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. The U.S. Senate, in its report to the Senate Committee on Foreign Relations on the convention, carefully reviewed the evidence submitted by the commissioners and noted that the agreement had been entered into with the understanding that there should be no interpretation of the treaty that would result in the United States ceding sovereignty over any of its bays or harbors to Great Britain. The tribunal’s decision was based on the interpretation of the treaty as a whole, and it concluded that the bays and inlets falling within the three-mile limit were not to be considered as part of the United States’ territorial waters. The tribunal also noted that the United States had used the term “bay” in a geographical sense, and that the British had interpreted the term “inlet” in the same way. The tribunal concluded that the United States had a right to regulate fishing in its bays and inlets, and that the United States had not ceded sovereignty over its bays or harbors to Great Britain.

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 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.\(^4\)

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 Roop, 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 Miramichi, 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, Chezabucto and St. Peter's Bays, Miram Bay, and Placentia 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.
Inland Waters Problem

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. 1534). 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." Id. For a full discussion of this arbitration, see Jessup, The Law of Territorial Waters and Maritime Jurisdiction 363-382 (1937).
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. 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.

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 CASE 147, U.S. COAST AND GEODETIC SURVEY PUBLICATION (1954).

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
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.

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 531 (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 landlocked 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

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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.\footnote{For the first published discussion of the United States proposal, see Boggs, supra note 9.}

\textit{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.\footnote{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...} The Bureau of the Census also used the method...
in its consideration of the area of the United States and of the individual states as part of the 1940 census; 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). 34

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." 35

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.

14. This is the "Chapman line." For a discussion of its technical basis, see 731.
waters under either proposal. 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.)

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.
Inland Waters Problem

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.)*

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). *(See figs. 1 and 13.)*

### 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 seas 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 sinuositites
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 con-
siderable background, particularly in the usage of Great Britain and other coun-
tries bordering the North Sea with respect to fisheries; was incorporated in a
series of British treaties between 1839 and 1887 with France, the North Ger-
man 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 515(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 Ap-
pendix 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 G,
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


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

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).

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."  

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.

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). 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 411).
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 explicit—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 curvation 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. I 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.\textsuperscript{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.\textsuperscript{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;\textsuperscript{37} and (2) the vital interests of the coastal nation including such elements as geographical configuration, economic interests, and the requirements of self defense.\textsuperscript{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.”\textsuperscript{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,\textsuperscript{40} of the Court’s

\textsuperscript{35} Jessup (1927), op. cit. supra note 6, at 382.

\textsuperscript{36} Memorandum Concerning Historic Bays, supra note 33, at 81.

\textsuperscript{37} There are two views regarding the conditions necessary to constitute “usage” as a root of historical title: usage \textit{per se}, and usage evidenced by international acquiescence. The latter is the more prevalent view.

\textsuperscript{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.


\textsuperscript{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, and of Secretary of State Root's statement in the North Atlantic Coast Fisheries Arbitration of 1910.

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
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 intro-
duced 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.
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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. 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.” 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. 3d 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.

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
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.
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 sand spit 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 sand spit 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. Willenbacher].

\(^{50}\) 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.

\(^{52}\) *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.
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.
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.\(^6\)

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.\(^7\)

\(^6\) 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.

\(^7\) 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 ascertainament of the termini at the headlands of a true bay.” 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.
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).

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.

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.


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.
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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 454), 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.


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). The latter would of course be subject to the Master's recommendation as to harborworks (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."68 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 (1931), citing Rose v. Smith, 50 Am. Repts. 16 (1883) (Conn.); The Aurora, 29 Fed. 98, 203 (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 indentation 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."
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


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, 2201 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).

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 harbor works, 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 n.).

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 harbor works.”

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.”

The recommendation of the Special Master was substantially the same.

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 harbor works 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. 123 (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

![Diagram](image)

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

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 2124(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.