 miles, the waters between the various territorial seas will be high seas.

46. Report of the ILC (1956), *supra* note 7, at 17. In Dec. 1957, attention was focused upon this question by an Indonesian Proclamation under which its territorial sea was to be measured from straight baselines connecting the outermost points of the islands, thus enclosing vast areas of the sea between the islands. This was contested by the leading maritime countries. Sorensen, *supra* note 31, at 239. When Hawaii was admitted as a state, its sea boundaries did not include all the water areas between the islands but only a 3-mile belt around each island, leaving areas of high seas between most of them. S. Rept. 80, 86th Cong., 1st sess. 4 (1959).

47. In the Coast Survey, the terminology used for a low-tide elevation or a drying rock is "rock awash." Rocks awash are defined as "those exposed at any stage of the tide between mean high water and the sounding datum, or that are exactly awash at these planes." JEFFERS, *op. cit. supra* note 39, at 209.

48. This means that the portion of the low-tide elevation outside the territorial sea would be used to generate a new territorial sea. The effect of this is to treat such elevations as if they were islands, which seems inconsistent with the principle expressed in par. 2, of Art. 11, that a low-tide elevation situated outside the territorial sea "has no territorial sea of its own." The more consistent rule would be to treat such elevations as if they terminated at the outer limit of the territorial sea, but apparently both the ILC and the Conference considered these as special cases that justified a more liberal treatment. (*See* fig. 47.)

Low-tide elevations on which an installation is built—a lighthouse, for example which is itself permanently above water—apparently remain in the category of low-tide elevations and do not take on the character of islands.[49] But they may be used as end points for the drawing of straight baselines, which without such installations would not be permissible (*see* 2211 A).[50]

Finally, the territorial sea generated by a low-tide elevation applies only to such elevation within the territorial sea of the mainland or an island. If the bulge in the territorial sea caused by the presence of a low-tide elevation encompasses another low-tide elevation, the latter will not generate a new territorial sea.[51] But this does not apply to an island situated within the territorial sea. If the bulge resulting therefrom encompasses a low-tide elevation, the latter generates a new territorial sea. This follows from the fact that no distinction is made in the convention between an island lying within and an island lying without the territorial sea. Therefore, the rules applicable to the mainland should be applicable to all islands. (*See* fig. 47.)

E. HARBORS AND ROADSTEADS

Under the Geneva convention the distinguishing feature between harbors (or ports) and roadsteads is that the former is part of the inland waters while the latter is assimilated to the territorial sea. Neither term is defined specifically, but each is treated in terms of the method of delimiting the territorial sea where such features exist. It must therefore be assumed that the customary meaning of the terms is intended (*see* Part 1, 46).

(*a*) *Harbors.*—Article 8 of the convention provides: "For the purpose of delimiting the territorial sea, the outermost permanent harbour works which form an integral part of the harbour system shall be regarded as forming part of the coast." This provision is open to interpretation as to what constitutes a "harbour system" and "harbour works." Of itself, the convention provides no ready answer. However, it is important to note that Article 8 is identical with Article 8 of the draft articles of the International Law Commission, and it is reasonable to assume that the Geneva Conference was aware of the ex-

49. This is not actually stated but must be inferred from the articles dealing with islands and low-tide elevations. In the ILC report, however (see commentary (2)(i) to Art. 10), this is spelled out as a limitation on the term "island."

50. This provision broadens the scope of the ILC recommendation which specifically prohibited the drawing of straight baselines between low-tide elevations and made no exception for the presence of lighthouses or similar installations (*see* note 14 *supra* and accompanying text). Report of the ILC (1956), *supra* note 7, at 14. *See also* note 15 *supra.*

51. This follows from par. 2 of Art. 11, which states that where a low-tide elevation is "at a distance exceeding the breadth of the territorial sea *from the mainland or an island,* it has no territorial sea of its own." (Emphasis added.)

planatory comments of the ILC. In its commentary (1), the Commission notes that "The waters of a port up to a line drawn between the outermost installations form part of the internal waters of the coastal State." The situation envisioned by this commentary is one where the entrance to a port is protected from closing up by building jetties seaward into the ocean. Other situations may not be as clear cut, but some guidance is possible from commentary (2), which states that "Permanent structures erected on the coast and jutting out to sea (such as jetties and coast protective works) are assimilated to harbour works." [52]

(*b*) *Roadsteads.*—Roadsteads are sea areas used for loading, unloading, and anchoring of ships. Article 9 provides that when such areas would otherwise be situated wholly or partly outside the outer limit of the territorial sea, they are to be included in the territorial sea. This provision is identical with the draft rules of the ILC and also follows substantially the Report of the Second Sub-Committee at the 1930 Hague Conference.[53]

2212. *Boundary Through the Territorial Sea—The Median Line*

If coastlines were relatively straight, and the land boundary between adjacent coastal States reached the shore at right angles, the problem of delimiting the boundary between them through the territorial sea would be a simple one—an extension seaward of the last land frontier would be a logical solution. But coastlines are rarely straight, and land boundaries seldom reach the shore at right angles. Figure 48, for example, illustrates a situation where an extension of the land boundary through the territorial sea would clearly be inequitable for State *A* because it would deprive it of a portion of the territorial sea that clearly belongs to it. The inequity would be magnified as the line is extended seaward to the edge of the continental shelf. What then is the most equitable method to apply?

The problem was exhaustively considered by the International Law Commission with the aid of a study by a committee of experts. The solution agreed on as the most satisfactory and the most equitable was to draw the boundary "by application of the principle of equidistance from the nearest points on the baseline from which the breadth of the territorial sea of each country is

52. Report of the ILC (1956), *supra* note 7, at 16. While the ILC in commentary (3) posed the question whether Art. 8 could still be applied where a jetty extends several kilometers into the sea or whether such installations should be considered the same as installations for the exploration of natural resources on the continental shelf, which would have safety zones but no territorial sea (*see* note 93 *infra*), it declined to state an opinion because of the rareness of the situation. Nor did it express an opinion as to where a dividing line might be drawn.

53. The ILC notes in a commentary that the question of treating roadsteads as internal waters was considered but was decided against because of the possibility that innocent passage through them might be prohibited. It felt that the rights which a coastal State must exercise over such areas were sufficiently safeguarded by assigning to them a status of territorial sea. Report of the ILC (1956), *supra* note 7, at 16.

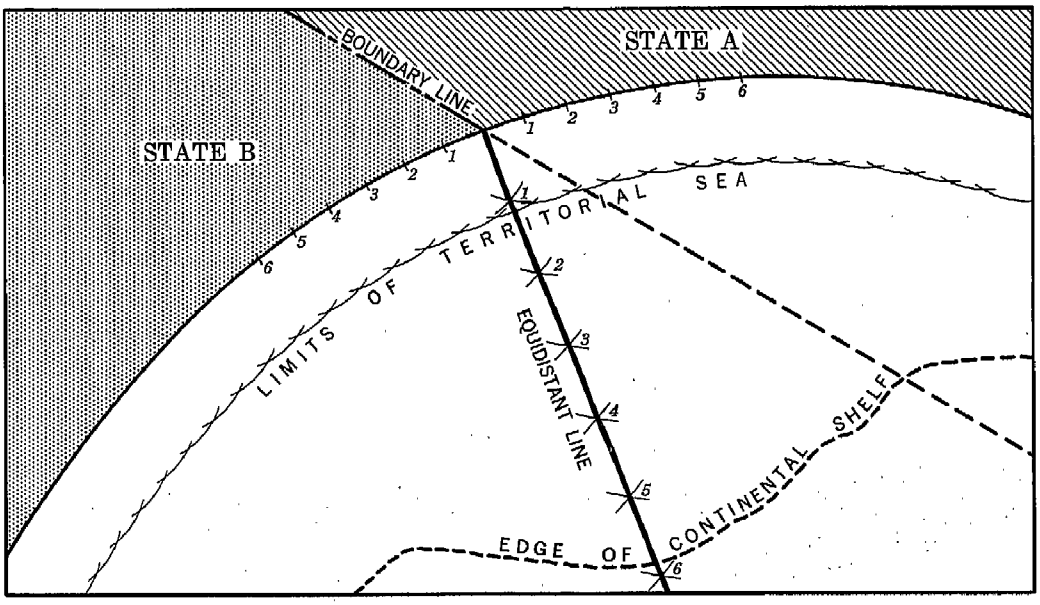

FIGURE 48.—A continuation seaward of the land boundary results in an inequity to State *A*. An equidistant line is preferable under such conditions (*see* note 60 *infra*).

measured." [54] This principle is embodied in the median-line concept. The ILC adopted a separate rule for cases where the coasts of two States are opposite each other, the boundary in such cases being the median line. This distinction between an equidistant line and a median line seems valid from a geometrical point of view, for a true median line presupposes a line that is in the middle. Theoretically, at least, a boundary line through the territorial sea between two adjacent States, while an equidistant line, is not a true median line.

The Geneva convention combines both cases—opposite coasts and adjacent coasts—into a single article (Art. 12). It fixes the boundary between two States not directly but as a prohibition against either State extending 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." This, in effect, adopts the median-line principle as the boundary between two States.

Since in all cases of boundary making, the objective is agreement between the parties concerned, the convention provides for the use of the median line

54. Report of the ILC (1956), *supra* note 7, at 18. Besides considering the continuation of the land frontier, the Commission studied several other possibilities, namely: a line at right angles to the coast at the point where the land frontier reached the sea; a line coinciding with the geographic parallel passing through the point at which the land frontier meets the coast; and a line at right angles to the general direction of the coast. The Commission rejected these methods as impracticable for a general rule of law, although suitable in special situations. It adopted instead the principle of equidistance.

only in the absence of such agreement, and justifies a departure from such mathematical line where a historic title or other special circumstance exists. But even in such cases, the median line would still provide the best starting point for arriving at an agreement.[55]

The ILC made an additional recommendation on the matter of enclaves within the territorial sea. This provided that where the delimitation of the territorial seas of two States lying opposite each other results in an enclave of high seas not more than 2 miles in breadth within the territorial sea, such enclave could by agreement be assimilated to the territorial sea. This, however, was not adopted by the Conference.[56]

A. CONSTRUCTION OF A MEDIAN LINE

The precise median line or the median-line principle can be applied in a large variety of geographic situations to delimit the sea boundary between coastal States in an equitable manner. Among these may be found cases where States are opposite each other, adjacent to each other, opposite and adjacent, or where islands exist in the vicinity of the boundary line.[57] Only the methods applicable to the first two will be described.[58]

55. Exceptional configurations of a coast, the presence of islands, the existence of special mineral or fishery rights in one of the States, or the presence of a navigable channel are among the special circumstances which might justify a deviation from the median line. It might be noted in this connection that a questionnaire, drawn up by the Special Rapporteur of the International Law Commission and submitted to a committee of experts, contained the following question regarding the international boundaries in the territorial sea: "How should the international boundary be drawn between two countries, the coasts of which are opposite each other at a distance of less than $2T$ miles [T being the breadth of the territorial sea]? To what extent have islands and shallow waters to be accounted for?" To this, the committee replied: "An international boundary between countries the coasts of which are opposite each other at a distance of less than $2T$ miles should as a general rule be the median line, every point of which is equidistant from the base-lines of the States concerned. Unless otherwise agreed between the adjacent States, all islands should be taken into consideration in drawing the median line. Likewise, drying rocks and shoals within T miles of only one State should be taken into account, but similar elevations of undetermined sovereignty, that are within T miles of both States, should be disregarded in laying down the median line. There may, however, be special reasons, such as navigation and fishing rights, which may divert the boundary from the median line. The line should be laid down on charts of the largest scale available, especially if any part of the body of water is narrow and relatively tortuous." Whiteman, *Conference on the Law of the Sea: Convention on the Continental Shelf*, 52 AMERICAN JOURNAL OF INTERNATIONAL LAW 649 n.131, 651 (1958).

56. At the 1930 Hague Conference, the American delegation had proposed a somewhat analogous rule for the assimilation of partly surrounded pockets of high seas. It provided that where the delimitation of the territorial sea results in a pronounced concavity such that a straight line not more than 4 miles long entirely closed off the concavity, the coastal State may regard it as part of the territorial sea if it satisfies the semicircular rule for bays. This proposal was not adopted by the Second Sub-Committee of that Conference.

57. Examples of these and others may be found in Pearcy, *Geographical Aspects of the Law of the Sea*, 49 ANNALS OF THE ASSOCIATION OF AMERICAN GEOGRAPHERS 17–19 (Mar. 1959).

58. These are based on a paper prepared by Commander Kennedy, of the United Kingdom delegation to the Conference on the Law of the Sea, entitled "Brief Remarks on Median Lines and Lines of Equidistance, and on the Methods Used in Their Construction," and distributed at the Conference on Apr. 2, 1958. Also, *see* Boggs, *Delimitation of Seaward Areas Under National Jurisdiction*, 45 AMERICAN JOURNAL OF INTERNATIONAL LAW 256–263 (1951), for a discussion of median-line techniques.

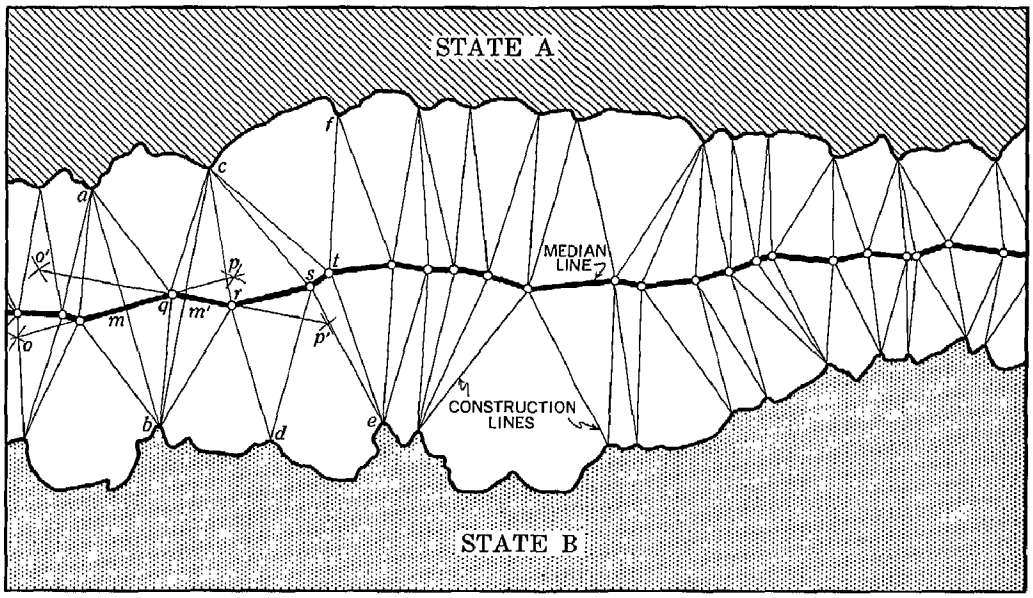

FIGURE 49.—Construction of a median-line boundary between coasts opposite each other. Only two of the perpendicular bisectors are shown.

In constructing a true median-line boundary, it is essential to keep in mind that every point on such boundary must always be equidistant from the nearest points on the baselines from which the territorial sea is drawn. Unless this geometric principle is satisfied the resulting boundary will not be a true median line. And for purposes of drawing median lines, the baselines from which equal distances are measured may be the low-water lines, closing lines of bays, or straight baselines. The technical construction for the two cases is somewhat different and will be treated separately.

(*a*) *Where the Coasts Are Opposite Each Other.*—In figure 49, a point on the true median line must first be established. This can be a trial-and-error method, or it may be a direct method as follows: Center the dividers on a prominent point on the coast of State *A* and swing an arc until a point on the coast of State *B* nearest to this center is found. With the same radius, center the dividers on the point on the coast of State *B* and verify that the original point on State *A* is the nearest to it. (This is not necessarily always so and is dependent upon the particular shapes of the coastlines.) If the selected points are not the nearest to each other *from both coasts*, two other points must be found that are. The initial point on the median line is the midpoint of the line joining these two points. In the figure, *a* and *b* are the points near-

est to each other and *m* is a point on the median line. Having established the initial point, other points on the median line are derived as follows:

(1) Draw a perpendicular *omp* to the line *ab* at point *m*. This will be the median line, since from the geometric construction every point on this line is equidistant from both *a* and *b*.

(2) A point *q* is next found by trial and error in the line *mp* that is equidistant from the nearest point on the coast of either State and from points *a* and *b*. Let this point be *c* on the coast of State *A*. Hence, at *q*, the relationship $qa=qb=qc$ exists, and there are no points on the coastline of either State nearer to the median line than points *a*, *b*, and *c*.

(3) A perpendicular bisector *o'm'p'* is next drawn to line *bc* (this must pass through point *q* since *qb* is equal to *qc*), and a point *r* found on this bisector that is equidistant from *b* and *c* and from the nearest point on the coast of either State. Let this point be *d* on the coast of State *B*.

(4) A perpendicular bisector is next drawn to line *cd*, and a point *s* is found on this bisector that is equidistant from *c* and *d* and from the nearest point on the coast of either State. Let this point be *e* on the coast of State *B*.

(5) A perpendicular bisector is next drawn to line *ce*, and a point *t* found on this bisector that is equidistant from *c* and *e* and from the nearest point of the coast of either State. Let this point be *f* on the coast of State *A*.

(6) This process is continued to the desired limit of the boundary to be delimited.[59]

(*b*) *Where the Coasts Are Adjacent to Each Other.*—Figure 50 illustrates an application of the median-line principle to delimit the boundary through the territorial sea of two adjacent States. In this case, a point is first selected at a distance from the coast sufficient to encompass the outer limit of the territorial sea. This point should be equidistant from the nearest point on the coastline of each State. Let this point be *t* in the figure and *a* and *b* the nearest points to it on the coastlines of States *A* and *B*, respectively. This, by definition, is a point in the median line. Having established this initial point on the median line, other points on it are derived as follows:

(1) Draw a perpendicular bisector *otp* to the line *ab* through point *t*. This bisector is the median line since every point on it is equidistant from both *a* and *b*.

(2) Proceed shorewards along the median line until a point is found that is equidistant from the nearest point on the coast of either State and from points *a* and *b*. Let this point be *u* and the nearest point be *c* on the coast of State *A*. Hence, at *u*, the relationship $ua=ub=uc$ exists.

(3) Draw a perpendicular bisector through *u* to the line *cb* and proceed along this bisector shorewards until a point is reached that is equidistant from points *b* and *c* and the nearest point on the coast of either State. Let this point be *v* and the nearest point be *d* on the coast of State *A*.

59. Where a point on the median line is equidistant from four or more points, as occasionally happens, the median line continues along the perpendicular bisector of the two points on the opposite coasts furthest removed from the starting point.

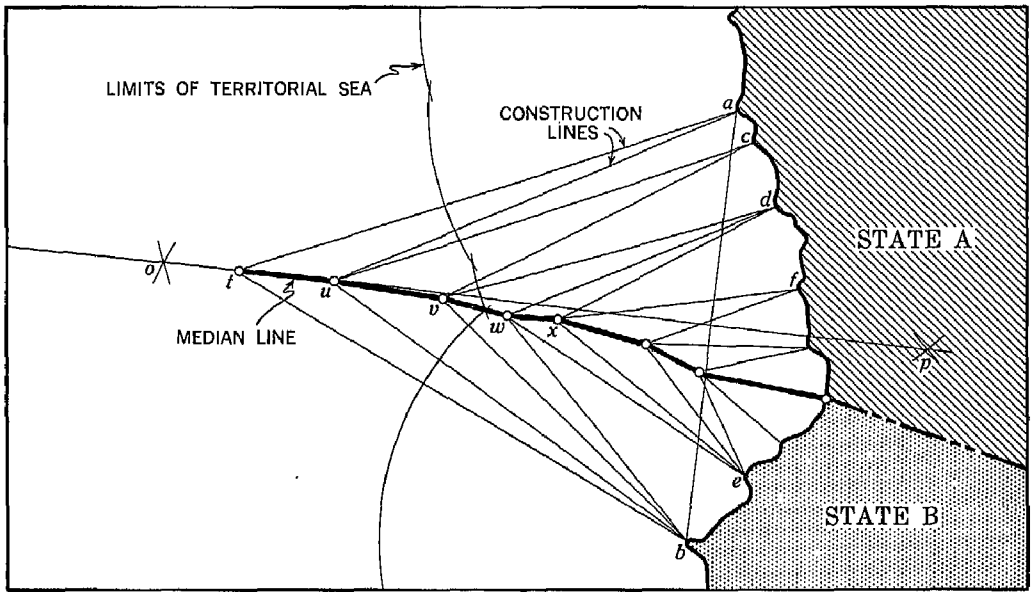

FIGURE 50.—Construction of a median-line boundary between coasts adjacent to each other. Only one perpendicular bisector is shown.

(4) Draw a perpendicular bisector through v to the line db and proceed along this bisector shorewards until a point is reached that is equidistant from points d and b and the nearest point on the coast of either State. Let this point be w and the nearest point be e on the coast of State B.

(5) Draw a perpendicular bisector through w to the line de and proceed along this bisector shorewards until a point is reached that is equidistant from points d and e and the nearest point on the coast of either State. Let this point be x and the nearest point be f on the coast of State A.

(6) This process is continued, always taking the perpendicular bisector from a point on the median line to the nearest points on the coasts of States A and B, until the boundary at the coast is reached.[60]

2213. *Charting of Boundary Lines*

The Convention on the Territorial Sea and the Contiguous Zone calls for the charting of boundary lines or baselines on the official charts of the coastal State in four situations: (1) Where a normal baseline is used (Art. 3)—this is

60. Where the coastline of two adjacent States is not particularly complex, the principle of equidistance can be preserved by drawing the lateral boundary between them as shown in figure 48. With the shore terminus of the land boundary as a center, intercepts are drawn at equal intervals on the coastline of each State. Arcs are then swung seaward from corresponding intercepts with radii equal to the distances between them. The intersections of corresponding arcs form points on the lateral boundary, each of which is by construction equidistant from corresponding points on the coastline of each State.

the low-water line as indicated on the large-scale charts;[61] (2) where straight baselines are used (Art. 4, par. 6);[62] (3) where roadsteads exist they must be indicated together with their boundaries (Art. 9); and (4) where there is a boundary between the territorial seas of two States opposite to each other it is to be shown on large-scale charts (Art. 12, par. 2).

In the case of straight baselines and roadsteads, the convention also calls for giving due publicity to such boundaries. Presumably this would mean in *Notices to Mariners* and in *Coast Pilots.*

2214. *The Right of Innocent Passage*

The rules pertaining to innocent passage through the territorial sea are embodied in Articles 14 through 23 of the convention, and are subdivided into those applicable to *All Ships,* to *Merchant Ships,* to *Government Ships Other Than Warships,* and to *Warships.*

Since no boundary problems *per se* are involved, these rules will be noted only insofar as they represent a limitation on the right of a coastal State to control the waters within its national boundaries.

The right of innocent passage is the one feature of the territorial sea that distinguishes it from national or internal waters. The principle of such passage has been recognized for a long time as an integral part of the law of the sea, and represents a balance between the maritime interest in preserving the greatest possible freedom of passage and the coastal State's interest in protecting its security.

(*a*) *Rules Applicable to All Ships.*—The basic paragraphs of this section of the convention are those that define "passage" and "innocent passage." *Passage* means "navigation through the territorial sea for the purpose either of traversing that sea without entering internal waters, or of proceeding to internal waters, or of making for the high seas from internal waters" (Art. 14, par. 2).[63]

61. The lack of specific details as to the exact low-water line to be used gives this provision a degree of flexibility so as to encompass both a low-water line and a lower low-water line, depending upon which is used on the official charts (*see* 2211 A(*a*)). The ILC recognized this in commentary (2) to Art. 4 by observing that the traditional expression "low-water mark" may have different meanings, and that there is no uniform standard by which States in practice determine this line. Report of the ILC (1956), *supra* note 7, at 13.

62. This was not a requirement in the recommendations of the ILC.

63. This includes stopping and anchoring, but only insofar as they are incidental to ordinary navigation or are made necessary by *force majeure* or by distress (Art. 14, par. 3).

Passage is defined as *innocent* (Art. 14, par. 4) "so long as it is not prejudicial to peace, good order or security of the coastal State." [64]

(*b*) *Rules Applicable to Warships.*—Article 23, which applies to warships, does not specifically grant warships the right of innocent passage in the territorial sea; it merely gives the coastal State the right to require a warship to leave the territorial sea if it has disregarded the regulations of that State concerning passage, after being requested to comply. The implication, however, is clear that warships have the right of innocent passage.[65]

A. PASSAGE THROUGH INTERNATIONAL STRAITS

A special aspect of the doctrine of innocent passage is its applicability to international straits, that is, waterways used for international navigation.[66] The background for the consideration of such waterways by the Geneva Conference was the case of *United Kingdom* v. *Albania* (commonly known as the *Corfu Channel* case), in which the International Court of Justice laid down the doctrine that the decisive criterion for a strait being open to the passage of vessels of other nations is "its [the strait's] geographical situation as connecting two parts of the high seas and the fact of its being used for international navigation" (*see* Part 1, 52).[67]

The International Law Commission followed the decision in the *Corfu Channel* case and adopted a rule to the effect that the innocent passage of foreign ships must not be suspended "through straits normally used for inter-

64. Other provisions give the coastal State the right to suspend temporarily, in specified areas, the innocent passage of foreign ships if the security of the coastal State is endangered (Art. 16, par. 3), and require foreign ships to comply with the laws and regulations enacted by the coastal State that are in conformity with the articles of the convention and other rules of international law (Art. 17).

65. This provision is practically identical with Art. 25 of the draft rules of the ILC, but the ILC also provided a more positive rule (Art. 24) which granted innocent passage to warships but subject to previous authorization or notification. This article failed to receive a two-thirds vote, and the convention was left only with Art. 23, with no special provision relating to the innocent passage of warships. The point has been made that the proceedings of the Conference indicate that a majority of the delegations did not intend warships to have such right. Sorensen, *supra* note 31, at 235. For a comprehensive discussion of the articles dealing with the right of innocent passage, *see* Fitzmaurice, *Some Results of the Geneva Conference on the Law of the Sea,* THE INTERNATIONAL AND COMPARATIVE LAW QUARTERLY 90–108 (Jan. 1959).

66. An international strait is not necessarily one that lies between two coastal States but can be situated wholly within the territory of a single State, as, for example, the Kiel Canal, which, although within German territory, was held by the Permanent Court of International Justice, under the Treaty of Versailles, to be open to all vessels. Similarly, the Corfu Channel was held to be an international strait, even though for a part of its length the shores belong to the same country (*see* fig. 15). COLOMBOS, INTERNATIONAL LAW OF THE SEA (4th ed.) 170, 191 (1959).

67. A strait in the juridical sense is thus distinguishable from a strait in the geographical sense, the latter being usually defined as a relatively narrow waterway connecting two larger bodies of water. It will be recalled that the *Corfu Channnel* case was relied on by the Government in the *California* case to uphold its contention that the waters between the southern California coast and the offshore islands are not inland waters but high seas (*see* Part 1, 53).

national navigation between two parts of the high seas."[68] The convention adopted at Geneva goes further than the *Corfu Channel* case and the ILC draft. It incorporates in Article 16, paragraph 4, the new concept that innocent passage should also include straits that connect the high seas with the *territorial sea* of another State. This is a distinct broadening of the existing rule and in the direction of greater freedom of the seas. The full text of the convention on this matter is as follows:

"There shall be no suspension of the innocent passage of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State."[69] (*See* fig. 38.)

2215. *The Contiguous Zone*

The term "contiguous zone" in international law may be defined as an area of the high seas, outside and adjacent to the territorial sea of a country, over which it exercises control for special purposes, such as the protection of its revenue and health laws. The origin of this doctrine goes far back into history,[70] but the first attempt to codify it as a principle of international law was in 1930 at the Hague Codification Conference. No agreement was reached on the matter, but nations continued to claim various rights of control for different purposes in areas beyond the traditional 3-mile limit.

Based upon the recommendation of the International Law Commission, the Geneva Conference gave clear, legal status to the contiguous zone doc-

68. Report of the ILC (1956), *supra* note 7, at 19 (Art. 17, par. 4). In commentary (4) to this rule, the Commission stated: "The question was asked what would be the legal position of straits forming part of the territorial sea of one or more States and constituting the sole means of access to a port of another State. The Commission considers that this case could be assimilated to that of a bay whose inner part and entrance from the high seas belong to different States. As the Commission felt bound to confine itself to proposing rules applicable to bays, wholly belonging to a single coastal State, it also reserved consideration of the above-mentioned case." *Id.* at 20. This question was raised by the State of Israel and had reference to the Strait of Tiran at the entrance to the Gulf of Aqaba, which is bordered by Egypt, Saudi Arabia, Jordan, and Israel. It was against this background that the Geneva Conference considered the right of innocent passage through straits.

69. According to the chairman of the U.S. delegation to the Geneva Conference, this provision specifically determines the controversy as to the right of Israeli shipping to pass through the Strait of Tiran to the Gulf of Aqaba (the Israeli port of Eilat is located at the head of the Gulf). Dean, *supra* note 11, at 621–623. For critical studies of the legal status of the Gulf and the right of passage through it, *see* Selak, *A Consideration of the Legal Status of the Gulf of Aqaba,* 52 AMERICAN JOURNAL OF INTERNATIONAL LAW 660 (1958), and Gross, *The Geneva Conference on the Law of the Sea and the Right of Innocent Passage Through the Gulf of Aqaba,* 53 AMERICAN JOURNAL OF INTERNATIONAL LAW 564 (1959).

70. The United States, since 1799, has claimed its right to enforce anti-smuggling measures within 12 miles of its shores. The treaties signed by the United States between 1924 and 1932 for the enforcement of its prohibition laws are an implicit affirmation of this doctrine. (*See* Part 1, 3211.)

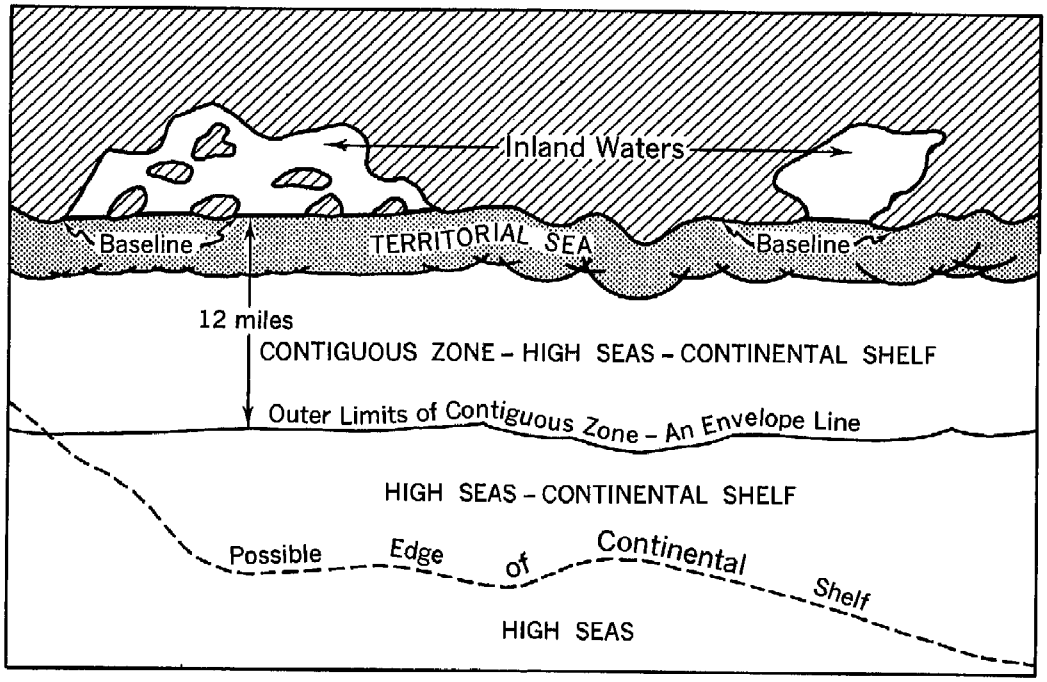

FIGURE 51.—Zones of water areas recognized in international law. These zones are not mutually exclusive but overlap in some instances.

trine.[71] In Article 24, the convention provides (1) that "in a zone of the high seas contiguous to its territorial sea, the coastal State may exercise the control necessary to . . . prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea," and (2) that "the contiguous zone may not extend beyond twelve miles from the baseline from which the breadth of the territorial sea is measured."[72] (*See* fig. 51.)

It should be noted first that the contiguous zone is a part of the high seas and not merely something separate from the territorial sea. The legal status of the waters of the zone is not changed. The coastal State exercises no sovereignty over such waters but rather control to the extent provided by the convention. It differs from the rights it exercises over the territorial sea in that in the former (the contiguous zone) the rights are derived

71. The juridical basis for the recognition of a contiguous zone was set forth by the ILC in commentary (1) to Art. 66. It said: "International law accords States the right to exercise preventive or protective control for certain purposes over a belt of the high seas contiguous to their territorial sea." Report of the ILC (1956), *supra* note 7, at 39.

72. This is identical with Art. 66 of the ILC report except for the reference to immigration which was omitted from the Commission's draft rules on the ground that there was no need to grant the coastal State special rights for this purpose in the contiguous zone. *Id.* at 40 (commentary (7)).

from international law, whereas in the latter (the territorial sea) the powers are derived from its own laws in an area which international law regards (for all practical purposes) as belonging to it.[73]

The second point that should be noted is that the convention makes it clear that not only is the maximum breadth of the zone limited to 12 miles measured from the coastline, or from straight baselines where permitted, but that such distance includes, and is not additional to, the territorial sea, as similarly measured. Thus, for a 3-mile territorial sea, the maximum breadth of the contiguous zone would be 9 miles. This would be reduced to 6 and 3 miles for a 6- and 9-mile territorial sea, respectively; while for a 12-mile territorial sea there would be no contiguous zone.[74]

(*a*) *Delimitation of Outer Limits.*—No specific provision is made for the method of delimiting the outer limits of the contiguous zone. Inasmuch as the measurement is made from the baseline, there is no reason why the same method that the Conference adopted for drawing the outer limits of the territorial sea should not be used for the contiguous zone, that is, by the use of an envelope line. All the reasons advanced for the use of this method in the first case are equally applicable to the second case (*see* 2211 B and Part 2, 1621(*c*)).

(*b*) *Boundary Through the Contiguous Zone.*—As in the case of the territorial sea, the convention does not fix directly the boundary through the contiguous zone between two States opposite or adjacent to each other, but as a prohibition against either State extending its "contiguous zone 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 the two States is measured" (Art. 24, par. 3). This, in effect, adopts the median line as the boundary between the two States through the contiguous zone. The reasons

73. Fitzmaurice, *supra* note 65, at 112. There is one limitation to the character of the contiguous zone as part of the high seas, and that is in the matter of "hot pursuit." Hot pursuit is the right which a coastal State has to pursue a foreign vessel on the high seas that has committed an offense in territorial waters. The limitations on this right are that the pursuit must follow immediately upon the escape of the vessel and must be continuous. Hence, normally, hot pursuit cannot originate if the offending vessel is first spotted in the contiguous zone, since that is part of the high seas. But the Convention on the High Seas adopted at Geneva permits such pursuit if there has been a violation of the rights of the coastal State for the protection of which the contiguous zone was established (*see* 223(*d*)).

74. It was maintained by some of the delegations that the contiguous zone is independent of the territorial sea and that countries were entitled to a contiguous zone of up to 12 miles, regardless of what they claimed as territorial sea. On the basis of a 12-mile territorial sea this would mean a zone of 24 miles over which a coastal State could exercise some kind of rights with respect to foreign shipping. *Id.* at 109. Commentary (9) to Art. 66 of the draft rules of the ILC would seem to be an answer to this contention. The Commission noted: "Until such time as there is unanimity in regard to the breadth of the territorial sea, the zone should be measured from the coast and not from the outer limit of the territorial sea. States which have claimed extensive territorial waters have in fact less need for a contiguous zone than those which have been more modest in their delimitation." Report of the ILC (1956), *supra* note 7, at 40.

for such selection and the method of constructing such boundary have been discussed in connection with establishing a boundary through the territorial sea (*see* 2212).

2216. *Internal Waters*

Article 5 of the convention deals with the status of the waters on the landward side of the baseline of the territorial sea. Paragraph 1 applies to the case of normal baselines (*see* 2211 A(*a*)) and follows the accepted rule that the waters on the landward side of such baselines form part of the internal waters of the State, over which no right of innocent passage exists (*see* Part 1, 311). (*See* fig. 51.) Where straight baselines are permissible, the problem is different. The approved use of such baselines is a relatively new development in the law of the sea (*see* 2211 A(*b*)), and areas of water which formerly were part of the territorial sea or the high seas may be enclosed as internal waters by the use of such baselines. In the *Anglo-Norwegian Fisheries* case, the Court considered these waters to be internal waters and as much subject to the complete sovereignty of the coastal State as are rivers and lakes. The Conference, while following the Court on the status of such areas as internal waters, nevertheless, added in paragraph 2 the important modification that where the establishment of a straight baseline "has the effect of enclosing as internal waters areas which previously had been considered as part of the territorial sea or of the high seas, a right of innocent passage . . . shall exist in those waters." [75]

2217. *The Breadth of the Territorial Sea*

There is one patent omission from the Convention on the Territorial Sea as adopted at Geneva—it contains no article relating to its breadth. This subject, together with the related one of the extent to which a coastal State should have exclusive fishing rights in the waters off its coast, was considered by the Conference but none of the proposals submitted received the necessary votes required for adoption.[76]

75. This provision follows closely the recommendation of the ILC except that the latter limited innocent passage to waters normally used for international traffic. Report of the ILC (1956), *supra* note 7, at 14. The elimination of this restriction from the convention is in the direction of greater freedom of the seas.

76. It will be recalled that the International Law Commission was also unable to reach agreement on a uniform distance and contented itself with merely noting some of the difficulties that stood in the way. The Commission did, however, note that international law does not permit an extension of the territorial sea beyond 12 miles (*see* 1313).

Although the United States believed the 3-mile territorial sea to be firmly established in international law, and although it regarded that distance a proper compromise between the national interests of the coastal State and the international community's interest in the freedom of the seas, it was, nevertheless, willing to explore the situation in the hope of achieving agreement.[77]

A variety of proposals was made by different delegations, ranging from a continuation of the 3-mile limit to a 12-mile limit. When it became apparent that none of these proposals could muster the necessary two-thirds majority, the United States offered a compromise proposal for a 6-mile territorial sea with the right of the coastal State to regulate fishing for an additional 6 miles, subject to certain historical fishing rights for foreign vessels.[78]

In plenary session, the United States proposal received more votes than any other proposal—45 votes for, 33 against, and 7 abstentions—but still 7 votes short of the required 52. No further action was taken by the Conference on this proposal.

The breadth of the territorial sea was again considered at the Second Geneva Conference in 1960 where various proposals were discussed but no agreement reached (*see* 231).

2218. *Comparison of Convention With Boundary Criteria Formerly Used by the United States—Agreements and Differences*

The positions taken by the United States from time to time with respect to the delimitation of territorial waters are set out (with citations) in the letter of November 13, 1951, from the Acting Secretary of State to the Attorney General (*see* Appendix D).[79] The provisions may be summarized as follows:

(*a*) In the case of a relatively straight coast, or a coast with small indentations not equivalent to true bays, the baseline for measuring the territorial sea is the low-water mark, following the sinuosities of the coast, and is not drawn from headland to headland. The United States maintained this position at the

77. Support of a narrow territorial belt by the United States was based on compelling military and commercial, as well as legal, reasons. Dean, *The Geneva Conference on the Law of the Sea: What Was Accomplished*, 52 AMERICAN JOURNAL OF INTERNATIONAL LAW 610–613 (1958).

78. *Id.* at 614. This was the first time the United States had departed from its traditional adherence to the 3-mile limit, and was advanced with the belief that it accommodated the sincere interests of all States represented. The effect of the proposal would have been to accord each State a 12-mile zone for fishing, at the same time preserving 6 miles of the 12-mile zone as high seas. The complete text of the U.S. compromise proposal may be found in 38 DEPT. STATE BULLETIN 1110–1111 (1958). For a discussion of the proposals made by other maritime nations for the breadth of the territorial sea and fishing rights in adjacent areas, *see* Sorensen, *supra* note 31, at 245–249.

79. This letter deals primarily with boundary questions raised by the *California* case (*see* Part 1, 2111). Other pertinent matters, such as delimitation of the outer limit of the territorial sea, will be considered in the light of the United States position at the 1930 Hague Conference for the Codification of International Law (hereinafter cited as the 1930 Conference).

1930 Conference and in the proceedings before the Special Master in the *California* case.[80]

(*b*) Where a coast is broken by a deep indentation having the character of a bay, the baseline for measuring the territorial sea is a straight line across the headlands if the distance between is 10 miles or less; for distances greater than 10 miles, the baseline is a straight line drawn at the point nearest the entrance where the distance does not exceed 10 miles, provided that the water area landward of such line itself has the character of a bay. This position was supported by the United States at the 1930 Conference. It also proposed a rule (the semicircular rule) for determining when a particular indentation of the coast should be regarded as a bay to which the 10-mile rule would apply. Both the 10-mile rule and the semicircular rule were urged by the United States in the *California* case.[81]

(*c*) Where a strait or channel between the mainland and an offshore island or islands connects two areas of open sea, the baseline follows the shore of the mainland and of each island. The waters of the strait or channel are either marginal sea or high sea, depending upon whether the width is less or greater than 6 nautical miles. With respect to a strait which is merely a channel of communication to an inland sea, the rules regarding bays apply. This was the position of the United States at the 1930 Conference and in the *California* case.[82]

(*d*) With respect to the measurement of territorial waters when rocks, reefs, mudbanks, sandbanks, islands or groups of islands lie off a coast, the position of the United States has been to regard as islands separate bodies of land which are capable of use, irrespective of their distance from the mainland, while separate bodies of land, whether or not capable of use, but standing above the level of low tide (low-tide elevations, drying rocks, rocks awash), are regarded as islands if they are within 3 nautical miles of the mainland. Each island, as

80. Brief for the United States before the Special Master 9 (May 1952), United States v. California, Sup. Ct., No. 6, Original, Oct. Term, 1951. The Geneva convention follows this rule with regard to normal baselines, but adopts the new concept of straight baselines in accordance with the principles laid down by the International Court of Justice in the *Anglo-Norwegian Fisheries* case (*see* 2211 A). In the *California* case, the United States contended that the rule of the *Fisheries* case was not obligatory on States not party to the controversy, citing the letter of Feb. 12, 1952, from the Secretary of State to the Attorney General (*see* Appendix D). It therefore adhered to the principles set out in the letter of Nov. 13, 1951, *supra*. *Id.* at 35–36, 173–175.

81. *Id.* at 9–10. The Geneva convention follows the semicircular rule for bays, but adopts a 24-mile closing line instead of a 10-mile line (*see* 2211 C(*a*) and (*c*)).

82. *Id.* at 9, 171–172. There are no comparable provisions in the Geneva convention dealing with straits, other than the provision relating to the right of innocent passage through straits used for international navigation. This necessarily implies that such straits do not take on the character of inland waters but rather marginal sea or high sea, and to that extent is the same as the position heretofore advocated by the United States. The distinction of the Geneva convention lies in the fact that it also applies to straits that connect the high seas with the *territorial sea* of another State (*see* 2214A).

defined, has its own territorial belt measured in the same manner as in the case of the mainland.[83]

(*e*) With respect to mouths of rivers which do not flow into estuaries, although the United States made no proposal regarding them at the 1930 Conference it was in accord with the recommendation of the Second Sub-Committee which agreed to take for the baseline a line following the general direction of the coast and drawn across the mouth of the river, whatever its width.[84]

(*f*) Regarding harbors and roadsteads, the position of the United States at the 1930 Conference was that both were to be considered as inland waters. In the case of the former (harbors), the outermost permanent harbor works were to be used as the baseline for measuring the extent of the territorial sea, and in the case of the latter (roadsteads), the exterior boundary of the roadstead was to be used as the baseline.[85]

(*g*) For defining the seaward limits of the territorial sea, the United States proposed at the 1930 Conference the use of the envelope of all arcs of circles having a radius of 3 nautical miles drawn from all points on the coast. This line has been identified more specifically as a line every point of which is at a distance of 3 nautical miles from the nearest point on the baseline from which the territorial sea is measured (*see* Part 2, 1621(*c*)).[86]

(*h*) With regard to boundaries through the territorial sea, no proposals were made by the United States at the 1930 Conference, nor were any recommended by the Second Sub-Committee. Reference to the use of "equitable

83. *Id.* at 171. This was the position of the United States at the 1930 Conference, but the Second Sub-Committee of that Conference did not accept the capability-of-use criterion, which would have included as islands natural appendages of the seabed exposed only at low tide. Instead, it defined an island as an area of land, surrounded by water, which is permanently above high-water mark, but it agreed that natural appendages exposed at low tide should be taken into account in delimiting territorial waters if they are situated within the territorial sea of the mainland or of an island. *Ibid.* The Geneva convention is essentially the same as the recommendation of the Second Sub-Committee except that while the latter did not exclude artificial islands from the definition, the Geneva convention specifically confines the term to a "naturally-formed area of land" (*see* 2211 D(*a*) and (*c*)).

84. *Id.* at 170–171. The sub-committee also recommended that if a river flows into an estuary, the rules applicable to bays apply to the estuary. The Geneva convention contains a similar provision with regard to rivers except no mention is made of estuaries (*see* 2211 A(*c*)).

85. The report of the Second Sub-Committee adopted the same provision for harbors as proposed by the United States, but did not adopt an inland water status for roadsteads, but rather a territorial sea status. The Geneva convention, in the case of harbors, appears on the face somewhat more restrictive than the United States proposal, inasmuch as the outermost permanent harbor works are noted as those "which form an integral part of the harbour system." However, reference to the final report of the International Law Commission, which contained an identical provision, shows the difference to be more apparent than real. For an interpretation of the application of the provision in the Geneva convention to a coast, *see* 2211 E(*a*). With regard to roadsteads, the Geneva convention follows the report of the Second Sub-Committee of the 1930 Conference and assigns to them a territorial sea status and not an inland waters status (*see* 2211 E(*b*)).

86. The Geneva convention follows this definition except no distance is specified for the breadth of the territorial sea (*see* 2211 B).

principles" for determining the boundary between the United States and the nation concerned was included in the Truman Proclamation of 1945 on the continental shelf (*see* Part 2, 2221), but no working rule was specified. The Geneva convention represents the first formulation of the median-line principle for delimiting boundaries through the territorial sea and the continental shelf (*see* 2212 and 2224).

222. Convention on the Continental Shelf

Of all the subjects included within the scope of the Geneva conventions, none treat of more recent concepts than those pertaining to the continental shelf. The development of techniques for drilling for oil in the subsoil gave rise to claims by coastal States for extensive rights over the seabed beyond the limits of the territorial sea. There was no uniformity in these claims either as to extent or to the degree of control exercised (*see* Part 2, 2221). This created a highly explosive situation and the first attempt to bring order out of the developing chaotic condition was a consideration of the regime of the continental shelf by the International Law Commission (*see* 1312). The recommendations of the ILC, with certain modifications, form the basis of the Convention on the Continental Shelf adopted by the Geneva Conference.

While the claims heretofore made were for the most part unilateral in nature, the Geneva convention represents the first worldwide accord on the subject and marks a significant forward step in the orderly development of this aspect of the international law of the sea. What was attempted to be accomplished was a balanced compromise between the requirements of the coastal State and the needs of the international community.

The convention rejects the view that the continental shelf doctrine justifies claims to vast offshore areas regardless of depth or exploitability, or that it entitles a coastal State to exercise unlimited jurisdiction over the waters above the shelf. On the contrary, the regime of the continental shelf as developed by the convention is subject to and within the orbit of the paramount principle of the freedom of the high seas and of the airspace above.

One of the important contributions that the convention makes regarding rights and obligations in the continental shelf is its clarification of the nature and extent of scientific research that may be carried on there, which was left unresolved by the International Law Commission.[87]

87. For a comprehensive article-by-article discussion of the first seven articles of the convention, together with the various proposals made in Committee IV, *see* Whiteman, *Conference on the Law of the Sea: Convention on the Continental Shelf*, 52 American Journal of International Law 629 (1958).

The convention contains 15 articles, the first 7 being substantive in nature and the last 8 procedural. Only the pertinent ones of the first 7 will be examined.

2221. *Definition of Continental Shelf*

Substantively, Article 1 of the convention follows the ILC draft and defines the continental shelf as "the sea-bed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas"; and "the sea-bed and subsoil of similar submarine areas adjacent to the coasts of islands." [88]

The definition thus provides alternative criteria for determining the outer limit of the shelf over which a coastal State may exercise sovereign rights. The first—a depth of 200 meters (or 100 fathoms)—coincides with the geographic concept of the average shelf edge and provides a fixed legal limit of a State's rights.[89] The second alternative adopts the criterion of exploitability as the limit beyond the conventional edge of the shelf over which sovereign rights may be exercised. Although the exploitability test does not satisfy the requirement of certainty, which is essential in any legal concept, it does have the advantage of flexibility and makes the convention applicable, without prior alteration of the limit adopted, to future situations brought about by technological developments in the field of oceanic exploration.[90]

88. In one draft, the ILC adopted the exploitability test with no reference to a specific depth of water; in another, it adopted the 200-meter depth test with no exploitability test; in the final draft it adopted the 200-meter test *and* the exploitability test on the basis of its adoption by the Inter-American Specialized Conference on "Conservations of Natural Resources: Continental Shelf and Oceanic Waters," held at Ciudad Trujillo in 1956. Report of the ILC (1956), *supra* note 7, at 41. The latter part of the definition is clarifying in nature. It was not a part of the draft rules of the ILC but was stated in commentary (10) as being applicable to submarine areas contiguous to islands. *Id.* at 42. Proposals made in Committee IV of the Geneva Conference for defining the continental shelf included the following criteria: 550 meters but not over 100 miles from the outer limit of the territorial sea; deletion of depth-of-exploitability test; 550-meters test only; shelf edge or 200 meters; shelf edge or 550 meters; shelf and slope (continental terrace); and exploitability test only. Whiteman, *supra* note 87, at 634.

89. This limit is conventionally accepted as the edge of the shelf, although in any given instance the edge of the geographic or geologic shelf may actually occur at either a greater or lesser depth. There is a practical reason for adopting this limit, since it is usually marked on nautical charts. In 1952, the International Committee on the Nomenclature of Ocean Bottom Features adopted the following definition for the continental shelf: "The zone around the continent, extending from the low water line to the depth at which there is a marked increase of slope to greater depth. Where this increase occurs the term shelf edge is appropriate. Conventionally its edge is taken at 100 fathoms (or 200 metres) but instances are known where the increase of slope occurs at more than 200 or less than 65 fathoms. When the zone below the low water line is highly irregular, and includes depths well in excess of those typical of continental shelves, the term Continental Borderland is appropriate." BULLETIN, INTERNATIONAL UNION GEODESY AND GEOPHYSICS 555 (July 1953).

90. It has been suggested that since the legal concept of the continental shelf owes its origin to the generally recognized need for giving the coastal State an exclusive right to its exploitation,

In summary, for purposes of the convention, the normal limit to which the right of the coastal State extends is where the depth of water does not exceed 200 meters. And this is irrespective of the existence of a continental shelf in the geologic sense or of its extension beyond 200 meters. In this area, exploitability, and therefore the necessary control, will be presumed. Beyond this normal limit, however, the coastal State may exercise the specified rights only if exploitation of such areas is feasible.[91]

2222. *Sovereign Rights of Coastal State*

Article 2 of the convention provides that the coastal State exercises *sovereign rights* over the continental shelf for the purpose of exploring it and exploiting its natural resources. This provision is identical with Article 68 of the ILC draft articles.[92] Paragraphs 2 and 3 of the article enunciate the principle that the rights recognized are exclusive in the coastal State and do not depend on actual exploration or on occupation, effective or notional, or on any express proclamation. No one may undertake such activities or make a claim to the continental shelf without the express consent of the coastal State.

Within the limitations noted below, the coastal State may construct and maintain installations and other devices necessary for exploration and ex-

it would be contrary to the concept if exploitable resources outside the adopted limit could not be reached by the State. Sorensen, *supra* note 31, at 228.

Present Exploitability.—In the consideration of the conventions on the law of the sea by the Senate Foreign Relations Committee, the question was asked: "What are the practical or theoretical limitations on the exploitation of the natural resources of the 'Continental Shelf' at great depth?" The answer by the Department of State was that for mineral resources, the present practical limitation of operations is around 200 feet (*see* fig. 52), some holes for petroleum having been drilled in depths of 1,500 feet. The Department also noted that operational depths are continually increasing as new techniques are developed, and that serious discussion is now going on relative to the possibility of drilling, for research purposes, even from oceanic depths. But it probably will be some time before oil and gas operations are practical on a substantial scale at depths even as great as 200 meters. As for living organisms, there seem to be no insurmountable difficulties in exploiting sedentary marine organisms in depths in excess of 200 meters, but they are not numerous, and are not presently exploited by United States fishermen. *Hearing, supra* note 31, at 88 (Question 19).

91. For a discussion of the physical characteristics of the continental shelf, the development of its legal status, and the impact of the new shelf doctrine on the freedom of the high seas, *see* Part 2, 221, 2222, and 223.

92. The term "sovereign rights" was adopted by the ILC as a compromise between the views of those desiring to use the term "sovereignty" and those who preferred "jurisdiction and control." The Commission avoided the use of sovereignty because of its possible interpretation as an infringement on the principle of the full freedom of the superjacent waters and the airspace above. The Truman proclamation (*see* Part 2, 2221) and the Outer Continental Shelf Lands Act (*see* Part 2, 232) both used the words "jurisdiction" and "control," the United States taking the position that under such decisions as the *Island of Palmas Arbitration,* 2 International Arbitral Awards 829 (1928), there can be no sovereignty without effective occupation and control. Dean, *supra* note 77, at 620. The *Palmas* case involved a dispute between the United States and the Netherlands over the Island of Palmas (Miangas) in the Western Pacific. It was claimed by the United States as a cession from Spain in 1898, but the Permanent Court of Arbitration denied the claim on the ground that the evidence showed the Netherlands had been exercising undisputed sovereignty over the island for more than 200 years.

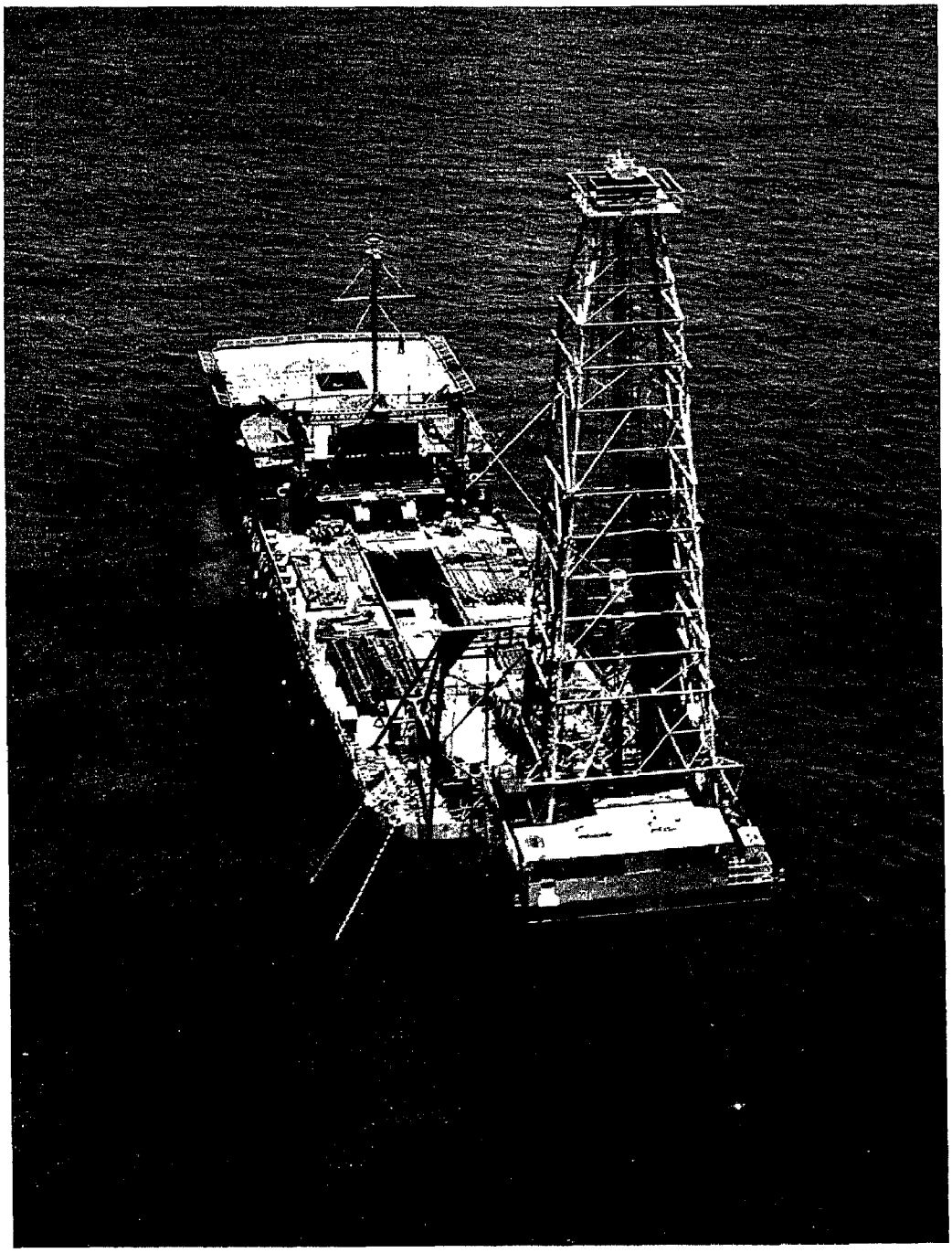

FIGURE 52.—Tender-type platform on the outer continental shelf in the Gulf of Mexico, approximately 60 miles from shore in 206 feet of water. (*Courtesy, J. Ray McDermott & Co., Inc.*)

ploitation of the natural resources of the shelf, and establish safety zones around them up to a distance of 500 meters, measured from each point of their outer edge, and within such zone to take those measures as are necessary for the protection of the installations (Art. 5, pars. 2 and 3).[93]

The last substantive article of the convention (Art. 7) declares the right of the coastal State "to exploit the subsoil by means of tunnelling irrespective of the depth of water above the subsoil."[94]

(*a*) *Limitations.*—That the rights of the coastal State under the convention do not amount to a general extension of its sovereignty is spelled out in several of the articles. For example, Article 3 preserves the legal status of the superjacent waters over the continental shelf as high seas, and of the airspace above those waters;[95] Article 4 maintains the freedom to lay submarine cables and pipelines; Article 5, paragraph 1, protects the freedom of navigation, fishing, and the conservation of the living resources of the sea from unjustifiable interference by the coastal State; and Article 5, paragraph 6, prohibits the establishment of installations where they will interfere with the use of recognized sea lanes essential to international navigation.[96]

(*b*) *Obligations of the Coastal State.*—The sovereign rights over the continental shelf which are granted to the coastal State carry with them certain obligations to the rest of the international community. Included are the obligations to give due notice of the construction of installations and the permanent means for giving warning of their presence must be maintained; to completely remove any installations abandoned or disused (this is mandatory upon the coastal State); and to undertake, in the safety zones, appro-

93. Such installations do not possess the status of islands; they have no territorial sea and their presence do not affect the delimitation of the territorial sea of the coastal State (par. 4).

94. This is a new article and did not appear in the draft rules of the ILC. The phraseology is not too well chosen since "subsoil" connotes an indefinite penetration below the seabed and "depth of water" is associated with the seabed rather than with the subsoil. The article is also unclear as to whether "tunnelling" includes the technique of directional drilling. For the views of writers on the meaning of the terms "sea-bed" and "subsoil" in relation to the continental shelf, *see* Johnson, *The Legal Status of the Sea-Bed and Subsoil,* ZEITSCHRIFT FUR AUSLANDISCHES OFFENTLICHES RECHT UND VOLKERRECHT 462–463 (Mar. 1956).

95. With this limitation in the convention, the distinction between sovereignty, sovereign rights, and exclusive jurisdiction and control are not of great practical importance. The United States accepted the term "sovereign rights" in the convention after it became clear that its use in the light of the limitation could not even remotely cast doubt on the status of the superjacent waters and airspace. Whiteman, *supra* note 87, at 635–637.

96. In the ILC draft rules, there was a specific prohibition against establishing installations in narrow channels because the importance of such areas to international navigation precludes the construction of installations. Report of the ILC (1956), *supra* note 7, at 43, 44. This was omitted by the Conference, presumably on the basis that the main consideration should be interference with navigation and not the nature of particular areas.

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priate measures for protecting the living resources of the sea from harmful agents. (Art. 5, pars. 5 and 7.)[97]

A. NATURAL RESOURCES—WHAT THEY ENCOMPASS

Inasmuch as the whole basis for establishing a continental shelf doctrine is to give the coastal State the right to explore and exploit the natural resources, it was important that the term be clearly defined. Article 2, paragraph 4, of the convention, makes this clear. Natural resources are defined as including not only mineral and other nonliving resources of the seabed and subsoil, but also "living organisms belonging to sedentary species," that is, those "which, at the harvestable stage, either are immobile on or under the sea-bed or are unable to move except in constant physical contact with the sea-bed or the subsoil." This definition is the result of a joint amendment to the ILC draft (Art. 68) which merely referred to "natural resources" but did not define the term because the Commission believed that the drafting of an appropriate definition required a combination of legal and scientific experience, which it lacked. The joint amendment is the result of close consultation between lawyers and biologists, and is based on the principles laid down in the Commission's commentaries (3, 4, and 5) to Article 68.[98]

The exact nature of the natural resources intended to be covered by the joint amendment was spelled out in the debate in Committee IV. Because of their importance in clarifying the scope of the convention, a summation of the statement made by the Australian delegate, who submitted the amendment on behalf of five other countries, is included here.[99]

97. The ILC noted in its commentary to this provision that installations should be equipped with warning devices (lights, audible signals, radar, buoys, etc.), and interested parties should be notified of their construction so that they may be marked on charts. This also applies to provisional installations that are likely to interfere with navigation, although there is no obligation to disclose plans relating to contemplated construction. *Id.* at 44. This would seem to place an obligation on the coastal State to show such installations on the nautical charts and to give notice thereof in the *Coast Pilots* and the *Notices to Mariners.*

98. Whiteman, *supra* note 87, at 639. The Commission set forth the following principles: that sedentary fisheries, especially those permanently attached to the bed of the sea, would be encompassed within the term natural resources, but not so-called bottom-fish and other fish which, although living in the sea, occasionally have their habitat at the bottom or are bred there; that the marine fauna and flora should live in constant physical and biological relationship with the seabed and continental shelf; and that objects such as wrecked ships and their cargoes (including bullion) lying on the seabed or covered by the sand of the subsoil are not included. Report of the ILC (1956), *supra* note 7, at 42.

99. He stated that the words "and other non-living resources" were added so that the article would apply to resources such as the shells of dead organisms. So far as the living resources were concerned, it was the permanent, intimate association of certain living organisms with the seabed which justified giving the coastal State exclusive right in them. The living organisms belonging to sedentary species comprised coral, sponges, oysters, including pearl-oysters, pearl-shell, the sacred chank of India and Ceylon, the trochus, and plants. The sponsors of the amendment had agreed that no crustacea or swimming species should be covered by the definition. The term "harvestable stage" refers to the stage of life during which the resources

2223. *Oceanographic and Other Scientific Research*

Article 5 (pars. 1 and 8) of the convention contains two references to research on the continental shelf.

Paragraph 1 provides that the exploitation of the natural resources of the shelf must not result "in any interference with fundamental oceanographic or other scientific research carried out with the intention of open publication." This provision did not appear in the ILC draft articles but was added by the Geneva Conference. The Commission's 1953 proposals caused some anxiety in scientific circles, where it was thought that extending sovereign rights of a coastal State over the continental shelf might affect the freedom of oceanographic research at sea, unless specific safeguards were provided.[100] The Commission, however, made no change in the final article adopted in 1956 (Art. 68).[101]

As originally introduced, Article 5 did not include the phrase "or other scientific research." It was added after it was explained (by the delegate from Denmark) that the proposal referred to "fundamental oceanographic research only" and that "oceanography was a study of the phenomena of the ocean, which included the seabed as well as the ocean waters but did not extend to the subsoil." There was therefore no danger of those engaged in oceanographic research also exploring the subsoil of the continental shelf for the purpose of finding useful mineral resources.[102]

This limitation was unacceptable to the scientists attached to the American delegation because it would have excluded such important adjuncts of oceanographic research as coring and sampling. The result was the incorporation of the phrase "or other scientific research" so as to include research in the subsoil of the continental shelf.[103]

are harvestable and not to the particular moment at which they are captured. Whiteman, *supra* note 87, at 638–640. In further amplification of what is encompassed by the term "natural resources," the Department of State stated that the term "includes such species as shellfish which burrow into the sea bottom or are constantly in contact with the sea bottom during the part of their life history when they are of value commercially. Hence, clams, oysters, abalone, etc. are included in the definition, whereas shrimp, lobsters, and finny fish are not." *Hearing, supra* note 31, at 88 (Question 18).

100. The Governing Board of the National Academy of Sciences—National Research Council took cognizance of this on June 20, 1954, and adopted a resolution urging that "the traditional freedom of scientific research at sea be protected by international agreement." *Freedom of Scientific Research at Sea,* 4 NEWS REPORT 57 (National Academy of Sciences—National Research Council, July–Aug. 1954).

101. Report of the ILC (1956), *supra* note 7, at 42. The Commission did, however, take cognizance of the viewpoint of scientists in its commentary (10) to Art. 68, by observing that the anxiety was unjustified insofar as research in the waters above the shelf is concerned, since these waters form part of the high seas and freedom to conduct research there is not affected. Consent of the coastal State, in the Commission's view, would only be required for research relating to the exploration or exploitation of the seabed or subsoil, but that refusal of consent would only be made in exceptional cases, as where the coastal State fears an impediment to the exclusive rights granted. *Id.* at 43.

102. Whiteman, *supra* note 87, at 644.

103. This information was conveyed verbally to the author by a member of the American delegation.

Paragraph 1 is thus a limitation on the coastal State's right to explore the natural resources of the continental shelf, the same as in the case of navigation and fishing, except that *any* interference with research is prohibited, whereas only *unjustifiable* interference with navigation and fishing is prohibited.[104]

Paragraph 8, on the other hand, sets forth the obligations of those desiring to engage in research. The consent of the coastal State must first be obtained. This is a prerequisite to any research on the shelf, as is the right of the State, if it so desires, to participate in the research. In addition, the research must be purely scientific research into the physical or biological characteristics of the continental shelf. All this is subject to the overriding provision that the results of the research shall be published. While the paragraph also contains an admonition that the coastal State should not normally withhold its consent if the request is submitted by a qualified institution, this must be subordinate to the primary requirement that express consent must be obtained in the first instance. The net result is that whereas prior to the Convention on the Continental Shelf oceanographic and other research outside the territorial sea of a nation could be carried on by foreign vessels as a matter of right, once the convention becomes operative this right will be greatly curtailed (*see* 2223 A).[105]

A. IMPACT ON U.S. OCEANOGRAPHIC PROGRAM

The consent aspect of the oceanographic research provision of the Convention on the Continental Shelf will have an important impact on the world-wide oceanographic program recommended for the United States.[106] How best to implement such program within the framework of the convention and what agreements can be entered into with other countries whereby international research programs can be carried out effectively and with adequate protection of national interests have been under study for some time.[107]

104. Some doubt was expressed at the Conference whether such distinction should be made, but the words "in any interference" were approved on a separate vote in plenary. *Id.* at 648.

105. Par. 8 was also put to a separate vote in plenary on the basis that if no kind of scientific research could be undertaken without the consent of the coastal State, much valuable purely scientific work would be stopped. The paragraph was nevertheless approved by the Conference. *Ibid.*

106. In 1959, a Committee on Oceanography, working under the sponsorship of the National Academy of Sciences, submitted its report stressing the importance of an ocean-wide, ocean-deep survey program through international cooperation in which the United States' share would be about 30 percent. *Oceanography 1960 to 1970, 1–Introduction and Summary of Recommendations,* National Academy of Sciences—National Research Council (1959).

107. In August of 1959, the Committee on Oceanography (*see* note 106 *supra*) sponsored a special meeting on this problem (the author attended as an observer) at which it was the consensus that a letter be addressed to the Standing Committee on Science of the Federal Council for Science and Technology recommending that a statement of policy be drafted, for enunciation by the President of the United States, setting forth the principles under which oceanographic research in the continental shelf areas could be undertaken by foreign countries. This pronouncement could then be used as the basis for subsequent bilateral agreements with foreign countries.

Related to the problem of research on the continental shelf is the interpretation of Public Law 212—The Outer Continental Shelf Lands Act (*see* Part 2, 23). This involves questions with respect to U.S. nationals engaging in research on the shelf without prior permission from the Secretary of the Interior who administers the act, and whether bilateral agreements with other countries could be reconciled with the act without the need for supplemental legislation.[108]

2224. *Boundary Through the Continental Shelf*

Article 6 of the convention adopts in substance the same principles for delimiting the boundary between two States through the continental shelf as was adopted for the territorial sea (*see* 2212) and for the contiguous zone (*see* 2215(*b*)). Agreement among the States concerned is stressed as the first approach.[109] Only in the absence of agreement, or unless another boundary line is justified by special circumstances (*see* note 55 *supra*), is the rule laid down in the article to be resorted to. This rule follows the principle of equidistance. In the case of two States whose coasts are opposite to each other (par. 1), the boundary line is to be a median line between their respective baselines (*see* 2212 A (*a*) and fig. 49). For two adjacent States having a common continental shelf (par. 2), the boundary line is to be "determined by application of the principle of equidistance from the nearest points of the baselines from which the breadth of the territorial sea of each State is measured" (*see* 2212 A(*b*) and fig. 50).

The final provision of Article 6 (par. 3) calls for the boundary lines between States to be defined with reference to charts and geographical features as they exist at a particular date using fixed, permanent, identifiable points on land. This requirement is somewhat different from that required for the boundary between the territorial seas of two States, where an actual charting of the boundary line is provided for (*see* 2213). The draft articles of the International Law Commission contained no requirement for either charting or for defining such boundary, but in commentary (2) to Article 72 it stated that certain advantages would accrue to having the boundary lines marked on official large-scale charts, but since such boundaries were less

108. At the meeting noted in note 107 *supra*, divergent views were expressed regarding this matter, and it was agreed to ask for a ruling and further clarification of this matter from the Secretary of the Interior (*see* Part 2, 234 note 41).

109. Although stated more directly than in the Convention on the Territorial Sea and the Contiguous Zone, the intent is the same, namely, that the possibility of agreeing upon a boundary line be first explored.

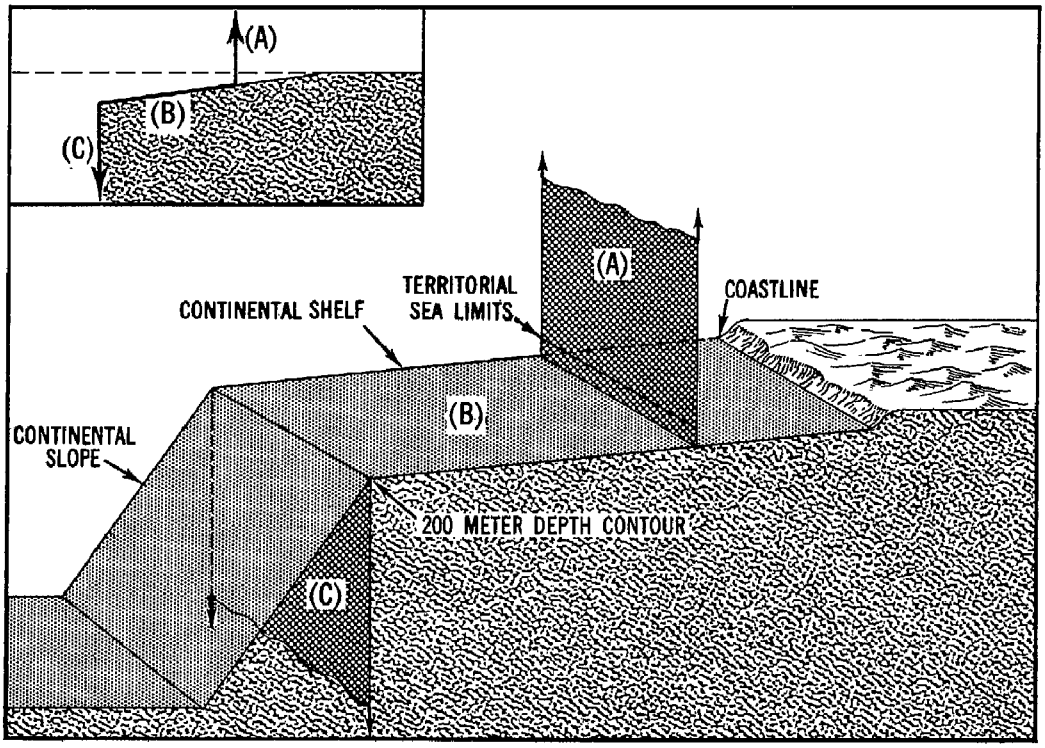

FIGURE 53.—Three-dimensional character of an offshore boundary. (*After Moodie.*)

important to users of charts than to know the boundary of the territorial sea, the Commission refrained from imposing any obligation in the matter.[110]

2225. *Three-Dimensional Character of an Offshore Boundary*

Under the conventions adopted at Geneva, the offshore boundary of a coastal State through the territorial sea and the continental shelf takes on a three-dimensional character (*see* fig. 53). At the outer limit of the territorial sea, it is defined by the vertical plane (*A*) rising from the sea floor through the superjacent waters and the airspace above for an indefinite height. From plane (*A*) the boundary is the inclined plane (*B*) of the continental

110. Report of the ILC (1956), *supra* note 7, at 44. This can only mean that inasmuch as the Commission adopted no rule requiring the charting of the outer limits of the territorial sea, it felt no obligation for charting the lateral boundary through the continental shelf. But the two are not comparable because the uniqueness of the arcs-of-circles method lies in the fact that only one such line can be drawn along a given coast and hence no line need be drawn at all (*see* Part 2, 1621(*c*)); whereas, the boundary through the shelf depends upon the configuration of the coast, the presence of islands, and the agreement between the parties for an equitable adjustment of a median or equidistant line. The latter factors are probably the reason why the Geneva Conference added paragraph 3 to the article. COLOMBOS (1959), *op. cit. supra* note 66, at 70.

shelf extending seaward until the 200-meter isobath is reached, after which it becomes the descending vertical plane (*C*) penetrating into the subsoil for an indefinite distance. In profile, the boundary would appear as shown in the inset in the upper left-hand corner of the figure.[111]

223. Convention on the High Seas

Freedom of the high seas is today a dominant principle of maritime law, and to that extent the Convention on the High Seas is the only one of the four conventions adopted at Geneva that is generally declaratory of international law (see preamble to convention). The modern concept of the freedom of the seas dates back to the time of Elizabeth I of England who in 1580 resisted the extravagant claims of Spain with the declaration that "the use of the sea and air is common to all; neither can any title to the ocean belong to any people or private man, forasmuch as neither nature nor regard of the public use permitteth any possession thereof." [112] This principle was later expounded by Grotius in a pamphlet published in 1609 under the title *Mare Liberum* (free sea), in which he defended the right to resist by force the monopoly claimed by the Portuguese in the East Indies (*see* Part 1, 32). By the close of the 17th century this doctrine won general acceptance as in the best interests of the community of nations, and except for certain claims put forward to defined areas of territorial or internal waters, no modern nation now attempts to assert any exclusive or special authority over the domain of the high seas. This liberation of the high seas from the national law of any nation means that they are governed by the law of nations, and any exercise of national authority on the high seas must be validated by reference to that law.

Since the high seas are *res communis* (the property of all) and incapable of appropriation by any State, no boundary problems are involved except in those portions covered by the contiguous zone (*see* 2215) and by the continental shelf (*see* 2222) where international law recognizes certain rights as exclusive in the coastal State.

The convention comprises 37 articles and covers such topics as freedom of navigation, the nationality and status of ships, the immunity of warships and other governmental ships, piracy, hot pursuit, and the right to lay sub-

111. Figure 53 takes into account only the geographical concept of the continental shelf as conventionally accepted. Under the exploitability test, the boundary could extend for an indefinite distance along the continental slope before descending vertically into the subsoil (*see* 2221).

112. Dean, *The Second Geneva Conference on the Law of the Sea: The Fight for Freedom of the Seas*, 54 American Journal of International Law 757 (1960).

marine cables and pipelines. Only those articles will be considered that have a bearing on the subject matter of this publication.

(*a*) *Definition of High Seas.*—Article 1 defines the term high seas as "all parts of the sea that are not included in the territorial sea or in the internal waters of a State." This is identical with the definition recommended by the International Law Commission. The high seas are thus in part coextensive with the waters of the contiguous zone and those over the continental shelf (*see* fig. 51).[113]

(*b*) *The Four Freedoms.*—Article 2 of the convention sets forth the four broad principles on which the law of the sea is predicated. It begins with the recognized principle of international law that "The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty." Freedom of the high seas is exercised under the conditions laid down by the articles of the convention and by other rules of international law. It comprises, *inter alia,* both for coastal and non-coastal States, the following freedoms: "(1) Freedom of navigation; (2) freedom of fishing; (3) freedom to lay submarine cables and pipelines; and (4) freedom to fly over the high seas." These freedoms, and others which are recognized by general principles of international law, "shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas."

These principles are substantially the same as those embodied in the draft rules of the ILC. They are not restrictive but merely specify four of the main freedoms.[114] Only two of the freedoms are treated in the convention—freedom of navigation and freedom to lay submarine cables and pipelines. Omitted are freedom of fishing, which is dealt with separately under the Convention on Fishing and Conservation of the Living Resources of the High Seas (*see* 224), and freedom of air navigation. The latter, although closely associated with freedom of the sea, is not part of the law of the sea (*see* note 114 *supra*).

113. Normally there is no need for a boundary in the high seas, but occasionally a demarcation line is shown through the high seas for the allocation of territory, as was done in the case of the Treaty of 1867 by which Russia ceded Alaska to the United States (15 Stat. 539 (1867)). This line is shown in part on Coast Survey chart 9302.

114. Report of the ILC (1956), *supra* note 7, at 24. The Commission notes that freedom to fly over the high seas is expressly mentioned because it considers that it follows directly from the principle of the freedom of the sea. It refrained, however, from formulating rules on air navigation because its work was confined to the codification and development of the law of the sea. The Commission recognized that any freedom to be exercised in the interests of all must be regulated. Among these regulations are: (1) "The right of States to exercise their sovereignty on board ships flying their flag"; (2) the "exercise of certain policing rights"; (3) the "rights of States relative to the conservation of the living resources of the high seas"; and (4) the "institution by a coastal State of a zone contiguous to its coast for the purpose of exercising certain well-defined rights." *Ibid.*

Freedom of navigation on the high seas, includes, *inter alia,* such rights as the right of a State, whether coastal or not, to sail ships under its flag (Art. 4); and the right to fix conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag (Art. 5). These rights, however, carry with them certain obligations, among which are promulgation by the State of regulations to ensure safety at sea with regard to the use of signals, maintenance of communications, prevention of collisions, and seaworthiness of ships (Art. 10); requiring ships flying its flag to render assistance to persons or ships in distress (Art. 12); and cooperation in the repression of piracy (Art. 14).[115]

(*c*) *Immunity of Warships and Other Government Vessels.*—Warships on the high seas have under the convention (Art. 8) complete immunity from the jurisdiction of any State other than the flag State. And warship is defined as "a ship belonging to the naval forces of a State and bearing the external marks distinguishing warships of its nationality." The same immunity applies to ships owned or operated by a State and used only in government noncommercial service (Art. 9).[116]

(*d*) *Hot Pursuit.*—Brief mention has already been made of the doctrine of hot pursuit in connection with the contiguous zone (*see* note 73 *supra*). This doctrine of international law permits a vessel to be pursued on the high seas and there seized when she commits a violation of the laws of a foreign State while within its territorial waters. Pursuit under these circumstances is considered in point of law to be a continuation of an act of jurisdiction which began while the offending vessel was within the jurisdiction of the State whose laws are being violated. It is rationalized on the ground that without this right the power of the coastal State to protect its own interests would be largely nullified.

115. Of interest, in connection with collisions at sea, is Art. 11 of the convention, which provides that only the flag State, or the State of which the accused is a national, may exercise penal jurisdiction in matters of collision or with respect to any other incident of navigation (damage to submarine cables or pipelines) concerning a ship on the high seas. This provision is identical with the recommendation of the International Law Commission (Art. 35) and in effect reverses the 1927 judgment of the Permanent Court of International Justice in the celebrated *Lotus* case (P.C.I.J., Ser. A., No. 10 (1927)). The *Lotus,* a French ship, collided with a Turkish collier in the Aegean Sea outside territorial waters. The collier was sunk and eight persons were drowned. When the *Lotus* arrived at Constantinople, the Turkish authorities tried and convicted the officer-in-charge notwithstanding protestation by France that Turkey lacked jurisdiction under international law. The case was ultimately referred to the Permanent Court, which decided that Turkey did not violate international law (the Court was evenly divided with the President casting the deciding vote). A diplomatic conference held at Brussels in 1952 disagreed with the Court. The ILC agreed with the conference as did the Geneva Conference. Report of the ILC (1956), *supra* note 7, at 27 (commentary (1)).

116. In the draft articles of the ILC, merchant ships engaged in commercial government service were also given immunity on the ground that there were no sufficient reasons for making any distinction between the two classes of merchant ships. But the Geneva Conference did not accept this view. Report of the ILC (1956), *supra* note 7, at 26.

Being an exception to the general rule of freedom of navigation on the high seas, the right can be used only in strict observance of the rules laid down.[117]

Article 23 of the Convention on the High Seas sets forth in some detail in what manner and under what circumstances such pursuit may be undertaken. It is substantially the same as Article 47 of the draft rules of the International Law Commission which in the main was taken from the regulations adopted by the Second Commission of The Hague Conference.

The right of hot pursuit attaches when the competent authorities of the coastal State have good reason to believe that the ship has violated the laws and regulations of that State. It may be undertaken if the suspected vessel or one of its boats is within the internal waters, the territorial sea, or the contiguous zone of the pursuing State, but in the last case only "if there has been a violation of the rights for the protection of which the zone was established" (*see* 2215). Other requirements are that the pursuit may only be continued outside the territorial sea or the contiguous zone if it has not been interrupted; that a visual or auditory signal to stop has been given; and that it be exercised only by warships or military aircraft, or other ships or aircraft on government service specially authorized for that purpose. But it is not necessary for the pursuing ship to be within the territorial sea at the time she gives the order to stop. The right of hot pursuit ceases as soon as the ship pursued enters the territorial sea of its own country or of a third State.[118]

(*e*) *Submarine Cables and Pipelines.*—One of the consequences of the freedom of the high seas is that States are entitled to lay submarine telegraph cables from their shores to the shores of other States that agree to the connection.[119] The need for their protection soon became apparent and negotiations to this end were begun which culminated in the signing on March 14, 1884, of the International Convention for the Protection of Submarine Tele-

117. Basically, this is not a new doctrine. It was recognized by Justice Story as early as 1826 in the case of *The Marianna Flora,* 11 Wheat. 1, 42 (24 U.S., 1826); was adopted by the Institute of International Law in 1894 (COLOMBOS (1959), *op. cit. supra* note 66, at 142, 143); and was embodied in the Report of the Second Commission of the 1930 Hague Conference on the Codification of International Law.

118. The doctrine of hot pursuit was one of the questions raised before a Canadian-American Commission in connection with the sinking of the Canadian ship *The I'm Alone* on Mar. 22, 1929, 215 miles from the American coast, following a two-day pursuit by a U.S. Coast Guard vessel. The case arose under the Anglo-American Treaty of 1924 (U.S. Treaty Series, No. 685) which allowed United States officers to board British vessels outside the limits of territorial waters but up to a distance of one hour's sailing from the United States' coast, measured by the speed of the offending vessel or her boats, for the purpose of enforcing the Prohibition laws. The Report of the Commission in 1935 was to the effect that the sinking was unlawful and could not be justified by any principle of international law. But a direct decision on the point of hot pursuit was avoided. COLOMBOS (1959), *op. cit. supra* note 66, at 122, 123, 146.

119. The first cable was laid between Dover and Calais in 1851. *Id.* at 329. The first Atlantic cable between Europe and America was completed in 1866. Knox, *Precise Determination of Longitude in the United States,* 47 THE GEOGRAPHICAL REVIEW 561 (1957).

graph Cables.[120] The Convention on the High Seas (Arts. 26 to 29) confirms the freedom to lay submarine cables and pipelines and adopts rules regarding the exercise of this right and the duties of States to take measures to protect them against damage. The provisions follow closely the draft rules of the ILC, which in turn are based generally on the Convention of 1884.[121]

224. Convention on Fishing and Conservation of the Living Resources of the High Seas

This convention flows from Article 2 of the Convention on the High Seas, which enumerates "freedom of fishing" as one of the four freedoms comprised within the broad doctrine of freedom of the high seas (*see* 223(*b*)). In the draft articles of the International Law Commission (ILC), it was dealt with as a subsection of the General Regime of the High Seas, but the Geneva Conference codified it as a separate convention, as it did the Convention on the Continental Shelf (*see* 222). Of the four conventions adopted at Geneva, the Convention on Fishing and Conservation of the Living Resources of the High Seas has the least to do with sea boundaries. It will therefore be dealt with only peripherally.

2241. *Background of Convention*

Although the right of everyone to engage in fishing outside the territorial waters of coastal States has been a recognized principle of international law for many years, maritime nations have recognized for a long time that unlimited fishing at all seasons may seriously deplete the seas of fish. Over the years, a number of agreements (bilateral and multilateral) have been entered into for the international regulation of fisheries. One of the earliest of such agreements was between England and France in 1839 for the joint

120. The convention was signed by 26 States, including the United States. Colombos (1959), *op. cit. supra* note 66, at 330.

121. The 1884 Convention referred only to submarine cables, whereas the present convention includes pipelines. The ILC draft rules also included high-voltage power cables, but this was not embodied in Art. 26 of the Geneva convention, which grants States the right to lay cables and pipelines. It was, however, included in Art. 27, which provides for their protection. The reason for the discrimination is not apparent and is very likely a drafting omission in Art. 26. Report of the ILC (1956), *supra* note 7, at 38. The United States at first urged the Conference to refrain from dealing with the subject of cables and pipelines because of existing conventions, but withdrew its objection on the understanding that existing conventions or other international agreements already in force would not be affected. This understanding is embodied in Art. 30 of the convention. Message from the President of the United States Transmitting Four Conventions on the Law of the Sea and an Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes, Executives J to N, Inclusive (Senate), 86th Cong., 1st sess. 9 (1959).

regulation of fisheries in the English Channel.[122] One of the important multilateral agreements, in which the United States was a party, was the Bering Sea Fur Seal Arbitration of 1893, culminating in the treaty of July 7, 1911, between the United States, Great Britain, Russia, and Japan. The treaty prohibits the killing, taking, and hunting of seals within the Pacific Ocean north of latitude 30° North, including the seas of Bering, Kamchatka, Okhotsk, and Japan. The seals may only be captured on land by the littoral States concerned.[123]

With the development of new methods and techniques permitting more intensified fishing over wide sea areas, the need for conservation and protection of fishery resources has become more urgent, and unilateral conservation regulations have been issued by a number of countries, following the Presidential Proclamation of September 28, 1945, which set forth the policy of the United States with respect to fisheries in certain areas of the high seas. The proclamation (known as the Truman proclamation) included, among other things, the concern of the United States over the inadequacy of present arrangements for the protection and perpetuation of the fishery resources adjacent to its coasts, and therefore "regards it as proper to establish conservation zones in those areas of the high seas contiguous to the coasts of the United States wherein fishing activities have been or in the future may be developed and maintained on a substantial scale." The proclamation further provided that where only United States nationals fish, such zones can be established and controlled by the United States alone, but where activities have been or shall hereafter be developed and maintained jointly by nationals of the United States and other countries, explicitly bounded conservation zones may be established by agree-

122. COLOMBOS (1959), *op. cit. supra* note 66, at 349.

123. *Id.* at 357–358. This arbitration arose out of the arrest by American revenue officers of a British schooner in Bering Sea, 59 miles from land, in violation of the laws of the United States which prohibited the killing of fur seals in the waters of the Alaska Territory. The laws were construed by the executive branch of the Government as applying to the Bering Sea beyond the 3-mile limit on the basis that this jurisdiction was asserted by Russia for more than 90 years and jurisdiction over the waters east of the cession boundary was transferred to the United States by the treaty of 1867. The Supreme Court of the United States upheld the finding of the District Court of Alaska against the owner of the schooner on the ground that the Court was bound by the actions of the executive branch in its interpretation of the treaty and the laws of Congress enacted on the basis of what was acquired under that treaty. *In Re Cooper*, 143 U.S. 472 (1892). A series of diplomatic exchanges followed this decision, and the matter was submitted to arbitration. The issue for the tribunal was by agreement of the parties "what right of protection or property" the United States had "in the fur seals frequenting the islands of the United States in Behring Sea when such seals are found outside the ordinary three-mile limit?" (In the oral argument the tribunal was advised that the United States did not assert a territorial claim to the waters of the Bering Sea beyond the 3-mile limit. 12 *Fur Seal Arbitration 107–110, Proceedings of the Tribunal at Paris, 1893.*) A majority of the tribunal answered that the United States had no right of protection or property in the fur seals. The tribunal also drafted regulations for the joint control of the seal fisheries but they proved unworkable in practice and were ultimately superseded by regulations incorporated in the multilateral treaty of July 7, 1911, *supra*. SMITH, THE LAW AND CUSTOM OF THE SEA 56–58 (1950); COLOMBOS (1959), *op. cit. supra* note 66, at 136–138, 357–358. This has now been superseded by the Interim Convention on Conservation of North Pacific Fur Seals, signed at Washington, D.C., on Feb. 9, 1957, by Canada, Japan, the U.S.S.R., and the United States. *Id.* at 358. For a discussion of other treaties and conventions relating to fishing on the high seas, see *id.* at 359–366.

ment and all fishing shall be subject to regulation and control as provided in such agreements.[124]

2242. *The Convention Proper*

Such unilateral measures as the Truman proclamation, together with other treaty arrangements between interested nations for conservation in certain

124. Presidential Proclamation No. 2668, 59 Stat. 885 (1945). The proclamation recognized the right of other nations to establish similar conservation zones provided corresponding recognition is given to any fishing interests of nationals of the United States which may exist in such areas. It is also provided that the character of the areas as high seas and the right to unimpeded navigation in the conservation zones are in no way affected. For a comprehensive documentation of fishery matters, including proclamations, treaties, conventions, and diplomatic documents of States in the Western Hemisphere, together with the final 1956 Report of the International Law Commission on the Law of the Sea (*see* 13), *see* BAYITCH, INTER-AMERICAN LAW OF FISHERIES (1957).

Regulation of Coastal Fisheries.—It should be borne in mind that the proclamation deals only with fisheries on the high seas. The regulation of coastal fisheries within state boundaries in the United States is under the control of the individual state, in the absence of conflicting federal legislation. This was pointed up in the recent case of *Corsa* v. *Tawes,* 149 F. Supp. 771 (1957), where a Maryland fishing statute was sought to be enjoined on the ground that it unduly burdened interstate commerce. In upholding the statute, the court set forth the constitutional principles applicable in such cases. "Since the decision in *Manchester* v. *Commonwealth of Massachusetts,* 139 U.S. 240 (1890)," the court said, "it has been beyond dispute that in the absence of conflicting congressional legislation under the commerce clause, regulation of the coastal fisheries is within the police power of the individual states under the doctrine of *Cooley* v. *Board of Wardens of Port of Philadelphia,* 12 How. 298 (53 U.S., 1852)." (The *Cooley* case upheld a Pennsylvania statute regulating pilots on the ground that it was a matter properly lending itself to local state control, and until Congress through legislation has shown an intent to establish a general policy in this field states could regulate them.) The *Corsa* case applies to both residents and non-residents who fish within the 3-mile limit. The doctrine has been extended to the area beyond the 3-mile limit, that is, to the high seas, insofar as residents of a state are concerned, and is based on the analogous principle of the Federal Government having the right to control the conduct of its citizens upon the high seas. Thus, in the case of *Skiriotes* v. *Florida,* 313 U.S. 69, 77 (1940), the Supreme Court upheld a Florida statute regulating the taking of commercial sponges by citizens of the state from waters at a point 6 nautical miles from the coast in the Gulf of Mexico, the Court saying: "If the United States may control the conduct of its citizens upon the high seas, we see no reason why the State of Florida may not likewise govern the conduct of its citizens upon the high seas with respect to matters in which the State has a legitimate interest and where there is no conflict of Congress." It follows that the United States could control fisheries on the high seas that would be effective against citizens of every state, for example, the establishment of conservation zones under the Truman proclamation, *supra.*

Another facet of state regulation of coastal fisheries was presented in the case of *Toomer* v. *Witsell,* 334 U.S. 385 (1947), where the South Carolina statute regulating shrimp fishing in the 3-mile belt was attacked by residents of Georgia as violative of the Federal Constitution. The statute required non-residents of South Carolina to pay a license fee of $2,500 for each shrimp boat and residents to pay only $25. The Supreme Court held this to be discriminatory against non-residents to the point of being virtually exclusionary, and as such violated the privileges and immunities clause of the Constitution (Art. IV, sec. 2), which provides that "The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States." This was designed to insure to citizens of State *A* who venture into State *B* the same privileges which the citizens of State *B* enjoy. "One of the privileges," the Court said, "which the clause guarantees to citizens of State *A* is that of doing business in State *B* on terms of substantial equality with the citizens of that State." On the question of state jurisdiction over coastal waters beyond low-water mark being contrary to the federal paramount rights doctrine of the *Submerged Lands Cases* (*see* Part 1, 112), the Court said that in deciding that the United States had paramount rights in the 3-mile belt, it gave emphasis to a statement in *Skiriotes* v. *Florida, supra,* that Florida has an interest in the proper maintenance of the sponge fishery and that the state statute "so far as applied to conduct within the territorial waters of Florida, in the absence of conflicting federal legislation, is within the police power of the State."

The intent of Congress to leave the matter of control over coastal fisheries to the states has recently been made explicit in the Submerged Lands Act of 1953 (67 Stat. 29), which declares it to be in the public interest that the right to manage and develop the natural resources (including fish) in the waters within the boundaries of the states be vested in such states (*see* Part 2, 121 note 12 and accompanying text).

areas, however important they were, did not form a coherent and complete universal system with full international sanction. This was the purpose of the Geneva convention, the keynote of which was "conservation" and "international cooperation," and is reflected in the preamble in such phraseology as "the development of modern techniques for the exploitation of the living resources of the sea," "the need of the world's expanding population for food," and "a clear necessity that they [the problems] be solved . . . on the basis of international co-operation."

The basic principles of the convention are set forth in Article 1. It reaffirms the historic rights of all States to fish upon the high seas, subject to individual treaty obligations and to the provisions of the convention. It imposes a new duty upon all States to adopt, or to cooperate with other States in adopting, for their nationals such measures as may be necessary for the "conservation of the living resources of the high seas." [125]

(*a*) *International Cooperation.*—The convention provides the framework for a new system of international cooperation. Where the nationals of only one State fish a particular stock in a certain area, that State is obligated to take conservation measures when necessary (Art. 3). But where two or more States fish the same stock in an area, they must, at the request of one of them, enter into negotiations with a view to agreeing upon a program of conservation (Art. 4).[126] Once such a program has been adopted other States subsequently fishing in the area for the same stock must accept the measures in force or reach an agreement to adopt new measures (Art. 5).

(*b*) *Special Status of Coastal States.*—The convention recognizes a special interest of a coastal State in the conservation of the living resources in the high seas adjacent to its territorial sea, even though its nationals do not fish there, and may therefore take part in any system of research and regulation for purposes of conservation (Art. 6). The coastal State may, if negotiations with the interested fishing States have not led to agreement within 6 months, unilaterally adopt conservation measures, provided an emergency exists and the regulations are not discriminatory against foreign fishermen (Art. 7).[127] States which do not fish a particular area, but have a special

125. This is defined in Art. 2 as "the aggregate of the measures rendering possible the optimum sustainable yield from those resources so as to secure a maximum supply of food and other marine products."

126. If nationals of different States fish different stocks in the same area, the convention does not apply. The Conference believed that a provision covering such a situation would be far-reaching and cumbersome. Sorensen, *supra* note 31, at 221.

127. According to Prof. Sorensen, chairman of the Danish delegation, this provision is a triumph of States with less-developed fisheries over States practicing high seas fishing on a large scale. But it leaves open some questions, for example, How far from the coast can such measures apply? No measure is indicated and the answer must be inferred from the scientific considerations that justify the conservation measures. *Id.* at 223.

interest in conservation of that area, may request the State or States whose nationals do fish in that area to adopt a program. Failing such agreement the interested State may initiate arbitration procedures as provided in the convention (Art. 8).[128]

A special provision (Art. 13) is made for the regulation by the coastal State of fisheries conducted by means of equipment embedded in the floor of the sea adjacent to its territorial sea. This is defined as "those fisheries using gear with supporting members embedded in the sea floor, constructed on a site and left there to operate permanently, or if removed, restored each season on the same site." Such fisheries may be regulated by the coastal State if they have been maintained and conducted by its nationals over a long period, and, except where fishing has been exclusively conducted by such nationals, nonnationals must be allowed to participate in such activities on an equal footing. The general status of the area as high seas is not affected by such regulations.[129] These fisheries are not to be confused with "sedentary" fisheries, which are regulated by Article 2 of the Convention on the Continental Shelf (*see* 2222A, and note 99 *supra*).[130]

(*c*) *Arbitral Procedures.*—This convention is unique in that it is the only one of the four adopted at Geneva that provides for a built-in compulsory-settlement-of-disputes procedure.[131] Failing in the voluntary agreement provided for in the several articles of the convention, Articles 9–11 provide for a compulsory and speedy settlement of disputes by a special commission composed of five members who must be specialists in matters relating to fisheries and may not be nationals of the States involved in the dispute. Criteria to be applied by the commission in the settlement of disputes are set out in Article 10.

128. The United States advocated the inclusion in the convention of the doctrine of "abstention," which is to the effect that where a State has developed a fishery in a particular area, States which have not formerly fished that stock, or have not contributed to the development of the area, should abstain from fishing there in the future. But this failed to receive the necessary votes. Dean, *supra* note 11, at 626. However, ratification of the convention by the United States will not be construed as impairing the applicability of the principle of abstention. It leaves the United States completely free to press for its inclusion in fishery agreements. This understanding was recommended by the President to the Senate and was incorporated by the Senate in its ratification of the convention (*see* text at note 147 *infra*). Message from the President, *supra* note 121, at 2. *See* also *Hearing, supra* note 31, at 87 (Questions 16 and 17).

129. This article is the same as Art. 60 of the draft rules of the International Law Commission, except for the definition and the exception regarding non-nationals of the coastal State, which were added by the Conference. Report of the ILC (1956), *supra* note 7, at 38.

130. The ILC in commentary (1) to Art. 60 notes that although fisheries are described as sedentary either by reason of the species caught (*see* note 99 *supra*), or by reason of the equipment used, it decided to apply it to the first type only which it dealt with in its articles on the continental shelf. The second type of fishery covers species that are mobile and therefore cannot be regarded as natural resources of the seabed in the sense that the term is used in connection with the continental shelf. *Ibid.*

131. For the other three conventions, there is an "Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes" (*see* 225).

Its decisions are binding on the States concerned, and Article 94 of the Charter of the United Nations is made applicable to those decisions (Art. 11).[132]

225. Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes

Apart from the Convention on Fishing (*see* 2242(*c*)), no other convention adopted at Geneva provides for a method of settlement of disputes arising under the convention. Instead, the Conference adopted an "Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes."

Article I of the protocol provides that disputes arising out of the interpretation or application of any convention shall lie within the compulsory jurisdiction of the International Court of Justice. Such jurisdiction may be invoked by any party to the dispute who is also a party to the protocol.

Other articles permit the parties to resort to an arbitral tribunal (Art. III) or adopt a conciliation procedure (Art. IV) before resorting to the Court. The protocol, like the four conventions adopted, is subject to ratification (Art. V).

226. Resolutions Adopted by Conference

Besides the four conventions and the Optional Protocol, the Conference adopted a number of resolutions (nuclear tests, pollution, conservation conventions, etc.), chief among which were a resolution on the Regime of Historic Waters and a resolution on Convening of a Second United Nations Conference on the Law of the Sea.[133]

The resolution on historic waters calls for the General Assembly of the United Nations to arrange for the study of the juridical regime of historic waters, including historic bays (*see* Part 1, 45), and to communicate the results to all States Members.[134]

The resolution on a second conference—the most important of all—was adopted with a view to reaching agreement on the unresolved problems of the width of the territorial sea and the width and rights in the contiguous, exclusive,

132. Art. 94 relates to the decisions of the International Court of Justice and provides that "if any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment."

133. 38 Dept. State Bulletin 1124–1125 (1958).

134. The International Law Commission in its draft articles did not provide for the regime of historic waters. In its article on bays, "historic" bays are specifically excluded. Report of the ILC (1956), *supra* note 7, at 15.

coastal fishing zone (*see* 2217). The resolution recites the agreements that have been reached in the several areas of the law of the sea and recognizes the desirability of making further efforts to reach agreement on those questions which have been left unsettled. To this end, it requests the General Assembly to study the advisability of convening a second international conference of plenipotentiaries.

227. Provisions for Signature, Ratification, and Operation

All the conventions adopted contain procedural articles relating to signature, ratification, and operation. All are identical except that the Convention on the Continental Shelf and the Convention on Fishing and Conservation provide for the right of States to make reservations to certain articles at the time of signature, ratification, or accession.[135]

The conventions were open for signature until October 31, 1958, by all States Members of the United Nations or of any of the specialized agencies, and by any other State invited by the General Assembly to become a party to a convention. As of that date, the Convention on the Territorial Sea and the Contiguous Zone had been signed by 44 States, the Convention on the Continental Shelf by 46 States, the Convention on the High Seas by 49 States, and the Convention on Fishing and Conservation of the Living Resources of the High Seas by 37 States.[136]

The signatures alone do not make the conventions operative. Each convention, as well as the Optional Protocol, is subject to ratification, without a time limit, and is open for accession by any State who could have signed the convention.[137] The conventions come into force on the 30th day following the date of deposit with the Secretary-General of the United Nations the

135. Art. 12 of the Convention on the Continental Shelf allows reservations to any of the substantive articles of the convention other than Arts. 1 to 3, inclusive. These latter pertain to the definition of the shelf, the sovereign rights of the coastal State, and the status of the waters over the shelf. Art. 19 of the Convention on Fishing and Conservation allows reservations to articles other than Arts. 6 and 7, and 9 to 12, inclusive. The first two deal with the special status of coastal States, and the last four pertain to the settlement of disputes.

136. The names of the States that signed the various conventions are given in Message from the President, *supra* note 121, at 21–60. The Optional Protocol is open for signature (without a time limitation) by all States who become parties to any of the conventions adopted. As of Nov. 6, 1958, 30 States had signed the Protocol. *Id.* at 62–66.

137. See, for example, Arts. 9 and 10 of the Convention on the Continental Shelf. After the closing date for signature, eligible States may accede to a convention. The distinction between ratification and accession in international law is that *ratification* applies to the approval of an act which has already been taken by an agent (for example, the signature called for in the text accompanying note 136 *supra*), whereas *accession* applies to a situation where one power becomes a party to an engagement already effected between other powers.

22d instrument of ratification or accession.[138] At the end of 5 years after a convention becomes operative, a request for revision may be made at any time by any of the parties thereto, provided the Secretary-General of the United Nations is so notified. The Secretary-General has the duty to inform all States regarding signatures, ratifications, accessions, reservations, the date on which a convention comes into force, and requests for revision.

These conventions and the Optional Protocol are now pending before the congresses and parliaments of the world, awaiting ratification or accession. (*See* 2272.)

2271. *Action by the United States*

The conventions were dated at Geneva as of April 29, 1958. Subsequently, on September 15, 1958, the chairman of the U.S. delegation signed all the conventions, including the Optional Protocol, in behalf of the United States.[139] On September 9, 1959, the President of the United States, with a view to receiving the advice and consent of the Senate to ratification, sent to that body a message transmitting the four Conventions on the Law of the Sea and the Optional Protocol adopted at Geneva.[140]

A hearing on the conventions was held on January 20, 1960, before the Committee on Foreign Relations of the Senate.[141] The principal witness was the chairman of the U.S. delegation at Geneva, who submitted a prepared statement explaining the conventions. One of the important points brought out at the hearing was that the conventions are intended to affect the rights of the United States as a sovereign with respect to the rights of other sovereign States, and would not apply to relations under our Constitution between the rights of the several states and the Federal Government.[142]

At the close of the hearing, the committee submitted a list of 30 questions to the witness on which it desired answers in writing. This list together

138. See, for example, Art. 11 of the Convention on the Continental Shelf. After the deposit of the 22d instrument, States may still ratify or accede, but as to them the convention becomes operative on the 30th day after their deposit of the instruments of ratification or accession. There is no time limit for ratification or accession.

139. Message of the President, *supra* note 121, at 27, 41, 51, 59, and 66.

140. *Id.* at 2. Included in the Message was a report by the Acting Secretary of State to the President, enclosing the following: commentaries on the conventions; certified copies of the agreements of Apr. 29, 1958; certified copy of final act of the Conference, together with annexed resolutions. *Id.* at 2–5.

141. *Hearing before Committee on Foreign Relations on Executives J to N, Inclusive,* 86th Cong., 2d sess. (1960).

142. *Id.* at 19. This is in consonance with the holding in *United States* v. *Louisiana et al.*, 363 U.S. 1 (1960), in which the Court held the Submerged Lands Act to be a domestic matter and not controlled by international considerations (*see* Part 2, 1541(*b*)).

with answers prepared by the Department of State on March 2, 1960, are included in the printed record of the hearing.[143] The final question of the committee related to the benefits that would accrue to the United States if the conventions came into force. The Department of State replied comprehensively to this question, enumerating not only the benefits of a general nature—for example, those that flow from agreement on the rules of international law to which the United States can subscribe, and, as a principal maritime and naval power, those that accrue to it from having international agreement on the law of the sea—but also some of the more specific benefits that will ensue. In summary, these are: a marked advance in the content and formulation of international law through the adoption of the articles on straight baselines, innocent passage, and the contiguous zone, in the Convention on the Territorial Sea;[144] an endorsement of numerous principles in the Convention on the Continental Shelf, which the United States has been following since they were first enunciated in the Truman Proclamation of 1945 (*see* Part 2, 2221);[145] a codification of existing principles of international law in the Convention on the High Seas, thereby providing stability and avoidance of disputes in this field; and a comprehensive treatment for the first time in international law of the problems relating to the conservation of maritime resources in the Convention on Fishing and Conservation of the Living Resources of the High Seas.[146]

The Committee on Foreign Relations reported the conventions to the Senate with the recommendations that the Senate give its advice and consent to the ratification of the conventions and the Optional Protocol, and that it include in its resolution of ratification an understanding on the prin-

143. *Hearing*, *supra* note 141, at 82–93. Some of the answers being of a clarifying nature have been incorporated in appropriate sections of this text, *supra*. The record of the hearing contains a table showing the status of the conventions, as of Feb. 11, 1960, with regard to action taken by the various States. *Id.* at 94. For status of ratification, *see* 2272.

144. *Id.* at 92–93. By restricting the use of straight baselines to certain exceptional geographic situations, its indiscriminate use to reduce to internal waters large areas heretofore regarded as territorial waters or high seas is prevented. Defining passage as innocent as long as it is not prejudicial to the peace, good order, or security of the coastal State furnishes a clear and precise definition, something which has not heretofore existed in international law. The article on the contiguous zone confirms the practice followed by the United States of exercising customs jurisdiction over a zone, outside its territorial sea, the outer limit of which is 12 miles from the coast. *Id.* at 93.

145. The United States is one of the principal countries making use of the natural resources of the continental shelf. The convention reflects for the first time international agreement on the rules governing the exploration and exploitation of this vast submerged area of the world. *Ibid.*

146. The United States, as one of the leading fishing nations of the world, has far-flung and highly diversified high seas fisheries interests. With the advent of modern-day fishing vessels, equipment, and techniques, stocks of fish are more than ever vulnerable to over-exploitation. If this is to be avoided, nations concerned need to agree upon appropriate conservation regimes along rational lines. *Ibid.*

ciple of abstention (*see* note 128 *supra*). The conventions were debated in the Senate on May 26, 1960, at which time it consented to their ratification, after incorporating an understanding on the principle of abstention. A separate vote on the protocol failed to receive the concurrence of two-thirds of the Senators present and voting.[147]

2272. *Status of Ratification or Accession*

As of March 27, 1962, various conventions had been ratified or acceded to by the following countries: [148]

Convention on the Territorial Sea.—Byelorussia, Cambodia, Czechoslovakia, Haiti, Hungary, Israel, Malaya (Federation of), Nigeria, Rumania, Senegal, Sierra Leone, Ukraine, U.S.S.R., United Kingdom, United States, and Venezuela.

Convention on the Continental Shelf.—Byelorussia, Cambodia, Colombia, Czechoslovakia, Guatemala, Haiti, Israel, Malaya (Federation of), Rumania, Senegal, Ukraine, U.S.S.R., United States, and Venezuela.

Convention on the High Seas.—Afghanistan, Byelorussia, Cambodia, Czecholslovakia, Guatemala, Haiti, Hungary, Indonesia, Israel, Malaya (Federation of), Nigeria, Rumania, Senegal, Sierra Leone, Ukraine, U.S.S.R., United Kingdom, United States, and Venezuela.

Convention on Fishing and Conservation of the Living Resources of the High Seas.—Cambodia, Haiti, Malaya (Federation of), Nigeria, Senegal, Sierra Leone, United Kingdom, and United States.

Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes.—Haiti.

147. 106 CONG. REC. 11187–11196 (1960). The rejection of the Optional Protocol had for its background the Connally Reservation that was adopted under Senate Resolution 196 of 1946, in which the United States accepted generally the compulsory jurisdiction of the International Court of Justice but reserved the right to decide whether a certain matter is a domestic problem of the United States and not a matter upon which the Court has the power to act. It was stated in the Committee on Foreign Relations that none of the conventions contained any provision that had the effect of superseding domestic legislation in the United States, either federal or state. It was pointed out that if the United States assented to the Optional Protocol, there would be no reservation such as the Connally Amendment, unless the Senate chose to incorporate it. Disputes arising out of the interpretation or operation of any of the four conventions would come under the jurisdiction of the International Court whose decisions would be binding upon the States concerned. *Hearing, supra* note 141, at 75–76, 88–89 (Question 20). It was believed by some, who voted against ratification, that the protocol should be ratified, but with a reservation to protect the domestic jurisdiction of the United States. 106 CONG. REC. 11195–11196 (1960).

148. Information furnished by the United Nations office at New York, Mar. 27, 1962. *See also,* Dean, *The Second Geneva Conference on the Law of the Sea: The Fight for Freedom of the Seas,* 54 AMERICAN JOURNAL OF INTERNATIONAL LAW 772 (1960).

23. THE SECOND GENEVA CONFERENCE (1960)

The Second Conference on the Law of the Sea was convened at Geneva on March 17, 1960, pursuant to the resolution of the General Assembly of the United Nations of December 10, 1958.[149] In contrast with the multinature of the First Conference, the Second Conference was limited by the terms of the resolution to two specific questions: the breadth of the territorial sea, and fishery limits. These two matters were intimately bound together. Since under traditional international law, the coastal State has exclusive fishing rights in the territorial sea (*see* Part 1, 312), the desire for extending such rights seaward could be met in two ways: by extending the territorial sea, or by creating a contiguous fishing zone beyond the territorial sea.

Although the United States has throughout its history consistently followed the 3-mile limit for the territorial sea and considers that this is the limit sanctioned by international law, there has been a growing defection from this principle in recent years by other countries. When the First Conference convened at Geneva in 1958, 21 nations claimed a 3-mile territorial sea, 17 claimed 4 to 6 miles, 13 claimed 7 to 12 miles, and 9 nations claimed the sea above the continental shelf for varying distances.[150] The problem of reconciling these differences was one of the tasks of the Second Conference on the Law of the Sea.

It will be recalled that at the First Conference, the United States had sponsored a proposal for a 6-mile territorial sea and a 6-mile fishing zone beyond, subject to historic fishing rights in the outer 6 miles which could be perpetual (*see* 2217). While the failure of this proposal left intact the traditional position of the United States with respect to the 3-mile limit,[151] it realized the necessity of international agreement on the breadth of the territorial sea and on fishing rights in order that a regime of law might be effected. The take-off and limiting point for the Second Conference

149. U.N. Doc. A/Res/1307 (XIII) (1958); 1958 U.N. Yearbook 381–383. Eighty-eight nations participated in the Second Conference. Dean, *Notes and Comments,* 55 AMERICAN JOURNAL OF INTERNATIONAL LAW 680 (1961).

150. Sorensen, *supra* note 31 (Table III), at 244. This is a summary table based on U.N. Doc. A/Conf.13/C.1/L.11/Rev. 1, and Corrs. 1 and 2 (1958). A synoptical table was prepared by the U.N. Secretariat in Feb. 1960 (U.N. Doc. A/Conf.19/4), just before the Second Conference convened, giving the breadth and juridical status of the territorial sea and adjacent zones (*see* Appendix J).

151. The chairman of the U.S. delegation, in a closing address to the Conference on Apr. 28, 1958, made the following statement: "Our offer to agree on a 6-mile breadth of territorial sea, provided agreement could be reached on such a breadth under certain conditions, was simply an offer and nothing more. Its nonacceptance leaves the preexisting situation intact." 38 DEPT. STATE BULLETIN 1110–1111 (1958).

was therefore the "6-plus-6" formula, the United States being convinced that 6 miles was the outer limit consistent with national security.[152]

231. Proposals for Breadth of Territorial Sea

Although various proposals were made, in the final analysis they resolved themselves, as at the First Conference, into the 6-milers and the 12-milers. The principal sponsors of the 6-mile category were the United States and Canada. Originally, separate proposals were made by each. The United States proposal was essentially the same as at the First Conference—a 6-mile territorial sea with an additional 6-mile partially exclusive fishing zone—but a limitation was placed on historic rights in the fishing zone to the extent that any State whose vessels had fished in the outer 6-mile zone of another State during the 5 years preceding January 1, 1958, could continue to fish within that zone for the same groups of species and to an equivalent yearly extent as were taken during the 5-year period.[153] The Canadian proposal was also essentially the same as its proposal at the First Conference and provided for a territorial sea up to a maximum of 6 miles and an *exclusive* fishing zone up to a maximum of 12 miles from the coast.[154]

Later, both States withdrew their separate proposals and on April 8, 1960, agreed on a joint compromise proposal, the essence of which was a suspension of the coastal State's exclusive fishing jurisdiction in the outer 6 miles during an interim period of 10 years from October 31, 1960, if other States could show that their fishing vessels had fished in the outer 6 miles for the 5-year base period immediately preceding January 1, 1958. The compromise lay in the introduction of the idea that the historic rights should be enjoyed for a defined period and not in perpetuity. After the 10-year period, the coastal State's fishing rights in the outer 6-mile zone would become exclusive. Where no practice of fishing could be shown the coastal State could immediately claim a 12-mile fishing jurisdiction.[155]

152. During the period between the two Conferences, representatives from the Navy and from the Department of State visited nations all over the world to muster support for the compromise proposal. Powers and Hardy, *How Wide the Territorial Sea?*, 87 U.S. Naval Institute Proceedings 70 (1961).

153. Dean, *supra* note 148, at 774. The U.S. proposal at the First Conference did not limit the historic right to fish to the same groups of species or to an equivalent amount (*see* 2217).

154. This exclusion of historic rights in the outer 6-mile fishing zone was the reason for the disagreement between the United States and Canada at the First Conference. *Ibid.*

155. The U.S.-Canadian proposal, as introduced in the Committee of the Whole, was as follows:
"1. A State is entitled to fix the breadth of its territorial sea up to a maximum of six nautical miles measured from the applicable baseline.
"2. A State is entitled to establish a fishing zone contiguous to its territorial sea extending to a maximum limit of twelve nautical miles from the baseline from which the breadth of its terri-

Within the 12-mile category there were originally several proposals,[156] which later merged into an 18-power proposal and provided for a flexible territorial sea up to 12 miles, with an exclusive fishing zone of 12 miles measured from the applicable baseline. Under this proposal, any State which had fixed the breadth of its territorial sea or contiguous fishing zone at less than 12 nautical miles would have been entitled, *vis-a-vis* any other State with a wider delimitation thereof, to exercise the same sovereignty or rights up to a limit equal to the limits fixed by the other State.[157]

2311. *Implications of a 12-Mile Limit*

As has been heretofore pointed out, the territorial sea is the belt of water running along the coast over which the coastal State exercises sovereignty, subject to certain limitations imposed by international law. The United States has always favored a 3-mile limit for its territorial sea, believing this to be most consistent with the principle of freedom of the seas. Any extension of this limit cuts down the freedom of other nations to sail on, fly over, or lay submarine cables in what was formerly the high seas. And even though under the Convention on the Territorial Sea and the Contiguous Zone, adopted at the First Geneva Conference, warships have a right

torial sea is measured, in which it shall have the same rights in respect of fishing and the exploitation of the living resources of the sea as it has in its territorial sea.

"3. Any State whose vessels have made a practice of fishing in the outer six miles of the fishing zone established by the coastal State, in accordance with paragraph 2 above, for the period of five years immediately preceding January 1, 1958, may continue to do so for a period of ten years from October 31, 1960.

"4. The provisions of the Convention on Fishing and Conservation of the Living Resources of the High Seas, adopted at Geneva, April 27, 1958, shall apply *mutatis mutandis* to the settlement of any dispute arising out of the application of the foregoing paragraphs." Bowett, *The Second United Nations Conference on the Law of the Sea*, 9 INTERNATIONAL AND COMPARATIVE LAW QUARTERLY 426 (July 1960). See also U.N. Doc. A/Conf.19/C.1/L.10 (1960).

This compromise proposal was characterized by the chairman of the U.S. delegation as "sincerely designed to find a rule acceptable to the Conference, though admittedly at considerable expense to U.S. fishing interests . . . The sacrifice inherent in the joint proposal was offered in the hope of achieving agreement at the Conference on a territorial sea limited to 6 miles without increasing the contiguous zone beyond 12 miles, while protecting American fishing vessels against unilateral claims for at least 10 years." Dean, *supra* note 148, at 775, 776.

156. A proposal by the U.S.S.R. provided for a permissive 3- to 12-mile zone of territorial waters, with provision that any State choosing less than a 12-mile zone could add the remaining area up to 12 miles as an exclusive fishing zone. A Mexican proposal also provided for a 3- to 12-mile zone but with a sliding scale of fishing zone bonuses if the territorial sea was kept narrow. Thus, where the breadth of the territorial sea is from 3 to 6 miles the fishing zone could be extended up to a limit of 18 miles; for 7 to 9 miles it would be up to 15 miles; and for 10 to 11 miles it would be up to 12 miles. There was also a 16-power proposal which was substantially the same as the later 18-power proposal, *supra*. None of these proposals survived the Committee of the Whole. *Id.* at 774, 775.

157. *Ibid.* and U.N. Doc. A/Conf.19/C.1/L.2/Rev.1 (1960).

of innocent passage through the territorial sea (*see* 2214(*b*)), the freedom of transit through this zone cannot be considered the same as on the high seas where the right is absolute. This view was expressed by some of the delegations at the Second Conference.[158] Furthermore, Article 17 of the convention specifically provides that foreign ships exercising the right of innocent passage "shall comply with the laws and regulations enacted by the coastal State in conformity with these articles and other rules of international law."

It was for this reason that the United States adopted as its first goal in the Conference the preservation of the traditional limit of the territorial sea at 3 miles. A widened territorial sea—for example, 12 miles—would therefore, in the view of the United States, have a serious impact on freedom of navigation. It would also have an impact on the responsibilities of a coastal State for safeguarding its sea lanes by establishing and maintaining appropriate systems of aids to navigation and by providing adequate nautical charts of its coastal areas.

(*a*) *Effect on Freedom of Navigation.*—The encroachment on the high seas by a widened territorial sea is best exemplified by the case of a single offshore rock of small extent that rises above the plane of high water. With a 3-mile limit, the rock would give rise to a territorial sea of 28 square miles; a 6-mile limit would result in a territorial sea four times the area, or 113 square miles; and a 12-mile limit would create a territorial sea of 452 square miles.[159]

Another effect of a 12-mile limit on the freedom of navigation is in relation to passage through international straits. These narrows lie athwart the great sea routes of the world. Converting even a part of them to territorial waters would adversely affect the free movement of merchant ships and naval vessels. It has been estimated that there are approximately 116 important international straits in the world, the free use of which would be

158. The Australian delegation expressed it in this way: "On the high seas, ships of all nations had an absolute and unqualified right of navigation, whereas on the territorial sea of a coastal State the right of innocent passage was qualified, since it might be suspended at the discretion of the coastal State if the latter deemed such action essential for its security." Bowett, *supra* note 155, at 419.

159. A widened territorial sea was also felt by the U.S. delegation to work to the disadvantage of the United States in time of war. The theory on which this is predicated is that submarines of a belligerent country that chose to disregard the neutrality of a non-belligerent State could find a relatively safe haven in the territorial waters of the latter without being detected and thus act as a prey on vessels of a nation which respected such neutrality. Such submarines could probably not operate effectively in a narrow zone because of the shallowness of the water. From statement by the chairman of the U.S. delegation to the Geneva Conference in *Hearing, supra* note 141, at 110.

affected by the choice of a 12-mile territorial sea. Of these, 52 would become subject to national sovereignties if a 6-mile limit were adopted.[160]

(*b*) *Effect on Navigational Aids and on Charting Programs.*[161]—The obligation which every nation has for protecting the lives and property of its nationals is an inherent responsibility and one that flows from nationhood and government. In the United States, Congress, which by judicial interpretation has control over navigable waters of the United States, has enacted basic laws for effectuating this responsibility.[162] This obligation of a nation towards its citizens has been carried over into the field of international responsibilities both as a matter of self-interest—for example, that its territorial sea be not infringed upon, particularly with regard to fisheries—and as a result of international conventions and agreements.[163]

The obligations towards national and international commerce and navigation manifest themselves in the establishment and maintenance of adequate systems of aids to navigation, and in the publication of nautical charts and related manuals.

In considering the effect of a 12-mile limit on existing navigational aids, it may be accepted as axiomatic that the farther from shore the territorial limits are placed, the more difficult it will be for a vessel to fix its position accurately in relation to those limits, if the identical aids to navigation are available. And accuracy of position is basic, particularly for foreign vessels engaged in fishing operations, since encroachment upon territorial waters by them is a grave offense. (It must also be assumed that foreign vessels generally, although in innocent passage, would have the right, if they so chose, to traverse the sealanes of the world outside the territorial limits.) The coastal State would therefore be under obligation to furnish an appro-

160. A further breakdown of the 52 straits that would be affected by a 6-mile limit indicated that only 11 would come under the sovereignty of nations which would appear likely to claim the right to terminate or interfere with the transit of our warships or aircraft, whereas under a 12-mile rule 18 straits would fall within this category. Denial of passage through these additional straits was considered "a completely unacceptable impairment of our defensive mobility and capability." *Ibid.*

161. This section is based on a memorandum prepared by the Bureau at the request of the Office of the Judge Advocate General of the Navy Department, and sent to the U.S. delegation at Geneva on Mar. 18, 1960. A portion of the memorandum was embodied in the chairman's opening statement to the Conference on Mar. 24, 1960.

162. Examples of these are the act which set up the Coast and Geodetic Survey to survey and chart the coastal waters of the United States; the act which created the old Lighthouse Bureau to establish and maintain an adequate system of aids to navigation in our coastal and inland waters (now lodged in the Coast Guard); and the act which placed the responsibility for keeping the navigable waters of the United States free public highways in the Corps of Engineers.

163. Among the latter may be mentioned the International Hydrographic Conferences that have been held periodically since 1921, under the aegis of the International Hydrographic Bureau, to coordinate the efforts of national hydrographic offices; and the International Meetings on Marine Radio Aids to Navigation, held in 1946 and 1947, for the purpose of standardizing radio navigational aids.

priate system of navigational aids by which these vessels could locate themselves accurately with respect to the territorial sea.

At a distance of 3 nautical miles from shore, the height of the navigator's eye need be only 7½ feet above the water level to see the shoreline, but at a distance of 12 miles, the height would have to be 110 feet above the water to see the shoreline. With a standard height of eye of 15 feet, any aid to navigation placed on shore would have to be at least 44 feet high in order to be seen at a distance of 12 miles. This would obtain under ideal conditions. In actual practice, the visibility would be reduced by adverse meteorological conditions so that the navigational structures would have to be at a higher elevation than theory indicates.

Methods used in ordinary navigation, such as bow-and-beam bearings, cross-bearings, and the like, on distant lights, would no longer suffice. At a distance of 3 miles, the navigator could use many of the charted landmarks, such as tanks, water towers, etc., for accurate position fixing, whereas at 12 miles these would no longer be visible. The so-called international lights (defined by the International Hydrographic Conference of 1947 as those lights of international interest) would probably be found to be spaced too far apart to be of value for accurate position determination.[164] Secondary systems of lights and buoys are closer spaced but do not have the visibility of the international lights. An extension of the territorial limits to 12 miles might necessitate the reconstitution of a coastal State's entire system of aids to navigation (perhaps replaced by an electronic system) to meet the new conditions.

Existing charting programs would also be affected by an extension of the territorial sea to 12 miles. This arises from the provisions in the Convention on the Territorial Sea and the Contiguous Zone relating to the representation of various features associated with the territorial sea on *large-scale* charts—for example, normal baselines, straight baselines, and boundaries between the territorial sea of two coastal States (*see* 2213). These clearly indicate that the data necessary for a vessel to determine its position with respect to such features should be available on large-scale charts of the coastal State.[165]

164. Along the Atlantic coast of the United States, these lights are spaced 13 to 28 miles apart for the northern portion and 51 miles for the southern portion. The visibility averages from 10 to 21 miles.

165. Although "large-scale" is a relative term and is not defined in the convention, a scale of 1:80,000 (approximately 1 nautical mile to the inch) would probably be the upper limit of such classification.

It would be incumbent upon coastal States either to revise where necessary their existing series of large-scale charts (by extension or redesign), or, lacking such series, to provide a new series that would satisfy the intent of the convention.[166] Such programs would be costly to undertake and require years to complete.

232. Final Action by Conference

The joint U.S.-Canadian proposal with its 6-plus-6 formula was adopted by the Committee of the Whole and embodied in its report to the plenary session. In plenary, however, a 10-power proposal was introduced in the form of a resolution, which, while recognizing a 12-mile fishing zone, would have postponed the final determination of the breadth of the territorial sea to some undetermined future date. This resolution became the principal support of the 12-milers and the principal opposition to the 6-milers.[167]

When the final vote was taken in plenary session on April 26, 1960, the U.S.-Canadian proposal fell one short of the required two-thirds majority of those present and voting, the tally showing 54 nations in favor, 28 against, and 5 abstentions, out of a total of 82 nations voting. This was 9 more affirmative votes than the United States proposal received at the First Conference. The 10-power proposal, by contrast, received 32 affirmative votes, 39 negative votes, and 17 abstentions, thus falling short of even a simple majority.[168]

Thus, for the second time, the Geneva Conference on the Law of the Sea failed to reach agreement on the crucial question of the breadth of the territorial sea.

233. Present United States Position

The failure of the Conference to reach agreement reinstates the traditional position of the United States with respect to the 3-mile limit. This

166. In the case of the United States, for example, the Bureau would have to revamp its charting program, first, with respect to the existing large-scale series along the Atlantic and Gulf coasts where 35 of the present 74 affected charts of the 1:80,000 scale series would require reconstruction, to avoid impractical sizes, or an extension of their offshore limits; and, second, with respect to the Pacific coast where present continuous coverage is at a small scale (1:200,000 on the average) and would require a complete new series of approximately 50 charts. (For a 3-mile limit, many of the existing discontinuous large-scale charts would suffice.)

167. Bowett, *supra* note 155, at 431, and U.N. Doc. A/Conf.19/L.9 (1960).

168. Dean, *supra* note 148, at 776, 777. A subsequent motion to have the Conference reconsider the U.S.-Canadian proposal also failed to receive the required two-thirds majority.

position, the United States believes, is in accord with established international law and is the only breadth of territorial waters on which there has ever been anything like common agreement. At the close of the Second Conference, the chairman of the U.S. delegation stated that the offer to agree on a 6-mile territorial sea with an additional 6-mile fisheries zone had been made only in the hope of achieving agreement at the Conference; rejection of the offer left the pre-existing situation intact.[169]

169. *Id.* at 788, and U.N. Doc. A/Conf.19/Sr.14, at 6 (1960).

APPENDIXES A TO K

APPENDIX A

Glossary of Terms Used

(This glossary is intended to serve as a ready reference to the legal and technical terms used in Volume One, whether or not they are defined in the text. The figure references are to those in the text.)

A

Abstention.—A doctrine advocated by the United States at the Geneva Conference on the Law of the Sea which holds that where a State has developed a fishery in a given area, States which have formerly not fished that stock, or have not contributed to the development of the area, should abstain from fishing there in the future. Principle was not incorporated in the convention on fishing but ratification of convention by the United States was made subject to its right to press for its inclusion in fishery agreements. See *Conventions on the Law of the Sea.*

Accession.—Where a sovereign power becomes a party to an agreement already effected between other powers. See *Ratification.*

Accretion.—The gradual and imperceptible accumulation of land by natural causes, as out of the sea or a river. This may result from a deposit of alluvion upon the shore, or by a recession of the water from the shore. Accretion is the act, while alluvion is the deposit itself. See *Riparian Rights, Alluvion, Reliction, Riparian Boundaries.*

Act of Dec. 19, 1836.—The act by which the Republic of Texas fixed its seaward boundary in the Gulf of Mexico at 3 leagues from land. See *Texas Boundary Act, United States* v. *Louisiana et al.*

Act of Mar. 2, 1799.—See *Twelve-Mile Limit.*

Adjacent Sea.—See *Marginal Sea.*

Admiralty Mile.—The nautical mile used in Great Britain; its value is 6,080 feet or 1,853.2 meters. See *Nautical Mile, International Nautical Mile.*

Advice and Consent.—Art. II, sec. 2, cl. 2, of the Constitution provides that the President shall have power to make treaties by and with the *advice and consent* of the Senate if two-thirds of the Senators present concur. See *Optional Protocol of Signature.*

Aeronautical Chart.—A chart intended primarily for air navigation. Portrays all information (topographic features and aeronautical data) necessary for the safe conduct of aircraft. Also called an Air Navigation Chart. See *World Aeronautical Chart.*

A Fortiori.—With the greater force; all the more.

Aid to Navigation.—A device external to a boat or vessel designed to assist in determination of position, a safe course, or to warn of dangers. Examples are: Lighthouses, lights, buoys, daybeacons, radio beacons, and electronic devices.

Alabama Case.—See *Alabama* v. *Texas et al.*

Alabama Decision (1960).—See *United States* v. *Louisiana et al.*

Alabama v. Texas et al.—A suit filed by Alabama against Texas, Louisiana, Florida, and California, and certain officials of the Federal Government, challenging the constitutionality of Public Law 31. See *Public Law 31, Decision of Mar. 15, 1954.*

Alluvion.—The soil that is deposited along a river or the sea by gradual and imperceptible action of the sea. See *Accretion.*

Amicus Brief.—A friend-of-the-court brief. Filed by one not a party to the suit but is allowed to introduce argument to protect his interests or enlighten the court. Derived from *amicus curiae,* a friend of the court.

Amicus Curiae Brief.—See *Amicus Brief.*

Ancillary Problems.—Auxiliary or subordinate to a principal problem.

Anglo-Norwegian Fisheries Case.—Same as *United Kingdom* v. *Norway.*

Anglo-Venezuelan Treaty of 1942.—See *Gulf of Paria.*

Annexation.—The incorporation of newly acquired territory into the national domain as an integral part thereof. Texas was admitted into the Union through the process of annexation, whereas the States of California and Louisiana were created out of federal territory.

Appellate Jurisdiction.—The power and authority which courts have to hear cases on appeal from the decision of a lower court. Appellate courts do not hear evidence, but determine matters of law. The Supreme Court generally has appellate jurisdiction only, except in certain special cases enumerated in the Constitution over which it has original jurisdiction—jurisdiction in the first instance. See *Original Jurisdiction.*

Application of the Pollard Rule to the Marginal Sea.—The basis for the Supreme Court's interpretation of the grant of submerged lands made to the states under Public Law 31. See *Pollard Rule, Public Law 31.*

Arbitral Procedures.—Procedures for the settlement of disputes by arbitration.

Archipelago.—An area of water studded with many islands or with a group of islands; also, such a group of islands.

Arcs-of-Circles Method.—A method of constructing an *envelope line* by means of a series of arcs of fixed radius from points along the baseline, the most seaward arcs defining the line (fig. 27). See *Envelope Line.*

Art. IV, Sec. 3, Cl. 2.—The provision in the Constitution of the United States which gives Congress the power to dispose of property belonging to the United States. See *Decision of Mar. 15, 1954.*

Artificial Harbor.—One where protection is afforded through the construction of harborworks or breakwaters; for example, the outer harbor of San Pedro (fig. 10). See *Harbor.*

As It Exists at the Time of Survey.—An expression used by the Special Master in the *California* case to indicate that the boundary between federal and state jurisdiction is to be determined by the existing ordinary low-water mark regardless of whether changes resulted from accretion, from accretion induced by artificial structures, or from artificial causes. See *Riparian Boundaries, Report of Special Master.*

At the Time a State Became a Member of the Union.—See *Historic State Boundary.*

Attorney-General v. Chambers (4 De G. M. & G. 206).—An 1854 leading English case in which the word "ordinary," as applied to tides, was first construed as meaning the medium high tides between the springs and the neaps, and that the landward limit of the seashore is the line of the medium high tides between the springs and the neaps. See *Ordinary Tides, Borax Consolidated, Ltd.* v. *Los Angeles.*

Avulsion.—The loss of lands bordering on the seashore by sudden or violent action of the elements, perceptible while in progress; a sudden and rapid change in the course and channel of a boundary river. Neither of these changes works a change in the riparian boundary. See *Accretion, Erosion, Reliction.*

Awash Rock.—Same as *Rock Awash.*

B

Baseline.—A term used in the international law of the sea to indicate the reference line from which the outer limits of the marginal sea and other offshore zones are measured; the dividing line between inland waters and the marginal sea. See *Rule of the Tidemark, Normal Baseline, Straight Baselines, Headland-to-Headland Line.*

Base Point 21.—A point on the Norwegian system of straight baselines (*see* fig. 14) located on a rock bare only at low tide. See *United Kingdom* v. *Norway.*

Bay (According to Geneva Convention).—A well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast. The area of such an indentation must be as large as, or larger than the semicircle whose diameter is a line drawn across the mouth of the indentation. See *Semicircular Rule, Conventions on the Law of the Sea, Bay* (General).

Bay (General).—An indentation of the coast; an embayment; a subordinate adjunct to a larger body of water; a body of water between and inside of two headlands. See *Open Bay, Closed Bay, Bay* (According to Geneva Convention).

Beach.—Same as *Tidelands.*

Bering Sea Fur Seal Arbitration.—An arbitration in 1893, culminating in the treaty of July 7, 1911, between the United States, Great Britain, Russia, and Japan, to regulate the hunting of seals in the Pacific Ocean north of latitude 30° North, including the seas of Bering, Kamchatka, Okhotsk, and Japan.

Bilateral Arrangement.—An agreement between two parties containing mutual promises which do not affect other parties. The Anglo-Venezuelan Treaty of 1942 was an agreement by both parties not to claim rights in the submarine areas on the other side of a dividing line between the two countries. See *Gulf of Paria.*

Boggs Formula.—See *Reduced Areas.*

Bow-and-Beam Bearings.—A method of determining a vessel's position from observations on a single navigational aid by taking successive bearings of 45° and 90°.

Borax Case.—See *Borax Consolidated, Ltd.* v. *Los Angeles.*

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Borax Consolidated, Ltd. v. Los Angeles (296 U.S. 10).—A 1935 landmark case in the law of tidal boundaries. Established for the Federal courts the doctrine that in construing a federal grant, the common-law term "ordinary high-water mark," as the boundary between upland and tideland, is to be interpreted as "the mean high-tide line"; that is, as neither the mean of the spring tides nor the mean of the neap tides, but a mean of all the high tides. The case also established the first precise standard for the demarcation of the line of mean high water on the ground; that is, by using for the plane of mean high water a determination from "an average of 18.6 years" as near as possible (citing Tidal Datum Planes, Special Publication No. 135, U.S. Coast and Geodetic Survey (1927)). See *Attorney-General* v. *Chambers, Mean High-Water Line.*

Brief.—A written or printed document, prepared by counsel to serve as the basis for argument in a case, and usually filed for the information of the court. It embodies the points of law which counsel desires to establish, together with arguments and authorities upon which he rests his contention. See *Amicus Brief.*

Bynkershoek, Cornelius Van.—A Dutch jurist who is generally credited with having first advanced the concept (in 1702) that the distance of a cannon shot from shore is the distance that a littoral nation should be allowed to dominate. This gave rise to the so-called 3-mile limit, since the range of cannon at that time was approximately 3 nautical miles, or a marine league. See *Marginal Sea.*

C

California Case.—See *United States* v. *California.*

Cannon-Shot Rule.—The rule that a maritime nation has a right of dominion over the sea near its coast to the extent that it can defend itself. First propounded in 1702 when the range of cannon was approximately a marine league or 3 nautical miles. See *Bynkershoek, Marginal Sea.*

Capability-of-Use Principle.—The principle that a body of land to be regarded as an island must be capable of use. This principle was advanced by the U.S. delegation at the 1930 Hague Conference for the Codification of International Law. See *Island* (According to Geneva Convention).

Carte Blanche.—Literally, a blank card or a blank paper signifying unconditional terms or unlimited authority.

Cartographic History of San Pedro Bay.—A study made by the Coast and Geodetic Survey with respect to the historic limits of the bay and the origin and charting history of Point Lasuen. See *Letter of July 14, 1947.*

Ceases to Have the Configuration and Characteristics of a Bay.—An expression used in the North Atlantic Coast Fisheries Arbitration of 1910 to describe the place at coastal indentations from which the 3-mile limit of exclusion was to be measured. See *North Atlantic Coast Fisheries Arbitration of 1910, Semicircular Rule, Ten-Mile Rule.*

Chain-of-Title Theory.—One of the two theories on which the Government relied in the *California* case. The cession by Mexico of the territory of California, following the Mexican War, and the express reservation in the act admitting California to statehood that title to all public lands remained in the United States. See *National External Sovereignty.*

Change of the Moon.—The time of new moon. See *Full and Change of the Moon.*

Channel Areas.—The water areas between the mainland and the offlying islands along the southern California coast, the status of which (inland waters or open sea) the Special Master in the *California* case was to determine (fig. 13). See *Overall-Unit-Area.*

Chapman Line.—A tentative administrative line established by the United States for the coast of Louisiana, following the decision of June 5, 1950, as the dividing line between federal and state jurisdiction. The name follows the name of the then Secretary of the Interior, Oscar L. Chapman. See *Federal-State Boundary.*

Chart.—See *Nautical Chart.*

Chart Datum.—The tidal datum used on nautical charts for referencing the soundings (depth units). See *Tidal Datums.*

Chesapeake Bay.—Claimed as inland waters by the United States on historic grounds. See *Historic Bay.*

Civil Law.—The system of law that is based upon statutes and upon written codes, and has for its antecedents the Roman law, particularly the Justinian Code. It is distinguished from the common, or unwritten, law which is based upon judicial decisions and precedent. See *Common Law.*

Closed Bay.—An indentation of a coast that is part of the inland waters; one that conforms to the geometric criteria adopted for the determination of bays as inland waters. See *Semicircular Rule, Open Bay.*

Closed Sea.—See *Mare Clausum.*

Closing Line.—The dividing line between inland waters and the marginal sea across the entrance of a true bay. See *True Bay, Inland Waters, Marginal Sea.*

Coalesce.—See *Inseparability Doctrine.*

Coast.—A zone of land of indefinite width (perhaps 1 to 3 miles) bordering the sea; the land that extends inland from the shore. See *Shore.*

Coastal Fisheries.—In the United States, those under the control and regulation of the several states, under their inherent police powers, in the absence of conflicting federal legislation. See *Police Power.*

Coastal State.—A nation bordering on the open sea. See *Open Sea, Littoral State.*

Coast Guard Lines.—Lines established by the U.S. Coast Guard for separating areas of the sea where the Inland Rules of the Road apply from those where the International Rules apply. See *Inland Rules of the Road, International Rules of the Road.*

Coast Line (According to Public Law 31).—Defined as the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters (fig. 24). See *Line of Ordinary Low Water.*

Coastline.—The line of contact between land and sea. In the Coast Survey, the term is considered to be synonymous with shoreline. See *Coast Line* (According to Public Law 31), *Shoreline, Political Coastline.*

Coastline Rule.—See *Rule of the Tidemark.*

Coast Pilots.—Adjuncts to the nautical charts containing information of importance to the navigator most of which cannot be shown conveniently on the charts and is not readily available elsewhere. The Coast Pilots of the Coast and Geodetic Survey comprise 8

volumes and cover the coasts of continental United States, Hawaii, the Virgin Islands, and Puerto Rico.

Codification of International Law.—As defined in the statute of the International Law Commission, it is the more precise formulation and systematization of rules of international law in fields where there already have been extensive State practice, precedent, and doctrine. See *International Law Commission.*

Committee of Experts.—A technical committee which met at The Hague in April 1953, under the aegis of the International Law Commission, to study problems related to the delimitation of the territorial sea and to make recommendations thereon.

Common Law.—The body of judicial decisions developed in England and based upon immemorial usage. It is unwritten law as opposed to statute, or written, law. The English common law forms the foundation for the system of law in the United States. See *Civil Law.*

Comparison of Simultaneous Observations.—In tidal technology, a method of determining mean values by comparison of short-period observations at a station with simultaneous observations made at a station for which mean values, based on long-period observations, are available. See *Mean Values, Short-Period Observations.*

Competence Test.—See *Exploitability Test.*

Compromise Proposal.—See *United States Compromise Proposal.*

Congressional Power to Admit New States.—A power granted to Congress under Art. IV, sec. 3, cl. 1 of the Constitution, and carries with it the power to fix state boundaries.

Conjunctive Phrase.—A phrase that contains two conditions, both of which must be fulfilled to satisfy a definition or otherwise. See *Disjunctive Phrase.*

Connally Reservation.—Adopted in 1946 under Senate Resolution 196, in which the United States accepted generally the compulsory jurisdiction of the International Court of Justice but reserved the right to decide whether a certain matter is a domestic problem of the United States and not a matter upon which the Court has power to act. See *Optional Protocol of Signature, International Court of Justice.*

Constitutional System.—The dual sovereignty system in the United States, that is, the states and the Federal Government. The Federal Government is one of delegated, limited, and enumerated powers, and all powers not expressly granted or necessarily implied in the Constitution are reserved to the states. This has been held to apply to internal affairs rather than to external affairs. See *United States* v. *Curtiss-Wright Export Corp., National External Sovereignty.*

Conterminous, Coterminous.—Having a common boundary. Tidelands and inland waters have a common boundary with the marginal sea; the marginal sea has a common boundary with the high seas (fig. 2). See *Conterminous United States.*

Conterminous United States.—Comprises the 48 States of the United States and the District of Columbia; all of the states exclusive of Alaska and Hawaii. They have common boundaries and are not separated by foreign territory or the high seas. See *Conterminous, Continental United States.*

Contiguous Zones.—Zones beyond the marginal sea over which a nation exercises certain types of jurisdiction and control without affecting the character of the area as high seas. See *Zones Beyond the Marginal Sea.*

Continental Shelf.—The submerged portion of a continent which slopes gently seaward from the low-water line to a point where a substantial break in grade occurs, at which point the bottom slopes seaward at a considerable increase in slope until the great ocean depths are reached. The point of break defines the "edge" of the shelf, and the steeper sloping bottom the "continental slope." Conventionally, the edge is taken at 100 fathoms (or 200 meters) but instances are known where the increase in slope occurs at more than 200 or less than 65 fathoms. See *International Committee on the Nomenclature of Ocean Bottom Features.*

Continental Slope.—The declivity from the outer edge of the continental shelf into great depths. See *Continental Shelf, Continental Terrace.*

Continental Terrace.—The zone around the continents, extending from low-water line to the base of the continental slope. See *Continental Shelf, Continental Slope.*

Continental United States.—Includes Conterminous United States plus the State of Alaska. See *Conterminous United States.*

Convention.—In international law, an agreement between sovereign States less formal than a treaty by which such States arrange for the regulation of matters affecting all of them. See *Conventions on the Law of the Sea.*

Conventional Line.—A method of delimiting the seaward boundary of the marginal sea. Usually associated with straight lines, but may be a combination of lines: straight lines along a concave coast and curved lines along a convex coast. See *Replica Line, Envelope Line.*

Convention on Fishing and Conservation of the Living Resources of the High Seas.—See *Conventions on the Law of the Sea.*

Convention on the Continental Shelf.—See *Conventions on the Law of the Sea.*

Convention on the High Seas.—See *Conventions on the Law of the Sea.*

Convention on the Territorial Sea and the Contiguous Zone.—See *Conventions on the Law of the Sea.*

Conventions on the Law of the Sea.—The four conventions adopted at Geneva in 1958, to wit: Convention on the Territorial Sea and the Contiguous Zone, Convention on the Continental Shelf, Convention on the High Seas, and Convention on Fishing and Conservation of the Living Resources of the High Seas. See *First Geneva Conference.*

Corfu Channel.—The body of water that separates the Greek Island of Corfu from Albania and the mainland of Greece (*see* fig. 15) and adjudicated in the *Corfu Channel* case. See *United Kingdom* v. *Albania.*

Corfu Channel Case.—Same as *United Kingdom* v. *Albania.*

Courbe Tangente.—Same as *Envelope Line.*

Cross Bearings.—A method of determining a vessel's position from observations on two or more aids to navigation.

Curvature of the Coast.—Any indentation in a coast that does not conform to a "true bay" and where the baseline follows the sinuosities of the coast. See *True Bay, Baseline.*

Customs-Enforcement Areas.—Areas, not more than 50 miles from customs waters, designated by the President, under Anti-Smuggling Act of 1935, upon a finding that

customs laws are being violated, and in which U.S. revenue officers may board foreign vessels. See *Twelve-Mile Limit.*

Customs Waters.—See *Twelve-Mile Limit, Customs-Enforcement Areas.*

D

Daily Tides.—Same as *Diurnal Tides.*

Datum.—A reference point, line, or plane used as a basis for measurements. See *Datum Plane.*

Datum Plane.—A surface used as a reference from which heights or depths are reckoned. The plane is called a Tidal Datum when defined by a phase of the tide, for example, high water or low water. See *Tidal Datums.*

Decision of Court.—The decision of a court usually embodies a statement of the facts, the conclusions of law, and the reasoning by which the court arrived at its judgment. See *Decree of Court.*

Decision of June 23, 1947 (332 U.S. 19).—The decision of the Supreme Court in which the doctrine of federal paramount rights in the submerged lands seaward of inland waters was first enunciated. See *United States* v. *California, Submerged Lands, Paramount Rights.*

Decision of June 5, 1950 (339 U.S. 699, 707).—The decision of the Supreme Court upholding federal paramount rights in the submerged lands off the Louisiana and Texas coasts. See *United States* v. *Louisiana, United States* v. *Texas.*

Decision of March 15, 1954 (347 U.S. 272).—The decision of the Supreme Court upholding the constitutionality of Public Law 31 as a valid exercise of the power of Congress to dispose of the territory or other property of the United States. See *Alabama* v. *Texas et al.; Rhode Island* v. *Louisiana et al.; Art. IV, Sec. 3, Cl. 2.*

Decision of May 31, 1960 (363 U.S. 1, 121).—The decision of the Supreme Court upholding the claims of Texas and Florida to a maritime boundary of 3 leagues (9 geographic miles) in the Gulf, which under Public Law 31 entitled them to a grant of submerged lands extending for that distance from the coastline, but denying to Louisiana, Alabama, and Mississippi rights beyond 3 geographic miles. See *Public Law 31, United States* v. *Louisiana et al., United States* v. *Florida et al.*

Declaration of Panama.—A declaration by the United States and other American Republics proclaiming a security zone 300 miles wide for the protection of neutral commerce of the Americas during World War II. See *Extraterritorial Jurisdiction, Zones Beyond the Marginal Sea.*

Declaratory Judgment.—A judgment of a court which simply declares the rights of the parties on a question of law.

Declaratory of International Law.—Expressive of existing law, or that which puts an end to a doubt as to what the law is.

Decree of Court.—A statement of the legal findings of the court and an order putting its decision into effect. In *United States* v. *Louisiana et al.,* the Supreme Court decision was announced on May 31, 1960, but its final decree was entered on Dec. 12, 1960. See *Decision of Court.*

De Facto.—Actually; in fact.

Delaware Bay.—Claimed as inland waters by the United States on historic grounds. See *Historic Bay.*

Demarcation Line.—A line through the high seas marking the allocation of territory between two countries, rather than a boundary line; for example, the line through Bering Strait and Bering Sea between Russia and Alaska.

De Novo.—Anew, afresh. In the *California* case, the term "ordinary low-water mark" required a *de novo* interpretation. See *Ordinary Low-Water Mark.*

Deposition.—Testimony taken under oath and in writing before a competent officer in response to interrogatories in lieu of court testimony.

Dereliction.—Same as *Reliction.*

Dictum, Dicta.—An abbreviated form of *obiter dictum* (a remark by the way) or *obiter dicta.* Any statement of the law enunciated by a court merely by way of illustration, argument, analogy, or suggestion not necessarily involved nor essential to the determination of the case in hand. *Dicta* lack the force of an adjudication.

Director's Letter to Solicitor General.—See *Letter of Feb. 8, 1952.*

Discontinuous Charts.—Charts that do not form part of a continuous series; for example, widely separated harbor charts.

Disjunctive Phrase.—A phrase set in the alternative and usually expressed by the word "or." Opposed to conjunctive. See *Prior to or at the Time.*

Dissenting Opinion.—A minority opinion by a judge or judges denoting the explicit disagreement with the decision of the majority.

Diurnal Inequality.—The difference in height of the two high waters or of the two low waters of each day. See *Mixed Tides.*

Diurnal Tides.—Tides having a period or cycle of approximately one tidal day. Such tides exhibit only one high and one low water during a tidal day; the predominant type of tide in the Gulf of Mexico.

Doctrine of Accretion.—See *Accretion.*

Doctrine of Erosion.—See *Erosion.*

Domestic Purposes.—Not affecting the field of foreign relations or international law. In *United States* v. *Louisiana et al.,* the Supreme Court held the purposes of Public Law 31 to be purely domestic and therefore the extent of the grant of submerged lands to the states was not limited by the 3-mile national boundary. See *Decision of May 31, 1960, National Boundary.*

Dominium.—Ownership or proprietary rights as distinguished from *imperium* which refers to governmental powers of regulation and control. In the *Texas* case, the Court held that once low-water mark is reached the two coalesce and unite in the national sovereign.

Draft Articles of ILC.—The final articles of the law of the sea which the International Law Commission adopted at its 8th session in 1956 and which formed the basis for the conventions adopted at the First Geneva Conference in 1958. See *Final Report of International Law Commission.*

Drying Rock.—Terminology used in Final Report of International Law Commission but not defined. See *Low-Tide Elevation.*

Drying Shoal.—Terminology used in Final Report of International Law Commission but not defined. See *Low-Tide Elevation.*

E

Edge of Shelf.—See *Continental Shelf.*

Embayment.—Any indentation of a coast regardless of width at the entrance or depth of penetration into the land. See *Inland Waters.*

Enclave.—An area of high seas partly or entirely within the territorial sea.

End Points.—The points along a coast or on offshore islands that are used for drawing straight baselines. See *Straight Baselines.*

Envelope Line.—A form of line used to delimit the seaward boundary of the marginal sea, and the one incorporated in the Convention on the Territorial Sea and the Contiguous Zone adopted at Geneva in 1958 (*see* Appendix I). Defined as a line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the marginal sea. Geometrically, it is the locus of the center of a circle of fixed radius the circumference of which is always in contact with the baseline (*see* fig. 27). The name is derived from the fact that it forms a continuous series of intersecting arcs which are farthest seaward of all the possible arcs that can be drawn from the baseline with the same radius, thus enveloping all arcs that fall short of the seaward arcs. See *Baseline.*

Epicontinental Sea.—The waters overlying the continental shelf.

Equal Footing.—See *Equal-Footing Clause.*

Equal-Footing Clause.—A clause usually included in the statutes of admission of states entering the Union subsequent to the adoption of the Constitution which provides that the new states are admitted to the Union on an equal footing with the Original States. The clause has been held to refer to political rights and to sovereignty and not designed to wipe out diversities in economic standing. It has nevertheless been held to have a direct effect on certain property rights, as for example, ownership of the tide lands and the submerged lands under inland navigable waters. See *Inland Water Rule.*

Equidistant Line.—See *Principle of Equidistance.*

Eroding Processes.—See *Erosion.*

Erosion.—In riparian law, the gradual and imperceptible washing away of the land along the sea by natural causes. Also applied to the submergence of the land due to encroachment of the waters. See *Riparian Law, Riparian Boundaries.*

Estuary.—An arm of the sea at the wide lower end of a tidal river.

Exclusive Sovereignty.—An assertion of complete sovereignty. The type of sovereignty recognized in international law that would bring water areas into the category of inland waters which otherwise would be excluded, provided there has been acquiescence by foreign governments. See *Historic Bay, Historic Waters.*

Executive Branch.—All agencies of the Government (departments and independent agencies) that are under the direction of the President as the chief executive officer.

Executive Proclamation No. 2667 (59 Stat. 884).—Same as *Presidential Proclamation of Sept. 28, 1945* (Continental Shelf).

Exploitability Test.—Under the 1958 Geneva Convention on the Continental Shelf, a coastal nation may exercise sovereign rights beyond the conventional limit of 200 meters for the shelf if the area admits of the exploitation of the natural resources.

Extended Boundaries.—The seaward boundaries beyond 3 geographic miles which a state may have under Public Law 31. See *Federal-State Boundary* (Under Public Law 31), *Historic State Boundary.*

Extended Jurisdiction.—See *Zones Beyond the Marginal Sea.*

Exterior Boundaries.—Refers to the seaward boundaries of the marginal or territorial sea. In the United States this is considered to be 3 geographic or nautical miles from the seaward limits of inland waters. See *Marginal Sea, Seaward Limits of Inland Waters.*

Exterior Coastline.—See *Political Coastline.*

Exterior Limits of Inland Waters.—Same as *Seaward Limits of Inland Waters.*

Extraterritorial Jurisdiction.—Authority which a nation exercises on the high seas beyond the territorial sea. Generally associated with law enforcement and national security (*see* Appendix J). See *Zones Beyond the Marginal Sea.*

F

Federal-State Boundary (Under Public Law 31).—The seaward boundaries of the states. Along the Atlantic and Pacific coasts the boundary cannot exceed 3 geographic miles from the coastline of each state as defined in Public Law 31; along the Gulf coast it cannot exceed 9 geographic miles from the coastline. Federal jurisdiction begins at the seaward boundaries of the states. See *Historic State Boundary, Decision of May 31, 1960.*

Federal-State Boundary (Under Submerged Lands Cases).—The ordinary low-water mark and the seaward limits of inland waters along the coasts of California, Louisiana, and Texas, adjudicated by the Supreme Court as the beginning of federal paramount rights in the submerged lands. See *Decision of June 23, 1947, Decision of June 5, 1950.*

Fictitious Shoreline.—Refers to the line that divides inland waters from the open sea at indentations. The term "coast line" in the Submerged Lands Act includes the actual low-water line and the line marking the seaward limits of inland waters. See *Coast Line* (According to Public Law 31).

Fifteen-Mile Limitation.—The closing line for indentations recommended by the International Law Commission. See *Ten-Mile Rule, Twenty-Four-Mile Rule.*

Final Decree.—The decree entered by the Supreme Court in the case of *United States* v. *Louisiana et al.* on Dec. 12, 1960. See *Decree of Court.*

Final Report of International Law Commission.—The draft articles on the law of the sea adopted by the Commission at its 8th Session and submitted to the General Assembly of the United Nations in 1956. Identified as Official Records, U.N. General Assembly, 11th Sess., Supp. No. 9 (1956) (U.N. Doc. A/3159).

Findings of the Special Master.—The final recommendations made to the Supreme Court in the *California* case. See *Report of Special Master.*

First Geneva Conference.—The United Nations Conference on the Law of the Sea held at Geneva, Feb. 24 to Apr. 27, 1958.

Fisheries Case.—Same as *United Kingdom* v. *Norway.*

Fisheries Investigation of the U.S. Tariff Commission.—See *Semicircular Rule Applied.*

Florida Constitution of 1868.—The basis for the Supreme Court's holding that Florida is entitled to a 3-league boundary in the Gulf of Mexico under Public Law 31. See *United States* v. *Florida et al.*

Florida Decision (1960).—See *United States* v. *Florida et al.*

Flux and Reflux of the Tide.—The flow and ebb of the tide; more correctly, flow and ebb of the tidal movement.

Following the Sinuosities of the Coast.—Following the convolutions of a coast along the tidal line adopted as the baseline for measuring the marginal sea. In the Submerged Lands Cases and the Submerged Lands Act it is the ordinary low-water mark or line of ordinary low water. See *Rule of the Tidemark.*

Force Majeure.—Superior or irresistible force.

Foreshore.—In legal terminology, the strip of land between the high- and low-water marks that is alternately covered and uncovered by the flow of the tide. In coastal engineering work, it is defined as the part of the shore that lies between the crest of the berm and the ordinary low-water mark, which is ordinarily traversed by the uprush and backrush of the waves as the tide rises and falls; the foreshore would thus extend farther inshore than the shore. See *Shore.*

Foreshore Slope.—The inclination of the foreshore to the horizontal. See *Foreshore.*

Four Freedoms.—Under the broad doctrine of freedom of the high seas, they comprise the following: freedom of navigation, freedom of fishing, freedom to lay submarine cables and pipelines, and freedom to fly over the high seas. See *Freedom of the Seas.*

Four-Mile Limit.—Norway's fisheries zone based on a "4-mile league" in use in Scandinavian States a half century before the 3-mile limit (1 marine league) entered into international practice. See *Norwegian Royal Decree of July 12, 1935.*

Freedom of Navigation.—The right of a State (coastal or not) to sail ships on the high seas under its flag.

Freedom of the Seas.—The Roman doctrine that the open sea cannot be appropriated for the exclusive use of any one nation. See *Mare Liberum, Four Freedoms.*

French Proposal.—See *Segmental Method.*

Full and Change of the Moon.—The times of the spring tides. See *Moon's Phase, Spring Tides.*

Fundamental Oceanographic Research.—Research into the phenomena of the ocean including the seabed and the ocean waters, but not the subsoil. See *Other Scientific Research.*

G

General Direction of the Coast.—A phrase used in the *Fisheries* case as one of the conditions under which straight baselines may be drawn; that is, they must not depart to any appreciable extent from the general direction of the coast (*see* fig. 14). No specific

criteria, however, were laid down by the Court for determining what constitutes an appreciable departure. See *United Kingdom* v. *Norway.*

General Trend Line of the Ordinary Low-Water Mark.—The general direction of the ordinary low-water mark on either side of a headland for determining the termini of the headland-to-headland line at the seaward limit of inland waters (fig. 12). See *Termini at Headlands.*

Geneva Conference (1958).—See *First Geneva Conference.*

Geneva Conference (1960).—See *Second Geneva Conference.*

Geneva Conventions (1958).—See *Conventions on the Law of the Sea.*

Geographical Strait.—A relatively narrow waterway connecting two larger bodies of water. Distinguished from an international strait. See *Strait as an International Highway.*

Geographic Mile.—Same as *Nautical Mile.*

Geological and Geophysical Explorations.—Under Public Law 212, it means exploration in the substructure of the earth using seismic or other methods. See *Public Law 212.*

Geometrical Method.—See *Semicircular Rule.*

Geometric Construction.—Used in the *Fisheries* decision as referring to straight baselines and independent of the low-water mark. See *United Kingdom* v. *Norway.*

Grotius, Hugo.—A Dutch jurist and author of a pamphlet published in 1609 under the title *Mare Liberum* in which he first expounded the doctrine of the freedom of the seas. See *Mare Liberum.*

Gulf of Paria.—Separates the British island of Trinidad from the mainland of Venezuela; the area involved in the Anglo-Venezuelan Treaty of Feb. 26, 1942, the first action taken by coastal nations to appropriate the mineral resources in submerged lands beyond the territorial sea.

H

Hague Conference of 1930 for the Codification of International Law.—A conference of nations convened under the aegis of the League of Nations, for the consideration of problems relating to the territorial sea.

Half-Tide Level (also called Mean Tide Level).—A tidal datum midway between mean high water and mean low water.

Harbor.—A place where ships may find shelter or refuge from the sea and the winds. According to Coast Survey terminology—for purposes of standardizing its use in surveying and charting—a natural or artificially improved body of water providing protection for vessels and generally anchorage and docking facilities. In legal terminology, it is a haven or a space of deep water so sheltered by the adjacent land as to afford a safe anchorage for ships. According to the Geneva Convention on the Territorial Sea, the outermost permanent harborworks which forms an integral part of a harbor system is regarded as forming part of the coast from which the territorial sea is measured. See *Natural Harbor, Artificial Harbor.*

Harborworks.—Structures erected along the seacoast at inlets or rivers for protective purposes, or for enclosing sea areas adjacent to the coast to provide anchorage and shelter. See *Harbor, Artificial Harbor.*

Harmonic Analysis.—The mathematical process by which the observed tide at a place is analyzed by breaking it down into a number of constituent tides of simple periodic forces, each having a fixed period. In this process, the sun and moon are replaced by a number of hypothetical tide-producing bodies which move in circular orbits around the earth in the plane of the equator. See *Harmonic Constant, Harmonic Constituent.*

Harmonic Constant.—The amplitude and epoch (the time, in angular measure, between the meridian passage of a hypothetical tide-producing body and the high water of its tide) of a harmonic constituent of the tide. See *Harmonic Constituent, Harmonic Analysis.*

Harmonic Constituent.—One of the elements in a mathematical expression for the tide-producing force and in corresponding formulas for the tide, each constituent representing a periodic change or variation in the relative positions of the earth, sun, and moon. See *Harmonic Analysis.*

Harvestable Stage.—The stage of life of organisms of the sea during which the resources are harvestable, and not the particular moment at which they are captured. See *Sedentary Species.*

Having Equal Significance in the Tidal Cycle.—An expression used in the letter of Feb. 8, 1952, from the Director, Coast and Geodetic Survey, to the Solicitor General, explaining tidal datums (*see* Appendix E). Refers to the two high waters and two low waters of unequal height that occur during a tidal day in the mixed type of tide, each of the two heights being given the same weight in the computation of mean values. See *Mixed Tides, Letter of Feb. 8, 1952.*

Headland.—In common usage, a land mass having a considerable elevation. In the context of the law of the sea, elevation is not an important attribute and a headland may be the apex of a salient of the coast, the point of maximum extension of a portion of the land into the water, or a point on the shore at which there is an appreciable change in direction of the general trend of the coast. See *Termini at Headlands.*

Headland Theory.—The superposition of a fictitious coastline on the geographic or physical coastline but having no contact with the actual coast except at salient points. See *Political Coastline, King's Chambers.*

Headland-to-Headland Line.—The line which joins the termini at the outer headlands of an indentation of the coast that has been determined to be inland waters by the semicircular rule or on historic grounds. It marks the seaward limit of inland waters. See *Termini at Headlands, Semicircular Rule.*

Hearings on S.J. Res. 13.—Hearings before the Senate Committee on Interior and Insular Affairs on a submerged lands act. See *S.J. Res. 13.*

Higher High Water.—The higher of the two high waters of a tidal day where the tide is of the semidiurnal or mixed type. The single high water occurring daily during periods when the tide is diurnal is considered to be a higher high water. See *Diurnal Tides, Lower High Water.*

Higher Low Water.—The higher of the two low waters of a tidal day where the tide is of the semidiurnal or mixed type. See *Lower Low Water.*

Highest Observed Water Level.—Results from tide and surge, and, strictly speaking, is not a highest observed *tide.*

High Seas.—The open sea beyond and adjacent to the territorial sea, which is subject to the exclusive jurisdiction of no one nation. Littoral nations frequently exercise limited jurisdiction over portions of the high seas adjacent to their coasts for purposes of enforcing customs and other regulations (fig. 51). The Geneva Convention on the High Seas defines it as "all parts of the sea that are not included in the territorial sea or in the internal waters of a state." See *Open Sea, Contiguous Zones.*

High Water.—The maximum height reached by a rising tide. This may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of prevailing meteorological conditions.

High-Water Line.—A generalized term associated with the tidal plane of high water but not with a specific phase of high water—for example, higher high water, lower high water. See *Mean High-Water Line.*

High-Water Mark.—Same as *High-Water Line.*

Historic Bay.—In international law, a bay over which there has been an exclusive assertion of sovereignty by a coastal nation and an acquiescence by foreign governments, which brings it into the category of inland waters. Historic bays are well-recognized exceptions to the rules applicable to ordinary bays and neither the semicircular rule nor the 10-mile limitation applies. Legality of claim does not depend upon the size of the area affected. Delaware and Chesapeake Bays are examples of historic bays in the United States. See *Ten-Mile Rule, Semicircular Rule, Inland Waters.*

Historic Limits.—Refers to a bay whose exterior limits have been established by long usage, as indicated on charts, maps, or in documents. Where an historic title to a bay has been established, it might become important to also establish its historic limits where such limits are not too well defined. See *Point Lasuen.*

Historic State Boundary.—Under Public Law 31, it is the seaward boundary of a state as it existed at the time it became a member of the Union, or as heretofore approved by Congress. As interpreted by the Supreme Court, "at the time it became a member of the Union" means at the time of admission in the light of the historic events surrounding the event of admission. See *Public Law 31.*

Historic Use.—See *Historic Bay.*

Historic Waters.—Waters, including historic bays, over which there has been an exclusive assertion of sovereignty by a coastal nation and an acquiescence by foreign governments. See *Historic Bay.*

Horizontal Jurisdiction.—A jurisdiction extending only to the seabed and subsoil under Public Law 212 and not to the waters over the continental self. See *Public Law 212.*

Hot Pursuit.—The right which international law accords a coastal nation to pursue a foreign vessel on the high seas that has committed an offense against its laws while in its territorial sea.

H.J. Res. 373.—A House resolution of the 82d Cong., 2d sess. (1952), declaring the boundaries of the inland waters of the United States to be as far seaward as is permissible under international law, and providing for a survey of such boundaries to be

made by the Coast and Geodetic Survey in the light of the *Anglo-Norwegian Fisheries* case. The resolution was not enacted into law. See *United Kingdom* v. *Norway, H. Res. 676.*

H. Rept. 2515.—An interim report submitted in the 82d Cong., 2d sess. (1952), pursuant to H. Res. 676 for a study of the seaward boundaries of the United States. See *H. Res. 676.*

H. Res. 676.—A House resolution of the 82d Cong., 2d sess. (1952), naming a committee to study the seaward boundaries of inland waters and the seaward boundaries of the United States. See *H. Rept. 2515.*

Hydrographic Survey (Coast and Geodetic Survey).—A record of a survey, *of a given date,* of a water area, with particular reference to the submarine relief which is shown by means of soundings (depth units) and depth contours.

I

Imperceptible Process.—A change that takes place in the shoreline that cannot be perceived while the change is going on. See *Accretion, Erosion.*

Imperium.—See *Dominium.*

Implied Powers.—Those powers of the Federal Government that are necessarily implied from the express powers enumerated in the Constitution. They are derived from Art. I, sec. 8, cl. 18, which grants to Congress the power to make all laws necessary and proper for carrying into effect the express powers.

Including All Islands Within Three Leagues of the Coast.—A phrase used in the act admitting Louisiana into the Union, and interpreted by the Supreme Court to include the islands only and not the waters within that distance. See *Decision of May 31, 1960.*

Including All the Islands Within Six Leagues of the Shore.—A phrase used in the act admitting Mississippi and Alabama into the Union, and interpreted by the Supreme Court to include the islands only and not the waters within that distance. See *Decision of May 31, 1960.*

Indreleia.—A sailing route between the mainland of Norway and certain of its offshore islands. Held in the *Anglo-Norwegian Fisheries* case not to be an international strait but rather a navigational route prepared as such by means of artificial aids to navigation by Norway. See *United Kingdom* v. *Norway, Strait as an International Highway.*

Infra.—Below, under. When used in text it refers to matter in a later part of the publication. See *Supra.*

Infrared Photography.—Utilizing only those rays of light which lie just beyond the red end of the visible spectrum, such as are emitted by a hot body. They are invisible and are detected by their thermal and photographic effects. See *Panchromatic Photography.*

Inland Navigable Waters.—See *Navigable Inland Waters.*

Inland Rules of the Road.—The rules of navigation that are applicable to the water areas landward of the lines established by the U.S. Coast Guard. See *Coast Guard Lines, International Rules of the Road, United States* v. *Newark Meadows Improvement Co.*

Inland Water Rule.—The doctrine laid down by the Supreme Court that the submerged lands under inland navigable waters and the tidelands belong to the states as an incident of sovereignty. The first was established in the case of *Martin* v. *Waddell,* 16 Pet. 367 (1842) and involved one of the Thirteen Original States, and the second was established in the case of *Pollard's Lessee* v. *Hagan,* 3 How. 212 (1845), and involved one of the subsequently admitted states. See *Tidelands, Equal-Footing Clause.*

Inland Waters (also called National Waters, Interior Waters, and Internal Waters).—The waters of a country, both tidal and nontidal, that lie landward of the marginal sea, as well as the waters within its land territory, such as rivers and lakes, over which the nation exercises complete sovereignty. Waters landward of the marginal sea are those landward of the low-water mark and those landward of the seaward limits of ports, bays, harbors, and rivers. The seaward limit of a bay is a headland-to-headland line where the bay constitutes inland waters, otherwise it is the low-water mark following the sinuosities of the shore (*see* fig. 2).

Innocent Passage.—As adopted at the 1958 Geneva Conference on the Law of the Sea, it is the right of navigation through the territorial sea which a foreign vessel has for the purpose either of traversing that sea without entering internal waters, or of proceeding to internal waters, or of making for the high seas from internal waters, so long as the passage is not prejudicial to peace, good order, or security of the coastal State. The right of innocent passage also extends to straits used for international navigation that connect two parts of the high seas or the high seas with the territorial sea of another State, and to areas which formerly were part of the territorial sea or the high seas but through the use of straight baselines have become internal waters. See *Internal Waters, Strait as an International Highway, Strait of Tiran.*

Inseparability Doctrine.—The doctrine enunciated in the *Texas* case that with respect to the submerged lands seaward of low water on the open coast the *dominium* (proprietary rights) cannot be separated from the *imperium* (governmental rights) but that the two coalesce or unite in the national sovereign. See *Dominium, United States* v. *Texas.*

Insular Shelf.—Same as *Island Shelf.*

Inter Alia.—Among other things.

Interim Agreement.—An agreement entered into Oct. 12, 1956, between the United States and Louisiana to provide for continued oil operations in the Gulf pending a determination of the seaward boundary of the state. See *Decision of May 31, 1960, Coast Line* (According to Public Law 31).

Interior Waters.—Same as *Inland Waters.*

Internal Waters.—Same as *Inland Waters.*

International Boundary.—The boundary in the Great Lakes between the United States and Canada to which the rights of the adjoining states in the submerged lands extend under Public Law 31. See *Public Law 31.*

International Committee on the Nomenclature of Ocean Bottom Features.—A committee set up in 1948 at Oslo, Norway, for the purpose of standardizing the nomenclature of ocean bottom features. Adopted a number of definitions in 1952 among which were Continental Shelf, Island Shelf, Continental Slope, and Continental Terrace.

International Court of Justice.—A tribunal originating with the Charter of the United Nations, and successor to the Permanent Court of International Justice, for settling disputes between nations. Its decisions are binding on all nations that submit to its jurisdiction. See *Permanent Court of International Justice, Connally Reservation.*

International Domain.—The area seaward of low-water mark along the open coast and seaward of inland waters. In the *California* case, the Supreme Court held that once low-water mark is passed, the international domain is reached. As to the marginal sea, this does not mean that it belongs to the family of nations, as do the high seas, but that it is a creature of international law. See *Marginal Sea.*

International Law.—The body of rules and principles of action which civilized nations recognize as binding upon them in their dealings and relations with one another; the law of nations.

ILC.—International Law Commission.

International Law Commission.—A body created by the General Assembly under Art. 13 of the Charter of the United Nations to initiate studies and make recommendations for the purpose of encouraging the progressive development of international law and its codification. See *Final Report of International Law Commission, Codification of International Law, Progressive Development of International Law.*

International Lights.—Defined by the International Hydrographic Conference of 1947 as those lights of international interest. The larger lights along a coast spaced a considerable distance apart. See *Secondary Lights.*

International Nautical Mile.—Equals 6,076.10333 feet or 1,852.0 meters. Adopted by the United States July 1, 1954. See *Nautical Mile.*

International Rules of the Road.—The rules of navigation that are applicable to the water areas seaward of the lines established by the U.S. Coast Guard. See *Coast Guard Lines, Inland Rules of the Road, United States* v. *Newark Meadows Improvement Co.*

International Strait.—A strait used for international navigation. See *Strait as an International Highway.*

Ipso Facto.—By the fact itself. See *Ipso Jure.*

Ipso Jure.—By the law itself. See *Ipso Facto.*

Island (According to Coast Survey usage).—A land area (smaller than a continent) extending above and completely surrounded by water at mean high water; an area of dry land entirely surrounded by water or a swamp; an area of swamp entirely surrounded by open water. See *Island* (According to Geneva Convention).

Island (According to Geneva Convention).—A *naturally formed* area of land, surrounded by water, which is above water at high tide. See *Island* (According to Coast Survey usage), *Naturally Formed.*

Island Shelf.—The zone around an island or island group, extending from the low-water line to the depths at which there is a marked increase of slope to greater depths. Conventionally its edge is taken at 100 fathoms (or 200 metres). See *International Committee on the Nomenclature of Ocean Bottom Features.*

Islands Forming Part of a Land Form.—Islands that are so situated with respect to a characteristic land formation, such as a headland, which but for the intervening water areas would be part of such formation (*see* fig. 25).

J

Jefferson, Thomas.—Secretary of State under President Washington in 1793. Put forward the first official American claim for a 3-mile marginal belt. Cited by the Supreme Court in the *California* case as indicative of the fact that the Thirteen Original Colonies never acquired ownership of a 3-mile belt. See *Marginal Sea.*

Judicial Notice.—The act by which a court, in conducting a trial, or framing its decision, will, of its own motion, take cognizance of certain facts without proof which are regarded as established by common knowledge—the laws of the state, international law, historical events, main geographical features, etc. In *United States* v. *Romaine,* 255 Fed. 253 (1919), it was said a court might properly take judicial notice of the official plats of the Coast and Geodetic Survey, and in the *Borax* case the Supreme Court took judicial notice of the Bureau's definition of *mean high water* as given in *Tidal Datum Planes.* See *Borax Consolidated, Ltd.* v. *Los Angeles.*

Judicial Review.—The power of a court to pass on a decision of a lower court, an administrative body, or an act of a legislative body.

Juridical.—Legal. See *Juridical Bay.*

Juridical Bay.—A bay that conforms to the requirements of the law. A legal bay. See *Semicircular Rule.*

Jus Privatum.—Private law as distinguished from *jus publicum,* or public law. The law regulating the rights of individuals. The right, title, or dominion of a private owner. At common law, title to lands below high-water mark was in the King as the sovereign, but the dominion was vested in him as the representative of the people and for their benefit. See *Jus Publicum, Common Law.*

Jus Publicum.—Public law as distinguished from *jus privatum,* or private law. The right which a sovereign exercises in a public capacity for the benefit of the people, as distinguished from a right exercised in a proprietary capacity. See *Jus Privatum.*

Justiciable.—That which is proper to be brought before a court of law for determination.

K

King's Chambers.—The doctrine proclaimed by King James I in 1604, by which England claimed jurisdiction over an area formed by squaring off the British Isles between distant headlands.

L

Lambert Conformal Conic Projection.—One of the systems of representing a portion of the curved surface of the earth upon a plane surface. Provides for a nearly uniform scale over large areas and offers the best facilities for determining location, direction, and distance—the fundamentals of navigation—by aircraft. Widely used for aeronautical charts. See *World Aeronautical Charts.*

Landlocked.—Indentations along the open coast that are nearly cut off from access to the sea; almost completely surrounded by land—for example, San Francisco and San Diego Bays.

Landmark.—See *Termini at Headlands.*

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Lands Beneath Navigable Waters.—The lands granted to the states under Public Law 31 and include lands within state boundaries covered by nontidal waters but navigable at time state entered the Union; lands permanently or periodically covered by tidal waters to a distance not exceeding 3 geographic miles on the Atlantic and Pacific coasts and 9 geographic miles in the Gulf of Mexico; and all filled in, made, or reclaimed lands which formerly were lands beneath navigable waters. See *Public Law 31, Nontidal Waters.*

Large-Scale Chart.—A relative term, but generally one covering a small area on the ground. In Coast Survey usage, a scale of 1:80,000 (1 inch on chart=80,000 inches on the ground) would be the upper limit of such classification. See *Small-Scale Chart.*

Largess.—Liberality.

Las Siete Partidas.—The body of Spanish law written in the 13th century during the reign of Alphonso X.

Last Land Frontier.—The last course of a land boundary that reaches the sea.

Lateral Boundaries.—Side boundaries; boundaries between adjacent states extending from shore to their seaward boundaries under Public Law 31; boundaries between adjacent nations through the marginal sea and the contiguous zones.

Law of Prize.—The system of laws and rules applicable to the capture of vessels or cargo at sea belonging to one of two belligerent powers by a war vessel or privateer of the other belligerent and claimed as enemy property.

Legislative History of an Act.—The history of an act through the legislative body from its inception to its final passage; includes hearings, committee reports, and floor debate. See *Legislative Intent.*

Legislative Intent.—When the wording of an act of Congress is subject to more than one interpretation, courts will look to the discussions and debates on the measure for a guide as to which interpretation was intended. See *Legislative History of an Act.*

Letter of Feb. 8, 1952.—A memorandum from the Director, Coast and Geodetic Survey, to the Department of Justice (*see* Appendix E), explaining the uses of tidal datum planes and including a discussion of the term "ordinary low water" as it pertains to the California coast. See *Tidal Datums, Ordinary Low Water.*

Letter of July 14, 1947.—Letter from Attorney General Clark to Secretary of Commerce Harriman seeking assistance and services of the Coast and Geodetic Survey in preparing the technical aspects of the federal-state boundary problem along the California coast for presentation before a Special Master. See *Federal-State Boundary, Special Master.*

Line of Mean Higher High Tide.—Same as *Mean Higher-High-Water Line.*

Line of Ordinary High Water.—Same as *Ordinary High-Water Line.*

Line of Ordinary High-Water Mark.—Same as *Ordinary High-Water Line.*

Line of Ordinary Low Water.—Same as *Ordinary Low-Water Line.*

Littoral.—Pertaining to the shore, especially of the sea; a coastal region. Used coextensively with "riparian." See *Riparian Lands.*

Littoral State.—One that borders on the sea or great lakes. Corresponds to Riparian State, which borders on a river. See *Riparian Lands.*

Littus (or Litus) Maris.—The seashore.

Lopphavet.—A water area along the skjaergaard coast of Norway (*see* fig. 14) across which the longest straight baseline was drawn (44 miles) under the Royal Decree of July 12, 1935. See *United Kingdom* v. *Norway.*

Louisiana Case.—See *United States* v. *Louisiana.*

Louisiana Decision (1960).—See *United States* v. *Louisiana et al.*

Louisiana Purchase.—A land acquisition from France in 1803. Bounded generally by the Mississippi River on the east, and on the west by a line which ran, approximately, along the present eastern boundary of Idaho, and through the center of what are now Colorado and New Mexico. The territory extended north to Canada, and south to the northern boundary of Texas.

Lower High Water.—The lower of the two high waters of any tidal day where the tide is of the semidiurnal or mixed type. See *Higher High Water.*

Lower Low Water.—The lower of the two low waters of any tidal day where the tide is of the semidiurnal or mixed type. The single low water occurring daily during periods when the tide is diurnal is considered to be a lower low water. See *Tidal Day, Diurnal Tides, Mixed Tides, Higher Low Water.*

Lowest Observed Water Level.—Results from tide and surge, and, strictly speaking, is not a lowest observed *tide.*

Low-Tide Elevation (According to Geneva Convention).—A *naturally formed* area of land surrounded by and above water at low tide but submerged at high tide. See *Rock Awash.*

Low Water.—The minimum height reached by a falling tide. This may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of prevailing meteorological conditions.

Low-Water Line.—A generalized term associated with the tidal plane of low water but not with a specific phase of low water—for example, lower low water, higher low water. See *Mean Low-Water Line.*

Low-Water Line Survey of Louisiana Coast.—A cooperative undertaking between the Bureau of Land Management, the State of Louisiana, and the Coast and Geodetic Survey, by which the Survey mapped the mean low-water line from aerial photographs coordinated with an accurate tidal datum. See *Map Location.*

Low-Water Mark.—Same as *Low-Water Line.*

Lunar Day.—See *Tidal Day.*

Luttes v. State (324 S.W. 2d 167).—A 1958 decision by the Supreme Court of Texas, interpreting the Civil Law concept of seashore—in the light of modern conditions and the need for exact application—as extending to the line of mean higher high tide determined from a 19-year period. See *Civil Law.*

M

Mandate.—A command, order, or direction.

Mandatory.—Without power of choice; obligatory. See *Permissive.*

Map Location.—The location of a point or line on a map rather than its demarcation on the ground. See *Low-Water Line Survey of Louisiana Coast.*

Mare Clausum.—The sea closed. The title of a work by John Selden in 1635, intended as an answer to Grotius' *Mare Liberum,* in which he undertook to prove that the sea is capable of private dominion and defended the broad claims of England on the grounds of a good title based on long-standing usage backed by sufficient naval strength. See *Mare Liberum.*

Mare Liberum.—The sea free, or the sea open. The title of a work by Grotius in 1609 in which he contended that the sea was not capable of private dominion. He urged the Roman doctrine of freedom of the seas and against the Portuguese claim to an exclusive trade to the Indies, through the south Atlantic. See *Mare Clausum.*

Marginal Belt.—Same as *Marginal Sea.*

Marginal Sea (also called Territorial Sea, Adjacent Sea, Marine Belt, Maritime Belt, and 3-Mile Limit).—The water area bordering a nation over which it has exclusive jurisdiction, except for the right of innocent passage of foreign vessels. It is a creation of international law, although no agreement has thus far been reached by the international community regarding its width. It extends seaward from the low-water mark along a straight coast and from the seaward limits of inland waters where there are embayments. (*See* fig. 2.) The United States has traditionally claimed 3 nautical miles as its width and has not recognized the claims of other countries to a wider belt.

Marginal Sea Concept.—The concept that a nation bordering on the sea needs to exercise jurisdiction over the waters along its coasts to some distance from shore as a matter of self-defense. See *Marginal Sea.*

Marine Belt.—See *Marginal Sea.*

Marine League.—Equals 3 nautical or geographic miles. See *Nautical Mile.*

Marine Mile.—Same as *Nautical Mile.*

Maritime Belt.—Same as *Marginal Sea.*

Maritime Boundary.—A water boundary. See *National Boundary.*

Mean Diurnal High-Water Inequality.—One-half the average difference between the two high waters of each day over a 19-year period. It is obtained by subtracting the mean of all high waters from the mean of the higher high waters. See *Nineteen-Year Tidal Cycle.*

Mean Diurnal Low-Water Inequality.—One-half the average difference between the two low waters of each day over a 19-year period. It is obtained by subtracting the mean of the lower low waters from the mean of all low waters. See *Nineteen-Year Tidal Cycle.*

Mean Higher High Tide.—Same as *Mean Higher High Water.*

Mean Higher-High-Tide Line.—Same as *Mean Higher-High-Water Line.*

Mean Higher High Water.—The average height of the higher high waters over a 19-year period. See *Higher High Water, Nineteen-Year Tidal Cycle.*

Mean Higher-High-Water Line.—The intersection of the tidal plane of *mean higher high water* with the shore. See *Mean Higher High Water.*

Mean High Tide.—Same as *Mean High Water.*

Mean High Water.—The average height of the high waters over a 19-year period.

All high waters are included in the average where the type of tide is either semidiurnal or mixed. Where the type of tide is predominantly diurnal, only the higher high-water heights are included in the average on those days when the tide is semidiurnal. See *Mixed Tides, Semidiurnal Tides, Diurnal Tides, Nineteen-Year Tidal Cycle.*

Mean High-Water Line.—The intersection of the tidal plane of mean high water with the shore. See *Mean High Water, Shore.*

Mean High-Water Mark.—Same as *Mean High-Water Line.*

Mean Lower Low Water.—The average height of the lower low waters over a 19-year period. The tidal plane used on the Pacific coast as the datum for soundings on the hydrographic surveys and nautical charts of the Coast and Geodetic Survey. See *Mixed Tides, Lower Low Water.*

Mean Low Water.—The average height of the low waters over a 19-year period. All low-water heights are included in the average where the type of tide is either semidiurnal or mixed. Where the type of tide is predominantly diurnal, only the lower low-water heights are included in the average on those days when the tide becomes semidiurnal. See *Mixed Tides, Semidiurnal Tides, Diurnal Tides, Nineteen-Year Tidal Cycle.*

Mean Low-Water Line.—The intersection of the tidal plane of mean low water with the shore. See *Mean Low Water, Shore.*

Mean Low-Water Mark.—Same as *Mean Low-Water Line.*

Mean Sea Level.—The average height of the surface of the sea for all stages of the tide over a 19-year period, usually determined from hourly height readings. A determination of mean sea level that has been adopted as a standard for heights is called a *sea level datum.* The sea level datum now used for the Coast and Geodetic Survey level net is officially known as the *Sea Level Datum of 1929,* the year referring to the last general adjustment of the net, and is based upon observations taken over a number of years at various tide stations along the coasts of the United States and Canada. See *Nineteen-Year Tidal Cycle.*

Mean Tide Level.—Same as *Half-Tide Level.*

Mean Values.—In tidal technology, the values obtained from averaging tidal observations at a station over a long-period of time, a period of 19 years giving the best value. See *Comparison of Simultaneous Observations, Nineteen-Year Tidal Cycle.*

Median Line.—A geometric line adopted at the 1958 Geneva Conference on the Law of the Sea for designating the boundary through the territorial sea between two coastal nations. See *Median Line Defined.*

Median Line Defined.—A line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial sea of each of two coastal nations is measured (fig. 49). See *Median Line.*

Memorandum of Apr. 18, 1961.—A memorandum from the Director, Coast and Geodetic Survey, to the Department of Justice, setting forth recommendations (with commentaries) on the principles to be established in defining "coast line" as it applies to various geographic configurations along the Gulf coast, particularly the Louisiana coast. See *Coast Line* (According to Public Law 31).

Memorandum of Aug. 12, 1949.—Sets forth position of United States with respect to boundary line between inland waters and the open sea for seven areas along the Cali-

fornia coast, and includes a method of determining the termini of the boundary line at headlands, the semicircular method, and criteria for ascertaining "ordinary low-water mark." See *Seven Segments, Semicircular Rule, Ordinary Low-Water Mark.*

Memorandum of Feb. 14, 1953.—A memorandum from the staff counsel, Senate Committee on Interior and Insular Affairs, containing a chronology of the major background events in the submerged lands controversy from 1921 to 1953. Published in *Hearings on S.J. Res. 13,* at 1231. See *S.J. Res. 13.*

Memorandum on Mean Low Water.—Prepared in Coast and Geodetic Survey (May 26, 1949) to clarify the distinction between "plane of mean low water" and "line of mean low water" and the technical problems involved in the determination of each. See *Letter of July 14, 1947.*

Memorandum on Tidal Datums.—See *Letter of Feb. 8, 1952.*

Message From the President.—A message from the President of the United States to the Senate transmitting for ratification the four conventions on the law of the sea and the optional protocol of signature adopted at the First Geneva Conference. Identified as EXECUTIVES J to N, Inclusive (Senate), 86th Cong., 1st sess. (1959). See *First Geneva Conference.*

Meter.—A unit in the metric system of measures (a decimal system) and is equal to 39.37 inches in the United States.

Metes and Bounds.—The boundary lines or limits of a tract of land. One of the oldest methods of describing land and was used to transfer lands in the Thirteen Original Colonies. Defined variously in law dictionaries as: the boundary lines of land, with their terminal points and angles; the boundary lines and corners of a piece of land; and the boundary lines of lands with their terminating points or angles.

Mineral Leasing Act of 1920.—An act, recorded in 41 Stat. 437, setting out the conditions under which the Secretary of the Interior is authorized to issue mineral leases in the public lands. Act does not apply to the submerged lands of the outer continental shelf.

Mississippi Decision (1960).—See *United States* v. *Louisiana et al.*

Mixed Tides.—Tides in which the presence of a diurnal wave is conspicuous by a large inequality in either the high- or low-water heights, or in both, with two high waters and two low waters occurring each tidal day. Tides along the California coast are of the mixed type (fig. 17). See *Tidal Day, Diurnal Inequality.*

Moon in Quadrature.—Position of the moon when its longitude differs by 90° from the longitude of the sun. The corresponding phases are known as first quarter and last quarter (third quarter). See *Moon's Phase.*

Moon's Orbit.—The path of the moon relative to the earth. The angle which the moon's orbit makes with the plane of the earth's equator (its obliquity) varies from 18.3° to 28.6°, with an average of 23½°.

Moon's Phase.—A regularly recurring aspect of the moon with respect to the amount of illumination, as New Moon, First Quarter, Third Quarter, Full Moon.

Multilateral Agreement.—An agreement entered into by more than two parties containing mutual promises which do not affect other parties. See *Bering Sea Fur Seal Arbitration.*

Multimouthed Bay.—A bay having more than one entrance.

Municipal Law.—The branch of law that pertains to the internal or domestic affairs of a nation, as distinguished from international law. See *International Law.*

Mutatis Mutandis.—With the necessary changes in points of detail, meaning that matters or things are generally the same, but to be altered when necessary, as to names, offices, and the like.

N

National Boundary.—The seaward boundary of the United States within which it exercises exclusive sovereignty except for the right of innocent passage of foreign vessels; the 3-mile limit. See *Marginal Sea.*

National External Sovereignty.—One of the two theories on which the Government relied in the *California* case. The sovereignty which the Federal Government exercises in external matters, for example, in foreign affairs. Such sovereignty is exclusive and includes the war-making power, the treaty-making power, and international boundary negotiations. The Supreme Court in *United States* v. *California* held that paramount rights in the offshore submerged lands run to the Federal Government by virtue of its national external sovereignty. The investment of the Federal Government with the powers of external sovereignty does not depend upon the affirmative grants of the Constitution. See *United States* v. *Curtiss-Wright Export Corp., Constitutional System, Chain-of-Title Theory.*

National Maritime Boundary.—See *National Boundary.*

National-State Boundary Identity Theory.—The theory advanced by the Government in *United States* v. *Louisiana et al.* that a state's seaward boundary cannot exceed the national boundary. See *National Boundary.*

National Waters.—See *Inland Waters.*

Natural Causes Induced by Artificial Structures.—Refers to situations where changes in the shoreline have resulted from gradual and imperceptible processes, but where the processes were set in motion by the building of artificial structures such as jetties or breakwaters (fig. 21). See *Accretion, Erosion.*

Natural Entrance Points.—The headlands of a true bay across which a closing line may be drawn. See *True Bay, Headland, Closing Line.*

Natural Harbor.—One where the configuration of the coast provides the protection necessary, for example, San Diego Bay (fig. 6). See *Harbor.*

Naturally Formed.—As applied to an island it is one formed by natural processes as distinguished from one artificially formed, such as a spoil bank resulting from dredging operations. See *Island* (According to Geneva Convention).

Natural Resources.—Under Public Law 31 they include oil, gas, and all other minerals, and fish, shrimp, oysters, clams, crabs, lobsters, sponges, kelp, and other marine animal and plant life. Under the Convention on the Continental Shelf adopted at Geneva in 1958, they include mineral and other nonliving resources of the seabed and subsoil and the living organisms belonging to sedentary species. See *Sedentary Species.*

Nautical Chart.—A printed reproduction of a compilation of data derived from topographic and hydrographic surveys and miscellaneous information for use in marine navigation (*see* fig. 10). The distinction between a survey and a chart is that the first is

an original record *of a given date,* whereas the second is a compilation of many surveys *of different dates.* See *Hydrographic Survey, Topographic Survey.*

Nautical Mile (also called Sea Mile and Geographic Mile).—A unit of distance used in marine navigation. The United States nautical mile is defined as equal to one-sixtieth of a degree of a great circle on a sphere whose surface equals the surface of the earth. Its value, calculated for the Clarke Spheroid of 1866, is 1,853.248 meters or 6,080.20 feet. It is 1.151 times as long as the statute or land mile of 5,280 feet and may be taken as equal to the length of a minute of arc along the equator or a minute of latitude on the map which is being measured. In 1954, the United States adopted the international nautical mile which is 1852.0 meters or 6,076.10333 feet. See *International Nautical Mile, Admiralty Mile.*

Navigability.—The actual navigable capacity of a waterway and not the extent of tidal influence.

Navigable Inland Waters.—Under federal law, those inland waters which are available for navigation in their natural condition, or which can be made available for navigation by reasonable improvements.

Navigational Servitude.—The rights which the United States retains over the area granted to the states under Public Law 31 by virtue of its control over the navigable waters of the United States, for the purpose of commerce, navigation, national defense, and international affairs. See *Public Law 31, Servitude.*

Neap Tides.—Tides of decreased range occurring semimonthly as the result of the moon being in quadrature; that is, when the tidal forces of sun and moon act at right angles to each other on the waters of the earth (*see* fig. 19). Tides during these periods do not rise as high nor fall as low as during the rest of the month. See *Moon in Quadrature.*

Nineteen-Year Tidal Cycle.—The period of time generally reckoned as constituting a full tidal cycle because the more important of the periodic tidal variations due to astronomic causes will have passed through complete cycles. The longest cycle to which the tide is subject is due to a slow change in the declination of the moon which covers 18.6 years. See *Mean Low Water, Mean High Water.*

Nonperiodic Forces.—Those forces that occur without regard to a fixed cycle. The effect of wind and weather upon the waters is the result of nonperiodic forces. See *Periodic Forces.*

Nontidal Waters.—Waters not subject to tidal influence. Under Public Law 31, lands beneath such waters of a state which were navigable when the state entered the Union are granted to the state. See *Lands Beneath Navigable Waters.*

Normal Baseline.—The line following the sinuosities of the low-water mark, except where indentations are encountered that fall within the category of true bays, when the baseline becomes a straight line between headlands (fig. 24). See *Baseline, Bay.*

North Atlantic Coast Fisheries Arbitration of 1910.—An arbitration by the Permanent Court of Arbitration at The Hague of a dispute between the United States and Great Britain over the interpretation of the clause "to within three marine miles of any of the coasts, bays, creeks, or harbours" of the British dominions in America in the Treaty of 1818. The tribunal interpreted the clause to mean that the 3 marine miles are to be measured from a straight line drawn across the body of water at the place where it ceases to have the configuration and characteristics of a bay.

Norwegian Royal Decree of July 12, 1935.—A decree defining a fisheries zone of 4 miles measured from straight baselines along the skjaergaard coast of Norway and adjudicated by the International Court of Justice in the *Fisheries* case. See *United Kingdom* v. *Norway.*

Norwegian System.—Norway's method of drawing straight baselines for its territorial sea. See *United Kingdom* v. *Norway.*

Notes Verbale.—Unsigned memoranda or notes, used in diplomacy, in order to avoid an appearance of urgency which is not required.

Notice to Mariners.—In the United States, a weekly pamphlet published by the Government and containing information affecting the safety of navigation, such as changes in aids to navigation.

O

Obliquity of Moon's Orbit.—See *Moon's Orbit.*

Ocean Industries, Inc. v. Superior Court (252 Pac. 722).—A 1927 California case which held that a vessel anchored in Monterey Bay (19 miles across headlands and indenting the coast about 9 miles) 3½ miles from shore was within the boundaries of California on the basis that the word "bays" in the California Constitution of 1849 embraced all bays regardless of size (*see* fig. 1). Cited by California in the case before the Special Master to support its claim that Monterey Bay is a historic bay. See *Historic Bay, Seven Segments.*

Ocean Rule.—The rule laid down in the *California* case regarding federal paramount rights in the submerged lands of the open sea. The counterpart of the inland-water rule of state ownership. See *Inland-Water Rule, Open Sea.*

Offshore Submerged Lands.—Lands beyond the low-water mark along the open coast that are covered with water. See *Submerged Lands, Submerged Lands Cases.*

"Of Proprietorship."—Words struck by the Court from the decree proposed by the United States in the *California* case, which led to the belief that the Court was adjudicating something less than ownership. See *Dominium, Alabama* v. *Texas et al.*

One Hour's Run From Shore.—The limiting distance from the coast (measured by speed of suspected vessel) at which vessels suspected of violating the National Prohibition Act of 1920 could be boarded by U.S. officers, under a 1924 convention between the United States and Great Britain.

Open Bay.—An indentation of a coast that is part of the open sea; one that does not conform to the geometric criteria adopted for the determination of bays as inland waters. See *Semicircular Rule, Closed Bay.*

Open Coast.—The coast that fringes the marginal sea as distinguished from the coast that fringes inland waters. See *Open Sea, Marginal Sea, Inland Waters.*

Open Roadstead.—A roadstead with relatively little protection from the sea. See *Roadstead.*

Open Sea.—The water area seaward of the ordinary low-water mark, or seaward of inland waters. See *Mare Liberum.*

Operative.—To take effect. The conventions on the law of the sea become operative on the 30th day following the date of deposit with the United Nations of the 22d instrument of ratification or accession. See *Ratification, Accession.*

Optional Protocol of Signature.—An agreement (subject to ratification), adopted at the Geneva Conference on the Law of the Sea, for submission by the signatories to the compulsory jurisdiction of the International Court of Justice any dispute arising out of the interpretation or application of any of the conventions adopted by the Conference. The United States failed to ratify the Protocol. See *Connally Reservation.*

Op. Cit. Supra.—An abbreviation for *opus citum supra* meaning "in the work cited above." Used when referring to a book previously cited to avoid repeating the full citation.

Opus Citum Supra.—See *Op. Cit. Supra.*

Ordinary High Water.—A nontechnical term considered by the Coast and Geodetic Survey to be the same as the tidal plane of mean high water. See *Ordinary Tides; Mean High Water; Borax Consolidated, Ltd.* v. *Los Angeles.*

Ordinary High-Water Line.—Same as *Mean High-Water Line.* See *Ordinary Tides.*

Ordinary High-Water Mark.—Same as *Ordinary High-Water Line.*

Ordinary Low Water.—A nontechnical term considered by the Coast and Geodetic Survey to be the same as the tidal plane of mean low water. See *Ordinary Tides, Mean Low Water.*

Ordinary Low-Water Line.—Same as *Mean Low-Water Line.* See *Ordinary Tides.*

Ordinary Low-Water Mark.—A term used by the Supreme Court in the submerged lands cases to indicate where federal paramount rights begin in the offshore submerged lands, and which the Special Master in the *California* case was called upon to interpret with respect to the type of tide found along the California coast (*see* fig. 17). The intersection of the tidal plane of mean low water with the shore (*see* fig. 20). See *Ordinary Tides, Mean Low Water, Mixed Tides.*

Ordinary Tides.—This term is not used in a technical sense by the Coast and Geodetic Survey, but the word "ordinary" when applied to tides may be taken as the equivalent of the word "mean." See *Ordinary High Water; Ordinary Low Water; Attorney-General* v. *Chambers; Borax Consolidated, Ltd.* v. *Los Angeles.*

Original Jurisdiction.—The jurisdiction which a court has to hear a case or controversy in the first instance, rather than on appeal. Most courts of original jurisdiction determine the facts through the presentation of evidence. See *Appellate Jurisdiction, Special Master.*

Original States.—Same as *Thirteen Original States.*

Other Scientific Research.—A phrase included in the Geneva Convention on the Continental Shelf to broaden the provision for noninterference with fundamental oceanographic research to include research into the subsoil, such as coring and sampling. See *Fundamental Oceanographic Research.*

Outer Coastline.—See *Political Coastline.*

Outer Continental Shelf.—Under Public Law 212 (the Outer Continental Shelf Lands Act) it is that portion of the continental shelf which lies seaward of state boundaries as defined in Public Law 31 (the Submerged Lands Act). See *Continental Shelf, Historic State Boundary, Public Law 31.*

Outer Continental Shelf Lands Act.—Same as *Public Law 212.*

Outer Edge of Continental Shelf.—Same as *Edge of Shelf.* See *Continental Shelf.*

Overall-Unit-Area.—The area along the southern California coast between the mainland and a line running from Point Conception to Point Loma around the seaward side of all the islands and claimed by California to be part of the inland waters of the state (fig. 13). See *Channel Areas.*

P

Pacific Coast Pilot of 1889.—A comprehensive descriptive record of the topography, hydrography, and navigational information of the Pacific coast for use of the mariner. Extracts of this work were introduced at the hearing before the Special Master in the *California* case for identifying the southeastern extremity of San Pedro Bay.

Panchromatic Photography.—Sensitive, as a film or plate emulsion, to light of all colors. See *Infrared Photography.*

Paramount Rights.—Superior rights. A term used by the Supreme Court in the submerged lands cases to designate the rights of the Federal Government in the submerged lands seaward of the inland waters of California, Louisiana, and Texas. See *Decision of June 23, 1947; Decision of June 5, 1950.*

People v. Stralla et al. (96 P. 2d 941).—A 1939 California case which held that a vessel anchored in Santa Monica Bay 6 miles landward of the line Point Dume-Point Vicente (*see* fig. 13) was within the territorial waters of California on the basis that the word "bays" in the California Constitution included all bays without limitation as to distance between headlands. Cited by California in the case before the Special Master to support its claim that Santa Monica Bay is a historic bay. See *Historic Bay, Seven Segments.*

Per Curiam Opinion.—An opinion by the court as distinguished from an opinion written by any one judge. The *Alabama* case was a *per curiam* opinion with two judges dissenting. See *Decision of Mar. 15, 1954.*

Periodic Forces.—Those forces that recur with regularity; the tide-producing forces of sun and moon. See *Tide-Producing Force.*

Permanent Court of Arbitration.—A Hague tribunal established by the Hague Convention of 1899 (concluded between a number of countries) for the settlement of disputes arising from differences of a legal nature, or relating to the interpretation of treaties not possible to settle by diplomacy. The North Atlantic Coast Fisheries dispute between the United States and Great Britain was submitted to the tribunal for settlement. See *North Atlantic Coast Fisheries Arbitration of 1910.*

Permanent Court of International Justice.—A court set up in 1921 under the Covenant of the League of Nations. Also called *World Court.* See *International Court of Justice.*

Permissive.—Giving a power of choice, but not compelling. See *Mandatory.*

Per Se.—Of itself; taken alone.

Phase.—Any recurring aspect of a periodic phenomenon, as "new moon," "high water," etc. See *Moon's Phase.*

Phase Age.—The time between the occurrence of spring or neap tides and the corresponding phases of the moon; that is, spring tides do not usually occur on the days of

new and full moon, and neap tides do not usually occur on the days of first and third quarters. See *Spring Tides, Neap Tides.*

Photogrammetric Bridging.—The process by which photogrammetric surveys are extended and adjusted between bands of ground control. See *Photogrammetric Survey.*

Photogrammetric Survey.—In Coast Survey usage, a survey of a portion of the land surface utilizing aerial photographs and reduced to map form by stereoscopic or other instrumental equipment. See *Topographic Survey.*

Physical Coastline.—A term used in the proceedings before the Special Master in the *California* case to designate the line where the land and water meet along the open coast, irrespective of coastal indentations, and to distinguish it from a "political coastline." See *Shoreline, Political Coastline.*

Physical Line of the Coast.—A term used in the *Anglo-Norwegian Fisheries* decision to designate the line following the low-water mark. See *Physical Coastline, Rule of the Tidemark.*

Planimetric Map.—A map which presents the horizontal positions only for the features represented; distinguished from a topographic map by the omission of relief.

Plenary Session.—One in which the full membership is represented, as opposed to a committee session.

Plenipotentiary.—One vested with full power to negotiate, subject to ratification, for the government he represents.

Point Lasuen.—A feature near present-day Huntington Beach and first named by the English explorer Vancouver in 1793 (*see* fig. 10). The location of the point was the subject of considerable testimony in the *California* case before the Special Master, in an effort to establish the historic limits of San Pedro Bay.

Police Power.—The inherent power which a sovereign has (to wit, a state in the United States) over persons and property to promote the safety and welfare of the people. See *Coastal Fisheries.*

Political Agencies of Government.—The legislative and executive branches of the Federal Government, as distinguished from the judicial branch.

Political Coastline.—A term used in the proceedings before the Special Master in the *California* case to designate the limits of inland waters in the vicinity of islands, and to distinguish it from the term "physical coastline." Also referred to as "outer or exterior" coastline. See *Overall-Unit-Area, Physical Coastline.*

Pollard Rule.—The doctrine of state ownership of the tidelands and the submerged lands under inland navigable waters. See *Inland Water Rule, Pollard's Lessee* v. *Hagan, Decision of May 31, 1960.*

Pollard's Lessee v. Hagan (3 How. 212).—An 1845 case in which the Supreme Court established the doctrine that ownership of the tidelands is an incident of state sovereignty. See *Tidelands.*

Preadmission Status.—The status of a state prior to its admission to the Union—may be a territory, as in the case of Alaska, or an independent republic, as in the case of Texas.

Preamble.—The introductory part of a statute or convention which states the reasons and intent of the law. See *Convention.*

Predominantly Diurnal.—Where the dominant feature of the tide is diurnal, that is, where the diurnal wave is the dominant one. See *Diurnal Tides.*

Prescription.—In international law, the acquisition of sovereignty over territory through continuous and undisputed exercise of sovereignty over it during a long period of time. See *Historic Bay.*

Presidential Proclamation of Sept. 28, 1945 (Coastal Fisheries).—A proclamation issued by President Truman setting forth the policy of the United States with regard to the protection of the fishery resources of the high seas adjacent to its coast, and regarding it as proper to establish conservation zones in those areas (59 Stat. 885). See *Coastal Fisheries.*

Presidential Proclamation of Sept. 28, 1945 (Continental Shelf).—A proclamation issued by President Truman extending jurisdiction and control of the United States over the natural resources of the subsoil and seabed of the continental shelf, but not affecting the waters above as high seas (*see* Appendix F).

Principle of Equidistance.—A principle applied in drawing a seaward boundary between two adjacent coastal nations through the territorial sea in such a manner that the sea area will be equitably divided between them (figs. 48 and 50). See *Median Line Defined.*

Principle of the Semicircular Rule for Bays.—This postulates that a bay whose area is equal to a semicircle, the diameter of which is a line joining the headlands, is on the borderline between an open and a closed bay (fig. 3). See *Semicircular Rule, Open Bay, Closed Bay.*

Prior to or at the Time.—A phrase used in Public Law 31 in relation to the seaward boundaries of the states; interpreted by the Supreme Court to mean that congressional action surrounding the event of admission was relevant to a determination of present boundaries, that is, by the historic action taken with respect to them jointly by Congress and the state, and does not mean preadmission boundaries alone nor does it mean at the moment of admission. See *Decision of May 31, 1960.*

Procedural.—That which goes to the form rather than to the substance or merits of a controversy.

Proceedings Before the Special Master.—Hearings held during Feb., Mar., and Apr. of 1952, in Washington, D.C., and Los Angeles, Calif., at which expert and fact witnesses appeared for the purpose of establishing the federal-state boundary along the coast of California under the *California* decision. See *Report of Special Master, Decision of June 23, 1947.*

Progressive Development of International Law.—As defined in the statute of the International Law Commission, it is the preparation of draft conventions on subjects which have not yet been regulated by international law or in regard to which the law has not yet been sufficiently developed in the practice of States. See *International Law Commission, Convention.*

Projet.—A draft of a proposed treaty.

Property Rights.—Rights growing out of the ownership of land.

Proprietary Interest.—An interest that grows out of ownership, as distinguished from a governmental interest which would not necessarily imply ownership. The con-

trol of navigation in inland navigable waters is a function of the Federal Government, but under Public Law 31 the states have a proprietary interest in the submerged lands under such waters within their boundaries. See *Public Law 31*.

Prospective Operation.—Begins to operate in the future, usually upon a condition being fulfilled. Opposed to retroactive operation.

Public Domain.—Those areas of land that were turned over to the General Government by the Original States and such other lands as were later acquired by treaty, purchase, or cession, and are disposed of under authority of Congress. The submerged lands granted to the states under Public Law 31 have been held to be part of the public domain. See *Public Law 31, Decision of Mar. 15, 1954.*

Public Land.—Same as *Public Domain.*

Public Law 31 (Submerged Lands Act).—An act passed during the 1st session of the 83d Congress and signed into law on May 22, 1953 (*see* Appendix G). Confirms and establishes the titles of the states to lands beneath navigable water within their boundaries and to the natural resources within such lands and water. The act also establishes jurisdiction and control of the United States over the natural resources of the seabed of the continental shelf seaward of state boundaries. See *Public Law 212.*

Public Law 212 (Outer Continental Shelf Lands Act).—An act passed during the 1st session of the 83d Congress and signed into law on Aug. 7, 1953 (*see* Appendix H). Provides for the jurisdiction, control, and administration by the United States over the submerged lands seaward of the states' boundaries as defined in Public Law 31; that is, over the outer continental shelf. See *Public Law 31, Continental Shelf, Outer Continental Shelf.*

Q

Quitclaim Title.—A title to property that extends no further than the title released by the grantor; a claim one may have in property without professing that the title is valid.

R

Rapporteur.—An official charged with drawing up and presenting reports to a main body.

Ratification.—The approval of an act which has already been taken by an agent. At the Geneva Conference on the Law of the Sea, the conventions adopted were signed by the representative of the United States, subject to ratification by the Senate. See *Accession.*

Rationale.—The legal principle underlying a decision of a court. The rationale of the submerged lands cases was the national external sovereignty of the United States. See *National External Sovereignty.*

Reconstruction Acts of 1867.—The acts passed by Congress after the Civil War reorganizing the governments of the seceded states.

Reduced Areas.—A technique used in applying the semicircular rule to an indentation by which the shape of the indentation is generalized and a comparison of areas made easier. Arcs of circles are drawn around the shore of the indentation using as a radius a proportionate part of the distance between headlands, for example, one fourth, one fifth,

etc. The area enclosed by the envelope of the arcs is then compared with the area of the semicircle whose radius is correspondingly reduced. See *Semicircular Rule, Envelope Line.*

Reliction (also known as Dereliction).—The gradual and imperceptible recession of the water resulting in an uncovering of land once submerged. See *Accretion.*

Replica Line (also known as *Tracé Parallèle*).—A method of delimiting the seaward boundary of the marginal sea by lifting the low-water line bodily from its existing position, moving it seaward a distance equal to the width of the marginal sea, and laying it down parallel to its former position. See *Conventional Line, Envelope Line.*

Report of Special Master.—The final report of the Special Master (dated Oct. 14, 1952) in the *California* case setting forth his findings and recommendations on the three questions submitted to him by the Supreme Court. Ordered filed Nov. 10, 1952 (344 U.S. 872) (*see* Appendix C). See *Proceedings Before the Special Master, Seven Segments.*

Res Communis.—The property of all nations; things common to all and not subject to exclusive acquisition.

Res Nullius.—The property of no one and therefore capable of being appropriated by the first occupier.

Rhode Island Case.—See *Rhode Island* v. *Louisiana et al.*

Rhode Island v. Louisiana et al. (347 U.S 272).—A suit filed by Rhode Island against Louisiana, Texas, Florida, and California, and certain officials of the Federal Government, challenging the constitutionality of Public Law 31. See *Public Law 31, Decision of Mar. 15, 1954.*

Rio Bravo del Norte.—Rio Grande.

Ripa.—The bank of a river.

Riparian Boundaries.—Water boundaries, or boundaries formed by the sea or a river. The general rule is that riparian boundaries shift with changes due to accretion or erosion but retain their original location if brought about by avulsion or by artificial causes. See *Accretion, Avulsion, Erosion, Riparian Lands.*

Riparian Lands.—In strictness, lands bordering on a river. The term "riparian" is also used as relating to the shore of the sea or other tidal water, or of a lake or other considerable body of water not having the character of a watercourse. See *Ripa.*

Riparian Law.—The branch of the law which deals with the rights in land bordering on a river or the sea. See *Riparian Owner, Riparian Rights.*

Riparian Owner.—One who owns land bordering on the bank of a river. Usage has broadened the concept to include land along the sea or other tidal water, but strictly speaking the proper designation for such situations is "littoral." See *Ripa, Littoral State.*

Riparian Rights.—The rights of an owner of land bordering a river or the sea and relates to the water (its use), ownership of the shore, right of ingress and egress, accretions, etc. See *Riparian Owner.*

Roadstead.—Sea areas used for loading, unloading, and anchoring of ships; usually a shallow indentation in the coast.

Rock Awash.—In Coast Survey terminology it is a rock exposed at any stage of the tide between the datum of mean high water and the sounding datum, or one just bare at these datums. See *Sounding Datum, Low-Tide Elevation.*

Rock Rampart.—See *Skjaergaard, United Kingdom* v. *Norway.*

Rule of the Tidemark.—The rule that where a coastline is relatively straight, or where slight curvatures exist, the baseline follows the sinuosities of the coast as defined by a tidal plane. See *Baseline.*

Rules of the Road.—See *Inland Rules of the Road, International Rules of the Road.*

S

Safety Zones.—The zones which a coastal nation may establish for protective purposes around installations on the continental shelf. Under the Geneva Convention on the Continental Shelf such zones may not exceed 500 meters.

Sailing Lines.—Lines shown on nautical charts of the Coast and Geodetic Survey by a red overprint, giving the course and distance between turning points as the recommended routes to be followed by seagoing vessels.

San Pedro Bay.—One of the seven segments on which the Special Master in the *California* case was called upon to make recommendations as to its status (inland waters or open sea). See *Point Lasuen.*

Saving Clause.—A provision in a statute preserving rights which ordinarily would not be preserved but for the clause. Public Law 31 (the Submerged Lands Act) and Public Law 212 (the Outer Continental Shelf Lands Act) contain such a clause.

Seabed.—The bottom of the sea and the beginning of the subsoil; associated with "depth of water." See *Subsoil.*

Sea Level Datum.—See *Mean Sea Level.*

Sea Level Datum of 1929.—See *Mean Sea Level.*

Sea Mile.—Same as *Nautical Mile.*

Seaward Boundaries of a State.—See *Historic State Boundary.*

Seaward Limits of Inland Waters.—The beginning of the marginal sea; that is, at the line of ordinary low water along a straight or slightly curving coast, and a headland-to-headland line in the case of indentations that fall into the category of true bays. Where straight baselines are permissible, such lines mark the seaward limits of inland waters. See *Marginal Sea, True Bay, Straight Baselines.*

Secondary Lights.—The smaller lights along a coast spaced relatively close together and used for coastal navigation. See *International Lights.*

Secondary Tides.—Refers to those additional tides—higher low waters and lower high waters—that occur twice a month (when the moon is over the equator) in a general pattern of diurnal tides. See *Diurnal Tides.*

Second Geneva Conference.—The United Nations Conference on the Law of the Sea held at Geneva, Mar. 17 to Apr. 26, 1960.

Secretary of the Interior.—The officer of the Federal Government who is clothed with authority for administering and leasing the submerged lands of the outer continental shelf. See *Public Law 212, Outer Continental Shelf.*

Sedentary Species.—Under the Convention on the Continental Shelf, adopted at Geneva in 1958, they are organisms which, at the harvestable stage, are either immobile on or under the seabed, or are unable to move except in constant physical contact with the

seabed or subsoil. Organisms belonging to sedentary species include coral, sponges, oysters, pearl-oysters, pearl-shell, clams, but not shrimp, lobsters, and finny fish. See *Natural Resources, Harvestable Stage.*

Segmental Method.—A method for determining the status of a bay by utilizing the segment of a circle as the borderline case. The area between the curve of the coast and its chord is equal to the area of a segment of the circle the center of which is situated on the perpendicular to the chord in its middle at a distance from the chord equal to one-half the length of the chord and of which the radius is equal to the distance which separates this point from one end of the curve (*see* fig. 7). Proposed by the French delegation at the 1930 Hague Conference for the Codification of International Law. See *Semicircular Rule.*

Self-Executing.—Providing for its own carrying out.

Semicircle Test.—A test to determine whether an indentation is a true bay or not by applying the semicircular rule for bays. See *True Bay, Semicircular Rule.*

Semicircular Rule.—A geometric method, using the pattern of a semicircle, for determining when an indentation of a coast should be regarded as part of the inland waters of a country, and when it should be regarded as part of the open sea. The borderline case is a semicircle with a diameter equal to the distance between the headlands of the indentation; if the area of the indentation is greater than the area of the semicircle, the indentation is part of the inland waters; if it is less, the indentation is part of the open sea. (*See* fig. 4.) This method was first proposed in 1930 by the Director of the Coast and Geodetic Survey (Rear Admiral Patton), and was submitted by the United States delegation for consideration at the 1930 Hague Conference for the Codification of International Law. See *Inland Waters, Open Bay, Closed Bay, Segmental Method.*

Semicircular Rule Applied.—The U.S. Tariff Commission in 1930 applied the rule for determining the dividing line between the territorial sea and the high seas in connection with a fisheries investigation; the Bureau of the Census in 1940 for determining the area of the United States and of the individual states as part of the 1940 census; and the Interior Department in 1950 for establishing an administrative line along the Louisiana coast under the Supreme Court's decree of Dec. 11, 1950. See *Semicircular Rule.*

Semidaily Tides.—Same as *Semidiurnal Tides.*

Semidiurnal Tides.—Tides having a period of approximately one-half a tidal day; the type of tide that is predominant throughout the world, with two high waters and two low waters each tidal day. Tides along the Atlantic coast are of this type.

S.J. Res. 13.—Senate joint resolution introduced in the 83d Cong., 1st sess., and enacted as Public Law 31 (1953), which confirms and establishes titles of the states to lands beneath navigable waters within their boundaries and to the natural resources within such areas. See *Public Law 31.*

S. 1901.—Senate bill introduced in the 83d Cong., 1st sess., and enacted as Public Law 212 (1953), which provides for the jurisdiction of the United States over the submerged lands of the outer continental shelf. See *Outer Continental Shelf, Public Law 212.*

S. Rept. 411.—The Senate committee report on S. 1901, 83d Cong., 1st sess. (1953), which became Public Law 212 (Outer Continental Shelf Lands Act). See *S. 1901.*

S. Rept. 133.—The Senate committee report on S.J. Res. 13, 83d Cong., 1st sess. (1953), which became Public Law 31 (Submerged Lands Act). See *S.J. Res. 13.*

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Separability Clause.—A provision in a statute which allows a court to declare any portion invalid without invalidating the entire statute.

Servitude.—The right in respect to land owned by one person by virtue of which it is subject to a certain use or enjoyment by another person. Frequently applied to the right which foreign vessels have to travel through the marginal sea of another country. See *Marginal Sea, Navigational Servitude.*

Seven Seas.—Figuratively, all the waters or oceans of the world. Applied generally to the seven oceans—Arctic, Antarctic, North Atlantic, South Atlantic, North Pacific, South Pacific, and Indian.

Seven Segments.—The segments along the California coast adjudicated by the Special Master and comprising Crescent City Bay, Monterey Bay, San Luis Obispo Bay, Point Conception to Point Hueneme, Santa Monica Bay, San Pedro Bay, and Area east of San Pedro Bay.

Shore.—Same as *Tidelands.*

Shoreline.—The line of contact between the land and a body of water. On Coast and Geodetic Survey nautical charts and surveys the shoreline approximates the mean high-water line. In Coast Survey usage the term is considered synonymous with "coastline." See *Coastline.*

Short-Period Observations.—In tidal technology, observations obtained at a station over a period of time less than is necessary for obtaining mean values. See *Mean Values, Nineteen-Year Tidal Cycle.*

Sinuosities of the Coast.—See *Following the Sinuosities of the Coast.*

Skjaergaard.—The highly broken coast of Norway, north of latitude 66°28′48″ N. (the Arctic Circle), consisting of about 120,000 islands, islets, and rocks, that was adjudicated in the *Anglo-Norwegian Fisheries* case. See *United Kingdom* v. *Norway.*

Slight Curvature.—An indentation in the coastline that does not satisfy the semicircle test (fig. 4). See *Semicircular Rule, Open Bay.*

Small-Scale Chart.—A relative term, but generally one covering a large area on the ground. In Coast Survey usage, a scale of 1:100,000 (1 inch on chart=100,000 inches on the ground) or smaller would fall in this classification. See *Large-Scale Chart.*

Sounding Datum.—Same as *Chart Datum.*

Sovereign Rights.—Under the 1958 Geneva Convention, the rights which a coastal nation exercises over its continental shelf for the purpose of exploring it and exploiting its natural resources, without affecting the freedom of the superjacent waters and the airspace above. See *Convention on the Continental Shelf.*

Special Master.—An umpire or referee appointed by a court to take evidence and to make recommendations to the court based on his findings. In the *California* case, the Supreme Court named a Special Master to take evidence and make recommendations for determining the federal-state boundary along the California coast under *United States* v. *California.* See *Report of Special Master, Decision of June 23, 1947.*

Spring Tides.—Tides of increased range occurring semimonthly as the result of the moon being new or full; that is, when sun, moon, and earth are in line (*see* fig. 19). Tides during these periods rise higher and fall lower than during the rest of the month. See *Moon's Phase.*

Stare Decisis.—Literally, to stand by decided matters, or let the decision stand. The doctrine of *stare decisis* or precedent is a creation of the common law system of jurisprudence and is based on the theory that the principle underlying the decision in one case should control decisions in like cases in the same court or in lower courts within the same jurisdiction. International law does not recognize this principle and decisons of the International Court of Justice (the *Anglo-Norwegian Fisheries* decision, for example) have no binding force except between the parties to the proceeding, as laid down in Art. 59 of the Court's Statute.

State Department Letter of Feb. 12, 1952.—Sets forth Department's position with regard to delimitation of territorial waters, in the light of the *Anglo-Norwegian Fisheries* case (*see* Appendix D). The letter was made a part of the record of the hearings before the Special Master in the *California* case. See *Baseline, Anglo-Norwegian Fisheries Case, State Department Letter of Nov. 13, 1951.*

State Department Letter of Nov. 13, 1951.—Sets forth position of the United States as to principles governing the delimitation of territorial waters of the United States (*see* Appendix D). The letter was made a part of the record of the hearings before the Special Master in the *California* case. See *Baseline, State Department Letter of Feb. 12, 1952.*

Status Quo.—The existing state.

Statute Mile.—5,280 feet or 1,609.3 meters.

Statutory Interpretation.—An interpretation of the meaning of a legislative act based upon the wording and the legislative history of the act in order to arrive at the intent of the legislative body where the act on its face is inconclusive.

Straight Baselines.—A system of straight lines drawn along a coast between salient points—without following the sinuosities of the low-water mark—from which the territorial sea is measured (*see* fig. 14). The system is permissible where certain geographic situations obtain. See *United Kingdom* v. *Norway.*

Strait as a Channel of Communication to an Inland Sea.—Rules regarding bays apply according to United States position (Appendix D). See *Strait as an International Highway.*

Strait as an International Highway.—A strait connecting two parts of the high seas and used for international navigation (*see* fig. 15). Does not depend upon the volume of traffic nor on its relative importance to international navigation. So held in the *Corfu Channel* case. The 1958 Geneva Conference on the Law of the Sea extended this concept to include straits that connect the high seas with the *territorial sea* of a foreign State (fig. 38). See *United Kingdom* v. *Albania, Strait of Tiran.*

Strait, Geographical.—See *Geographical Strait.*

Strait, International.—See *International Strait.*

Strait Leading to Inland Water.—See *Strait as a Channel of Communication to an Inland Sea.*

Strait of Tiran.—A narrow waterway at the entrance to the Gulf of Aqaba, which is bordered by Egypt, Saudi Arabia, Jordan, and Israel. The strait was the background for the 1958 Geneva Conference adopting a provision extending the right of innocent passage to straits connecting the high seas and the territorial sea of a foreign State. See *Strait as an International Highway, Innocent Passage.*

Subject to the Regime of Internal Waters.—Subject to the rules and regulations governing internal waters. A phrase used by the Court in the *Anglo-Norwegian Fisheries* case as an element of justification for the use of straight baselines by Norway for defining its marginal belt. See *United Kingdom* v. *Norway, Inland Waters.*

Subjoinder.—An additional remark placed after a main provision in a convention, arbitration, etc.

Subjoined.—See *Subjoinder.*

Submarine Valley (also called Seavalley).—A depression in the sea bottom of broad valley form without the steep side slopes which characterize a canyon (*see* fig. 11).

Submerged Lands.—Lands covered by water at any stage of the tide, as distinguished from tidelands which are attached to the mainland or an island and cover and uncover with the tide. Tidelands presuppose a high-water line as the upper boundary, submerged lands do not. See *Tidelands, Submerged Lands Cases, Offshore Submerged Lands.*

Submerged Lands Act.—Same as *Public Law 31.*

Submerged Lands Cases.—The three cases involving rights in submerged lands underlying the ocean and outside the inland waters of California, Louisiana, and Texas. See *Decision of June 23, 1947, Decision of June 5, 1950.*

Subsequently Admitted States.—States admitted to the Union after the Union was formed, for example, Louisiana, California, and Texas.

Subsoil.—The indefinite penetration below the seabed. See *Seabed.*

Substantive.—Matters which affect the fundamental rights of a controversy as distinguished from matters which affect the form only. See *Procedural.*

Summary Denial.—A denial by a court of the right of a party to file a complaint. In the *Alabama* and *Rhode Island* cases, the Supreme Court denied the motions of Alabama and Rhode Island for leave to file complaints challenging the constitutionality of Public Law 31. See *Decision of Mar. 15, 1954.*

Superjacent Waters.—Refers to the waters above the continental shelf. See *Epicontinental Sea.*

Supra.—Above. The word when used in a book has reference to a previous part of the book—for example, a reference in note 12 to note 6 would be given as "*supra* note 6." See *Infra.*

T

Tellurometer Traverse.—Measuring the distance between points with a tellurometer—an instrument utilizing electronic methods.

Ten-Mile Rule.—The rule which limits inland waters at coastal indentations to a 10-mile headland distance. For indentations 10 miles or less at the entrance a headland-to-headland line would mark the limits; for indentations wider than 10 miles, the limits would be a line drawn across the bay in the part nearest the entrance at the first point where the width does not exceed 10 miles. See *Inland Waters, Semicircular Rule, Twenty-Four-Mile Rule.*

Termini at Headlands.—The points on shore (the low-water mark in the international law of the sea) between which the closing line at indentations is drawn to mark

the seaward limits of inland waters (fig. 12). See *Closing Line, Headland-to-Headland Line, Inland Waters.*

Territorial Limits.—The seaward limits of a littoral nation over which it has exclusive jurisdiction. See *Marginal Sea.*

Territorial Sea.—Same as *Marginal Sea.*

Territorial Waters.—Includes the territorial sea (marginal sea) and the inland waters of a country (lakes, rivers, bays, etc.). Sometimes used as synonymous with Territorial Sea.

Texas Boundary Act.—An act passed by the Texan Congress, Dec. 19, 1836, describing its seaward boundary as extending 3 leagues from land. This, together with the 3-league provision in the Treaty of Guadalupe Hidalgo, was the basis for the Supreme Court's holding that Texas was entitled to a grant of submerged lands extending a distance of 3 leagues from its coastline under Public Law 31. See *Treaty of Guadalupe Hidalgo, Decision of May 31, 1960.*

Texas Case.—See *United States* v. *Texas.*

Texas Decision (1960).—See *United States* v. *Louisiana et al.*

Thalweg Doctrine.—An international law concept which defines water boundaries between States by the middle of the deepest or most navigable channel, as distinguished from the geographic center or a line midway between the banks.

Theory of Equivalence.—An area equivalence used in connection with the semicircular rule. See *Semicircular Rule.*

Thirteen Original Colonies.—See *Thirteen Original States.*

Thirteen Original States.—The Thirteen Original Colonies who upon revolt from the British Crown became sovereign, independent states. They include New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia.

Three-League Boundary.—The maximum seaward boundary allowable for any state along the Gulf coast under Public Law 31. See *Marine League, Decision of May 31, 1960.*

Three-Mile Limit.—See *Marginal Sea.*

Three-Mile Marginal Belt.—Same as *Three-Mile Limit.*

Three-Mile Marine Belt.—Same as *Three-Mile Limit.*

Three-Mile National Boundary.—Same as *National Boundary.*

Tidal Boundary.—A boundary of land determined by the course of the tide and tied in with a specific phase of the tide; for example, *mean high water.* See *Phase, Mean High-Water Line, Mean Low-Water Line.*

Tidal Characteristics.—Primarily refers to the type of tide in a locality, that is, whether it is diurnal, semidiurnal, or mixed, for purposes of reducing short period observations to mean values. In considering the characteristics at a particular place, they would include the range and the time. See *Type of Tide.*

Tidal Datums.—Vertical datums defined by a phase of the tide—for example, high water—and used as a reference plane for heights on land and depths in the sea, and in the demarcation of waterfront boundaries. The Coast and Geodetic Survey level net is based

on the datum of mean sea level, but in its hydrographic work, including soundings on charts and tidal predictions, a low-water datum is used—mean low water for the Atlantic and Gulf coasts and mean lower low water for the Pacific coast. For defining tidal boundaries, mean high water and mean low water are used. See *Mean Sea Level, Mean Low Water, Mean High Water, Mean Lower Low Water.*

Tidal Day (also called Lunar Day).—The time of the rotation of the earth with respect to the moon, or the interval between two successive upper transits of the moon over the meridian of a place. The mean tidal day is approximately 24.84 solar hours in length.

Tidal Plane.—See *Tidal Datums.*

Tide.—The periodic rising and falling of the waters of the earth that result mainly from the gravitational attraction of the moon and sun acting upon the rotating earth. See *Tide-Producing Force.*

Tidelands.—The land that is covered and uncovered by the daily rise and fall of the tide. More specifically, it is the zone between the mean high-water line and the mean low-water line along a coast, and is commonly known as the "shore" or "beach." Referred to in legal decisions as between ordinary high-water mark and ordinary low-water mark. Tidelands presuppose a high-water line as the upper boundary. See *Ordinary Tides, Submerged Lands, Borax Consolidated, Ltd.* v. *Los Angeles.*

Tide-Producing Force.—That part of the gravitational attraction of a heavenly body which is effective in producing the tides on earth. The sun and moon are the principal astronomic bodies that have a tide-producing effect. The force varies approximately as the mass of the attracting body and inversely as the cube of its distance. The tide-producing force exerted by the sun is a little less than one-half that of the moon. See *Tide.*

Tide Tables.—Tables which give daily predictions of the times and heights of the tide at various reference stations, and tidal differences and constants by which additional predictions can be obtained for numerous other places.

Tidewaters.—Waters subject to the rise and fall of the tide. Sometimes used synonymously with tidelands, but would be better to limit tidewaters to areas always covered with water. The amount of tide is immaterial. See *Tidelands.*

Topographic Survey (Coast and Geodetic Survey).—A record of a survey, *of a given date,* of the natural features and the culture of a portion of the land surface and their delineation by means of conventional symbols. The topographic survey is the authority for the high-water line and all information inshore of that line including geographic names of topographic features. See *Photogrammetric Survey.*

Tracé Parallèle.—See *Replica Line.*

Traditional Position of the United States.—Refers to the fixing of the baseline for the marginal sea, and to the 3-mile width of the sea (Appendix D). See *Marginal Sea, Baseline, Strait as a Channel of Communication to an Inland Sea.*

Treaty of 1818.—The Treaty of Oct. 20, 1818, between the United States and Great Britain, which contained a provision relative to fishing by United States nationals in the waters adjacent to the British dominions in America. See *North Atlantic Coast Fisheries Arbitration of 1910.*

Treaty of Guadalupe Hidalgo.—A treaty of peace between the United States and Mexico, consummated Feb. 2, 1848. Contained a provision that the boundary line between

the two republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande. See *Texas Boundary Act.*

Treaty of July 20, 1912.—Entered into between the United States and Great Britain accepting the award and recommendation of the tribunal in the North Atlantic Coast Fisheries Arbitration of 1910. See *North Atlantic Coast Fisheries Arbitration of 1910.*

Treaty of Paris.—The treaty of Sept. 3, 1783, by which Great Britain recognized the independence of the United States.

Triangulation.—A method of surveying in which the stations are points on the ground at the vertices of a chain or network of triangles, whose angles are observed instrumentally and whose sides are derived by computation from selected triangle sides called base lines, the lengths of which are obtained from direct measurement on the ground.

Tributary Waterway.—Any body of water that flows into a larger body.

True Bay.—An indentation of a coast of such configuration as to become a part of the inland waters of a country. See *Closed Bay, Semicircular Rule, Inland Waters.*

Truman Proclamation.—See *Presidential Proclamation of Sept. 28, 1945.*

Trust Doctrine.—The doctrine that the Federal Government holds the submerged lands under the open sea in trust for all the people of the United States. Advanced in the *Alabama* case challenging the constitutionality of Public Law 31, but Supreme Court held that Congress could grant away such lands. See *Decision of Mar. 15, 1954.*

Twelve-Mile Limit.—The limiting distance (4 leagues) from the coast at which U.S. revenue officers, under the Act of Mar. 2, 1799, may board vessels bound for a U.S. port to determine the character of the cargo. See *Zones Beyond the Marginal Sea.*

Twenty-Four-Mile Rule.—The rule adopted by the First Geneva Conference as the closing line for bays in place of the Ten-Mile Rule. See *Ten-Mile Rule, Closing Line.*

Type of Tide.—The characteristic form of the tide with special reference to the relation of the diurnal and semidiurnal waves. Tides are usually classified as *diurnal, semidiurnal,* and *mixed,* but there are no sharply defined limits separating the groups. See *Diurnal Tides, Semidiurnal Tides, Mixed Tides.*

U

Unclaimed Land.—Applied to submerged lands under the marginal belt by Justice Frankfurter in the *California* case. As such, a determination to claim by the United States becomes a political decision and not for the courts to decide.

Unilateral Action.—A one-sided action without formal agreement of other parties of equal standing—for example, the Presidential Proclamation of Sept. 28, 1945, relative to the continental shelf. See *Presidential Proclamation of Sept. 28, 1945.*

Unilaterally.—A one-sided action—for example, where a state extends its boundaries by the act of its own legislature without congressional approval.

United Kingdom v. Albania (I.C.J. Rept., 1949).—The case in which the International Court of Justice found Albania responsible for damages sustained by two British warships, which struck mines while proceeding through the North Corfu Channel at a point within the territorial waters of Albania, on the ground that the Corfu Channel is a strait used for international navigation between two parts of the high seas (*see* fig. 15). The

decision was invoked by the Government in the *California* case to uphold its contention that the channels along the southern California coast are straits connecting two parts of the high seas (*see* fig. 13) and therefore not part of the inland waters of California. See *Overall-Unit-Area, Decision of June 23, 1947.*

United Kingdom v. Norway (I.C.J. Rept., 1951).—The case in which the International Court of Justice on Dec. 18, 1951, upheld Norway's method of drawing straight baselines along its skjaergaard coast north of latitude 66°28′48″ N. for delimiting the inshore limits of its territorial sea (*see* fig. 14). The decision was invoked in the *California* case to justify the contention that the baseline for the marginal sea around the southern California coast should be drawn around the offshore islands (fig. 13). See *Overall-Unit-Area, Decision of June 23, 1947.*

United Nations Conferences on the Law of the Sea.—See *First Geneva Conference, Second Geneva Conference.*

United States-Canadian Compromise Proposal.—A joint proposal made by the two countries at the Second Geneva Conference which provided for a 6-mile territorial sea and an additional exclusive fishing zone of 6 miles after an interim 10-year period subject to certain conditions. See *United States Compromise Proposal.*

U.S. Coast Guard Lines.—See *Inland Rules of the Road, International Rules of the Road.*

United States Compromise Proposal.—The proposal offered by the United States at the First Geneva Conference and provided for a 6-mile territorial sea with the right of a coastal State to regulate fishing for an additional 6 miles, subject to certain historical fishing rights for foreign vessels. The compromise was between those desiring a 12-mile territorial sea and those wishing to continue with a 3-mile sea. See *United States-Canadian Compromise Proposal.*

United States v. California (332 U.S. 19).—The first of three Supreme Court cases involving rights in the submerged lands seaward of inland waters. See *Decision of June 23, 1947.*

United States v. Carrillo (13 F. Supp. 121).—A 1935 case which held that a crime committed inshore of the line Point Fermin-Huntington Beach (*see* fig. 10) was not committed on the high seas but within the limits of San Pedro Bay. Cited by California in the case before the Special Master to support its claim that San Pedro Bay was a historic bay. See *Historic Bay, Seven Segments.*

United States v. Curtiss-Wright Export Corp. (299 U.S. 304).—A 1936 case which laid down the doctrine that after the American Revolution the powers of external sovereignty passed from the Crown to the colonies in their collective capacity and not to them severally. Cited by the Court in the *California* case as the basis for the holding that the Thirteen Original Colonies did not acquire ownership of the 3-mile belt or soil under it. See *Decision of June 23, 1947, National External Sovereignty.*

United States v. Florida et al. (363 U.S. 121).—The separate opinion which the Supreme Court wrote upholding the 3-league Gulf boundary for Florida under Public Law 31. See *Public Law 31, Decision of May 31, 1960.*

United States v. Louisiana (339 U.S. 699).—The second of three Supreme Court cases involving rights in the submerged lands seaward of the inland waters. See *Decision of June 5, 1950, United States* v. *California.*

United States v. Louisiana et al. (363 U.S. 1).—The case against the States of Louisiana, Texas, Mississippi, Alabama, and Florida, arising under Public Law 31, in which the United States sought to establish its right to the submerged lands in the Gulf of Mexico beyond 3 geographic miles from the coastline. See *Public Law 31, Decision of May 31, 1960.*

United States v. Newark Meadows Improvement Co. (173 Fed. 426).—A 1909 case which held that the lines established by the U.S. Coast Guard to separate the areas where the Inland Rules of the Road apply from those where the International Rules apply have no application other than the purpose of determining what rules of navigation are to be followed. They do not define the limits of inland waters. See *Inland Waters, Inland Rules of the Road, International Rules of the Road.*

United States v. Texas (339 U.S. 707).—The third of three Supreme Court cases involving rights in the submerged lands seaward of inland waters. See *United States* v. *California, United States* v. *Louisiana, Decision of June 5, 1950.*

Upland.—Land above mean high-water mark and subject to private ownership, as distinguished from tidelands, the ownership of which is prima facie in the state but also subject to divestment under state statutes. See *Tidelands.*

V

Vancouver, George.—The English explorer who, during his voyage of discovery to the North Pacific Ocean, anchored off San Pedro Bay on Nov. 25, 1793, and took a bearing to a point on shore which he named Point Lasuen (fig. 9). See *Point Lasuen.*

Vertical Datum.—A reference point or plane to which elevations of the land or depths of the sea are tied. See *Tidal Datums.*

Vis-a-Vis.—As against, or opposite each other.

Vital Interest Concept.—A view advanced to sustain the right to a bay on historic grounds. Includes such elements as geographical configuration, economic interests, and the requirements of self defense. In the *Anglo-Norwegian Fisheries* case, the Norwegian system of straight baselines was approved on the grounds, among other things, of the rights founded on the vital needs of the population and attested by very ancient and peaceful usage. See *Historic Bay, United Kingdom* v. *Norway.*

W

Waterfront Boundaries.—See *Riparian Boundaries.*

Wave Refraction.—The process by which the direction of a wave is changed while moving in shallow water at an angle to the contours. The part of the wave advancing in shallower water moves more slowly than the part still advancing in deeper water, causing the wave crest to bend toward alinement with the underwater contours. Advanced by California in the case before the Special Master to show the effect of wave refraction in reducing the energy of waves entering the overall-unit-area claimed by California to be part of the inland waters of the state. See *Overall-Unit-Area, Seven Segments.*

World Aeronautical Charts.—A standard series of aeronautical charts for use in air navigation. Constructed on the Lambert conformal conic projection at a uniform scale of 1:1,000,000 and covering the land areas of the world. Charts 52 and 90, covering the northwest coast of Norway, and chart 404, covering the southern California coast, were introduced by the Government in the case before the Special Master to show the physiographic differences between the two coasts (fig. 16). See *Seven Segments, Overall-Unit-Area.*

World Court.—Same as *International Court of Justice.*

Z

Zones Beyond the Marginal Sea.—Areas beyond the 3-mile belt over which the United States has exercised jurisdiction for special purposes—for example, in connection with enforcement of customs regulations, and the National Prohibition Act of 1920 (*see* Appendix J). See *Twelve-Mile Limit, One Hour's Run From Shore, Customs-Enforcement Areas.*

APPENDIX B

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(In the following bibliography, books and journals are identified by capitals and small capitals, and articles are identified by italics. This follows the form used in the text.)

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APPENDIX C

Special Master's Report

(*This report of the Special Master in* United States *v.* California (*332 U.S. 19*), *is identified as No. 6, Original, October Term, 1952. It was submitted to the Supreme Court on October 14, 1952, and ordered filed on November 10, 1952. The numbers in brackets correspond to the pagination in the published report and are so cited in the text of this volume.*)

On December 3, 1951, the Court entered its order continuing the order of February 12, 1949, by which I was appointed Special Master herein and directing the Special Master "to conduct hearings and to submit to this Court with all convenient speed his recommended answers to the following questions, with a view to securing from this Court an order for his further guidance in applying the proper principles of law to the seven coastal segments enumerated in Groups I and II of the Master's Report of May 31, 1949, ordered filed June 27, 1949, pp. 1 and 2 of said Report." The three questions are:

> *Question 1.* What is the status (inland waters or open sea) of particular channels and other water areas between the mainland and offshore islands, and, if inland waters, then by what criteria are the inland water limits of any such channel or other water area to be determined? [2]
>
> *Question 2.* Are particular segments in fact bays or harbors constituting inland waters and from what landmarks are the lines marking the seaward limits of bays, harbors, rivers and other inland waters to be drawn?
>
> *Question 3.* By what criteria is the ordinary low water mark on the coast of California to be ascertained?

Hearings have been held and testimony taken in Washington, D.C., and Los Angeles, Calif., during January, February, March, and April of this year. No oral testimony offered by either side was excluded. Some proffered documents were excluded as within the reach of judicial notice. However, the order of December 3, 1951 provided that any documents so excluded by the Special Master could be submitted in written form to the Court, to accompany, but not to be part of, the record of proceedings upon which the Master acted. By this procedure, no proffered documents were excluded from the Master's consideration. All proffered documents were either on the record or reached by the Master by way of judicial notice. Both parties have thus had unrestricted opportunity to present all the evidence, oral or written, that their own judgment dictated.[1]

1. The documents to which the respective parties have particularly directed the attention of the Master are listed at pages VI, VIII, IX, X, XI and XII of the Brief for the United States Before the Special Master, hereinafter referred to by the letters "U.S." followed by the page reference; at pages II, III and IV of the Reply Brief for the United States, hereinafter referred to as "U.S.R.," with the page reference; and at pages VI, VII and VIII of the Brief for the State of California in the Proceedings Before the Special Master, hereinafter referred to by the abbreviation "Cal." followed by the page reference.

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After full and painstaking consideration of the oral testimony and of the documents referred to as well as many other documents in the field of international law, and of the briefs and the authorities cited therein, I recommend answers to the three questions as follows:

Question 1: The channels and other water areas between [3] the mainland and the offshore islands within the area referred to by California as the "over-all unit area" [2] are not inland waters. They lie seaward of the baseline of the marginal belt of territorial waters, which should be measured in each instance along the shore of the adjoining mainland or island, each island having its own marginal belt.

Question 2: No one of the seven particular coastal segments now under consideration for precise determination and adjudication [3] is a bay constituting inland waters. The landmarks from which the lines marking the seaward limits (the straight-line segments of the baseline of the marginal belt) of bays, harbors, rivers and other inland waters are to be drawn as follows:

Bays

The extreme seaward limit of inland waters of a bay is a line ten nautical miles long. For indentations having pronounced headlands not more than ten nautical miles apart, and having a depth as hereinafter defined, a straight line is to be drawn across the entrance. Where the headlands are more than ten nautical miles apart, the straight line is to be drawn across the indentation at the point nearest the entrance at which the width does not exceed ten nautical miles. In either case the requisite depth is to be determined by the following criterion: The envelope of all arcs of circles having a radius equal to one-fourth the length of the straight line shall be drawn from all points around the shore of the indentation; if the area enclosed by the straight line across the entrance and the envelope of the arcs of the [4] circles is greater than that of a semicircle with a diameter equal to one-half the length of the line across the entrance, the waters of the indentation shall be regarded as inland waters; if otherwise, the waters of the indentation shall be regarded as open sea.

Harbors (Ports)

In front of harbors the outer limit of inland waters is to embrace an anchorage reasonably related to the physical surroundings and the service requirements of the port, and, absent contrary evidence, may be assumed to be the line of the outermost permanent harbor works.

River Mouths

Where rivers empty into the sea, the seaward limit of inland waters is a line following the general direction of the coast drawn across the mouth of the river whatever its width. If the river flows into an estuary, the rules applicable to bays apply to the estuary.

2. Second chart opposite p. 30 of California's brief in this Court of July 31, 1951, entitled "Brief in Relation to Report of Special Master of May 22, 1951," and Chart Cal. Exhs. A and B.

3. See Appendix I, Report of Special Master under Order of June 27, 1949.

Landmarks

Where pronounced headlands exist at tributary waterways, the appropriate landmark is the point of intersection of the plane of ordinary low water with the outermost extension of the natural headland. Where there is no pronounced headland, the landmark is the point of intersection of the ordinary low-water mark with a line bisecting the angle between the general trend line of the ordinary low-water mark along the open coast and the general trend line of the ordinary low-water mark along the shore of the tributary waterway.

Question 3: The "ordinary low-water mark on the coast of California" is the intersection with the shoreline (as it exists at the time of survey) of the plane of the mean of all [5] low waters, to be established, subject to the approval of the Court, by the United States Coast & Geodetic Survey from observations made over a period of 18.6 years.

The occasion for determination of these three questions by judgment of the Court arises in this way:

It had long been settled that individual states of the Union own in trust for their people the navigable tidewaters between high and low-water mark, and the soil or "tidelands" under them—*i.e.,* the shore that is covered and uncovered by the regular flow and ebb of the tides (*United States* v. *California,* 332 U.S. 19, 30; *Pollard* v. *Hagan,* 3 How. 212). California sought to have the *Pollard* rule of State ownership extended beyond the tidelands out into the soil beneath the marginal belt of territorial sea. The Court, refusing to thus transplant the *Pollard* rule, held that the Federal Government rather than the State has paramount rights in and power over the marginal belt, and full dominion of the resources of the soil under it. In its decree the Court defined the things embraced within this Federal right as "the lands, minerals and other things underlying the Pacific Ocean lying seaward of the ordinary low-water mark on the coast of California, and outside of the inland waters." Thus the line of demarcation between the tidelands owned by the State and the soil under the marginal belt over whose resources the United States has full dominion, is, under the Court's decision, "the ordinary low-water mark on the coast of California," subject only to the exception that wherever this low-water mark is interrupted by inland waters the seaward boundary of the inland water replaces the low-water line as an interpolated straight-line segment of the line of demarcation.

When the Court has answered Question 3 above as to how the low-water mark is to be chosen, the precise locations of those portions of the desired line of demarcation which are [6] the low-water marks can readily be fixed by appropriate survey. It is the fixing of the interpolated segments where the low-water mark is interrupted by inland waters that calls for adjudication of Questions 1 and 2.

As to Questions 1 and 2, the parties agree in recognizing that the determination of the demarcation line at which inland waters end and the marginal sea begins also determines the exterior limit of the marginal belt and therefore involves a question of the territorial jurisdiction of the United States as against foreign nations, *i.e.,* a question of external sovereignty.[4] In my consideration of appropriate answers to these questions I have understood that there is no controversy here as to the State's ownership—the status as inland waters—of bays not more than ten nautical miles wide and deep enough to meet

4. U.S. 20; Cal. Brief of July 31, 1951, p. 11.

the geometric formula (the Boggs formula) adopted in this case by the United States to measure its disclaimer.[5] And in formulating my recommendations I have assumed that appropriate answers to these questions of external sovereignty, involving as they do the degree of encroachment by the United States upon the open sea, depend upon whether any greater area of inland waters than is here conceded by the United States exists on the coast of California either by (1) any customary, generally recognized rule of international law which, like the three-mile marginal belt rule, for instance, exists for each country without needing the support of any particular assertion of right, or by (2) effective assertion by the United States on its own behalf in its international relations.[6]

[7] Except for the special case of historical bays, and a minor point not now in significant controversy here as to an appropriate measure of the depth of indentation of a "bay" (see post pp. 25–26), it is implicit in the positions taken by each of the parties, and in the documentary records to which they direct attention, that there is no customary, generally recognized rule of international law which establishes automatically as a matter of common right the criteria by which the baseline of the marginal belt is to be located.

Counsel for the United States, in support of the criteria they propose, stand fundamentally on the ground that the United States by effective assertion on its own behalf has established in its international relations the rule that the marginal belt is measured from the physical shore of the mainland, or of offshore islands, not from straight lines drawn from headland to headland or from point to point, but following the sinuosities of the coast except for deep indentations, such as bays, gulfs or estuaries, no more than ten miles wide. They do not, however, advance these criteria on the ground that they have acquired the authority of general rules of international law. Their position is that these criteria are in accord with the present and the traditional policy of the United States; that they are not in conflict with any established principles of international law; [8] that international law leaves the method of delimiting territorial waters to the national state within wide limits, and that these allowable limits clearly embrace the criteria here relied upon by the United States (U.S. 90). They say, correctly enough, that California's insistence upon more extensive areas of inland waters amounts to recognition that the criteria proposed by the United States *do not go beyond* what is permissible under international law.

California, on the other hand, proposes that the United States now adopt as the baseline of its marginal belt a line, referred to as the "exterior" or "political" coastline, running outside "all ports, bays, harbors, and other bodies of inland waters and along the seaward side of the outlying rocks and islands"; but it does not contend that any customary, generally recognized rule of international law *requires* such a line. Its position is not that

5. In any case, the areas disclaimed would be held inland waters under the ruling recommended in this report.

6. In recommending answers to the three propounded questions for "guidance in applying the appropriate principles of law to the seven coastal segments enumerated," I have assumed that the purpose in hand is the judicial determination of applicable principles of law to serve as guides in the physical locating of the line of demarcation between the State-owned tidelands and the federally owned submerged bottom of the marginal belt; not the determination of what might or might not be a wise policy for the nation to adopt within this field for which the political, not the judicial, agencies of government are responsible (*cf. United States* v. *California,* 332 U.S. 19, 40; *The Paquette Habana,* 175 U.S. 677, 700). I remain of the conviction (reflected in my report of May 31, 1949 at page 5, and again in my report of May 22, 1951 at page 2) that the Court has already held that the location of the exact coastal line is a justiciable matter (332 U.S. 26). Counsel's argument that the Court's act in referring these questions back to the Special Master for recommended answers carries the implication that I should base my recommendations on what I think might be a wise policy for the United States to pursue within the limits of international law, has not appealed to me at all (*cf.* post pp. 29, 40, 42–43).

international law imposes an obligation on the United States to adopt the criteria California proposes, but rather that there is no rule of international law that would prevent the United States from adopting those criteria if it should desire to do so. Thus California's position as to the non-existence of any customary, generally recognized, and limiting rule of international law on this point coincides with the position of the United States.

The absence from international law of any customary, generally accepted rule or rules fixing the baseline of the marginal belt is, indeed, conspicuous. At The Hague Conference of 1930, a carefully prepared attempt was made to reach agreement on some such rules among the maritime nations there represented, but the attempt failed. The recent decision of the International Court in the United Kingdom-Norway controversy seems to make a step in that direction, and it may be that by such judicial procedure further progress may eventually be made in this presently [9] undefined area of international law. But for the time being it must be conceded that no such customary or generally recognized rule exists.

Under these circumstances, adjudication of the status of the water areas here in controversy must depend upon whether there has been effective assertion by the United States in its international relations of the criteria proposed by California; and this question will be answered by judicial examination of prior actions of the United States, having due regard to relevant principles of international and domestic law (*Vermilya-Brown Co.* v. *Connell,* 335 U.S. 377, 380–381).

The Present and Past Position of the United States

Turning, then, to the question whether the criteria proposed by California are supported by any effective assertion by the United States on its own behalf in international relations, we have first to examine the testimony and the documentary records in this regard.

Counsel for the United States put into the record before the Special Master a letter dated November 13, 1951, and a supplementing letter of February 12, 1952, from the Secretary of State to the Attorney General (U.S. Appendix pp. 167–175).

The first of these letters is a statement from the Department of State in response to a request from the Attorney General, of the position of the United States as to principles or criteria which govern the delimitation of the territorial waters of the United States. The Attorney General asked in particular how such delimitation is made in the case of:

(a) A relatively straight coast, with no special geographic features, such as indentations or bays;
(b) A coast with small indentations not equivalent to bays; [10]
(c) Deep indentations such as bays, gulfs or estuaries;
(d) Mouths of rivers which do not form an estuary;
(e) Islands, rocks or groups of islands lying off the coast;
(f) Straits, particularly those situated between the mainland and offshore islands.

The supplementing letter was in response to an inquiry from the Attorney General as to whether, in the light of the decision of the International Court of Justice in the Fisheries case in December 1951 (*United Kingdom* v. *Norway*), the State Department adheres to the statement of position in its letter of November 13, 1951.

The letter of November 13, 1951, after noting that the Department of State, in the formulation of United States policy with respect to territorial waters and their delimitation, "has been and is guided by generally accepted principles of international law and by the practice of other states in the matter" (167–168), said, with respect to item (a)—a relatively straight coast, with no special geographic features, such as indentations or bays—that the Department of State "has traditionally taken the position that territorial waters should be measured from the low-water mark along the coast" (168).[7] As to item (b)—a coast with small indentations not equivalent to bays—the letter says that the Department of State has taken the position that "the base line follows the indentations or sinuosities of the coast, and is not drawn from headland to headland" (169). As to item (c)—a coast presenting deep indentations—the letter says (169) that the determination of the baseline in such cases has frequently given rise to controversies, but:

> "The practice of states, nevertheless, indicates substantial agreement with respect to bays, gulfs or [11] estuaries no more than 10 miles wide; the base line of territorial waters is a straight line drawn across the opening of such indentations, or where such opening exceeds 10 miles in width, at the first point therein where their width does not exceed 10 miles."

And the Department notes that the 10-mile rule is subject to the special case of historical bays (169–170). As to item (d)—mouths of rivers which do not flow into estuaries—the Department mentions the report of the Second Sub-Committee at The Hague Conference of 1930 as having "agreed to take for the baseline a line following the general direction of the coast and drawn across the mouth of the river, whatever its width (*Acts of Conference,* 220)." There is no dispute between the parties as to this item. As to item (e)—islands, rocks or groups of islands lying off the coast—the letter says (171) that at The Hague Conference of 1930 the United States took the position that "Each island, as defined, was to be surrounded by its own belt of territorial waters measured in the same manner as in the case of the mainland (*Acts of Conference,* 200)." As to the definition of an island the letter says that "separate bodies of land which were capable of use should be regarded as islands," and notes that the report of the Second Sub-Committee defined an island "as a separate body of land, surrounded by water, which was permanently above high water mark, and approved the principle that an island, so defined, had its own belt of territorial sea (*Acts of Conference,* 219)." As to item (f)—straits, particularly those situated between the mainland and offshore islands—the letter (172) says that the United States took the position at the Conference that "if a strait connected two seas having the character of high seas, and both entrances did not exceed six nautical miles in width, all of the waters of the strait should be considered territorial waters of the coastal state. In the case of openings [12] wider than six miles, the belt of territorial waters should be measured in the ordinary way (*Acts of Conference,* 200–201)." The straits here in controversy are of this character, i.e., the openings are wider than six miles. The Department noted that the Second Sub-Committee:

> "* * * specified in its observations on this subject that the waters of a strait were not to be regarded as inland waters, even if both belts of territorial waters and both shores belonged to the same state (*Acts of Conference,* 220). In this, it supported the policy of the United States to oppose claims to exclusive control of

7. Each of the assertions of this letter is fortified by references to specific instances in which the position is said to have been asserted or maintained.

> such waters by the nation to which the adjacent shore belonged. * * * With respect to a strait which is merely a channel of communication to an inland sea, however, the United States took the position, with which the Second Sub-Committee agreed, that the rules regarding bays should apply (*Acts of Conference,* 201, 220)."

And here again, the Department noted that the principles applicable to bays and straits "have no application with respect to the waters of bays, straits, or sounds, when a state can prove by historical usage that such waters have been traditionally subjected to its exclusive authority."

In the supplementary letter of February 12, 1952, with reference to the decision of the International Court of Justice in the *Fisheries* case, the Department said that it adheres to the statement of position given in the letter of November 13, 1951. The Department noted that in the *Fisheries* case the International Court of Justice held that Norway's fixing of the baselines for the delimitation of Norwegian fisheries by applying the straight baselines method had not violated international law, especially in view of the peculiar geography of the Norwegian coast and of the consolidation of this method by a constant and sufficiently long practice, but it said that the decision—

> [13] "does not indicate, nor does it suggest, that other methods of delimitation of territorial waters such as that adopted by the United States are not equally valid in international law. The selection of the baselines, the Court pointed out, is determined on the one hand by the will of the coastal state which is in the best position to appraise the local conditions dictating such selection, and on the other hand by international law which provides certain criteria to be taken into account such as the criteria that the drawing of baselines must not depart to any appreciable extent from the general direction of the coast, that the inclusion within those lines of sea areas surrounded or divided by the land formations depends on whether such sea areas are sufficiently closely linked to the land domain to be subject to the regime of internal waters, and that economic interests should not be overlooked the reality and importance of which are clearly evidenced by long usage.
>
> "In the view of the Department, the decision of the International Court of Justice in the Fisheries case does not require the United States to change its previous position with respect to the delimitation of its territorial waters. It is true that some of the principles on which this United States position has been traditionally predicated have been deemed by the Court not to have acquired the authority of a general rule of international law. Among these are the principle that the baseline follows the sinuosities of the coast and the principle that in the case of bays no more than 10 miles wide, the baseline is a straight line across their opening. These principles, however, are not in conflict with the criteria set forth in the decision of the International Court of Justice. The decision, moreover, leaves the choice of the method of delimitation applicable under such criteria to the national state. The Department, accordingly, adheres to its statement of the position of the United States, with respect to delimitation of its territorial waters in date of November 13, 1951" (174–175).

[14] *Bays*

The Department of State in its letter of November 13, 1951 first cites (168) a letter from Secretary of State Bayard to Secretary of the Treasury Manning of May 28, 1886 (U.S. Appendix 175–181). The first part of this letter is directed to the limitation of the marginal belt to a width of three miles; a question which is not here in controversy.

Following that, Secretary Bayard directs his attention to the question "Whether the line which bounds seaward the three-mile zone follows the indentations of the coast or extends from headland to headland * * *" (177). He says that "The headland theory, as it is called, has been uniformly rejected by our Government, * * *" and notes (176) in support of this assertion the opinions expressed in diplomatic correspondence by various Secretaries of State; a statement of Judge Woolsey in his work on international law, and an opinion of Umpire Bates of the London Commission of 1853.[8] He adds, referring to the so-called headland theory:

> "This doctrine is new and has received a proper limit in the convention between France and Great Britain of the 2d of August, 1839, in which it is equally agreed that the distance of three miles fixed as the general limit for the exclusive right of fishery upon the coasts of the two countries shall, with respect to bays the mouths of which do not exceed ten miles in width, be measured from a straight line drawn from headland to headland.
>
> * * * * * * *
>
> "We may therefore regard it as settled that, so far as concerns the eastern coast of North America, the [15] position of this Department has uniformly been that the sovereignty of the shore does not, so far as territorial authority is concerned, extend beyond three miles from low-water mark, and that the seaward boundary of this zone of territorial waters follows the coast of the mainland, extending where there are islands so as to place round such islands the same belt. This necessarily excludes the position that the seaward boundary is to be drawn from headland to headland, and makes it follow closely, at a distance of three miles, the boundary of the shore of the continent or of adjacent islands belonging to the continental sovereign" (177–178).

At the end of his letter Secretary Bayard said:

> "These rights we insist on being conceded to our fishermen in the northeast, where the mainland is under the British sceptre. We cannot refuse them to others on our northwest coast, where the sceptre is held by the United States" (181).

The controversy between Great Britain and the United States to which Secretary Bayard's words refer lasted throughout the nineteenth century; indeed, from the Treaty of Paris to the Treaty of July 12, 1912 following the decision and recommendations of the Arbitration Tribunal of September 7, 1910 in the *North Atlantic Coast Fisheries* case.[9] It gave occasion for the United States repeatedly to assert its position as to the location of the baseline of the marginal belt. The position maintained by the United States throughout the controversy was that the line of demarcation is the low-water mark following the sinuosities of the coast, excluding any straight-line measurement from headland to headland of bays. The arbitration was on a clause of the Treaty of October 20, 1818 which provided that "the United States hereby renounce forever, any liberty heretofore enjoyed or claimed by the inhabitants [16] thereof, to take, dry, or cure fish on, or within three marine miles of any of the coasts, bays, creeks, or harbors of His Britannic Majesty's dominions in

8. These letters of the Secretaries asserted the three-mile limitation of the marginal belt. They spoke of the three miles as measured from the "shore" (U.S. 55–56) and two of them, Jefferson in 1793 and Pickering in 1796, spoke of "landlocked" bays (U.S. 77, 78 and post p. 24). The Bayard letter (177) includes relevant quotations from Judge Woolsey and from Umpire Bates.

9. See Jessup, P. C., *The Law of Territorial Waters and Maritime Jurisdiction*, p. 363 *et seq.*

America not included within the above mentioned limits." The British representatives interpreted this treaty provision to exclude American fishermen from all bays regardless of their size and claimed that the limit described in the treaty should be measured three miles from a line drawn from headland to headland. The United States contended that the word "bays" in the treaty meant those smaller indentations which would naturally be classed with creeks and harbors. Mr. Elihu Root, speaking for the United States, advocated the six-mile rule for measuring bays; limiting the headland-to-headland doctrine by the three-mile rule. The decision of the Court of Arbitration on this question was unfavorable to the United States. The American interpretation of the Treaty of 1818 was rejected and the Court held that:

> "In case of bays, the three marine miles are to be measured from a straight line drawn across the body of water at the place where it *ceases to have the configuration and characteristics of a bay.* At all other places the three marine miles are to be measured following the sinuosities of the coast." (Italics supplied.)[10]

Expressing, however, the feeling that though this decision was correct in principle, it was "not entirely satisfactory as to its practical applicability," the Arbitration Tribunal went on to recommend, as it was empowered to do, that the parties to the controversy should agree specifically as to the exclusive fishing rights in certain named bays, and that:

> "1. In every bay not hereinafter specifically provided for the limits of exclusion shall be drawn three miles seaward from a straight line across the bay in the part nearest the entrance at the first point where the width does not exceed ten miles."

[17] This recommended disposition of the dispute was incorporated in the Treaty of 1912 between the United States and Great Britain (Senate Document 348, 61st Congress, 4th Session, Vol. 3, 2635).

The ten-mile rule incorporated in the 1912 treaty was thus a recession by the United States from its position that inland waters were limited by the three-mile marginal belt rule to bays six miles wide. In the 1912 treaty the ten-mile rule was accepted by the United States as a "proper limit" upon the headland-to-headland doctrine, to use the expression chosen by Umpire Bates in 1853 (post p. 19) and adopted by Secretary Bayard in his letter of May 28, 1886 (U.S. Appendix 177–178).

The rule had a very considerable background, particularly in the usage of Great Britain and other countries bordering on the North Sea with respect to fisheries. The Arbitration Tribunal in recommending the ten-mile rule expressly took into consideration[11] the fact that Great Britain had adopted the rule in treaties with France and with the North German Confederation and the German Empire, and likewise in the North Sea Convention; that it had on various occasions in the course of negotiations with the United States proposed and adopted the rule in instructions to its Naval Officers stationed on the northeastern coast, and that the rule had already formed the basis of a treaty between Great Britain and the United States, negotiated in 1888 by Secretary Bayard.[12] Dr. Drago dissented from the majority award of the Arbitration Tribunal, believing that it should have adopted the ten-mile rule as to bays. His dissenting opinion quotes the provisions of

10. *Ibid.*, p. 377.
11. *Ibid.*
12. This treaty was never ratified by the Senate.

a series of these British treaties and regulations incorporating that rule in 1839, 1843, 1867, 1868, 1874, 1882 and [18] 1887[13] and refers also to the unratified Treaty of 1888.

It appears from the historic documents referred to by Jessup and others that throughout the nineteenth century Great Britain adhered to the idea of following the sinuosities of the coast, but sometimes proposed the more restrictive six-mile rule.[14] One instance of this was a question asked in Parliament on February 25, 1907 in which the Foreign Office, Admiralty, the Colonial Office, the Board of Trade and the Board of Agriculture and Fisheries, stated, perhaps as a minimum, the six-mile rule.[15] In connection with it Dr. Drago referred to the comment of John Bassett Moore in a letter quoted in 13 (1894–95) *Annuaire de L. S. Institute de Droit Int.*, p. 146, to the effect that the ten-mile rule was no more than a practical application of the six-mile rule to the necessities of fishermen.[16] And Dr. Drago (111) expressed his opinion that:

> "The six miles are the consequence of the three miles marginal belt of territorial waters in their coincidence from both sides at the inlets of the coast, and the ten miles far from being an arbitrary measure are simply an extension, a margin given for convenience to the strict six miles for fishery purposes."

[19] In February 1853 Umpire Bates in the case of *The Washington* had reached the same conclusion as that of Dr. Drago's dissent. He rejected the contention of the British Government that the term "bays" in the Treaty of 1783, which used the same words as the Treaty of 1818, included the waters landward of lines drawn from headland to headland along the coast, using the expression subsequently adopted by Secretary Bayard in his letter of May 28, 1886, that "This doctrine [of headlands] is new, and has received a proper limit in the convention between France and Great Britain of the 2d of August 1839," which incorporated the ten-mile rule (IV Moore, *International Arbitrations*, 4342; I Moore, *Digest of International Law*, 785, 786). The Netherlands in its neutrality proclamation during the Russo-Japanese War adopted the ten-mile rule.[17] In 1903 the United States took the position in the Alaska Boundary Arbitration that a ten-mile limit for bays is proper (7 *Alaska Boundary Arbitrations*, S. Doc. 162, 58th Congress, 2d Session, p. 844). A French law of March 1, 1888 regulating fisheries incorporated the ten-mile rule (Crocker, 525–6).

The rule that the baseline of the marginal belt follows the sinuosities of the coast interrupted only by definitely limited straight lines across the mouths of bays has been widely commented upon and approved by jurists experienced in international law.[18] In 1894 the Institute of International Law adopted the principle that the territorial sea follows

13. Treaty between Great Britain and France, August 2, 1839; Regulations between Great Britain and France, May 24, 1843; Treaty between Great Britain and France, November 11, 1867; British Board of Trade Notice to fishermen under the regulation agreed to between Great Britain and the North German Confederation, November 1868, repeated in December 1874 under the arrangement between Great Britain and the German Empire; Treaty between Great Britain, Belgium, Denmark, France, Germany and The Netherlands for regulating the police of the North Sea Fisheries, May 6, 1882; British Order-in-Council, October 23, 1887 (*ibid.*, pp. 107–108).

14. *Ibid.*, 366, 380.

15. Pitt Cobbett, *"Cases and Opinions on International Law,"* Vol. I, p. 143, and this instance is noted by Dr. Drago in his dissenting opinion at pp. 110–111.

16. *Ibid.*, 356.

17. Jessup, 360; 1904, *For. Rel.*, U.S. 27.

18. The recommendations of the national and international associations referred to are accompanied in many cases by rather extensive comments in the journals and reports cited in the text.

the sinuosities of the coast except that it is measured from a straight line drawn across the bay. The limit incorporated in the rule was twelve marine miles rather than ten (Jessup, *The Law of Territorial Waters* [20] *and Maritime Jurisdiction,* 361; Crocker, *Extent of the Marginal Sea,* 148). In 1895 the International Law Association followed suit but used the ten-mile measure (*Transactions,* 1873–1924, 223). The Third Commission of the Second Hague Peace Conference in 1907 in its report relative to the laying of automatic submarine contact mines recommended the ten-mile rule (Scott, *Reports to The Hague Conference* of 1899 and 1907, 664; Crocker, 487, 491). And as Jessup notes (362) the League of Nations Committee of Experts for the Progressive Codification of International Law suggested in Article 4 the rule that the baseline of the marginal belt should follow the sinuosities of the coast except where it is interrupted by straight lines drawn across bays putting the limit at twelve marine miles.

The Secretary of State in his letter of November 13, 1951 further refers, in support of the ten-mile rule (U.S. Appendix 170) to the Research in International Law of the Harvard Law School. That research was organized in November 1927 for the purpose of preparing a draft of an international convention on certain subjects as to which the Council of The League of Nations, through its Preparatory Committee for the International Codification Conference, had addressed inquiries to various governments. Its report of 1929 recommended, in Article 5 of the section on the Law of Territorial Waters, Part III, the adoption of the ten-mile rule subject, of course, to the existence of so-called "historic bays" (Am. J. of Int. Law, Vol. 23, 1929, p. 265 *et seq.*). The wording of Article 5 was:

> "The seaward limit of a bay or river-mouth the entrance to which does not exceed ten miles in width is a line drawn across the entrance. The seaward limit of a bay or river-mouth the entrance to which exceeds ten miles in width is a line drawn across the bay or river-mouth where the width of the bay or river-mouth first narrows to ten miles."

[21] The article is followed by a rather full commentary by a distinguished group of American experts in the field of international law.

As the November 13, 1951 letter of the Secretary of State points out, the ten-mile rule was supported at The Hague Conference of 1930 by the United States, and it was incorporated in the Report of the Second Sub-Committee (*Acts of Conference,* 217–218).

On the foregoing facts I come without any embarrassment of doubt to the conclusion that, subject to the special case of historical bays, the United States has traditionally taken the position that the baseline of the marginal belt is the low-water mark following the sinuosities of the coast, and not drawn from headland to headland, except that at bays, gulfs or estuaries not more than ten miles wide the baseline is a straight line drawn across the opening of such indentations, or where such opening exceeds ten miles in width, at the first point therein where their width does not exceed ten miles; and that it has not in its international relations asserted the criteria proposed by California or any criteria that would mark as inland waters any greater water area on the coast of California than is here conceded by the United States, except for a possible but not now significant hiatus as to the depth of bays, discussed hereinafter (post pp. 25–26).

In thus reviewing the record and expressing the considerations which have led me to make the foregoing recommendations, I have not overlooked the fact that counsel for the United States take the position that this Court cannot go behind or disregard the State Department's declaration of what its policy now is or what it has been in the past

(U.S. 12–50). While I assume that with respect to what the policy of the United States now is in international relations this Court will accept without question the statement of the Secretary of State, I am not convinced that [22] the absolute statement of the rule by counsel for the United States (U.S. 36) as to what the policy of the United States has been in the past has no exceptions; particularly in view of the fact that, after all, the policy of the United States in its international relations is expressed perhaps more often by acts than by policy declarations, and here we are particularly concerned with what the policy was on October 28, 1947, when the decree in this case was entered. I do not think that any of the cases cited by counsel or any others that I have been able to find go quite that far (*cf. Vermilya-Brown Co.* v. *Connell,* 335 U.S. 377, 380). If I am wrong about that, and counsel for the United States are right, then the Court will act accordingly. In that event the conclusion would be the same as the one I have reached, although reached by a somewhat different route.

Counsel for the United States have also taken the position (U.S. 50–53) that Dr. Hudson's testimony in which he criticized the State Department's letters is irrelevant and should not be considered. I have not accepted that argument or followed that course. On the contrary, I have examined with the greatest care the testimony of Dr. Hudson (Tr. 65–214). I have not, however, found anything in it which significantly impeaches or contradicts anything in the two letters from the Secretary of State. I think that every criticism Dr. Hudson makes as to the accuracy of the recital by the Secretary of State of the traditional policy of the United States is more than amply covered by a remark included in the opinion of the International Court of Justice in the *Anglo-Norwegian Fisheries* case and quoted with approval, on different points of argument, both by counsel for the United States (U.S.R. 19) and by counsel for California (Cal. 50, fn. 13):

> "The Court considers that too much importance need not be attached to the few uncertainties or [23] contradictions, real or apparent, which the United Kingdom Government claims to have discovered in Norwegian practice."

It should be added that a great part of Dr. Hudson's testimony is taken up with his comments on the decision of the International Court of Justice in the *Anglo-Norwegian Fisheries* case (Tr. 70–108). He noted in his comments, as the Secretary of State noted in his supplementing letter of February 12, 1952, that the principles (1) that the baseline follows the sinuosities of the coast and (2) that in the case of bays not more than ten miles wide the baseline is a straight line across their opening, were deemed by the International Court not to have acquired the authority of a general rule of international law. That may be assumed to be true. Although the rule has been adopted by Great Britain and the other countries bordering the North Sea, except Norway, and by the United States, it does not by any means appear that it has been adopted universally by maritime nations. Indeed, counsel for California in their brief (Cal. 117) list a number of nations which are said to claim all bays without regard to their size or configuration.

The above-discussed present and traditional position of the United States in its international relations corresponds, so far as it goes, with the position taken here by counsel for the United States as to the appropriate answers to the questions under discussion. It does not go the whole way as to the criteria which determine whether a coastal indentation is a bay constituting inland waters, because the position of the State Department does

not include any particular formula or method for determining whether the coastal indentation is sufficiently deep to have the character of a bay.

The concept of a bay as inland waters over which a country has some natural or reasonable right to exercise exclusive [24] jurisdiction has often been expressed vaguely but understandably by use of the word "landlocked" (*cf.* 332 U.S. 34). Thus in a letter of November 8, 1793 to the British Minister (I Moore, *Digest of International Law*, 702–703) Mr. Jefferson referred to rivers and bays "as being landlocked, within the body of the United States." And on September 2, 1796, Mr. Pickering (*ibid.* 704) excepted from the marginal belt "any waters or bays which are so landlocked as to be unquestionably within the jurisdiction of the United States, be their extent what they may," and in my opinion the same concept is reflected in the criterion expressed in the judgment of the International Court of Justice in the Fisheries case (p. 133) as the "idea, which is at the basis of the determination of rules relating to bays," namely, "whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters." But it is quite clear that this concept has not yet found concrete expression in any generally accepted rule or formula of international law.

On this subject the State Department letter of November 13, 1951 says, referring to The Hague Conference of 1930 (170):

> "It was understood by most delegations that, as a corollary to the adoption of this principle, a system would be evolved to assure that slight indentations would not be treated as bays (*Acts of Conference*, 218). The United States proposed a method to determine whether a particular indentation of the coast should be regarded as a bay to which the 10 mile rule would apply (*Acts of Conference*, 197–199). The Second Sub-Committee set forth the American proposal and a compromise proposal offered by the French delegation in its report, but gave no opinion regarding these systems (*Acts of Conference*, 218–219)."

[25] The statement reflects (1) the existence of the question: When is a coastal indentation deep enough or of such configuration as to constitute an area of inland waters, and (2) the fact that no consensus was reached on this question at The Hague Conference. The American proposal referred to in the State Department letter was the Boggs formula upon which counsel for the United States rely in these proceedings as an appropriate method of answering this question. But so little has the drawing of a precise line of demarcation between inland waters and the marginal belt engaged attention in international relations that there is nothing that could be thought of as an accepted rule of international law as to the required depth of inland bays. The concern of the members of the Second Sub-Committee at The Hague Conference of 1930 with this question, as well as their failure to reach any consensus about it, is reflected not only in the above quotation and in their failure to reach agreement, but also in the observation on bays (*Acts of Conference*, 218) that "Most delegations agreed to a width of ten miles provided a system were simultaneously adopted under which slight indentations would not be treated as bays." It is clear, however, from the letter of the Secretary of State of November 13, 1951 that the State Department is not now prepared to say that the Boggs formula represents either a present or traditionally a definitive position of the United States on this detail. The position of counsel for the United States in these proceedings is not that the geometric formula proposed at The Hague Conference, and upon which the United States now stands as an

appropriate measure, has been established either as a general rule of international law or even as the traditional position of the United States in international law (U.S. 35).

A question *might* arise, under such circumstances, as to the status of the waters of a coastal indentation less [26] than ten miles wide but not deep enough to satisfy the Boggs formula. But no such question has *arisen* in these proceedings.[19] California accepts, of course, the concession or disclaimer of the United States so far as it goes, and it has not called attention to any coastal indentation which would be admitted to the status of inland waters by the ten-mile rule without limitation but would be excluded from that status for lack of depth under the Boggs formula. This modicum of difference between the criteria urged in this case on behalf of the United States and any definitive position taken by the State Department in our international relations is, therefore, without present significance in this controversy. My recommendation is that the Boggs formula should be accepted, for the present purposes of this case, as an appropriate technical method of ascertaining whether a coastal indentation has sufficient depth to constitute inland waters within the limitations of the ten-mile rule.

Islands Lying Off the Coast

The letter from the Secretary of State of November 13, 1951 says (U.S. Appendix, pp. 167–175) that at The Hague Conference of 1930 the United States took the position that each offshore island was to be surrounded by its own belt of territorial waters, and that this principle was approved in the Report of the Second Sub-Committee.

The rule that the baseline of the marginal belt follows the sinuosities of the coast, except where interrupted by straight-line segments not more than ten miles wide across the mouths of bays, in itself excludes the idea of drawing the coastline from headland to headland around offshore [27] islands. That each offshore island should have its own three-mile belt goes naturally with the fact that these islands are part of the territory of the nation to which the mainland belongs. No one, for instance, questions that the islands lying off the southern coast of California are part of the State of California, and as such each of them is, of course, entitled to its three-mile marginal strip (*cf. In re Marincovich,* 48 Cal. App. 474, 478). Subject to the special case of historical waters (post p. 30) it seems clear enough that the rule stated by the Secretary of State in his letter of November 13, 1951 is and has traditionally been the position of the United States in international relations, and I have therefore included in my recommended answer to Question 1 offshore islands as well as the mainland.

Straits

Subject to the special case of historical waters, the position of the United States as to straits connecting two areas of open sea, as set forth by the Secretary of State (*ante* p. 9), is that if both entrances are less than six nautical miles wide the strait is territorial waters but never inland waters. Otherwise, the marginal belt is to be measured in the ordinary way. If the strait is merely a channel of communication to an inland sea the ten-mile rule regarding bays should apply. The channels between the offshore islands

19. The controversy as to the Crescent City Bay area nine-tenths of a mile deep landward of a line three and one-half miles long (Cal. 86; U.S.R. 55–57) turns on the proper measurement of a harbor rather than on any application of the Boggs formula.

and the mainland in the so-called "unit area" claimed by California connect two areas of open sea.

To support his statement as to straits the Secretary refers (U.S. Appendix 172) to the position taken by Secretary Evarts on January 18, 1879 in connection with the passage through the Straits of Magellan (I Moore, *Digest of International Law,* 664). Counsel for the United States additionally cite (U.S. 67) a communication from Secretary of State Buchanan to the Minister of Denmark [28] of October 14, 1848 (H. Ex. Doc. 108, 33rd Congress, 1st Session, p. 38; I Moore, *Digest of International Law,* 660), protesting the levying by Denmark of dues on United States vessels passing through the Danish sound and belts from the North Sea to the Baltic, which ultimately led to the Treaty of April 11, 1857 (11 Stat. 719) by which complete freedom of navigation for American vessels in the Danish straits was established; and a letter from Mr. Jackson, United States Consul at Halifax, of October 3, 1870, insisting on the freedom of passage through the Strait of Canso from the Gulf of St. Lawrence to the Atlantic Ocean between Cape Breton Island and the mainland of Nova Scotia (U.S. 68–69; *"Foreign Relations,"* 1870, pp. 428, 430; see, also, I Moore, *Digest of International Law,* 789–791). The recommendations of the United States at The Hague Conference of 1930 on the subject of straits (*Acts of Conference,* 200) are quoted on page 70 of the United States brief.

Counsel for the United States further assert that the position of the United States with respect to straits has been completely in accord with the established rule of international law, citing a number of authorities (U.S. 71). They stress particularly the recent ruling in a decision of the International Court of Justice in the *Corfu Channel Case* (I.C.J. Reports 1949, p. 4) in which Great Britain was successful in having Albania held responsible for damages sustained by two British warships which struck mines while proceeding through the North Corfu Channel at a point within the territorial waters of Albania. The Strait of Corfu between the Greek Island of Corfu and the mainland is less than six miles wide at each end (U.S. 72–74; Hudson, *The Twenty Eighth Year of the World Court,* 44 A.J.I.L. 1–12). The pertinent extract from the opinion of the Court is quoted in the brief for the United States at pages 73–74. California in its brief filed in this [29] Court in relation to the Report of the Special Master of May 22, 1951, at page 41, takes the position that if Corfu Island had been part of the country of Albania "this channel could have been declared inland waters"; but I agree with counsel for the United States (U.S. 75) that this is an unsound distinction.

In its brief addressed to the Special Master on June 6, 1952 California (118–121) discusses the matter of channels. Counsel suggest that many nations have found it advantageous to adopt an "exterior" coastline extending around off-lying islands as the baseline of the marginal sea; that the exterior coastline as a base for the marginal sea depends in each case upon laws or decrees of a sovereign state and not upon any arbitrary limitation of distance, and that the United States is free, if it finds that it is in the national interest to do so, to recognize and declare that the waters between the off-lying islands of California and the mainland are wholly inland waters. It is true that some countries have adopted such an "exterior" coastline. Norway is an example. It is also clearly correct to say that the establishment of such a coastline depends in international law upon effective assertion of right by the particular State. Whether the United States is free to take the position advocated by California if it finds that it is in the national interest to do so, and whether that would in fact be in the national interest as argued

for California (Cal. 119–121) is in my judgment beyond anything submitted to me for consideration by the order of the Court (*ante* p. 7 and post pp. 40–43).

On the whole case as submitted I have, therefore, no hesitation in recommending to the Court that in its answer to Question 1 it should find that, subject to the special case of historical waters, the channels and other water areas between the mainland and the offshore islands lying off the southern coast of California are not inland waters.

[30] *Historical Waters*

In my consideration of this aspect of the case I have assumed that the establishment of an historical right to encroachment upon the open sea greater than the ten-mile rule hereinbefore discussed essentially depends upon an assertion of right by the interested nation.[20] The question to be answered is whether there has been any effective assertion by the United States of exclusive jurisdiction, or any exercise by it of exclusive authority, over the "over-all unit area of inland waters," or over the five important bays within the seven segments under consideration, claimed by California as inland waters; *i.e.*, Monterey Bay, Crescent City Bay area, San Luis Obispo Bay, Santa Monica Bay and San Pedro Bay.

With the exception of the anomalous incident of the *amicus* brief in the *Stralla* case (post pp. 35–37) there is no evidence that the United States has ever exercised exclusive authority or asserted exclusive jurisdiction in any of these areas beyond the three-mile marginal belt delimited as hereinbefore defined.

Answer to that question must, therefore, depend upon whether acts of California can take the place of, or amount to, effective assertion by the United States. Counsel for California contend that the "effect * * * of an assertion or exercise of jurisdiction by the State of California * * * is the same as if the action had been taken by the United States." [21] Counsel for the United States, on the other hand, take the position that since individual States of the Union have no capacity to deal with external affairs or foreign relations no effect whatever should be given in these proceedings to assertions made by the State [31] (U.S. 110).[22] Behind this interesting question of constitutional law lies the factual question whether California has, in fact, asserted or exercised exclusive authority over the water areas in question. Counsel for the United States aver that the past assertions of jurisdiction over coastal areas by California do not support its present position (U.S. 133 *et seq.*).

On the evidence submitted, I have reached the conclusion, as will presently appear, that no explicit assertion by California of exclusive authority over these water areas in dispute was ever made until in 1949 the Government Code of California declared that the boundary described in the Constitution runs three English miles seaward from the islands, rocks and reefs adjacent to the mainland, etc. (1949 Cal. Stats., Chap. 65; Cal. 56).

On the question of constitutional law propounded I agree with counsel for the United States that when the action of a State is actually contrary to action by the

20. *Cf.* U.S. 29; Cal. 9, 19 and the argument of Elihu Root in the *North Atlantic Coast Fisheries Case Proceedings*, Vol. XI, quoted by Jessup in *The Law of Territorial Waters and Maritime Jurisdiction*, at pp. 368–369.

21. Brief filed by California before Special Master, March 14, 1952, p. 2.

22. Counsel do not question that assertions by a State would be an appropriate element to be considered by the State Department, as evidence of long usage, if the State Department did assert for the United States the item of external sovereignty in question (U.S. 127).

Federal Government the action is invalid for the reason that it is in conflict with the superior authority of the United States (U.S. 110 and 128–129). But whether no effect whatever should be given to an assertion or exercise of exclusive authority by an individual State affecting citizens of foreign states, is a question that does not arise in these proceedings if my factual conclusions are correct. I do not, therefore, think it would be useful, or even appropriate for me to express any opinion on that subject; particularly in view of the fact that in the *Louisiana* case (339 U.S. 705) in passing upon the effect of Louisiana's claims *vis-a-vis* the United States or those acting on behalf of or pursuant to its authority, this Court expressly noted that it intimated no [32] opinion as to the effect of such actions by a State *vis-a-vis* persons other than the United States and its agents.

As to the facts, California has asserted the right to control fishing within the waters of Monterey Bay and the right to enforce its criminal laws within the waters of Santa Monica Bay, up to and three miles beyond a straight line drawn from headland to headland of those bays. The incidents of these assertions of right appear with respect to Monterey Bay in *Ocean Industries* v. *Greene,* 15 F. 2d 862 and *Ocean Industries* v. *Superior Court,* 200 Cal. 235 and as to Santa Monica Bay in *People* v. *Stralla,* 14 Cal. 2d 617.

In *Ocean Industries, Inc.,* v. *Greene et al.* (15 F. 2d 862, N. D. Cal., S. D., St. Sure, D. J.), decided November 13, 1926, Ocean Industries sought to enjoin Greene, individually and as an officer of the State of California, from interfering with the operation of plaintiff's fish reduction plant anchored within the indentation of Monterey Bay shoreward of a straight line drawn between its headlands, which are nineteen miles apart. Judge St. Sure denied the injunction for lack of jurisdiction on the ground (1) that California had jurisdiction because its Constitution included in the boundaries of the State harbors and bays, and its statute establishing Fish and Game Districts covered Monterey Bay within one of those districts; and (2) there had been no affirmative action of Congress taking such control of these areas. He interpreted the language of the Constitution of California, "all the islands, harbors and bays along and adjacent to the coast" to declare in effect that Monterey Bay is a part of the territory of the State; he found that there is in international law no established six-mile limitation of the distance between headlands of bays, supporting that finding by reference to the internationally recognized status of Chesapeake Bay, Delaware Bay and Cape Cod Bay in this country and Conception Bay in Newfoundland. He [33] resolved the ambiguity of statutory language defining the boundaries of the Fish and Game Districts, "under the circumstances," in favor of including the whole bay. When, in January 1927, the Supreme Court of California in *Ocean Industries, Inc.* v. *Superior Court* (200 Cal. 235) gave judgment on this same question it held that the place of anchorage was within the boundaries of California on essentially the same grounds; the word "bays" in the California Constitution was interpreted to embrace the entire area of all the bays indenting the coast, regardless of their size (243); the ambiguity of statutory language defining county boundaries was resolved by reference to the Constitution so interpreted (243–244), and the six-mile limit on the headland rule in international law was questioned by reference to Conception Bay, Newfoundland, Cancale Bay in France and Delaware and Chesapeake Bays in the United States (245–246). In August 1935, the U.S. District Court for the Southern District of California, Central Division (Stephens, D.J.) in *U.S.* v. *Carrillo et al.* (13 F. Supp. 121), dismissed certain counts of an indictment charging defendants with violation of a Federal statute by acts of piracy on the high seas. The acts were committed on a vessel in San Pedro

Bay more than three miles from the mainland but landward of a line drawn from headland to headland. Defendants' motion to dismiss was based on the ground that the vessel was within the territory of the State of California at the time of the alleged robbery. Judge Stephens adopted the idea that the baseline of the marginal belt runs from headland to headland at bays, rather than following the exact contour of the coast (122). He recognized that there must be some limitation read into this formula and found such limitation in the usage of the word "bays" by governments, explorers and geographers, and he followed *Ocean Industries* v. *Superior Court* in interpretation of the California Constitution. The State of California was not [34] a party. The position of the United States was the same there as it is here but the decision was against it. In November 1939, the Supreme Court of California decided in a criminal case (*People* v. *Stralla et al.,* 14 Cal. 2d 617) that defendants had violated the California Penal Code by operating a gambling ship anchored in Santa Monica Bay four miles from shore but approximately six miles landward from a line drawn between the headlands of the bay. The *Ocean Industries* case in the California Supreme Court and Judge Stephens' decision in the *Carrillo* case were both referred to (622, 623, 631, 632). In the Court's very full opinion holding that the vessel was anchored in the territorial waters of California the use of the word "bays" in the Constitution of California was interpreted to include all bays without limitation as to the distance between headlands, and the Fish and Game Code was interpreted in the light of this constitutional interpretation (631). The Court found no established limitation, in international law, of the headland doctrine, citing, as the other decisions had done, the accepted status of Delaware Bay, Conception Bay and Chesapeake Bay (628–630).

The rationale of all the decisions is, I think, directly in conflict with the position which the United States had then taken and now takes in its international relations. The interpretation which prevailed in these cases of the word "bays" in California's Constitution is the same interpretation that Great Britain urged for the word "bays" in the Treaty of 1818, and against which Mr. Root on behalf of the United States vigorously advanced the proposition that the headland doctrine should be limited by the three-mile rule to bays not more than six miles wide; and when the Arbitration Tribunal upheld Great Britain's contention but recommended acceptance by both parties of the ten-mile rule, the United States in the Treaty of 1912 retreated from Mr. Root's position only to the extent of fixing ten miles [35] as an appropriate limit for the headland doctrine (*ante* p. 17). It is to be noted, too, that these instances of assertion of right by the State of California in the courts did not constitute an assertion of exclusive authority over these waters such as might be the occasion for objection by foreign governments or action by the United States in our international relations. The *Ocean Industries* cases involved only a matter of regulating fishing which had no exclusive aspects. (*Cf. U.S.* v. *California,* 332 U.S. 37–38 and *Vermilya-Brown Co.* v. *Connell,* 335 U.S. 381.) The *Stralla* case and the *Carrillo* case which were criminal actions rested, of course, on the proposition that the area in question was part of the territorial waters of California, but there is nothing to indicate that the defendants were citizens of a foreign country. Under these circumstances, absence of objection from foreign countries cannot be regarded as acquiescence in the position of California, nor, I think, could silence on the part of the United States be interpreted as a concurrence by the United States in its foreign relations with the proposition on which California stood

in these cases. As to Delaware Bay, Chesapeake Bay, etc., which in all these cases were regarded by the courts as confirmation of their broad interpretation of the word "bays"; the fact is that in international law these instances are not regarded as a denial of the ten-mile rule. They are regarded in international law as bays which by historical usage have, in accordance with a well established custom in international law, been established as inland waters, notwithstanding the ten-mile rule (*cf.* Cal. 1951, 73).

In the *Stralla* case an *amicus* brief was filed by United States Attorney Ben Harrison "acting by direction of the Attorney General of the United States and in the name and in behalf of the United States of America" (Cal. Appendix 3, p. 6). The *amicus* brief supported the position of California. It particularly supported the interpretation of [36] California's Constitution urged by California (21) and, as the other decisions had done, regarded the recognition of Conception Bay as inland waters as supporting the broad interpretation of the headland-to-headland rule (14, 15), rather than as a particular exception to that rule based on historical grounds. Indeed, the authors of the *amicus* brief adopted in its entirety the "excellent brief of counsel for the people" (12). Counsel for California rely very much upon this incident of the *amicus* brief in the *Stralla* case (Cal. 27, 51). I quite agree that the position taken in that brief is squarely opposed to the position taken by the counsel for the United States here, and so do they (U.S. 132). It is equally clear, however, that the position taken in that brief is squarely in conflict with the traditional position of the State Department in our international relations. If to determine what the true position of the United States is on this subject choice has to be made between the *amicus* brief filed in the California court and the position traditionally taken by the United States *vis-a-vis* foreign nations in our international relations, I should elect to put aside the *amicus* brief.

Rather extensive testimony and arguments were presented before me as to the location of the southeastern headland of San Pedro Bay (Cal. 95–101; U.S. 149–150; and U.S.R. 67–72). In the *Carrillo* case (13 F. Supp. 121) Judge Stephens located the southeastern headland at the point contended for by the United States. If, contrary to my conclusion, the Court should find that California has established its contention that San Pedro Bay constitutes inland waters, and if the Court further rejects the determination of Judge Stephens in the *Carrillo* case, then I would recommend that the contention of California as to the southeastern headland should be rejected, and the contention of the United States accepted, on the evidence submitted, particularly the testimony [37] of Mr. Shalowitz for the United States (Tr. 1219–1235).

In the brief filed on behalf of California in the *Stralla* case it was asserted that the "body of water lying easterly of the islands adjacent to the coast is within the boundaries of the State of California," but the decision did not deal with that assertion. The ground upon which decision rested was that the vessel was anchored landward of the line from headland to headland. The suggestion in the brief that the boundaries of the State of California embraced the waters between the mainland and the outlying islands was no more than a caveat. It could not, I think, be regarded as an assertion of right that could have any repercussion or effect in our international relations. Counsel for California go even further to urge that the *amicus* brief, when it made a blanket endorsement of the brief for California, constituted an assertion by the United States in the field of international law of right to the exclusive control of the so-called "over-all unit"

of water, and this even though the *amicus* brief did not mention these waters or the remark about them in California's brief. In making my recommendations I have given no weight to that suggestion.

The contention that the bays, harbors and channels under consideration have been claimed and established as inland waters by California, is discussed by counsel for California in their brief at pages 44–57. The discussion starts with the interpretation of California's Constitution which California successfully pressed in the Courts, and which I have found to be contrary to the interpretation inherent in the traditional position of the United States limiting the headland-to-headland doctrine to bays not more than ten miles wide (*ante* pp. 34–35). Counsel's discussion also refers (47–48) to assertions of exclusive control of the waters off the shore of California by Spain in the eighteenth century and by Mexico in the first part of the nineteenth century, before the [38] Treaty of Guadalupe Hidalgo. It does not seem to me that these assertions of exclusive control have any significance now. On the contrary, I think they are reflections from the old rule of the closed sea, or *mare clausum,* which in the nineteenth century was replaced by the doctrine of the freedom of the seas—the traditional doctrine of the United States. Counsel also refer (49–50) to cases, which hardly help this point, in the State Courts of California in which the question of the status of waters between the marginal belts of the outlying islands and the marginal belt of the mainland was introduced but not decided (*Ex parte Keil,* 85 Cal. 310 (1890) and *Wilmington, etc.* v. *Railroad Commission,* 166 Cal. 741 (1913); affirmed 236 U.S. 151, 153 (1915)) or in which the statutory words "state waters" adjacent Catalina Island were limited to a belt three miles wide. At page 51 *et seq.,* counsel discuss the *Ocean Industries* case and the *Stralla* case including the finding of the California Supreme Court that the county boundaries should be interpreted in harmony with the Court's interpretation of the Constitution. They mention again that "Fish and Game District 19 includes all islands and the waters adjacent thereto lying off the coast of Southern California" but admit that these words "do not explicitly apply to all channel waters between the island and the mainland" (55), and they mention the California statute which makes it a misdemeanor to dump garbage or other waste products within twenty miles of the coast of California, without suggesting, however, that this sanitary regulation amounted to an assertion of exclusive right to waters within twenty miles of the coastline. And finally, counsel refer to the California Act of 1949 (1949 Cal. Stat., Chap. 65) which does indeed constitute an assertion of right, as inland waters, to the water areas here in controversy.

After painstaking consideration of California's position as thus stated in their brief, I conclude that this California [39] Statute of 1949, two years after the decision of this Court in the *California* case, is the first explicit assertion by California of exclusive authority over these water areas in dispute, or that these water areas constitute inland waters. Furthermore, I accept the contention of counsel for the United States, fully supported by the evidence and fairly stated, I think, in their brief (U.S. 134–148) that California, from 1933 to 1949, by its legislation as to Fish and Game Districts and as to county boundaries has recognized that its seaward boundary in the so-called "unit area" runs three miles from the mainland.

Much of the testimony submitted to the Special Master in these proceedings dealt with geography, the history and the economic importance of the water area in dispute; Monterey Bay, Crescent City Bay area, San Luis Obispo Bay, Santa Monica Bay and San Pedro

Bay, and the so-called "over-all unit area" between the offshore islands and the mainland (Cal. 79–117; U.S. 148–151; U.S.R. 50–78). If there had been any assertion of exclusive jurisdiction of these waters by or on behalf of the United States, then this testimony would in general be relevant to the question whether these areas present special characteristics such as would justify in international law an assertion of exclusive sovereignty. But if my factual conclusions are correct, then the testimony is irrelevant to any issue here presented. I see no point in prolonging this report by any detailed comments on the testimony.

Low-Water Mark

From the point of view of a disputed real estate boundary line, defined as "the ordinary low-water mark," the mean of all of the low tides would certainly be indicated. There would, from that point of view, be no more reason to choose the mean of the lower low tides (as one interested claimant might suggest from self-interest) than to choose the mean [40] of the higher low tides (as self-interest might likewise move the other claimant to suggest). The middle way—the statistical mean of all the low tides over the cyclical period of approximately nineteen years—would seem to be the only choice of which neither contestant could justly complain. That, I think, was the effect of the decision of the Ninth Circuit Court of Appeals in *Borax* v. *Los Angeles* (74 F. 2d 901, 906), expressly approved by this Court on *certiorari* (296 U.S. 10, 26).

But California urges that, from the point of view of national interest and policy with respect to territorial waters, the mean of the lower low tide should be preferred. Here, as well as in connection with the criteria it proposes as to the status of channels and as to the seaward boundary of the inland waters of bays, California advances the proposition that the adoption of the criteria it suggests "would serve the national interest by placing the international domain as far seaward as possible" (Cal. 142). In my recommendations I have rejected that argument because I have not understood that the order of the Court intended that I should express my views on such a question of the foreign policy of the nation. It seems clear to me that the question whether the national interest would best be served by placing the national baseline of the marginal belt as far seaward as possible is one which calls for "decisions of a kind for which the Judiciary has neither aptitude, facilities nor responsibility and which has long been held to belong in the domain of political power not subject to judicial intrusion or inquiry" (*C. & S. Air Lines* v. *Waterman Corp.*, 333 U.S. 103, 111). But if I am wrong in that, then I must report that the suggestion flies in the face of our traditional policy of freedom of the seas (*United States* v. *California,* 332 U.S. 19, 34). In any event, there is in the record before me as Special Master no evidence whatever that the policy of the United States is, or ever [41] has been, to place the baseline as far seaward as possible, nor is there any evidence that that policy would be for the best interest of the United States, or indeed for the best long-time interest of the State of California. To the contrary, counsel for the United States have directed attention to a letter dated April 25, 1952 from the Department of the Navy on behalf of the Department of Defense to the Chairman of the House Judiciary Committee, commenting upon the Joint Resolution, H. J. Res. 373 (U.S.R. Appendix 80–84). In that letter the Under Secretary of the Navy says, that as one of the world's foremost advocates of the doctrine of the freedom of the seas the United States has always advocated the three-mile limit of territorial waters delimited in such

a way that the outer limits thereof closely follow the sinuosities of the coastline; that the time-honored position of the Navy is that by thus securing greater freedom and range of its warships and aircraft the United States better protects its security interests, and the letter strongly recommends against the enactment of H. J. Res. 373 which would declare the boundaries of the inland waters of the United States to be as far seaward as is permissible under international law.

California urges, however, that the mean lower low-water mark should be adopted for another reason. It points out that the mean lower low-water mark, as distinguished from the mean of all low waters, is used for all hydrographical surveys and navigation charts of the Pacific Coast; that it is required in all the work of the Corps of Engineers by Section 5 of the Rivers and Harbors Act of March 4, 1915, and that it is also used by the California State Lands Commission (Cal. 141, Tr. 1110–1111). The reason why the mean of the lower low waters is used on navigation charts is, of course, because it is safer and therefore more serviceable to navigators (U.S. 155 and [42] letter of Feb. 8, 1952 from the Coast & Geodetic Survey to the Solicitor General—Appendix 181, 185–186). It seems clear enough that navigators approaching our coast and interested to locate the outer boundary of the three-mile marginal belt would refer to these official navigation charts (*cf.* U.S. 156). It would be a matter of convenience to navigators if the marginal belt were measured from a low-water mark based on the mean of the lower low waters as shown on these charts.

The letters from the Secretary of State to the Attorney General (U.S. Appendix 167–175) do not mention this question of fixing the low-water mark, and there is no evidence that the State Department has made any choice in our international relations. The report of the Second Sub-Committee at the Hague Conference included the following sentence:[23]

> "For the purposes of this Convention, the line of low-water mark is that indicated on the charts officially used by the coastal state, provided the latter line does not appreciably depart from the line of mean low water spring tide."

The reference here to the mean of the spring tides, rather than to the mean of all the low tides, would indicate that the consensus of the Second Sub-Committee was to prefer a restriction rather than enlargement of encroachment on the open sea; but whether a choice by the United States of the more seaward line based on the mean of the lower low tides would meet with approval by other nations, and whether our traditional policy of the freedom of the seas would outweigh, in determination of the national policy, the matter of convenience just referred to, is a matter of speculation upon which it does not seem profitable for me to enter.

I have, therefore, based my recommendation of the mean [43] of all the low tides upon the considerations as to property rights above set forth, believing that a choice of the mean of the lower low tides is a matter of international policy to be determined by the political agencies of government, rather than a matter of judicial determination.

In making this recommendation I have not overlooked the argument of counsel for the United States that this question has already been judicially determined by the Court in its use of the term "ordinary low-water mark" in its decree; that the term "ordinary low-water mark on the coast of California" is the equivalent of "mean low-water mark on the coast of California" and that the technical meaning of the latter term is the intersection

23. See *Acts of Conference*, 206.

with the coast of the plane of the mean of all the low tides rather than the plane of the mean of the lower low tides (U.S. 151 *et seq.*). It is of course true that the datum plane of all the low waters and also the datum plane of the lower low waters have been established, and each of these planes is made use of under appropriate circumstances. Mr. Marmer, an outstanding authority, testified that though the expression "ordinary low water" is not a technical term it is understood "to mean average or mean low water," and has the same meaning as "mean low water" (Tr. 58). I think his testimony establishes that to a man skilled in the art the lay expression "ordinary low water" would be taken to mean the same thing as the more exact technical term "mean low water." But nothing has been brought to my attention to indicate that this Court when it used the expression "ordinary low water" in its decree purposely intended to choose the mean of all the low waters as distinguished from the mean of the lower low waters, or that the Court in the principal case judicially resolved the question now in dispute. I have been unable to conclude that that question has already been judicially determined. If, however, I am wrong in that, [44] the correction of my error would lead to the same conclusion that I have recommended on other grounds.

There is one further question that has to be determined before the chosen low-water mark can be located by actual survey. That is the question whether the surveyors are to take the low-water mark as it exists today; or whether allowances are to be made for natural or artificial modifications of the shoreline. The parties agree that natural accretions and relictions are to be disregarded. The question is thus narrowed to artificial changes in the shoreline including artificial fills and structures; and artificial structures include outer harborworks as well as inner harborworks.

The question as to artificial structures has further been narrowed by the recommendation of counsel for the United States, that with respect to natural accretions added by gradual and imperceptible processes to the shoreline as a result of the presence of artificial structures, this Court should follow the so-called United States rule (see *County of St. Clair* v. *Lovingston,* 23 Wall. 46, 66–69; *cf. Oklahoma* v. *Texas,* 265 U.S. 493, 495) rather than the California rule (*Carpenter* v. *City of Santa Monica,* 63 Cal. App. 2d 772, 787–794; 147 P. 2d 964, 972–975). Under the United States rule such natural accretions to tidelands accruing from artificial structures belong to the riparian owner of the accreted land. Since that is also California's position in the present controversy, the parties are in agreement that such accretions belong to California rather than to the United States. This further narrows the dispute down to the question of the dominion and power over the lands, minerals and other things underlying the actual artificial structures or within areas between newly constructed outer harborworks and original inner harborworks. And even as to the first part of this narrowed question, the United States has taken the position, as I pointed out in my report of May 22, 1951 (p. 33), that it does not claim title to them; that it has drafted [45] a bill which has been introduced in Congress to make clear that "it does not expect to under any circumstances claim or assert title or take over any improvements which may have been made by the State or by any political subdivision of the State."

Counsel for the United States base their contention that the United States retains full dominion and power over the lands, minerals and other things underlying these artificial projections and harbor areas within the more recently constructed outer harborworks, upon what they regard as the accepted rule of law that artificial changes in the shoreline,

either in the nature of reclaiming land or constructing barriers which enclose water areas, do not change the title to the land affected by the improvements (Br. 100–101). They cite a number of cases in the courts of California, New Jersey, New York and Iowa to this effect.

California, on the other hand, contends (Cal. 123–132 and 134 *et seq.*) that these cases involving title to filled lands are not applicable in connection with the location of the marginal belt. Its position is that the full dominion and power of the United States rests, under the decision in the principal case and the decisions in the *Texas* and *Louisiana* cases, upon the national interests, national responsibilities and national concern in matters of external sovereignty which rest in the United States in connection with the water area of the three-mile marginal belt; not in the area in which these responsibilities might have existed in 1850 or at any other time in the past but upon the responsibilities which now exist (*cf. U.S.* v. *Louisiana,* 339 U.S. 704).

In my recommendation I have rejected the position of the United States and accepted the position of California, believing that the California position is the legally sound one. I have been fortified in this conclusion by two ancillary considerations: The first of these is that the United States has full control of the erection of any such artificial accretions, [46] because of its control of navigable waters. I think it may be assumed that in the past the question of the ownership of the lands, minerals and other things underlying these artificial accretions has not been taken into consideration by the United States in passing judgment upon whether the accretions will be permitted; but it seems clear that in the future that aspect of the matter can be, and probably will be, taken into account. I do not share the view of counsel for the United States (U.S. 102) that this would be an undesirable situation. On the contrary, I think it would give opportunity for appropriate negotiations and agreement between the State and the United States at the time the artificial change is approved.

Harbors

The second of these ancillary considerations, applicable particularly to the question of outer harborworks, is that the position of the United States leads to an anomalous and I think unsound conclusion. Counsel for the United States admit (U.S. 101) that at The Hague Conference of 1930 the United States proposed and the Second Sub-Committee recommended that the baseline of the marginal belt should at harbors be the "outermost permanent harbourworks," and they say that "* * * it is probably still the position of the United States that the completion of permanent harbor works carves the particular area out of the high seas and vests complete control in the nation owning the mainland, and in that respect makes the area 'inland water.'" They contend, however, that this does not mean that in the internal relation between the states and the Federal Government title would pass. They say that, on the contrary, under the rule of title to real estate above referred to, title would not pass and would remain in the United States rather than pass to California. They do not suggest that there is any authority or precedent in domestic or international [47] law for thus attributing a double status to these water areas. In my opinion, the contention that the boundaries of the marginal belt are at one place as between the United States and an individual State and at another, different place as between the United States and a foreign nation, is unsound on the general principle underlying the judgments in the principal case and the *Texas* and *Louisiana* cases.

Finally, there is, in my opinion, another fallacy in the position taken by the United States with respect to the extent of inland waters at harbors. The concept of a port or harbor necessarily includes anchorage area for vessels that load and unload without docking or vessels that are waiting for dock space; just as the concept of a railroad terminal includes switching yards and waiting rooms. Counsel for the United States (U.S. 101, 107) take the position that the baseline of the marginal belt should be so drawn as to include only anchorages which are protected by the natural configuration of the coast; that it should exclude anchorages which are sheltered by, or in which a deficient natural sheltering is supplemented by, the artificial construction of a breakwater. No authority or precedent is cited for this conclusion, and it does not seem to me a reasonable one. It would be a particularly hard rule on a coast like that of California on which nature has afforded relatively little shelter. I think it is in conflict with the generalized consensus of the Second Sub-Committee at The Hague Conference that the outermost harborworks should be excluded from the marginal strip of open sea. It can safely be assumed that wherever an artificial breakwater is erected (always with the consent of and usually by the Corps of Engineers) the breakwater is planned to include a reasonable, adequate anchorage for the port in question. It is for these reasons that I have recommended that in front of harbors the outer limit of inland waters should embrace an [48] anchorage reasonably related to the physical surroundings and the service requirements of the port, and, absent contrary evidence, may be assumed to be the line of the outermost harborworks.

Respectfully submitted,

WILLIAM H. DAVIS.

NEW YORK, NEW YORK, *October 14, 1952.*

APPENDIX D

Letters from Department of State to Department of Justice (Territorial Waters)

NOVEMBER 13, 1951.

Reference is made to your letter dated October 30, 1951, requesting a statement from the Department of State in regard to the position of the United States as to the principles or criteria which govern the delimitation of the territorial waters of the United States. You ask in particular how such delimitation is made in the case of:

(a) A relatively straight coast, with no special geographic features, such as indentations or bays;

(b) A coast with small indentations not equivalent to bays;

(c) Deep indentations such as bays, gulfs or estuaries;

(d) Mouths of rivers which do not form an estuary;

(e) Islands, rocks or groups of islands lying off the coast;

(f) Straits, particularly those situated between the mainland and offshore islands.

In the formulation of United States policy with respect to territorial waters and in the determination of the principles applicable to any problem connected therewith, such as the problem of delimiting territorial waters, the Department of State has been and is guided by generally accepted principles of international law and by the practice of other states in the matter.

(a) In the case of a relatively straight coast, with no special geographic features such as indentations or bays, the Department of State has traditionally taken the position that territorial waters should be measured from the low water mark along the coast. This position was asserted as early as 1886 (The Secretary of State, Mr. Bayard, to Mr. Manning, Secretary of the Treasury, May 28, 1886, I Moore, *Digest of International Law*, 720). It was maintained in treaties concluded by the United States. (See Article 1 of the Convention concluded with Great Britain for the Prevention of Smuggling of Intoxicating Liquors on January 23, 1924, 43 Stat. 1761.) This position was in accord with the practice of other states. (See Article 2 of the Convention between Great Britain, Belgium, Denmark, France, Germany and the Netherlands for regulating the Police of the North Sea Fisheries signed at The Hague, May 6, 1882, 73 *British and Foreign State Papers*, 39, 41, and Article 2 of the Convention between Germany, Denmark, Estonia, Finland, France, the British Empire, Italy, Latvia, Poland and Sweden, relating to the Non-Fortification and Neutralization of the Aaland Islands, concluded at Geneva on October 20, 1921, 9 *League of Nations Treaty Series*, 212, 217.) The United States maintained the same position at the Conference for the Codification of International Law held at The Hague in 1930. (See League of Nations, Bases of Discussion for the Conference for the Codification of International Law, II, Territorial Waters, C. 74 M. 39,

1929, V., 143, hereinafter referred to as *Bases of Discussion.*) The report of the Second Sub-Committee adopted the low water mark as the base line for the delimitation of territorial waters. (League of Nations. Acts of the Conference for the Codification of International Law, III, Territorial Waters, C. 351 (b) M. 145 (b), 1930, V., 217, hereinafter referred to as *Acts of Conference.*)

(b) The Department of State has also taken the position that the low water mark along the coast should prevail as the base line for the delimitation of territorial waters in the case of a coast with small indentations not equivalent to bays: the base line follows the indentations or sinuosities of the coast, and is not drawn from headland to headland. This position was already established in 1886. (See the letter from the Secretary of State Mr. Bayard to Mr. Manning, Secretary of the Treasury, dated May 28, 1886, *supra.*) The United States maintained this position at the Hague Conference of 1930. (See Amendments to Bases of Discussion proposed by the United States, *Acts of Conference,* 197.) The principle that all points on the coast should be taken into account in the delimitation of territorial waters was adopted in the report of the Second Sub-Committee (*Acts of Conference,* 217).

(c) The determination of the base line in the case of a coast presenting deep indentations such as bays, gulfs, or estuaries has frequently given rise to controversies. The practice of states, nevertheless, indicates substantial agreement with respect to bays, gulfs or estuaries no more than 10 miles wide: the base line of territorial waters is a straight line drawn across the opening of such indentations, or where such opening exceeds 10 miles in width, at the first point therein where their width does not exceed 10 miles. (See Article 2 of the Convention between Great Britain, Belgium, Denmark, France, Germany and the Netherlands, for regulating the Police of the North Sea Fisheries, signed at The Hague, May 6, 1882, 73 *Foreign and British State Papers,* 39, 41; The North Atlantic Coast Fisheries Arbitration between the United States and Great Britain of September 7, 1910; *U.S. Foreign Rel.,* 1910 at 566; and the Research in International Law of the Harvard Law School, 23 American Journal of International Law, SS, 266.)

Subject to the special case of historical bays, the United States supported the 10 mile rule at the Conference of 1930 (*Acts of Conference,* 197–199) and the Second Sub-Committee adopted the principle on which the United States relied (*Acts of Conference,* 217–218). It was understood by most delegations that, as a corollary to the adoption of this principle, a system would be evolved to assure that slight indentations would not be treated as bays (*Acts of Conference,* 218). The United States proposed a method to determine whether a particular indentation of the coast should be regarded as a bay to which the 10 mile rule would apply (*Acts of Conference,* 197–199). The Second Sub-Committee set forth the American proposal and a compromise proposal offered by the French delegation in its report, but gave no opinion regarding these systems (*Acts of Conference,* 218–219).

(d) With respect to mouths of rivers which do not flow into estuaries, the Second Sub-Committee agreed to take for the base line a line following the general direction of the coast and drawn across the mouth of the river, whatever its width (*Acts of Conference,* 220).

(e) With respect to the measurement of territorial waters when rocks, reefs, mud-banks, sandbanks, islands or groups of islands lie off the coast, the United States took the position at the Conference that separate bodies of land which were capable of use

should be regarded as islands, irrespective of their distance from the mainland, while separate bodies of land, whether or not capable of use, but standing above the level of low tide, should be regarded as islands if they were within three nautical miles of the mainland. Each island, as defined, was to be surrounded by its own belt of territorial waters measured in the same manner as in the case of the mainland (*Acts of Conference,* 200).

The report of the Second Sub-Committee defined an island as a separate body of land, surrounded by water, which was permanently above high water mark, and approved the principle that an island, so defined, had its own belt of territorial sea (*Acts of Conference,* 219). While the Second Sub-Committee declined to define as islands natural appendages of the sea-bed which were only exposed at low tide, it agreed, nevertheless, that such appendages, provided they were situated within the territorial sea of the mainland, should be taken into account in delimiting territorial waters (*Acts of Conference,* 217).

(f) The problem of delimiting territorial waters may arise with respect to a strait, whether it be a strait between the mainland and offshore islands or between two mainlands. The United States took the position at the Conference that if a strait connected two seas having the character of high seas, and both entrances did not exceed six nautical miles in width, all of the waters of the strait should be considered territorial waters of the coastal state. In the case of openings wider than six miles, the belt of territorial waters should be measured in the ordinary way (*Acts of Conference,* 200–201). The report of the Second Sub-Committee supported this position with the qualification that if the result of this determination of territorial waters left an area of high sea not exceeding two miles in breadth surrounded by territorial sea, this area could be assimilated to the territorial sea (*Acts of Conference,* 220).

The Second Sub-Committee specified in its observations on this subject that the waters of a strait were not to be regarded as inland waters, even if both belts of territorial waters and both shores belonged to the same state (*Acts of Conference,* 220). In this, it supported the policy of the United States to oppose claims to exclusive control of such waters by the nation to which the adjacent shore belonged. (The Secretary of State, Mr. Evarts, to the American Legation, Santiago, Chile, January 18, 1879, in connection with passage through the Straits of Magellan, I Moore, *Digest of International Law,* 664.) With respect to a strait which is merely a channel of communication to an inland sea, however, the United States took the position, with which the Second Sub-Committee agreed, that the rules regarding bays should apply (*Acts of Conference,* 201, 220).

In connection with the principles applicable to bays and straits, it should be noted that they have no application with respect to the waters of bays, straits, or sounds, when a state can prove by historical usage that such waters have been traditionally subjected to its exclusive authority. The United States specifically reserved this type of case at the Hague Conference of 1930 (*Acts of Conference,* 197).

The principles outlined above represent the position of the United States with respect to the criteria properly applicable to the determination of the base line of territorial waters and to the demarcation between territorial waters and inland waters.

JAMES E. WEBB,
Acting Secretary.

FEBRUARY 12, 1952.

Reference is made to your letter of January 22, 1952, inquiring whether, in the light of the decision of the International Court of Justice in the Fisheries Case (*United Kingdom* v. *Norway*) in date of December 18, 1951, the Department adheres to the statement of position given at your request on November 13, 1951, with respect to the principles or criteria governing the delimitation of the territorial waters of the United States.

The Department noted the holding of the Court that the Norwegian Government in fixing the base lines for the delimitation of Norwegian fisheries by applying the straight base lines method had not violated international law, especially in view of the peculiar geography of the Norwegian coast and of the consolidation of this method by a constant and sufficiently long practice.

The decision of the Court, however, does not indicate, nor does it suggest, that other methods of delimitation of territorial waters such as that adopted by the United States are not equally valid in international law. The selection of base lines, the Court pointed out, is determined on the one hand by the will of the coastal state which is in the best position to appraise the local conditions dictating such selection, and on the other hand by international law which provides certain criteria to be taken into account such as the criteria that the drawing of base lines must not depart to any appreciable extent from the general direction of the coast, that the inclusion within those lines of sea areas surrounded or divided by land formations depends on whether such sea areas are sufficiently closely linked to the land domain to be subject to the regime of internal waters, and that economic interests should not be overlooked the reality and importance of which are clearly evidenced by long usage.

In the view of the Department, the decision of the International Court of Justice in the Fisheries Case does not require the United States to change its previous position with respect to the delimitation of its territorial waters. It is true that some of the principles on which this United States position has been traditionally predicated have been deemed by the Court not to have acquired the authority of a general rule of international law. Among these are the principle that the base line follows the sinuosities of the coast and the principle that in the case of bays no more than 10 miles wide, the base line is a straight line across their opening. These principles, however, are not in conflict with the criteria set forth in the decision of the International Court of Justice. The decision, moreover, leaves the choice of the method of delimitation applicable under such criteria to the national state. The Department, accordingly, adheres to its statement of the position of the United States with respect to delimitation of its territorial waters in date of November 13, 1951.

DEAN ACHESON,
Secretary.

APPENDIX E

Letter from Coast and Geodetic Survey to Department of Justice (Tidal Datum Planes)

FEBRUARY 8, 1952.

This is in reference to your letter of January 29, 1952, requesting a statement from the Coast and Geodetic Survey in regard to the principles and practices governing the selection and determination of tidal datum planes. Specifically, you would like answers to the following questions:

(a) What tidal datums are utilized in the work of the Coast and Geodetic Survey?

(b) What tidal datum or datums does the Coast and Geodetic Survey utilize and for what purposes in its work on the Pacific coast?

(c) What practices would the Coast and Geodetic Survey follow in determining the datum of "ordinary low water" on the Pacific coast?

(d) Would this practice differ in the case of inland waters such as the inner bay of San Pedro?

I would like to preface my answers to these questions with the statement that the Coast and Geodetic Survey has been engaged in the study and application of tidal phenomena for more than a hundred years. During that period it has developed principles and standard technical procedures for the selection and establishment of reference planes based on tidal definition. These procedures form the basis for the answers to the specific questions raised in your letter.

(a) What tidal datums are utilized in the work of the Coast and Geodetic Survey?

Tidal datums are horizontal planes of reference determined from the rise and fall of the tide. There are a number of datums which may be derived from tidal observations. There is no one natural or basic tidal datum, although the datum of mean sea level is frequently so designated because it is the plane about which the tide oscillates.

The selection of a tidal datum usually depends upon the type of tide existing in a locality and the specialized purpose which the datum is to serve. The rise and fall of the tide is not the same everywhere, but differs from place to place both in amount and type. Along the Atlantic coast of the United States, the predominant type of tide is the "semidaily" which is characterized by two high and two low waters each tidal day, with little variation in height between successive low waters or between successive high waters. Along the Gulf coast, the tide is predominantly of the "daily" type, in which one high water and one low water occur each tidal day. And, along the Pacific coast, the tide is of the "mixed" type, and two high and two low waters occur each tidal day, but with marked variation in height between successive high waters and between successive low waters.

In its work along the various coasts of the United States and in the interior of the country, the Coast and Geodetic Survey utilizes the following principal tidal datums:

(1) Mean sea level
(2) Mean high water
(3) Mean low water
(4) Mean lower low water

In addition, the Coast and Geodetic Survey recognizes the following four tidal datums as of value to the engineer and for which the relationship to the other datums is determined:

(5) Highest tide observed
(6) Mean higher high water
(7) Half tide level or mean tide level
(8) Lowest tide observed

(b) What tidal datum or datums does the Coast and Geodetic Survey utilize and for what purposes in its work along the Pacific coast?

In its work on the Pacific coast, where the tide is of the mixed type, the Coast and Geodetic Survey utilizes primarily the datums of mean sea level, mean high water, and mean lower low water (Nos. 1, 2, and 4 above), but in its tidal bench mark data, published for the various tide stations along the Pacific coast, use is also made of Nos. 3, 5, 6, 7 and 8.

The purposes for which these datums are used are described in the following sections:

THE DATUM OF MEAN SEA LEVEL

The datum of mean sea level is used for referencing elevations of bench marks in the network of precise levels established by the Bureau throughout the United States, it being the most practicable datum for general engineering purposes. This datum, which may be defined as the average height of the surface of the sea for all stages of the tide over a 19-year period,[1] is the fundamental tidal datum to which all other datums are referred. In point of accuracy of determination, the datum of mean sea level is the most accurate of all tidal datums because it is derived by averaging *all* the tabulated *hourly* heights of the tide.

THE DATUM OF MEAN HIGH WATER

The datum of mean high water is used as the plane of reference for the shoreline—the dividing line between land and sea—and for elevations of alongshore features on the hydrographic and topographic surveys and the nautical charts of the Coast and Geodetic Survey. It is determined by averaging the heights of *all* the high waters (higher high and lower high) over a 19-year period.

THE DATUM OF MEAN LOWER LOW WATER

The datum of mean lower low water is used as the plane of reference for water depths (soundings) on hydrographic surveys and nautical charts of the Pacific coast and

1. Tide and Current Glossary, Special Publication No. 228 (Revised 1949 edition), U.S. Coast and Geodetic Survey, p. 24.

is derived by averaging the heights of only the lower low waters at a given place over a 19-year period.

Datums for soundings are selected primarily for their practical utility to the mariner and are closely related to the characteristics of the tide in a given area. From the standpoint of the mariner, the critical part of the tidal cycle is at the time of low water—depths in a channel or over a bar are then at a minimum—and hence a low-water datum is used. If a datum higher than low water were to be used, depths shown on the nautical charts would be greater than actually exist at the time of low water and might lead the mariner into a false sense of security, particularly if he failed to apply a correction to the charted depths. Therefore, where the tide is of the semidaily type, as on the Atlantic coast, the datum of mean low water is used, which is the mean of the two low waters occurring each day. But where the tide is of the mixed type, as on the Pacific coast, a datum based on the mean of the lower of the two low waters occurring each day is used, it being more serviceable to the navigator. The adoption of the datum of mean lower low water for the nautical charts of the Pacific coast is purely a matter of convenience and safety and has nothing to do with relative accuracy of datums.

In the Tide Tables of the Coast and Geodetic Survey for the Pacific coast, the predicted tides are also referenced to mean lower low water. This follows the practice of using the same datum for the predictions as is used for the nautical charts and enables the mariner to apply the height of the tide directly to the charted soundings and thus obtain the actual depth of water for any given place and for any height of tide.

(*c*) *What practices would the Coast and Geodetic Survey follow in determining the datum of "ordinary low water" on the Pacific coast?*

The term "ordinary" low water is not one which the Coast and Geodetic Survey has defined and standardized for survey operations and for technical engineering usage. But where the word "ordinary" is used in connection with tides, it is regarded as the equivalent of the word "mean." [2] Thus, "ordinary high water" is the same as "mean high water," and "ordinary low water" the same as "mean low water."

The basis for this interpretation is the consideration that where there is a variation in the height of any phase of the tide, each height having equal significance in the tidal cycle, the mean of the heights is more representative of that level than is any single height, when taken alone.

As applied to low water on the Pacific coast, where successive low waters fall to different levels, the mean of the two levels occurring each tidal day is more representative of the technical concept of low water than is either higher low or lower low when considered alone. (Similarly, the datum of ordinary lower low water would be better represented by the mean of all the lower low waters than by any single lower low water.) The Coast and Geodetic Survey therefore considers it technically correct to regard the mean of the two low waters on the Pacific coast (a low water occurs every 12 hours) as the "ordinary" or "usual" low water, as distinguished from either higher low water or lower low water, which, occurring only once every 24 hours, could relatively be classed as the "extraordinary" or "unusual" low water.

2. Tide and Current Glossary, Special Publication No. 228 (Revised 1949 edition), U.S. Coast and Geodetic Survey, p. 26.

The determination of the datum of "ordinary low water" on the Pacific coast thus becomes a matter of determining the datum of "mean low water." In deriving this datum the Coast and Geodetic Survey averages the low waters over a 19-year period as near as possible. Whether the tide is of the semidaily type—as on the Atlantic coast—or of the mixed type—as on the Pacific coast—*all* the low waters are used to arrive at a mean value.[3] The term mean low water datum is, therefore, one of technical definition and is not necessarily related to the datum used for referencing soundings on the nautical charts of the Bureau. It coincides with the chart datum used on the Atlantic coast but differs from the datum used on the Pacific coast, as explained above.

The relation of lower low water to the fall of the tide is of a similar nature to that which higher high water bears to the rise of the tide.[4] Likewise, mean high water and mean low water are cognate terms in relation to the rise and fall of the tide.

(d) Would this practice differ in the case of inland waters such as the inner bay of San Pedro?

Since the term mean low water datum is one of technical definition, the procedures used to derive it are the same for an inland body of water, such as the inner bay of San Pedro, as they are for the open coast.

R. F. A. STUDDS
Rear Admiral, USC&GS
Director

3. Tidal Datum Planes, Special Publication No. 135 (1951 edition), U.S. Coast and Geodetic Survey, p. 104.

4. *Id.* at 123.

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APPENDIX F

Presidential Proclamation of September 28, 1945 (The Continental Shelf)[1]

Whereas the Government of the United States of America, aware of the long range world-wide need for new sources of petroleum and other minerals, holds the view that efforts to discover and make available new supplies of these resources should be encouraged; and

Whereas its competent experts are of the opinion that such resources underlie many parts of the continental shelf off the coasts of the United States of America, and that with modern technological progress their utilization is already practicable or will become so at an early date; and

Whereas recognized jurisdiction over these resources is required in the interest of their conservation and prudent utilization when and as development is undertaken; and

Whereas it is the view of the Government of the United States that the exercise of jurisdiction over the natural resources of the subsoil and sea bed of the continental shelf by the contiguous nation is reasonable and just, since the effectiveness of measures to utilize or conserve these resources would be contingent upon cooperation and protection from the shore, since the continental shelf may be regarded as an extension of the land-mass of the coastal nation and thus naturally appurtenant to it, since these resources frequently form a seaward extension of a pool or deposit lying within the territory, and since self-protection compels the coastal nation to keep close watch over activities off its shores which are of the nature necessary for utilization of these resources;

Now, Therefore, I, Harry S. Truman, President of the United States of America, do hereby proclaim the following policy of the United States of America with respect to the natural resources of the subsoil and sea bed of the continental shelf.

Having concern for the urgency of conserving and prudently utilizing its natural resources, the Government of the United States regards the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control. In cases where the continental shelf extends to the shores of another State, or is shared with an adjacent State, the boundary shall be determined by the United States and the State concerned in accordance with equitable principles. The character as high seas of the waters above the continental shelf and the right to their free and unimpeded navigation are in no way thus affected.

1. Proclamation No. 2667 (59 Stat. 884).

APPENDIX G

Submerged Lands Act

(*This Act is identified as Public Law 31, 83d Congress, 1st Session, and is recorded in 67 Stat. 29.*)

AN ACT

To confirm and establish the titles of the States to lands beneath navigable waters within State boundaries and to the natural resources within such lands and waters, to provide for the use and control of said lands and resources, and to confirm the jurisdiction and control of the United States over the natural resources of the seabed of the Continental Shelf seaward of State boundaries.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Submerged Lands Act".

TITLE I

DEFINITION

SEC. 2. When used in this Act—

(a) The term "lands beneath navigable waters" means—

(1) all lands within the boundaries of each of the respective States which are covered by nontidal waters that were navigable under the laws of the United States at the time such State became a member of the Union, or acquired sovereignty over such lands and waters thereafter, up to the ordinary high water mark as heretofore or hereafter modified by accretion, erosion, and reliction;

(2) all lands permanently or periodically covered by tidal waters up to but not above the line of mean high tide and seaward to a line three geographical miles distant from the coast line of each such State and to the boundary line of each such State where in any case such boundary as it existed at the time such State became a member of the Union, or as heretofore approved by Congress, extends seaward (or into the Gulf of Mexico) beyond three geographical miles, and

(3) all filled in, made, or reclaimed lands which formerly were lands beneath navigable waters, as hereinabove defined;

(b) The term "boundaries" includes the seaward boundaries of a State or its boundaries in the Gulf of Mexico or any of the Great Lakes as they existed at the time such State became a member of the Union, or as heretofore approved by the Congress, or as extended or confirmed pursuant to section 4 hereof but in no event shall the term "boundaries" or the term "lands beneath navigable waters" be interpreted as extending from the coast line more than three geographical miles into the Atlantic Ocean or the Pacific Ocean, or more than three marine leagues into the Gulf of Mexico;

(c) The term "coast line" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters;

(d) The terms "grantees" and "lessees" include (without limiting the generality thereof) all political subdivisions, municipalities, public and private corporations, and other persons holding grants or leases from a State, or from its predecessor sovereign if legally validated, to lands beneath navigable waters if such grants or leases were issued in accordance with the constitution, statutes, and decisions of the courts of the State in which such lands are situated, or of its predecessor sovereign: ***Provided, however,*** That nothing herein shall be construed as conferring upon said grantees or lessees any greater rights or interests other than are described herein and in their respective grants from the State, or its predecessor sovereign;

(e) The term "natural resources" includes, without limiting the generality thereof, oil, gas, and all other minerals, and fish, shrimp, oysters, clams, crabs, lobsters, sponges, kelp, and other marine animal and plant life but does not include water power, or the use of water for the production of power;

(f) The term "lands beneath navigable waters" does not include the beds of streams in lands now or heretofore constituting a part of the public lands of the United States if such streams were not meandered in connection with the public survey of such lands under the laws of the United States and if the title to the beds of such streams was lawfully patented or conveyed by the United States or any State to any person;

(g) The term "State" means any State of the Union;

(h) The term "person" includes, in addition to a natural person, an association, a State, a political subdivision of a State, or a private, public, or municipal corporation.

TITLE II

LANDS BENEATH NAVIGABLE WATERS WITHIN STATE BOUNDARIES

SEC. 3. RIGHTS OF THE STATES.—

(a) It is hereby determined and declared to be in the public interest that (1) title to and ownership of the lands beneath navigable waters within the boundaries of the respective States, and the natural resources within such lands and waters, and (2) the right and power to manage, administer, lease, develop, and use the said lands and natural resources all in accordance with applicable State law be, and they are hereby, subject to the provision hereof, recognized, confirmed, established, and vested in and assigned to the respective States or the persons who were on June 5, 1950, entitled thereto under the law of the respective States in which the land is located, and the respective grantees, lessees, or successors in interest thereof;

(b) (1) The United States hereby releases and relinquishes unto said States and persons aforesaid, except as otherwise reserved herein, all right, title, and interest of the United States, if any it has, in and to all said lands, improvements, and natural resources; (2) the United States hereby releases and relinquishes all claims of the United States, if any it has, for money or damages arising out of any operations of said States or persons pursuant to State authority upon or within said lands and navigable waters; and (3) the Secretary of the Interior or the Secretary of the Navy or the Treasurer of the United States shall pay to the respective States or their grantees issuing leases covering such lands or natural

resources all moneys paid thereunder to the Secretary of the Interior or to the Secretary of the Navy or to the Treasurer of the United States and subject to the control of any of them or to the control of the United States on the effective date of this Act, except that portion of such moneys which (1) is required to be returned to a lessee; or (2) is deductible as provided by stipulation or agreement between the United States and any of said States;

(c) The rights, powers, and titles hereby recognized, confirmed, established, and vested in and assigned to the respective States and their grantees are subject to each lease executed by a State, or its grantee, which was in force and effect on June 5, 1950, in accordance with its terms and provisions and the laws of the State issuing, or whose grantee issued, such lease, and such rights, powers, and titles are further subject to the rights herein now granted to any person holding any such lease to continue to maintain the lease, and to conduct operations thereunder, in accordance with its provisions, for the full term thereof, and any extensions, renewals, or replacements authorized therein, or heretofore authorized by the laws of the State issuing, or whose grantee issued such lease: *Provided, however,* That, if oil or gas was not being produced from such lease on and before December 11, 1950, or if the primary term of such lease has expired since December 11, 1950, then for a term from the effective date hereof equal to the term remaining unexpired on December 11, 1950, under the provisions of such lease or any extensions, renewals, or replacements authorized therein, or heretofore authorized by the laws of the State issuing, or whose grantee issued, such lease: *Provided, however,* That within ninety days from the effective date hereof (i) the lessee shall pay to the State or its grantee issuing such lease all rents, royalties, and other sums payable between June 5, 1950, and the effective date hereof, under such lease and the laws of the State issuing or whose grantee issued such lease, except such rents, royalties, and other sums as have been paid to the State, its grantee, the Secretary of the Interior or the Secretary of the Navy or the Treasurer of the United States and not refunded to the lessee; and (ii) the lessee shall file with the Secretary of the Interior or the Secretary of the Navy and with the State issuing or whose grantee issued such lease, instruments consenting to the payment by the Secretary of the Interior or the Secretary of the Navy or the Treasurer of the United States to the State or its grantee issuing the lease, of all rents, royalties, and other payments under the control of the Secretary of the Interior or the Secretary of the Navy or the Treasurer of the United States or the United States which have been paid, under the lease, except such rentals, royalties, and other payments as have also been paid by the lessee to the State or its grantee;

(d) Nothing in this Act shall affect the use, development, improvement, or control by or under the constitutional authority of the United States of said lands and waters for the purposes of navigation or flood control or the production of power, or be construed as the release or relinquishment of any rights of the United States arising under the constitutional authority of Congress to regulate or improve navigation, or to provide for flood control, or the production of power;

(e) Nothing in this Act shall be construed as affecting or intended to affect or in any way interfere with or modify the laws of the States which lie wholly or in part westward of the ninety-eighth meridian, relating to the ownership and control of ground and surface waters; and the control, appropriation, use, and distribution of such waters shall continue to be in accordance with the laws of such States.

SEC. 4. SEAWARD BOUNDARIES.—The seaward boundary of each original coastal State is hereby approved and confirmed as a line three geographical miles distant from its coast

line or, in the case of the Great Lakes, to the international boundary. Any State admitted subsequent to the formation of the Union which has not already done so may extend its seaward boundaries to a line three geographical miles distant from its coast line, or to the international boundaries of the United States in the Great Lakes or any other body of water traversed by such boundaries. Any claim heretofore or hereafter asserted either by constitutional provision, statute, or otherwise, indicating the intent of a State so to extend its boundaries is hereby approved and confirmed, without prejudice to its claim, if any it has, that its boundaries extend beyond that line. Nothing in this section is to be construed as questioning or in any manner prejudicing the existence of any State's seaward boundary beyond three geographical miles if it was so provided by its constitution or laws prior to or at the time such State became a member of the Union, or if it has been heretofore approved by Congress.

SEC. 5. EXCEPTIONS FROM OPERATION OF SECTION 3 OF THIS ACT.—There is excepted from the operation of section 3 of this Act—

(a) all tracts or parcels of land together with all accretions thereto, resources therein, or improvements thereon, title to which has been lawfully and expressly acquired by the United States from any State or from any person in whom title had vested under the law of the State or of the United States, and all lands which the United States lawfully holds under the law of the State; all lands expressly retained by or ceded to the United States when the State entered the Union (otherwise than by a general retention or cession of lands underlying the marginal sea); all lands acquired by the United States by eminent domain proceedings, purchase, cession, gift, or otherwise in a proprietary capacity; all lands filled in, built up, or otherwise reclaimed by the United States for its own use; and any rights the United States has in lands presently and actually occupied by the United States under claim of right;

(b) such lands beneath navigable waters held, or any interest in which is held by the United States for the benefit of any tribe, band, or group of Indians or for individual Indians; and

(c) all structures and improvements constructed by the United States in the exercise of its navigational servitude.

SEC. 6. POWERS RETAINED BY THE UNITED STATES.—(a) The United States retains all its navigational servitude and rights in and powers of regulation and control of said lands and navigable waters for the constitutional purposes of commerce, navigation, national defense, and international affairs, all of which shall be paramount to, but shall not be deemed to include, proprietary rights of ownership, or the rights of management, administration, leasing, use, and development of the lands and natural resources which are specifically recognized, confirmed, established, and vested in and assigned to the respective States and others by section 3 of this Act.

(b) In time of war or when necessary for national defense, and the Congress or the President shall so prescribe, the United States shall have the right of first refusal to purchase at the prevailing market price, all or any portion of the said natural resources, or to acquire and use any portion of said lands by proceeding in accordance with due process of law and paying just compensation therefor.

SEC. 7. Nothing in this Act shall be deemed to amend, modify, or repeal the Acts of July 26, 1866 (14 Stat. 251), July 9, 1870 (16 Stat. 217), March 3, 1877 (19 Stat. 377),

June 17, 1902 (32 Stat. 388), and December 22, 1944 (58 Stat. 887), and Acts amendatory thereof or supplementary thereto.

SEC. 8. Nothing contained in this Act shall affect such rights, if any, as may have been acquired under any law of the United States by any person in lands subject to this Act and such rights, if any, shall be governed by the law in effect at the time they may have been acquired: *Provided, however,* That nothing contained in this Act is intended or shall be construed as a finding, interpretation, or construction by the Congress that the law under which such rights may be claimed in fact or in law applies to the lands subject to this Act, or authorizes or compels the granting of such rights in such lands, and that the determination of the applicability or effect of such law shall be unaffected by anything contained in this Act.

SEC. 9. Nothing in this Act shall be deemed to affect in any wise the rights of the United States to the natural resources of that portion of the subsoil and seabed of the Continental Shelf lying seaward and outside of the area of lands beneath navigable waters, as defined in section 2 hereof, all of which natural resources appertain to the United States, and the jurisdiction and control of which by the United States is hereby confirmed.

SEC. 10. Executive Order Numbered 10426, dated January 16, 1953, entitled "Setting Aside Submerged Lands of the Continental Shelf as a Naval Petroleum Reserve", is hereby revoked insofar as it applies to any lands beneath navigable waters as defined in section 2 hereof.

SEC. 11. SEPARABILITY.—If any provision of this Act, or any section, subsection, sentence, clause, phrase or individual word, or the application thereof to any person or circumstance is held invalid, the validity of the remainder of the Act and of the application of any such provision, section, subsection, sentence, clause, phrase or individual word to other persons and circumstances shall not be affected thereby; without limiting the generality of the foregoing, if subsection 3(a)1, 3(a)2, 3(b)1, 3(b)2, 3(b)3, or 3(c) or any provision of any of those subsections is held invalid, such subsection or provision shall be held separable and the remaining subsections and provisions shall not be affected thereby.

APPROVED *May 22, 1953.*

APPENDIX H

Outer Continental Shelf Lands Act
(Excerpts)

(*This Act is identified as Public Law 212, 83d Congress, 1st Session, and is recorded in 67 Stat. 462.*)

AN ACT

To provide for the jurisdiction of the United States over the submerged lands of the outer Continental Shelf, and to authorize the Secretary of the Interior to lease such lands for certain purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Outer Continental Shelf Lands Act".

SEC. 2. DEFINITIONS.—When used in this Act—

(a) The term "outer Continental Shelf" means all submerged lands lying seaward and outside of the area of lands beneath navigable waters as defined in section 2 of the Submerged Lands Act (Public Law 31, Eighty-third Congress, first session), and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control;

(b) The term "Secretary" means the Secretary of the Interior;

(c) The term "mineral lease" means any form of authorization for the exploration for, or development or removal of deposits of, oil, gas, or other minerals; and

(d) The term "person" includes, in addition to a natural person, an association, a State, a political subdivision of a State, or a private, public, or municipal corporation.

SEC. 3. JURISDICTION OVER OUTER CONTINENTAL SHELF.—(a) It is hereby declared to be the policy of the United States that the subsoil and seabed of the outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition as provided in this Act.

(b) This Act shall be construed in such manner that the character as high seas of the waters above the outer Continental Shelf and the right to navigation and fishing therein shall not be affected.

SEC. 4. LAWS APPLICABLE TO OUTER CONTINENTAL SHELF.—(a)(1) The Constitution and laws and civil and political jurisdiction of the United States are hereby extended to the subsoil and seabed of the outer Continental Shelf and to all artificial islands and fixed structures which may be erected thereon for the purpose of exploring for, developing, removing, and transporting resources therefrom, to the same extent as if the outer Continental Shelf were an area of exclusive Federal jurisdiction located within a State: *Provided, however,* That mineral leases on the outer Continental Shelf shall be maintained or issued only under the provisions of this Act.

(2) To the extent that they are applicable and not inconsistent with this Act or with other Federal laws and regulations of the Secretary now in effect or hereafter adopted, the civil and criminal laws of each adjacent State as of the effective date of this Act are hereby declared to be the law of the United States for that portion of the subsoil and seabed of the outer Continental Shelf, and artificial islands and fixed structures erected thereon, which would be within the area of the State if its boundaries were extended seaward to the outer margin of the outer Continental Shelf, and the President shall determine and publish in the Federal Register such projected lines extending seaward and defining each such area. All of such applicable laws shall be administered and enforced by the appropriate officers and courts of the United States. State taxation laws shall not apply to the outer Continental Shelf.

(3) The provisions of this section for adoption of State law as the law of the United States shall never be interpreted as a basis for claiming any interest in or jurisdiction on behalf of any State for any purpose over the seabed and subsoil of the outer Continental Shelf, or the property and natural resources thereof or the revenues therefrom.

(b) The United States district courts shall have original jurisdiction of cases and controversies arising out of or in connection with any operations conducted on the outer Continental Shelf for the purpose of exploring for, developing, removing or transporting by pipeline the natural resources, or involving rights to the natural resources of the subsoil and seabed of the outer Continental Shelf, and proceedings with respect to any such case or controversy may be instituted in the judicial district in which any defendant resides or may be found, or in the judicial district of the adjacent State nearest the place where the cause of action arose.

* * * * * * *

(e) (1) The head of the Department in which the Coast Guard is operating shall have authority to promulgate and enforce such reasonable regulations with respect to lights and other warning devices, safety equipment, and other matters relating to the promotion of safety of life and property on the islands and structures referred to in subsection (a) or on the waters adjacent thereto, as he may deem necessary.

(2) The head of the Department in which the Coast Guard is operating may mark for the protection of navigation any such island or structure whenever the owner has failed suitably to mark the same in accordance with regulations issued hereunder, and the owner shall pay the cost thereof. Any person, firm, company, or corporation who shall fail or refuse to obey any of the lawful rules and regulations issued hereunder shall be guilty of a misdemeanor and shall be fined not more than $100 for each offense. Each day during which such violation shall continue shall be considered a new offense.

(f) The authority of the Secretary of the Army to prevent obstruction to navigation in the navigable waters of the United States is hereby extended to artificial islands and fixed structures located on the outer Continental Shelf.

(g) The specific application by this section of certain provisions of law to the subsoil and seabed of the outer Continental Shelf and the artificial islands and fixed structures referred to in subsection (a) or to acts or offenses occurring or committed thereon shall not give rise to any inference that the application to such islands and structures, acts, or offenses of any other provision of law is not intended.

* * * * * * *

SEC. 7. CONTROVERSY OVER JURISDICTION.—In the event of a controversy between the United States and a State as to whether or not lands are subject to the provisions of this Act, the Secretary is authorized, notwithstanding the provisions of subsections (a) and (b) of section 6 of this Act, and with the concurrence of the Attorney General of the United States, to negotiate and enter into agreements with the State, its political subdivision or grantee or a lessee thereof, respecting operations under existing mineral leases and payment and impounding of rents, royalties, and other sums payable thereunder, or with the State, its political subdivision or grantee, respecting the issuance or nonissuance of new mineral leases pending the settlement or adjudication of the controversy. . . .

* * * * * * *

SEC. 11. GEOLOGICAL AND GEOPHYSICAL EXPLORATIONS.—Any agency of the United States and any person authorized by the Secretary may conduct geological and geophysical explorations in the outer Continental Shelf, which do not interfere with or endanger actual operations under any lease maintained or granted pursuant to this Act, and which are not unduly harmful to aquatic life in such area.

* * * * * * *

SEC. 14. PRIOR CLAIMS NOT AFFECTED.—Nothing herein contained shall affect such rights, if any, as may have been acquired under any law of the United States by any person in lands subject to this Act and such rights, if any, shall be governed by the law in effect at the time they may have been acquired: *Provided, however,* That nothing herein contained is intended or shall be construed as a finding, interpretation, or construction by the Congress that the law under which such rights may be claimed in fact applies to the lands subject to this Act or authorizes or compels the granting of such rights in such lands, and that the determination of the applicability or effect of such law shall be unaffected by anything herein contained.

SEC. 15. REPORT BY SECRETARY.—As soon as practicable after the end of each fiscal year, the Secretary shall submit to the President of the Senate and the Speaker of the House of Representatives a report detailing the amounts of all moneys received and expended in connection with the administration of this Act during the preceding fiscal year.

SEC. 16. APPROPRIATIONS.—There is hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

SEC. 17. SEPARABILITY.—If any provision of this Act, or any section, subsection, sentence, clause, phrase or individual word, or the application thereof to any person or circumstance is held invalid, the validity of the remainder of the Act and of the application of any such provision, section, subsection, sentence, clause, phrase or individual word to other persons and circumstances shall not be affected thereby.

APPROVED *August 7, 1953.*

APPENDIX I

Conventions on the Law of the Sea Adopted by United Nations Conference at Geneva, 1958

(*All conventions contain similar procedural articles for signing, ratification, and revision. They come into force on the thirtieth day following the deposit of the twenty-second instrument of ratification or accession with the United Nations. In the following reprint of the conventions these procedural articles are omitted.*)

A. CONVENTION ON THE TERRITORIAL SEA AND THE CONTIGUOUS ZONE [1]

The States Parties to this Convention, Have agreed as follows:

PART I: TERRITORIAL SEA

SECTION I. GENERAL

Article 1

1. The sovereignty of a State extends, beyond its land territory and its internal waters, to a belt of sea adjacent to its coast, described as the territorial sea.

2. This sovereignty is exercised subject to the provisions of these articles and to other rules of international law.

Article 2

The sovereignty of a coastal State extends to the air space over the territorial sea as well as to its bed and subsoil.

SECTION II. LIMITS OF THE TERRITORIAL SEA

Article 3

Except where otherwise provided in these articles, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.

Article 4

1. 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, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured.

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

3. Baselines shall not be drawn to and from low-tide elevations, unless lighthouses or similar installations which are permanently above sea level have been built on them.

4. Where the method of straight baselines is applicable under the provisions of paragraph 1, account may be taken, in determining particular baselines, of economic interests peculiar to the region concerned, the

1. Adopted Apr. 27, 1958 (U.N. Doc. A/Conf. 13/L.52).

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

5. The system of straight baselines may not be applied by a State in such a manner as to cut off from the high seas the territorial sea of another State.

6. The coastal State must clearly indicate straight baselines on charts, to which due publicity must be given.

Article 5

1. Waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State.

2. Where the establishment of a straight baseline in accordance with article 4 has the effect of enclosing as internal waters areas which previously had been considered as part of the territorial sea or of the high seas, a right of innocent passage, as provided in articles 14 to 23, shall exist in those waters.

Article 6

The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.

Article 7

1. This article relates only to bays the coasts of which belong to a single State.

2. For the purposes of these articles, a bay is a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as, or larger than, that of the semicircle whose diameter is a line drawn across the mouth of that indentation.

3. For the purpose of measurement, the area of an indentation is that lying between the low-water mark around the shore of the indentation and a line joining the low-water marks of its natural entrance points. Where, because of the presence of islands, an indentation has more than one mouth, the semi-circle shall be drawn on a line as long as the sum total of the lengths of the lines across the different mouths. Islands within an indentation shall be included as if they were part of the water area of the indentation.

4. If the distance between the low-water marks of the natural entrance points of a bay does not exceed twenty-four miles, a closing line may be drawn between these two low-water marks, and the waters enclosed thereby shall be considered as internal waters.

5. Where the distance between the low-water marks of the natural entrance points of a bay exceeds twenty-four miles, 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.

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

Article 8

For the purpose of delimiting the territorial sea, the outermost permanent harbour works which form an integral part of the harbour system shall be regarded as forming part of the coast.

Article 9

Roadsteads which are normally used for the loading, unloading and anchoring of ships, and which would otherwise be situated wholly or partly outside the outer limit of the territorial sea, are included in the territorial sea. The coastal State must clearly demarcate such roadsteads and indicate them on charts together with their boundaries, to which due publicity must be given.

Article 10

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.

2. The territorial sea of an island is measured in accordance with the provisions of these articles.

Article 11

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.

Article 12

1. 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. The provisions of this paragraph shall not apply, however, where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two States in a way which is at variance with this provision.

2. The line of delimitation between the territorial seas of two States lying opposite to each other or adjacent to each other shall be marked on large-scale charts officially recognized by the coastal States.

Article 13

If a river flows directly into the sea, the baseline shall be a straight line across the mouth of the river between points on the low-tide line of its banks.

SECTION III. RIGHT OF INNOCENT PASSAGE

SUB-SECTION A. RULES APPLICABLE TO ALL SHIPS

Article 14

1. Subject to the provisions of these articles, ships of all States, whether coastal or not, shall enjoy the right of innocent passage through the territorial sea.

2. Passage means navigation through the territorial sea for the purpose either of traversing that sea without entering internal waters, or of proceeding to internal waters, or of making for the high seas from internal waters.

3. Passage includes stopping and anchoring, but only in so far as the same are incidental to ordinary navigation or are rendered necessary by *force majeure* or by distress.

4. Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal State. Such passage shall take place in conformity with these articles and with other rules of international law.

5. Passage of foreign fishing vessels shall not be considered innocent if they do not observe such laws and regulations as the coastal State may make and publish in order to prevent these vessels from fishing in the territorial sea.

6. Submarines are required to navigate on the surface and to show their flag.

Article 15

1. The coastal State must not hamper innocent passage through the territorial sea.

2. The coastal State is required to give appropriate publicity to any dangers to navigation, of which it has knowledge, within its territorial sea.

Article 16

1. The coastal State may take the necessary steps in its territorial sea to prevent passage which is not innocent.

2. In the case of ships proceeding to internal waters, the coastal State shall also have the right to take the necessary steps to prevent any breach of the conditions to which admission of those ships to those waters is subject.

3. Subject to the provisions of paragraph 4, the coastal State may, without discrimination amongst foreign ships, suspend temporarily in specified areas of its territorial sea the innocent passage of foreign ships if such suspension is essential for the protection of its security. Such suspension shall take effect only after having been duly published.

4. There shall be no suspension of the innocent passage of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State.

Article 17

Foreign ships exercising the right of innocent passage shall comply with the laws and regulations enacted by the coastal State in conformity with these articles and other rules of international law and, in particular, with such laws and regulations relating to transport and navigation.

SUB-SECTION B. RULES APPLICABLE TO MERCHANT SHIPS

Article 18

1. No charge may be levied upon foreign ships by reason only of their passage through the territorial sea.

2. Charges may be levied upon a foreign ship passing through the territorial sea as payment only for specific services rendered to the ship. These charges shall be levied without discrimination.

Article 19

1. The criminal jurisdiction of the coastal State should not be exercised on board a foreign ship passing through the territorial sea to arrest any person or to conduct any investigation in connexion with any crime committed on board the ship during its passage, save only in the following cases:

(*a*) If the consequences of the crime extend to the coastal State; or

(*b*) If the crime is of a kind to disturb the peace of the country or the good order of the territorial sea; or

(*c*) If the assistance of the local authorities has been requested by the captain of the ship or by the consul of the country whose flag the ship flies; or

(*d*) If it is necessary for the suppression of illicit traffic in narcotic drugs.

2. The above provisions do not affect the right of the coastal State to take any steps authorized by its laws for the purpose of an arrest or investigation on board a foreign ship passing through the territorial sea after leaving internal waters.

3. In the cases provided for in paragraphs 1 and 2 of this article, the coastal State shall, if the captain so requests, advise the consular authority of the flag State before taking any steps, and shall facilitate contact between such authority and the ship's crew. In cases of emergency this notification may be communicated while the measures are being taken.

4. In considering whether or how an arrest should be made, the local authorities shall pay due regard to the interests of navigation.

5. The coastal State may not take any steps on board a foreign ship passing through

the territorial sea to arrest any person or to conduct any investigation in connexion with any crime committed before the ship entered the territorial sea, if the ship, proceeding from a foreign port, is only passing through the territorial sea without entering internal waters.

Article 20

1. The coastal State should not stop or divert a foreign ship passing through the territorial sea for the purpose of exercising civil jurisdiction in relation to a person on board the ship.

2. The coastal State may not levy execution against or arrest the ship for the purpose of any civil proceedings, save only in respect of obligations or liabilities assumed or incurred by the ship itself in the course or for the purpose of its voyage through the waters of the coastal State.

3. The provisions of the previous paragraph are without prejudice to the right of the coastal State, in accordance with its laws, to levy execution against or to arrest, for the purpose of any civil proceedings, a foreign ship lying in the territorial sea, or passing through the territorial sea after leaving internal waters.

SUB-SECTION C. RULES APPLICABLE TO GOVERNMENT SHIPS OTHER THAN WARSHIPS

Article 21

The rules contained in sub-sections A and B shall also apply to government ships operated for commercial purposes.

Article 22

1. The rules contained in sub-section A and in article 19 shall apply to government ships operated for non-commercial purposes.

2. With such exceptions as are contained in the provisions referred to in the preceding paragraph, nothing in these articles affects the immunities which such ships enjoy under these articles or other rules of international law.

SUB-SECTION D. RULE APPLICABLE TO WARSHIPS

Article 23

If any warship does not comply with the regulations of the coastal State concerning passage through the territorial sea and disregards any request for compliance which is made to it, the coastal State may require the warship to leave the territorial sea.

PART II: CONTIGUOUS ZONE

Article 24

1. In a zone of the high seas contiguous to its territorial sea, the coastal State may exercise the control necessary to:

(*a*) Prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea;

(*b*) Punish infringement of the above regulations committed within its territory or territorial sea.

2. The contiguous zone may not extend beyond twelve miles from the baseline from which the breadth of the territorial sea is measured.

3. 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 contiguous zone 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 the two States is measured.

PART III: FINAL ARTICLES

Article 25

The provisions of this Convention shall not affect conventions or other international agreements already in force, as between States Parties to them.

[Articles 26 to 32 inclusive are procedural in nature and have been omitted.]

B. CONVENTION ON THE CONTINENTAL SHELF [2]

The States Parties to this Convention,
Have agreed as follows:

Article 1

For the purpose of these articles, the term "continental shelf" is used as referring (*a*) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (*b*) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.

Article 2

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

2. The rights referred to in paragraph 1 of this article are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities, or make a claim to the continental shelf, without the express consent of the coastal State.

3. The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.

4. The natural resources referred to in these articles consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

Article 3

The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters as high seas, or that of the airspace above those waters.

Article 4

Subject to its right to take reasonable measures for the exploration of the continental shelf and the exploitation of its natural resources, the coastal State may not impede the laying or maintenance of submarine cables or pipelines on the continental shelf.

Article 5

1. The exploration of the continental shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea, nor result in any interference with fundamental oceanographic or other scientific research carried out with the intention of open publication.

2. Subject to the provisions of paragraphs 1 and 6 of this article, the coastal State is entitled to construct and maintain or operate on the continental shelf installations and other devices necessary for its exploration and the exploitation of its natural resources, and to establish safety zones around such installations and devices and to take in those zones measures necessary for their protection.

3. The safety zones referred to in paragraph 2 of this article may extend to a distance of 500 metres around the installations and other devices which have been erected, measured from each point of their outer

2. Adopted Apr. 26, 1958 (U.N. Doc. A/Conf. 13/L.55).

edge. Ships of all nationalities must respect these safety zones.

4. Such installations and devices, though under the jurisdiction of the coastal State, do not possess the status of islands. They have no territorial sea of their own, and their presence does not affect the delimitation of the territorial sea of the coastal State.

5. Due notice must be given of the construction of any such installations, and permanent means for giving warning of their presence must be maintained. Any installations which are abandoned or disused must be entirely removed.

6. Neither the installations or devices, nor the safety zones around them, may be established where interference may be caused to the use of recognized sea lanes essential to international navigation.

7. The coastal State is obliged to undertake, in the safety zones, all appropriate measures for the protection of the living resources of the sea from harmful agents.

8. The consent of the coastal State shall be obtained in respect of any research concerning the continental shelf and undertaken there. Nevertheless, the coastal State shall not normally withhold its consent if the request is submitted by a qualified institution with a view to purely scientific research into the physical or biological characteristics of the continental shelf, subject to the proviso that the coastal State shall have the right, if it so desires, to participate or to be represented in the research, and that in any event the results shall be published.

Article 6

1. 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. Where the same continental shelf is adjacent to the territories of two adjacent States, the boundary of the continental shelf shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance from the nearest points of the baselines from which the breadth of the territorial sea of each State is measured.

3. In delimiting the boundaries of the continental shelf, any lines which are drawn in accordance with the principles set out in paragraphs 1 and 2 of this article should be defined with reference to charts and geographical features as they exist at a particular date, and reference should be made to fixed permanent identifiable points on the land.

Article 7

The provisions of these articles shall not prejudice the right of the coastal State to exploit the subsoil by means of tunnelling irrespective of the depth of water above the subsoil.

[Articles 8 to 15 inclusive are procedural in nature and have been omitted.]

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C. CONVENTION ON THE HIGH SEAS [3]

The States Parties to this Convention,

Desiring to codify the rules of international law relating to the high seas,

Recognizing that the United Nations Conference on the Law of the Sea, held at Geneva from 24 February to 27 April 1958, adopted the following provisions as generally declaratory of established principles of international law,

Have agreed as follows:

Article 1

The term "high seas" means all parts of the sea that are not included in the territorial sea or in the internal waters of a State.

Article 2

The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by the other rules of international law. It comprises, *inter alia,* both for coastal and non-coastal States:

(1) Freedom of navigation;

(2) Freedom of fishing;

(3) Freedom to lay submarine cables and pipelines;

(4) Freedom to fly over the high seas.

These freedoms, and others which are recognized by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas.

Article 3

1. In order to enjoy the freedom of the seas on equal terms with coastal States, States having no sea-coast should have free access to the sea. To this end States situated between the sea and a State having no sea-coast shall by common agreement with the latter and in conformity with existing international conventions accord:

(*a*) To the State having no sea-coast, on a basis of reciprocity, free transit through their territory; and

(*b*) To ships flying the flag of that State treatment equal to that accorded to their own ships, or to the ships of any other States, as regards access to seaports and the use of such ports.

2. States situated between the sea and a State having no sea-coast shall settle, by mutual agreement with the latter, and taking into account the rights of the coastal State or State of transit and the special conditions of the State having no sea-coast, all matters relating to freedom of transit and equal treatment in ports, in case such States are not already parties to existing international conventions.

Article 4

Every State, whether coastal or not, has the right to sail ships under its flag on the high seas.

Article 5

1. Each State shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the State whose flag they are entitled to fly. There must exist a genuine link between the State and the ship; in particular, the State must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.

2. Each State shall issue to ships to which it has granted the right to fly its flag documents to that effect.

3. Adopted Apr. 26, 1958 (U.N. Doc. A/Conf. 13/L.53).

Article 6

1. Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in these articles, shall be subject to its exclusive jurisdiction on the high seas. A ship may not change its flag during a voyage or while in a port of call, save in the case of a real transfer of ownership or change of registry.

2. A ship which sails under the flags of two or more States, using them according to convenience, may not claim any of the nationalities in question with respect to any other State, and may be assimilated to a ship without nationality.

Article 7

The provisions of the preceding articles do not prejudice the question of ships employed on the official service of an intergovernmental organization flying the flag of the organization.

Article 8

1. Warships on the high seas have complete immunity from the jurisdiction of any State other than the flag State.

2. For the purposes of these articles, the term "warship" means a ship belonging to the naval forces of a State and bearing the external marks distinguishing warships of its nationality, under the command of an officer duly commissioned by the government and whose name appears in the Navy List, and manned by a crew who are under regular naval discipline.

Article 9

Ships owned or operated by a State and used only on government non-commercial service shall, on the high seas, have complete immunity from the jurisdiction of any State other than the flag State.

Article 10

1. Every State shall take such measures for ships under its flag as are necessary to ensure safety at sea with regard *inter alia* to:

(*a*) The use of signals, the maintenance of communications and the prevention of collisions;

(*b*) The manning of ships and labour conditions for crews taking into account the applicable international labour instruments;

(*c*) The construction, equipment and seaworthiness of ships.

2. In taking such measures each State is required to conform to generally accepted international standards and to take any steps which may be necessary to ensure their observance.

Article 11

1. In the event of a collision or of any other incident of navigation concerning a ship on the high seas, involving the penal or disciplinary responsibility of the master or of any other person in the service of the ship, no penal or disciplinary proceedings may be instituted against such persons except before the judicial or administrative authorities either of the flag State or of the State of which such person is a national.

2. In disciplinary matters, the State which has issued a master's certificate or a certificate of competence or licence shall alone be competent, after due legal process, to pronounce the withdrawal of such certificates, even if the holder is not a national of the State which issued them.

3. No arrest or detention of the ship, even as a measure of investigation, shall be ordered by any authorities other than those of the flag State.

Article 12

1. Every State shall require the master of a ship sailing under its flag, in so far as he

can do so without serious danger to the ship, the crew or the passengers:

(*a*) To render assistance to any person found at sea in danger of being lost;

(*b*) To proceed with all possible speed to the rescue of persons in distress if informed of their need of assistance, in so far as such action may reasonably be expected of him;

(*c*) After a collision, to render assistance to the other ship, her crew and her passengers and, where possible, to inform the other ship of the name of his own ship, her port of registry and the nearest port at which she will call.

2. Every coastal State shall promote the establishment and maintenance of an adequate and effective search and rescue service regarding safety on and over the sea and—where circumstances so require—by way of mutual regional arrangements co-operate with neighbouring States for this purpose.

Article 13

Every State shall adopt effective measures to prevent and punish the transport of slaves in ships authorized to fly its flag, and to prevent the unlawful use of its flag for that purpose. Any slave taking refuge on board any ship, whatever its flag, shall, *ipso facto*, be free.

Article 14

All States shall co-operate to the fullest possible extent in the repression of piracy on the high seas or in any other place outside the jurisdiction of any State.

Article 15

Piracy consists of any of the following acts:

(1) Any illegal acts of violence, detention or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:

(*a*) On the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;

(*b*) Against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;

(2) Any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;

(3) Any act of inciting or of intentionally facilitating an act described in sub-paragraph 1 or sub-paragraph 2 of this article.

Article 16

The acts of piracy, as defined in article 15, committed by a warship, government ship or government aircraft whose crew has mutinied and taken control of the ship or aircraft are assimilated to acts committed by a private ship.

Article 17

A ship or aircraft is considered a pirate ship or aircraft if it is intended by the persons in dominant control to be used for the purpose of committing one of the acts referred to in article 15. The same applies if the ship or aircraft has been used to commit any such act, so long as it remains under the control of the persons guilty of that act.

Article 18

A ship or aircraft may retain its nationality although it has become a pirate ship or aircraft. The retention or loss of nationality is determined by the law of the State from which such nationality was derived.

Article 19

On the high seas, or in any other place outside the jurisdiction of any State, every State may seize a pirate ship or aircraft, or a ship taken by piracy and under the control of pirates, and arrest the persons and seize the property on board. The courts of

the State which carried out the seizure may decide upon the penalties to be imposed, and may also determine the action to be taken with regard to the ships, aircraft or property, subject to the rights of third parties acting in good faith.

Article 20

Where the seizure of a ship or aircraft on suspicion of piracy has been effected without adequate grounds, the State making the seizure shall be liable to the State the nationality of which is possessed by the ship or aircraft, for any loss or damage caused by the seizure.

Article 21

A seizure on account of piracy may only be carried out by warships or military aircraft, or other ships or aircraft on government service authorized to that effect.

Article 22

1. Except where acts of interference derive from powers conferred by treaty, a warship which encounters a foreign merchant ship on the high seas is not justified in boarding her unless there is reasonable ground for suspecting:

(*a*) That the ship is engaged in piracy; or

(*b*) That the ship is engaged in the slave trade; or

(*c*) That, though flying a foreign flag or refusing to show its flag, the ship is, in reality, of the same nationality as the warship.

2. In the cases provided for in sub-paragraphs (*a*), (*b*) and (*c*) above, the warship may proceed to verify the ship's right to fly its flag. To this end, it may send a boat under the command of an officer to the suspected ship. If suspicion remains after the documents have been checked, it may proceed to a further examination on board the ship, which must be carried out with all possible consideration.

3. If the suspicions prove to be unfounded, and provided that the ship boarded has not committed any act justifying them, it shall be compensated for any loss or damage that may have been sustained.

Article 23

1. The hot pursuit of a foreign ship may be undertaken when the competent authorities of the coastal State have good reason to believe that the ship has violated the laws and regulations of that State. Such pursuit must be commenced when the foreign ship or one of its boats is within the internal waters or the territorial sea or the contiguous zone of the pursuing State, and may only be continued outside the territorial sea or the contiguous zone if the pursuit has not been interrupted. It is not necessary that, at the time when the foreign ship within the territorial sea or the contiguous zone receives the order to stop, the ship giving the order should likewise be within the territorial sea or the contiguous zone. If the foreign ship is within a contiguous zone, as defined in article 24 of the Convention on the Territorial Sea and the Contiguous Zone, the pursuit may only be undertaken if there has been a violation of the rights for the protection of which the zone was established.

2. The right of hot pursuit ceases as soon as the ship pursued enters the territorial sea of its own country or of a third State.

3. Hot pursuit is not deemed to have begun unless the pursuing ship has satisfied itself by such practicable means as may be available that the ship pursued or one of its boats or other craft working as a team and using the ship pursued as a mother ship are within the limits of the territorial sea, or as the case may be within the contiguous zone. The pursuit may only be commenced after a visual or auditory signal to stop has been given at a distance which enables it to be seen or heard by the foreign ship.

4. The right of hot pursuit may be exercised only by warships or military aircraft, or other ships or aircraft on government service specially authorized to that effect.

5. Where hot pursuit is effected by an aircraft:

(*a*) The provisions of paragraphs 1 to 3 of this article shall apply *mutatis mutandis;*

(*b*) The aircraft giving the order to stop must itself actively pursue the ship until a ship or aircraft of the coastal State, summoned by the aircraft, arrives to take over the pursuit, unless the aircraft is itself able to arrest the ship. It does not suffice to justify an arrest on the high seas that the ship was merely sighted by the aircraft as an offender or suspected offender, if it was not both ordered to stop and pursued by the aircraft itself or other aircraft or ships which continue the pursuit without interruption.

6. The release of a ship arrested within the jurisdiction of a State and escorted to a port of that State for the purposes of an inquiry before the competent authorities, may not be claimed solely on the ground that the ship, in the course of its voyage, was escorted across a portion of the high seas, if the circumstances rendered this necessary.

7. Where a ship has been stopped or arrested on the high seas in circumstances which do not justify the exercise of the right of hot pursuit, it shall be compensated for any loss or damage that may have been thereby sustained.

Article 24

Every State shall draw up regulations to prevent pollution of the seas by the discharge of oil from ships or pipelines or resulting from the exploitation and exploration of the seabed and its subsoil, taking account of existing treaty provisions on the subject.

Article 25

1. Every State shall take measures to prevent pollution of the seas from the dumping of radio-active waste, taking into account any standards and regulations which may be formulated by the competent international organizations.

2. All States shall co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas or air space above, resulting from any activities with radio-active materials or other harmful agents.

Article 26

1. All States shall be entitled to lay submarine cables and pipelines on the bed of the high seas.

2. Subject to its right to take reasonable measures for the exploration of the continental shelf and the exploitation of its natural resources, the coastal State may not impede the laying or maintenance of such cables or pipelines.

3. When laying such cables or pipelines the State in question shall pay due regard to cables or pipelines already in position on the seabed. In particular, possibilities of repairing existing cables or pipelines shall not be prejudiced.

Article 27

Every State shall take the necessary legislative measures to provide that the breaking or injury by a ship flying its flag or by a person subject to its jurisdiction of a submarine cable beneath the high seas done wilfully or through culpable negligence, in such a manner as to be liable to interrupt or obstruct telegraphic or telephonic communications, and similarly the breaking or injury of a submarine pipeline or high-voltage power cable shall be a punishable offense. This provision shall not apply to any break or injury caused by persons who acted merely with the legitimate object of

saving their lives or their ships, after having taken all necessary precautions to avoid such break or injury.

Article 28

Every State shall take the necessary legislative measures to provide that, if persons subject to its jurisdiction who are the owners of a cable or pipeline beneath the high seas, in laying or repairing that cable or pipeline, cause a break in or injury to another cable or pipeline, they shall bear the cost of the repairs.

Article 29

Every State shall take the necessary legislative measures to ensure that the owners of ships who can prove that they have sacrificed an anchor, a net or any other fishing gear, in order to avoid injuring a submarine cable or pipeline, shall be indemnified by the owner of the cable or pipeline, provided that the owner of the ship has taken all reasonable precautionary measures beforehand.

Article 30

The provisions of this Convention shall not affect conventions or other international agreements already in force, as between States parties to them.

[Articles 31 to 37 inclusive are procedural in nature and have been omitted.]

D. CONVENTION ON FISHING AND CONSERVATION OF THE LIVING RESOURCES OF THE HIGH SEAS [4]

The States Parties to this Convention,

Considering that the development of modern techniques for the exploitation of the living resources of the sea, increasing man's ability to meet the need of the world's expanding population for food, has exposed some of these resources to the danger of being over-exploited,

Considering also that the nature of the problems involved in the conservation of the living resources of the high seas is such that there is a clear necessity that they be solved, whenever possible, on the basis of international co-operation through the concerted action of all the States concerned,

Have agreed as follows:

Article 1

1. All States have the right for their nationals to engage in fishing on the high seas, subject (*a*) to their treaty obligations, (*b*) to the interests and rights of coastal States as provided for in this Convention, and (*c*) to the provisions contained in the following articles concerning conservation of the living resources of the high seas.

2. All States have the duty to adopt, or to co-operate with other States in adopting, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas.

Article 2

As employed in this Convention, the expression "conservation of the living resources of the high seas" means the aggregate of the measures rendering possible the optimum sustainable yield from those resources so as to secure a maximum supply of food and other marine products. Conservation programmes should be formulated with a view to securing in the first place a supply of food for human consumption.

4. Adopted Apr. 26, 1958 (U.N. Doc. A/Conf. 13/L.54).

Article 3

A State whose nationals are engaged in fishing any stock or stocks of fish or other living marine resources in any area of the high seas where the nationals of other States are not thus engaged shall adopt, for its own nationals, measures in that area when necessary for the purpose of the conservation of the living resources affected.

Article 4

1. If the nationals of two or more States are engaged in fishing the same stock or stocks of fish or other living marine resources in any area or areas of the high seas, these States shall, at the request of any of them, enter into negotiations with a view to prescribing by agreement for their nationals the necessary measures for the conservation of the living resources affected.

2. If the States concerned do not reach agreement within twelve months, any of the parties may initiate the procedure contemplated by article 9.

Article 5

1. If, subsequent to the adoption of the measures referred to in articles 3 and 4, nationals of other States engage in fishing the same stock or stocks of fish or other living marine resources in any area or areas of the high seas, the other States shall apply the measures, which shall not be discriminatory in form or in fact, to their own nationals not later than seven months after the date on which the measures shall have been notified to the Director-General of the Food and Agriculture Organization of the United Nations. The Director-General shall notify such measures to any State which so requests and, in any case, to any State specified by the State initiating the measure.

2. If these other States do not accept the measures so adopted and if no agreement can be reached within twelve months, any of the interested parties may initiate the procedure contemplated by article 9. Subject to paragraph 2 of article 10, the measures adopted shall remain obligatory pending the decision of the special commission.

Article 6

1. A coastal State has a special interest in the maintenance of the productivity of the living resources in any area of the high seas adjacent to its territorial sea.

2. A coastal State is entitled to take part on an equal footing in any system of research and regulation for purposes of conservation of the living resources of the high seas in that area, even though its nationals do not carry on fishing there.

3. A State whose nationals are engaged in fishing in any area of the high seas adjacent to the territorial sea of a coastal State shall, at the request of that coastal State, enter into negotiations with a view to prescribing by agreement the measures necessary for the conservation of the living resources of the high seas in that area.

4. A State whose nationals are engaged in fishing in any area of the high seas adjacent to the territorial sea of a coastal State shall not enforce conservation measures in that area which are opposed to those which have been adopted by the coastal State, but may enter into negotiations with the coastal State with a view to prescribing by agreement the measures necessary for the conservation of the living resources of the high seas in that area.

5. If the States concerned do not reach agreement with respect to conservation measures within twelve months, any of the parties may initiate the procedure contemplated by article 9.

Article 7

1. Having regard to the provisions of paragraph 1 of article 6, any coastal State may, with a view to the maintenance of the

productivity of the living resources of the sea, adopt unilateral measures of conservation appropriate to any stock of fish or other marine resources in any area of the high seas adjacent to its territorial sea, provided that negotiations to that effect with the other States concerned have not led to an agreement within six months.

2. The measures which the coastal State adopts under the previous paragraph shall be valid as to other States only if the following requirements are fulfilled:

(*a*) That there is a need for urgent application of conservation measures in the light of the existing knowledge of the fishery;

(*b*) That the measures adopted are based on appropriate scientific findings;

(*c*) That such measures do not discriminate in form or in fact against foreign fishermen.

3. These measures shall remain in force pending the settlement, in accordance with the relevant provisions of this Convention, of any disagreement as to their validity.

4. If the measures are not accepted by the other States concerned, any of the parties may initiate the procedure contemplated by article 9. Subject to paragraph 2 of article 10, the measures adopted shall remain obligatory pending the decision of the special commission.

5. The principles of geographical demarcation as defined in article 12 of the Convention on the Territorial Sea and the Contiguous Zone shall be adopted when coasts of different States are involved.

Article 8

1. Any State which, even if its nationals are not engaged in fishing in an area of the high seas not adjacent to its coast, has a special interest in the conservation of the living resources of the high seas in that area, may request the State or States whose nationals are engaged in fishing there to take the necessary measures of conservation under articles 3 and 4 respectively, at the same time mentioning the scientific reasons which in its opinion make such measures necessary, and indicating its special interest.

2. If no agreement is reached within twelve months, such State may initiate the procedure contemplated by article 9.

Article 9

1. Any dispute which may arise between States under articles 4, 5, 6, 7 and 8 shall, at the request of any of the parties, be submitted for settlement to a special commission of five members, unless the parties agree to seek a solution by another method of peaceful settlement, as provided for in Article 33 of the Charter of the United Nations.

2. The members of the commission, one of whom shall be designated as chairman, shall be named by agreement between the States in dispute within three months of the request for settlement in accordance with the provisions of this article. Failing agreement they shall, upon the request of any State party, be named by the Secretary-General of the United Nations, within a further three-month period, in consultation with the States in dispute and with the President of the International Court of Justice and the Director-General of the Food and Agriculture Organization of the United Nations, from amongst well-qualified persons being nationals of States not involved in the dispute and specializing in legal, administrative or scientific questions relating to fisheries, depending upon the nature of the dispute to be settled. Any vacancy arising after the original appointment shall be filled in the same manner as provided for the initial selection.

3. Any State party to proceedings under these articles shall have the right to name one of its nationals to the special commission, with the right to participate fully in

the proceedings on the same footing as a member of the commission, but without the right to vote or to take part in the writing of the commission's decision.

4. The commission shall determine its own procedure, assuring each party to the proceedings a full opportunity to be heard and to present its case. It shall also determine how the costs and expenses shall be divided between the parties to the dispute, failing agreement by the parties on this matter.

5. The special commission shall render its decision within a period of five months from the time it is appointed unless it decides, in case of necessity, to extend the time limit for a period not exceeding three months.

6. The special commission shall, in reaching its decisions, adhere to these articles and to any special agreements between the disputing parties regarding settlement of the dispute.

7. Decisions of the commission shall be by majority vote.

Article 10

1. The special commission shall, in disputes arising under article 7, apply the criteria listed in paragraph 2 of that article. In disputes under articles 4, 5, 6 and 8, the commission shall apply the following criteria, according to the issues involved in the dispute:

(*a*) Common to the determination of disputes arising under articles 4, 5 and 6 are the requirements:

(*i*) That scientific findings demonstrate the necessity of conservation measures;

(*ii*) That the specific measures are based on scientific findings and are practicable; and

(*iii*) That the measures do not discriminate, in form or in fact, against fishermen of other States.

(*b*) Applicable to the determination of disputes arising under article 8 is the requirement that scientific findings demonstrate the necessity for conservation measures, or that the conservation programme is adequate, as the case may be.

2. The special commission may decide that pending its award the measures in dispute shall not be applied, provided that, in the case of disputes under article 7, the measures shall only be suspended when it is apparent to the commission on the basis of *prima facie* evidence that the need for the urgent application of such measures does not exist.

Article 11

The decisions of the special commission shall be binding on the States concerned and the provisions of paragraph 2 of Article 94 of the Charter of the United Nations shall be applicable to those decisions. If the decisions are accompanied by any recommendations, they shall receive the greatest possible consideration.

Article 12

1. If the factual basis of the award of the special commission is altered by substantial changes in the conditions of the stock or stocks of fish or other living marine resources or in methods of fishing, any of the States concerned may request the other States to enter into negotiations with a view to prescribing by agreement the necessary modifications in the measures of conservation.

2. If no agreement is reached within a reasonable period of time, any of the States concerned may again resort to the procedure contemplated by article 9 provided that at least two years have elapsed from the original award.

Article 13

1. The regulation of fisheries conducted by means of equipment embedded in the

floor of the sea in areas of the high seas adjacent to the territorial sea of a State may be undertaken by that State where such fisheries have long been maintained and conducted by its nationals, provided that nonnationals are permitted to participate in such activities on an equal footing with nationals except in areas where such fisheries have by long usage been exclusively enjoyed by such nationals. Such regulations will not, however, affect the general status of the areas as high seas.

2. In this article, the expression "fisheries conducted by means of equipment embedded in the floor of the sea" means those fisheries using gear with supporting members embedded in the sea floor, constructed on a site and left there to operate permanently or, if removed, restored each season on the same site.

Article 14

In articles 1, 3, 4, 5, 6 and 8, the term "nationals" means fishing boats or craft of any size having the nationality of the State concerned, according to the law of that State, irrespective of the nationality of the members of their crews.

[Articles 15 to 22 inclusive are procedural in nature and have been omitted.]

E. OPTIONAL PROTOCOL OF SIGNATURE CONCERNING THE COMPULSORY SETTLEMENT OF DISPUTES [5]

The States parties to this Protocol and to any one or more of the Conventions on the Law of the Sea adopted by the United Nations Conference on the Law of the Sea held at Geneva from 24 February to 27 April 1958,

Expressing their wish to resort, in all matters concerning them in respect of any dispute arising out of the interpretation or application of any article of any Convention on the Law of the Sea of 29 April 1958, to the compulsory jurisdiction of the International Court of Justice, unless some other form of settlement is provided in the Convention or has been agreed upon by the parties within a reasonable period,

Have agreed as follows:

Article I

Disputes arising out of the interpretation or application of any Convention on the Law of the Sea shall lie within the compulsory jurisdiction of the International Court of Justice, and may accordingly be brought before the Court by an application made by any party to the dispute being a party to this Protocol.

Article II

This undertaking relates to all the provisions of any Convention on the Law of the Sea except, in the Convention on Fishing and Conservation of the Living Resources of the High Seas, articles 4, 5, 6, 7 and 8, to which articles 9, 10, 11 and 12 of that Convention remain applicable.

Article III

The parties may agree, within a period of two months after one party has notified its opinion to the other that a dispute exists, to resort not to the International Court of Justice but to an arbitral tribunal. After the expiry of the said period, either party to

5. Adopted Apr. 26, 1958 (U.N. Doc. A/Conf. 13/L.57).

this Protocol may bring the dispute before the Court by an application.

Article IV

1. Within the same period of two months, the parties to this Protocol may agree to adopt a conciliation procedure before resorting to the International Court of Justice.

2. The conciliation commission shall make its recommendations within five months after its appointment. If its recommendations are not accepted by the parties to the dispute within two months after they have been delivered, either party may bring the dispute before the Court by an application.

[Articles V to VII inclusive are procedural in nature and have been omitted.]

APPENDIX J

Claims of Nations to Breadth of Territorial Sea

(Including Zones for Specialized Purposes)

(This table is based on a synoptical table prepared by the Secretary General of the United Nations on Feb. 8, 1960 (U.N. Doc. A/Conf.19/4), for the Second Geneva Conference on the Law of the Sea. The breadth of the territorial sea is given opposite the name of the country.)

(a) Including sovereignty over superjacent waters. (b) Not affecting superjacent waters.
(c) In accordance with international law.

ALBANIA ..... 10 miles

ARGENTINA ..... 3 miles
- Continental shelf ..... (a)
- Customs ..... 12 miles
- Fishing ..... 10 miles
- Neutrality ..... 3 miles
- Sanitary regulations ..... 12 miles

AUSTRALIA ..... 3 miles
- Continental shelf ..... (b)
- Customs ..... 3 miles

BAHAMAS ..... 3 miles
- Continental shelf ..... (b)

BELGIUM ..... 3 miles
- Customs ..... 10 km.
- Fishing ..... 3 miles
- Neutrality ..... 3 miles

BRAZIL ..... 3 miles
- Continental shelf ..... (b)
- Fishing ..... 12 miles
- Neutrality ..... 3 miles

BRITISH GUIANA ..... 3 miles
- Continental shelf ..... (b)

BRITISH HONDURAS ..... 3 miles
- Continental shelf ..... (b)

BULGARIA ..... 12 miles

BURMA ..... Not specified

CAMBODIA (straight baselines) ..... 5 miles
- Continental shelf..(a) 50-meter depth
- Customs ..... 12 miles
- Fishing ..... 12 miles

CANADA ..... 3 miles
- Customs ..... 12 miles
- Fishing ..... 12 miles

CEYLON ..... 6 miles
- Continental shelf ..... (b)
- Customs ..... 6 miles
- Fishing ..... 6 miles
- Neutrality ..... 6 miles
- Sanitary regulations ..... 6 miles

CHILE ..... 50 km.
- Continental shelf ..... (a) 200 miles
- Customs ..... 100 km.

CHINA (Nationalist Government). 3 miles
- Customs ..... 12 miles

COLOMBIA ..... 6 miles
- Customs ..... 20 km.
- Fishing ..... 12 miles
- Sanitary regulations ..... 12 miles

COSTA RICA ..... (c)
- Continental shelf..... (a) 200 miles
- Fishing ..... 200 miles

CUBA ..... 3 miles
Customs ..... 12 miles
Fishing ..... 3 miles
Sanitary regulations ..... 5 miles

DENMARK ..... 3 miles
Customs ..... 4 miles
Fishing ..... 3 miles

DOMINICAN REPUBLIC ..... 3 miles
Customs ..... 15 miles
Fishing ..... 15 miles
Sanitary regulations ..... 15 miles

ECUADOR ..... 12 miles
Continental shelf .... 200-meter depth

EL SALVADOR ..... 200 miles
Continental shelf ..... (a) 200 miles
Fishing ..... 200 miles

ETHIOPIA ..... 12 miles
Fishing ..... 12 miles

FINLAND (straight baselines) ..... 4 miles
Customs ..... 6 miles

FRANCE ..... 3 miles
Customs ..... 20 km.
Fishing ..... 3 miles
Neutrality ..... 6 miles

GERMANY (Federal Republic of) ... (c)
Customs ..... 3 miles

GREECE ..... 6 miles
Neutrality ..... 6 miles

GREENLAND ..... Not specified
Fishing ..... 3 miles

GUATEMALA ..... 12 miles
Continental shelf ..... (b)
Customs ..... 12 miles
Neutrality ..... 12 miles

HONDURAS ..... Not specified
Continental shelf.. (b) 200-meter depth
Customs ..... 6 miles

ICELAND ..... Not specified
Customs ..... 4 miles
Fishing (straight baselines) . 12 miles

INDIA ..... 6 miles
Continental shelf ..... (b)
Customs ..... 12 miles

INDIA—Continued
Fishing ..... 100 miles
Sanitary regulations ..... 12 miles

INDONESIA (straight baselines) ... 12 miles

IRAN ..... 12 miles
Continental shelf ..... (b)

IRAQ ..... (c)

IRELAND (straight baselines) ..... 3 miles

ISRAEL ..... 6 miles
Continental shelf ..... (b)
Fishing ..... 6 miles

ITALY ..... 6 miles
Customs ..... 12 miles
Fishing ..... 6 miles

JAMAICA ..... 3 miles
Continental shelf ..... (b)

JAPAN ..... 3 miles
Neutrality ..... 3 miles

JORDAN ..... 3 miles
Fishing ..... 3 miles

KOREA (Republic of) ..... Not specified
Continental shelf ..... (a)
Fishing ..... 20 to 200 miles

LEBANON ..... Not specified
Customs ..... 20 km.
Fishing ..... 6 miles

LIBERIA (for all purposes) ..... 3 miles

LIBYA ..... 12 miles

MALAYA ..... 3 miles

MEXICO ..... 9 miles
Continental shelf ..... (b)

MONACO ..... (c)
Customs ..... 20 km.

MOROCCO ..... Not specified
Fishing ..... 6 miles

NETHERLANDS ..... 3 miles
Fishing ..... 3 miles
Neutrality ..... 3 miles

NEW ZEALAND ..... (c)
Customs ..... (c)
Fishing ..... 3 miles
Sanitary regulations ..... 3 miles

NICARAGUA ..... Not specified
Continental shelf ..... (a)
NORWAY ..... 4 miles
Customs ..... 10 miles
Fishing ..... 4 miles
Neutrality ..... 4 miles
PAKISTAN ..... 3 miles
Continental shelf
(b) 100-fathom depth
Fishing ..... 3 miles
PANAMA ..... 12 miles
Continental shelf ..... (a)
Fishing ..... Continental shelf
PERU ..... Not specified
Continental shelf ..... (a) 200 miles
Fishing ..... 200 miles
PHILIPPINES ..... Not specified
POLAND ..... 3 miles
Customs ..... 6 miles
PORTUGAL ..... Not specified
Continental shelf . (b) 200-meter depth
Customs ..... 6 miles
Sanitary regulations ..... 6 miles
ROMANIA ..... 12 miles
SAUDI ARABIA ..... 12 miles
Customs ..... 18 miles
Sanitary regulations ..... 18 miles
SPAIN ..... 6 miles
Customs ..... 6 miles
Fishing ..... 6 miles
SWEDEN ..... 4 miles
Customs ..... 4 miles
Neutrality ..... 4 miles
THAILAND ..... 6 miles
Fishing ..... 12 miles
TUNISIA ..... 3 miles
Fishing ..... 50-meter depth
TURKEY ..... Not specified
UNION OF SOUTH AFRICA ..... 3 miles
Customs ..... 3 miles
Fishing ..... 3 miles
Sanitary regulations ..... 3 miles
U.S.S.R. ..... 12 miles
UNITED ARAB REPUBLIC ..... 12 miles
UNITED KINGDOM ..... 3 miles
Customs ..... 3 miles
Fishing ..... 3 miles
UNITED STATES ..... 3 miles
Continental shelf ..... (b)
Customs ..... 12 miles
Sanitary regulations ..... 3 miles
URUGUAY ..... 6 miles
Neutrality ..... 5 miles
VENEZUELA (straight baselines) .. 12 miles
Continental shelf . (b) 200-meter depth
Customs ..... 15 miles
Sanitary regulations ..... 15 miles
VIET NAM (Republic of) ... Not specified
Fishing ..... 20 km.
YEMEN ..... Not specified
YUGOSLAVIA ..... 6 miles
Customs ..... 6 miles
Fishing ..... 10 miles

APPENDIX K

Table of Cases Cited

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Index

(Only the main text has been indexed and only those cases that are the subject matter of this volume or those related cases that have had an impact on the development of the law of riparian boundaries. In this Index, as in the text, the word State is capitalized when referring to a nation; otherwise it is lowercased. References are to pages.)

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