

**Supreme Court of the United States**

No. 128, Original

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STATE OF ALASKA,

Plaintiff,

v.

UNITED STATES OF AMERICA,

Defendant.

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**MEMORANDUM IN SUPPORT OF ALASKA'S MOTION  
FOR SUMMARY JUDGMENT ON COUNT II—JURIDICAL BAYS**

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July 24, 2002

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### INTRODUCTION

There are more than a thousand islands within Southeast Alaska's Alexander Archipelago. Only a handful, however, are so closely related to the mainland or a neighboring island as to be realistically considered a continuation of the mainland or neighboring island. It is those few exceptional islands, separated in their natural state by stretches of unusually shallow waters and fitting together like jigsaw pieces, that give rise to Alaska's claim that most of the waters of the Archipelago in fact comprise juridical or legal bays. Roughly in the middle of Southeast Alaska, three large interlocking islands—Mitkof, Kupreanof, and Kuiu—effectively form a peninsula that divides the waters of Southeast Alaska into areas that qualify as legal bays to the north and the south. The similar

integrated relationship of certain smaller islands to Baranof Island and Prince of Wales Island establish that Sitka Sound and Cordova Bay are legal bays as well.

As the Court has noted, the Submerged Lands Act left to the Court the task of defining the boundaries of a State's inland waters. See United States v. California, 381 U.S. 139, 164-165 (1965). Recognizing that the United States had joined in ratifying the International Convention on the Territorial Sea and Contiguous Zone, Sept. 10, 1964, 15 U.S.T. 1606, 516 U.N.T.S. 205, T.I.A.S. No. 5639 (the "Convention") (Ex. AK-127), and that the Convention contained the best and most workable definitions available, the Court adopted the definitions of the Convention for determining the line marking the seaward limit of inland waters of the States. See California, 381 U.S. at 163-165; United States v. Louisiana ("Louisiana Boundary Case"), 394 U.S. 11, 35 (1968).

Article 7 of the Convention sets forth the requirements for juridical or legal bays. Article 7 embodies a compromise between the interests in preserving areas of high seas and the recognition that certain deeply penetrating coastal configurations necessarily implicate important sovereign interests of the coastal nation.<sup>1</sup> As the Court has stated:

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<sup>1</sup> In every era, bays and other areas inter fauces terrae ("within the jaws of the land") have been recognized as so vitally interconnected with the economic and security interest of shore inhabitants as to become subject to the exclusive authority of the littoral state. See Gayle S. Westerman, The Juridical Bay 33



The ultimate justification for treating a bay as internal waters, under the Convention and under international law, is that, due to its geographic configuration, its waters implicate the interests of the territorial sovereign to a more intimate and important extent than do the waters beyond an open coast. [United States v. Maine, 469 U.S. 504, 519 (1985).]

To protect those interests, Article 7 provides an exception to the general rule that a coastal state's territorial sea is measured from the low water mark along the coast. See Convention art. 3 (Ex. AK-127). It dictates that for juridical bays, the closing lines or baselines drawn across the bay shall serve as the "coast" of the littoral state, rendering the enclosed sea inland waters. Id. art. 7(4), 7(5).

The Convention 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." Id. art. 7(2). The bay must also pass the semi-circle test, meaning that the area of the indentation must be as large or larger than a semi-circle whose diameter is the line or sum length of the lines drawn across the mouth or mouths of the indentation. See id. art. 7(2), 7(3). For each area meeting that two-part standard, the waters enclosed within 24 nautical mile (nm) closing or baselines are automatically inland waters. Id. art. 7(4), 7(5); see also id. art. 5(1).

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(1987) (Ex. AK-128). International consensus on the proper parameters for juridical bays, however, was not achieved until ratification of the Convention.

Before applying the tests of Article 7, however, it is necessary to identify the land that forms the “jaws” of the asserted bay. While bays are generally understood to be indentations into the mainland, the Court has recognized that islands may in fact function as extensions of the mainland and thus be treated as forming the headlands to a juridical bay. Louisiana Boundary Case, 394 U.S. at 60-67; Maine, 469 U.S. at 515-520. As shown below in Part I, under this Court’s precedents Mitkof, Kupreanof, and Kuiu Islands are properly considered a peninsular extension of the mainland. They fit together with each other and the mainland like jigsaw puzzle pieces; are separated only by shallow, narrow, riverine channels; and have been geologically linked for millions of years.

Once it is recognized that these islands are properly considered a peninsular extension of the mainland, it becomes clear that the Alexander Archipelago comprises two juridical bays, to the north and south of this peninsula. The first, North Bay, is depicted in green on Exhibit AK-129. The second, South Bay, is depicted in purple.<sup>2</sup> As shown in Part II, these areas qualify as juridical bays under Article 7 because they are well-marked indentations whose penetration is in such proportion to their mouths as to contain landlocked waters. The contrary

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<sup>2</sup> Alaska alleges in the alternative that South Bay is composed of more than one juridical bay. See Amended Complaint ¶¶ 32-36. There is presently no need to consider any alternate theories, however, since South Bay alone satisfies the requirements of Article 7.

position of the United States depends upon a novel interpretation of the Convention that looks not to the actual openings to the sea as the mouths of the bays, but to a fictitious mainland-to-mainland line. That unprecedented approach ignores what in this case is an overwhelming reality—that islands block access to most of these inland waters. The existence of, for example, the third-largest island in the United States at the mouth of the bay to the south and the fourth- and seventh-largest at the mouth to the north is not, as the Federal Government would have it, simply irrelevant. To the contrary, this Court has recognized that “ ‘the presence of islands at the mouth of an indentation tends to link it more closely to the mainland.’ ” Louisiana Boundary Case, 394 U.S. at 56 (citation omitted).

In Part III below, we explain how this legal conclusion is buttressed by the reality on the ground. The areas that constitute juridical bays under Article 7 are in fact used as bays by the inhabitants of Southeast Alaska. Finally, in Part IV, we apply the foregoing principles to establish that Sitka Sound and Cordova Bay also constitute juridical bays under Article 7.

## **ARGUMENT**

### **I. UNDER THIS COURT’S PRECEDENTS, MITKOF, KUPREANOF, AND KUIU ISLANDS SHOULD BE JOINED TO EACH OTHER AND THE MAINLAND TO FORM A PENINSULA**

This Court has recognized that islands may in fact function as extensions of the mainland and thus be treated as forming the headlands to a

juridical bay. In Maine, 469 U.S. at 517, the Court noted that it had previously recognized “a consensus that islands may be assimilated to the mainland, and that a common-sense approach was to be used to determine which islands may be so treated.” The Court saw “no reason to depart from those principles,” and concluded, “once again, that an island or group of islands may be considered part of the mainland if they ‘are so integrally related to the mainland that they are realistically parts of the “coast” within the meaning of the Convention.’ ” Id. (quoting Louisiana Boundary Case, 394 U.S. at 66). The Court noted that the factors set forth in the Louisiana Boundary Case continued “to be useful in determining when an island or group of islands may be so assimilated.” Id. These factors include an island’s “size, its distance from the mainland, the depth and utility of the intervening waters, the shape of the island, and its relationship to the configuration or curvature of the coast,” as well as the island’s “origin \* \* \* and resultant connection with the shore.” Maine, 469 U.S. at 516 (quoting Louisiana Boundary Case, 394 U.S. at 65 n.84, 66).

In Maine, the Court found that Long Island should be assimilated to the mainland, which resulted in the formation of a legal bay where before there was only a “mere curvature of the coast.” Southeast Alaska is similar in many

respects to Long Island Sound.<sup>3</sup> In particular, as with Long Island, the island assimilations in Alaska reveal the contours of a bay where before none was apparent. See Ex. AK-129. Three interlocking islands—Mitkof, Kupreanof, and Kuiu (depicted half in green and half in purple on Exhibit AK-129)—effectively create a peninsula of the mainland, resulting in bays to the north and south. Under this Court’s factors, recognition of the peninsula is appropriate as a matter of law based on the nautical charts of the area, reported information prepared for mariners seeking to traverse the region’s waters, and a succession of government reports on developing a safe channel through these islands. The successive assimilations which build the peninsula extending from the mainland are addressed in turn.

**A. The Mainland, Dry Strait, And Mitkof Island**

The first assimilation requires consideration of the relationship between Mitkof Island and the mainland, and Dry Strait, the intervening water. The general area is depicted on Exhibit AK-131, which reveals that the immediate mainland opposite Mitkof Island is actually Dry Island. But Dry Island is part of the mainland coast. The North Arm of the Stikine River passes to the north of Dry

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<sup>3</sup> The United States has linked the treatment of the coasts of Long Island and Southeast Alaska. In Maine, the United States argued that because the government had not used the islands of the Alexander Archipelago to create juridical bays, Long Island should not be used for such purposes. The Special Master ultimately disagreed with the United States, adding that the area in Alaska had not been litigated. Report of the Special Master at 31, 46-47, United States v. Maine, No. 35, Orig. (U.S. 1983) (Ex. AK-130).

Island, which together with Farm Island forms one of the Stikine River's mouths.

U.S. Dep't of Commerce, United States Coast Pilot 8, Pacific Coast Alaska: Dixon Entrance to Cape Spencer 168 (23rd ed. 1999) ("Coast Pilot") (Ex. AK-132).

Under the Convention, river mouths do not interrupt the coastline. See Convention art. 13 (Ex. AK-127).

Mitkof Island is separated from the mainland by an area aptly called Dry Strait, which is "mostly bare at low water" and passable only by small craft and only at high water. Coast Pilot, supra, at 167 (Ex. AK-132). A report to Congress noted that "the Stikine River has deposited sufficient material at its mouth to nearly connect Mitkof Island to the mainland at low tide." Southeastern Alaska: Interim Rep. on Preliminary Examination and Survey of Harbors in Alaska, H.R. Doc. No. 83-501, at 31 (1954) ("H.R. Doc. No. 83-501") (Ex. AK-133).

1. **Size and Distance From the Mainland.** Under the Court's factors, the "size" of an island and its "distance from the mainland" should be considered together. Consistent with the Court's "common-sense approach," Maine, 469 U.S. at 517, "assimilation is more likely to be justified \* \* \* the larger the island in comparison to the breadth of the intervening waterway." Michael W. Reed, Shore and Sea Boundaries 296 (2000) ("Reed") (Ex. AK-134). A look at a chart (Ex. AK-131) quickly reveals that the area of Mitkof Island greatly exceeds that of Dry Strait. Specific measurements of the distance between the shores are

provided below. See infra at 13. But the narrowest part of the channel at lower low water has a width of .05 nm. See Ex. AK-135 at HW14377 (area between lines 1 and 2 on plot of Dry Strait). The enormous area of Mitkof Island dwarfs the intervening channel, in much the same way as Long Island dwarfs the East River connecting it to the mainland.

**2. Depth and Utility of Intervening Waters.** As shown by Maine, the depth and utility of the intervening waters are also reasonably considered together because the controlling depth is often a significant factor in a waters' utility. The channel of the East River had been improved to 34 feet with the result that it could support significant traffic. But in its original state, the river was "as shallow as 15-18 feet, with a rapid current that made navigation from Long Island Sound extremely hazardous." 469 U.S. at 518.<sup>4</sup> Together with other factors, the Court found that the "shallowness and inutility of the intervening waters as they were constituted originally \* \* \* suggest that Long Island be treated as an extension to the mainland." Id. at 519 (emphasis added).

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<sup>4</sup> The United States had presented evidence that despite its challenges, the East River had nonetheless been relied upon for commercial navigation since the 1600s. Report of the Special Master at 40 (Ex. AK-130). Although the point is not explicitly addressed, the Court's decision amounts to a rejection of the United States' position that assimilation is not proper if the intervening water was a useful navigation channel. Reed, supra, at 276 (Ex. AK-134).

Government reports, the Coast Pilot, and the NOAA Chart of the area confirm that Dry Strait displays an even more pronounced “shallowness and inutility” than did the East River, thus presenting an even stronger case for assimilation. The reports of the strait’s condition are consistent. In 1916, it was noted that the Strait extended for 9 miles from deep water in Sumner Strait to deep water in Frederick Sound, and that the “channel that at one time existed between Mitkof and Dry Islands has been filled with alluvium brought down by the Stikine River and at present the [tidal] flats have a height above low water of 12 feet.” Reports on Preliminary Examination and Survey of Dry Straits, Alaska, H.R. Doc. No. 65-68, at 4 (1917) (Ex. AK-136). Similarly, a 1922 report notes that “[a]s indicated by the name, the straits are dry at times, the bottom being 5 to 10 feet above water at low tide.” Reports on Preliminary Examination and Survey of Wrangell Narrows, Alaska, and Improvement of Dry Straits, H.R. Doc. No. 67-179, at 3 (1922) (“H.R. Doc. 67-179”) (Ex. AK-137); see also id. at 7, 15.

More recent reports from 1974 and 1993, with telling photographs, reveal that the natural conditions of Dry Strait have not significantly changed or improved. See, e.g., Department of Army, Alaska Dist. Corps of Eng’rs, Combined Review of Repts. on Dry Strait, Wrangell Narrows & Turn Point Navigation, Alaska 2 (Mar. 1974) (photographs 1-9) (Ex. AK-138); id. App. C (photographs 5-6); Department of Army, U.S. Army Eng’r Dist., Alaska,



Navigation Improvements Interim Reconnaissance Rep.: Dry Strait/Wrangell Narrows, Alaska 8 (Dec. 1993); id. at 12 (figure 4) (Ex. AK-139) (“1993 Report”).

The utility of Dry Strait is limited. The 1993 Report states that “[c]ommercial craft rarely use Dry Strait except for tugs pulling log rafts during the highest tides of the month.” Id. at 15. The Report notes that “only one or two tides a month are high enough to provide adequate depths;” even then, a photograph shows “[t]racks made by log rafts in the sandy bottom of Dry Strait at high tide.” Id. at 12. The Report states that Dry Strait is used “only by log towing companies and small recreation craft” and that “[i]nsufficient depth and channel width make it impossible for small or large general cargo ships, passenger vessels, or the Alaska Marine Highway (ferry) system to use the existing waterway.” Id. at 40.

The Coast Pilot describes Dry Strait as follows:

[M]ostly bare at low water, affords passage for small craft at high water between the head of Sumner Strait and the head of Frederick Sound. It is extensively used by fishing boats and towboats operating between the towns of Wrangell and Petersburg. The channel requires local knowledge for safe navigation. Boats should attempt the passage only on the upper half of a rising tide. There are no abrupt changes in depth. The water is muddy at all times, and strong currents are experienced in places, 5 knots having been observed at times at Blaquiere Point. [Coast Pilot, supra, at 167 (Ex. AK-132).]

Current charts record depths at lower low water of 1/4 to 1 fathom in parts of the channel between Mitkof Island and the mainland, but much of the area is bare at

low water. Ex. AK-140. See also Ex. AK-136 (map). The shallowness and inutility of the waters of Dry Strait thus support assimilation of Mitkof Island to the mainland.

**3. Shape and Relationship to Configuration of Coast.** The next two factors are the shape of the island and its relationship to the configuration of the coast. These factors also are readily considered in concert. Standing alone, the shape of the island has no independent significance. It is how the island fits with the opposite shore that matters. Authorities who have addressed these factors have concluded that if the intervening waters are long and narrow, exhibiting a riverine or channel-like quality, assimilation is more justified. Reed, supra, at 277-278, 296 (Ex. AK-134). While the Court has never referred to a specific ratio, former State Department Geographer Hodgson has suggested that a 3:1 ratio of length to width would indicate that the intervening waters are sufficiently “channel-like” to justify assimilation. Id. at 278. As discussed below, the intervening waters comfortably meet that standard and are sufficiently riverine.

The shape and relationship of the island and mainland coasts are readily discernible by reference to a Federal Government chart, excerpts of which are provided as Exhibits AK-131 and AK-140. Mitkof Island is a blunt triangular shape. Much of the northeast coast faces the head of Frederick Sound while much of the southern shore faces Sumner Strait. But neither Frederick Sound nor

Sumner Strait are the intervening waters for purposes of the assimilation inquiry. Instead, Frederick Sound and Sumner Strait are, like Long Island Sound, parts of the areas potentially enclosed within the indentations that might be formed if the islands are assimilated to the coast.

The relationship between the mainland and island coasts at Dry Strait dictates that this is where the assimilation occurs.<sup>5</sup> At the head of Frederick Sound, the mainland coast shifts in direction. As the coast crosses the north arm of the Stikine River, it shifts direction to the southwest. The coast turns again, first to the south and then to the southeast. Within this approximately 4 nm stretch of Dry Strait, a narrow channel is formed between the mainland shore and Mitkof Island. Between the opposite coasts, which are aligned in a bow or westward arc, much of the area is filled by the alluvial deposits of the Stikine. At either ends of this narrow section, the island and the mainland diverge to create a deep channel more than 5 nm wide at the head of Frederick Sound, and the broad Koknuk flats at the head of Sumner Strait. See Exs. AK-131, 140, 136 (map).

Within the approximately 4 nm assimilation zone, the shape of the channel is sinuous, and depths range from 3 to 6 feet. The northern mouth has a width of .90 nm and the southern mouth has a width of .70 nm. The narrowest part of the channel has a width of .05 nm. Seven measurements were made of the

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<sup>5</sup> For ease of reference, this area will be called the "assimilation zone."

width at even intervals along the channel between the north and south limits. The average value of those measurements was .37 nm.<sup>6</sup> This means that the ratio of length to width for the channel is 10.6:1. While it is difficult in an area “mostly bare at low water” even to locate a channel on the relevant chart, see Ex. AK-140, what channel exists is sufficiently riverine to support treatment of Mitkof Island as part of the mainland to which it is nearly attached.

Reed remarks that “the nature of the intervening waterway may be the most significant of the Court’s criteria.” Reed, supra, at 296 (Ex. AK-134). The evidence confirms that the intervening waters of Dry Strait are a narrow sinuous channel, formed by the size, shape, and alignment of Mitkof Island; that the channel is shallow (where not entirely bare); and that it is used mainly by light draft fishing boats during only approximately a quarter of the tidal cycle, and by tugs pulling log rafts on the highest tides of the month. In short, Mitkof Island and Dry Strait present a far more compelling case for treatment as part of the mainland than did Long Island and the East River.

**4. Origin and Connection With Shore.** The final factor is the island’s “ ‘origin and its resultant connection with the shore.’ ” Maine, 469 U.S. at

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<sup>6</sup> Exhibit AK-135 contains the interval measurements and plots of the lines described above, and similar information for the other assimilations at issue in the creation of North and South Bays. See also Ex. AK-141 (affidavit of the maker of the measurements and plots).

516 (quoting Louisiana Boundary Case, 394 U.S. at 65 n.84). Because all the islands at issue have been subjected to the same general forces or processes which have resulted in their present connection to each other and the mainland, the discussion of this factor applies to each proposed assimilation to form the peninsula.<sup>7</sup>

The complexity of the geophysical and geomorphological history of Southeast Alaska could keep a cadre of scientists and students engaged in lively debate for years. But those complexities are immaterial here, because the basic process that has linked the Archipelago islands and the mainland is straightforward and well-established. In short, tens of millions of years ago, plate tectonic motion accreted belts of rock containing the islands at issue to the North American continent.

The following passage explains the significance of the process that unites the lands of Southeast Alaska:

The islands and all the marine bays, channels, passages, entrances, sounds, and straits of the northern portion of Southeast Alaska, including all submerged areas around Mitkof, Kupreanof, and Kuiu Islands, share a common geologic history and are considered to be part of the North American continent. The rocks of the islands and the rocks underlying adjacent marine waters all are classified scientifically as continental crust rather than oceanic crust, and record plate tectonic collisions which

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<sup>7</sup> In terms of unique considerations, the fact that alluvium from the Stikine River has nearly filled the area between Mitkof Island and the mainland has already been noted.

accreted terranes to the North American continent some 50-85 million years ago. [James Begét, Geologic Origin and Scientific Classification of Islands and Bays, Straits, Sounds, Entrances, Channels, and Passages of Southeast Alaska 1 (2001) (“Begét”) (Ex. AK-142).<sup>8</sup>]

Consistent with this report, a noted treatise provides two useful figures depicting the terranes and composite terranes that make up both Alaska’s mainland and islands. See G. Plafker & H.C. Berg, Overview of Geology and Tectonic Evolution of Alaska, in The Geology of Alaska 990-991 (G. Plafker & H.C. Berg, eds., 1994) (figs. 1, 2) (Ex. AK-143). As shown in these figures and the figures provided in Begét’s report (Ex. AK-142, figs. 2, 3), these northwest trending belts of terranes and lithic assemblages extend beyond the islands and into the mainland. Significantly, the divisions between the terranes and assemblages east to west are not aligned with the division between any of the islands Alaska seeks to assimilate to each other and the mainland. See also George Gehrels & H.C. Berg, Geology of Southeastern Alaska, in The Geology of Alaska, supra, at 454-455 (fig. 2) (Ex. AK-144). These figures also show that the major fault lines are not aligned with the breaks between any of the islands Alaska seeks to assimilate. For each assimilation at issue, the same basic structure exists on the

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<sup>8</sup> This unpublished report was prepared for Alaska by Professor Begét, who is one of the State’s expert witnesses.

opposite or facing shores of the mainland and island to be assimilated, and can be assumed to extend under the waters between them as well.

The lands' connection is reinforced by the fact that the islands, as well as the mainland portions of the accreted terranes, record the results of extensive continental glaciation during the last two million years. In Southeast Alaska, before the Ice Ages "river valleys were located where today's marine channels, passages, and bays are found, and the entire region was underlain by rocks of the Alexander and Taku terranes." Begét, supra, at 12 (Ex. AK-142). When the glaciers began to flow

[v]ery thick ice from the Cordilleran mountains repeatedly flowed westward, and each cycle of glaciation further eroded the landscape, creating the deep fjords, channels and bays seen today where geologic faults, fractures, and other zones of weakness had located the streams prior to glaciation. Geologic mapping shows that the glaciers extended beyond the modern coastline and terminated on what today is the continental shelf, eroding channels, bays, and straits throughout southeast Alaska. [Id.]

When the glaciers finally melted, the new landscape was flooded with the rise in sea level. Over one hundred years ago, naturalist John Muir captured the impact of glaciation on the landscape with his poetically stated observation:

Had the general glacial denudation been less, these ocean ways over which we are sailing would have been valleys and canyons and lakes; and the islands rounded hills and ridges, landscapes with undulating features like those found above sea-level wherever the rocks and glacial conditions are similar. In general, the island-bound

channels are like rivers, not only in separate reaches as seen from the deck of a vessel, but continuously so for hundreds of miles in the case of the longest of them \* \* \*. [T]he largest islands look like part of the mainland in any view to be had of them from the ship \* \* \*.

\* \* \*

Thus perfectly beautiful are these blessed evergreen islands, and their beauty is the beauty of youth, \* \* \* the very existence of the islands, their features, finish and peculiar distribution, are all immediately referable to ice-action during the great glacial winter just now drawing to a close. [John Muir, Travels In Alaska 17-18 (1979) (Ex. AK-1).]

Like the coast of Norway, the coast of Southeast Alaska features many deep fjords carved by glaciers and the continental ice sheet that overcame and transformed the landscape. Valleys and channels were widened and deepened to form the spectacular Alexander Archipelago. But this glacial action did not carve deep channels between the islands proposed for assimilation. Those intervening waters remain noticeably shallow in comparison to the other waters of the Archipelago, which may be several hundred feet deep. Despite the flow of glaciers across it, the peninsula dividing North and South Bays remained intact.

The islands proposed for assimilation and the intervening waters between them are found in belts of rocks that, due to tectonic plate collisions, have been a part of the continent for tens of millions of years. And as part of the unified landmass, they have been subjected to continental forces that continue to shape the



landscape. Both in their origin and their effect, the islands at issue are properly considered a part of the larger “mainland” landmass. The channels between them are geologically insignificant. They mark no change in character in the rocks between the facing shores or under the intervening waters. And they track neither terrane boundaries nor identified faults. They are thus proper subjects for assimilation.

**B. Mitkof Island (as Mainland), Wrangell Narrows, And Kupreanof Island**

Kupreanof Island provides the next block of the peninsula separating North and South Bays. The assimilation inquiry is the same as applied to Mitkof Island. The relationship between the mainland coast (as extended by Mitkof Island) and Kupreanof Island’s coast, and the intervening waters of the sinuous Wrangell Narrows, dictate that Kupreanof Island be treated as an extension of the mainland as well. For every enumerated factor, a better case is presented here than that found to justify assimilation of Long Island to the mainland.

1. **Size and Distance From the Mainland.** A mere glance at a chart (Ex. AK-145) confirms that the first factors to consider—size and distance to the mainland—justify treating Kupreanof Island as part of the mainland.

Kupreanof is a large island separated from land to the east by only a narrow channel of water. Based on Reed’s proposition that assimilation is more justified

the larger the island in comparison to the area of the intervening water, Reed, supra, at 296 (Ex. AK-134), these factors clearly support assimilation.

Specific measurements of the distance between the shores reinforce that conclusion. In the nearly 15 nm stretch of Wrangell Narrows passing between the facing coasts of Kupreanof Island's Lindenberg Peninsula and Mitkof Island, the narrowest expanse measured between mean lower low water lines is approximately .1 nm and the widest is approximately .8 nm. The average width of the channel in that expanse is approximately .4 nm. See Ex. AK-135 (HW14376). See also id. at HW14378-80 (extracts of NOAA Chart 17375). The area of Kupreanof Island thus dwarfs the area of Wrangell Narrows, just as Mitkof dwarfs Dry Strait.

**2. Depth and Utility of Intervening Waters.** The depth and utility of Wrangell Narrows are the next factors. Importantly, as noted, this Court focuses on the depth and utility of the channel as originally constituted, rather than its improved state. See Maine, 469 U.S. at 519. This has direct bearing on the consideration of Wrangell Narrows because it is of limited utility in its natural state and has been rendered useful only through manmade improvements.

In 1903, the Army Corps of Engineers informed Congress that in the "narrow passage" of Wrangell Narrows the available depth at low tide was not over 10 feet, while the draft of commercial vessels seeking to navigate it was

between 16 and 19 feet. Reports of Preliminary Examination and Survey of Wrangell Narrows, Alaska, H.R. Doc. No. 58-39, at 5 (1903) (Ex. AK-146). The report notes that for vessels traveling from Seattle to Skagway “[i]n no part of this route are the depths deficient except in Wrangell Narrows.” Id. Thus, the heavier draft vessels were forced to avoid the Narrows whose shoals, the report noted, were “a menace to life and property.” Id. See also id. at 2, 13. The Report thus recommended removing the shoals and deepening the channel to 20 feet. Id. at 2-3.

In 1922, Congress was reminded that Wrangell Narrows “is narrow and because of submerged rocks dangerous. Any vessel drawing more than 10 to 12 feet must wait upon the tide.” H.R. Doc. No. 67-179, at 5 (Ex. AK-137).<sup>9</sup> The Report thus continued to press for improvements to the channel or to Dry Strait. Id. at 9. To improve Wrangell Narrows, a plan was made to excavate 150,334 cubic yards of rock and 377,442 cubic yards of earth from fourteen shoals. Id. at 17.<sup>10</sup>

A 1939 Report transmitted to Congress describes the transformation of Wrangell Narrows into an established trade route:

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<sup>9</sup> In its original state, navigation of the Narrows was effected with 27 courses, involving a 550° change of direction. Report on Resurvey of Wrangell Narrows, Alaska, H.R. Doc No. 71-647, at 8 (1930) (Ex. AK-147).

<sup>10</sup> Twelve of the shoals occur in that portion of Wrangell Narrows adjacent to Lindenberg Peninsula, the area considered as the intervening waters or assimilation zone. Id. (project map).

The development of a satisfactory channel through Wrangell Narrows is comparable to the construction of an artificial waterway. In its unimproved state it was of negligible value to shipping. The existing improvement has proven to be one of the most valuable projects for the benefit of shipping that has ever been adopted for the Pacific Northwest. In most localities alternate methods of shipment may be employed, but Alaskan ports are wholly dependent upon water route, of which Wrangell Narrows has become an indispensable part. [Report on Re-Examination of Wrangell Narrows, Alaska, H.R. Doc. No. 76-260, at 11 (1939) (Ex. AK-148).]

These reports indicate that in its natural state, Wrangell Narrows held the distinction of being the only part of the Inside Passage between Seattle and Skagway where the depth was deficient for use by the regular vessels used in the coastwise trade. It was of “negligible value to shipping,” narrow, crooked, encumbered with shoals and reefs, shallow at low tide, and dangerous. The original, menacing conditions encountered in Wrangell Narrows are objectively less favorable than the original conditions of the East River, whose depth and inutility the Court found supported assimilating Long Island. See 469 U.S. at 519. As such, the depth and utility of Wrangell Narrows may be considered as a matter of law to support the treatment of Kupreanof Island as a part of the mainland.

**3. Shape and Relationship to Configuration of Coast.** The next factors to consider are the shape of the island and its relationship to the curvature or configuration of the coast. The chart (Ex. AK-145) reveals that Kupreanof Island fits into the mainland at Mitkof Island as though the forms were jigsaw

puzzle pieces. The intervening Wrangell Narrows is narrow and sinuous, well-suited to characterization as riverine or channel-like.

Though measurements of the width of the channel are unnecessary to appreciate the obvious close relationship between Kupreanof Island and the mainland, several measurements at lower low water were made in the nearly 15 nm area where Wrangell Narrows is adjacent to the Lindenberg Peninsula.<sup>11</sup> Within that assimilation zone, the average width of the channel (based on 15 measurements) is approximately .4 nm. This yields a ratio of length to width of just over 37:1, see Ex. AK-135, far in excess of the 3:1 ratio former State Department geographer Hodgson proposed would indicate a riverine quality justifying assimilation. See Reed, supra, at 278 (Ex. AK-134). Thus, the shape of the island and its relationship to the curvature or configuration of the coast compel assimilation.

**4. Origin and Connection With the Shore.** The criteria of the origin of the island and resultant connection to the mainland is satisfied in general terms by the geological and geomorphological evolution of the Archipelago and the adjoining mainland, as discussed above. See supra at 14-19.

Given Mitkof and Kupreanof Islands' jigsaw fit, the narrow and winding nature of Wrangell Narrows, its shallow course (especially as compared to

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<sup>11</sup> These measurements were made on Chart 17375, excerpts of which are included at Exhibit AK-135 (HW14378-14280). See also Ex. AK-141.

the surrounding waterways), and its difficulty of navigation without extensive and costly improvements, assimilation of the two island features is plainly warranted.

**C. Kupreanof Island (as Mainland), Rocky Pass, And Kuiu Island**

Kupreanof and Kuiu Islands also fit together as interlocking forms, in a manner that suggests a unified land mass. In contrast to the wide, deep and clear straits bordering the islands to the north and south, the narrow and rocky Keku Strait runs between the two islands. See NOAA Charts 17360, and 17372 (Exs. AK-145, AK-135). The Coast Pilot notes that Keku Strait consists of three parts: large bays to the north and south, and an 18 mile long “narrow intricate passage” known as Rocky Pass, passable only by small craft at high water. Coast Pilot, supra, at 174-175, 164 (Ex. AK-132). In 1977, a portion of the Pass called “The Summit” was dredged to 5 feet. Id. at 164. It is not recommended to attempt passage without local knowledge. Id.

**1. Size and Distance From the Mainland.** Beginning with the first of the factors enumerated by the Court, the chart confirms that Kuiu Island is much larger than the extent of the intervening waters. See Ex. AK-145.<sup>12</sup> Specific measurements of the channel reinforce the conclusion that size and distance from the mainland support treating the island as mainland. Within Rocky Pass, the

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<sup>12</sup> Most of Kuiu Island is shown on Chart 17360, and the rest on Chart 17320. The entire island is depicted on Ex. AK-129.

widest part of the channel at lower low water measures 1.6 nm, but the narrowest part measures .04 nm. See Ex. AK-135 (HW14381-83). The average width between the limits of the heads of the bays to the north and south is .57 nm. Id. Once again, the island to be assimilated dwarfs the intervening waters.

**2. Depth and Utility of Intervening Waters.** The next factor to consider is the depth and utility of the intervening waters in their original state. A 1954 report to the House of Representatives notes that in Rocky Pass, the least depth in the lane of travel was only one foot, and because “[n]umerous rocks constrict the channel,” passage “is made hazardous except at slack tide by strong currents.” H.R. Doc. No. 83-501, at 84 (Ex. AK-133). The worst passages were The Summit and the chillingly named Devil’s Elbow. Id. At Devil’s Elbow, the channel made a sharp right-angle turn and the current velocities reached 5 to 7 knots. Then, at The Summit “strong currents set in within an hour after high water.” Id. “Submerged rocks and reefs, although charted, add to the difficulties of navigation since control of a vessel is difficult in strong currents.” Id. As a result of these conditions,

[a] somewhat hazardous passage can be made through Keku Strait under present conditions during a period of only about 1 hour before and after each high tide. As several boats have been wrecked in passage, the strait bears a bad reputation among boat owners and is little used except by those familiar with the route. [Id. at 85]

This excerpt establishes that Rocky Pass was a treacherous water with a controlling depth of 1 foot, and open for practical use for only an hour on either side of slack water at high tide. This shallow depth and general inutility of the original Rocky Pass is more imposing than that presented in the Long Island Sound case.<sup>13</sup>

**3. Shape and Relationship to Configuration of Coast.** Kuiu Island is an irregularly shaped island whose coast is deeply indented by several small bays in addition to those found at either end of Rocky Pass. The shape of the coasts of Kuiu and Kupreanof Islands generally match each other between the heads of the bays to the north and south of Rocky Pass. Ex. AK-145. The east lobe of Kuiu Island appears as though it could be or had been snapped into place against the west shore of Kupreanof Island. This interlocking aspect is consistent with the channel-like quality of Rocky Pass.

That the intervening waters possess the riverine or channel-like character the Court found significant in the Long Island case is readily discerned from visual reference to the NOAA Charts, see Exs. AK-145, AK-135, but the conclusion is reinforced by consideration of the ratio of the channel's length to width. See Reed, supra, at 278 (Ex. AK-134). Within the 14 nm stretch of Rocky Pass extending between the limits of the bays to the north and south, measurements

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<sup>13</sup> The improvements made by dredging a 5 foot channel converted Rocky Pass to a water that could be used approximately 40% of the time. H.R. Doc. No. 83-501, at 85 (Ex. AK-133).



of the width between the lower low water lines were taken at regular intervals. See Ex. AK-135 at HW14376, 14381-83. The average width was found to be .57 nm, which yields a ratio of length to width of over 24:1. This is well in excess of the 3:1 ratio said to indicate a riverine channel across which an island may properly be assimilated to the mainland.

**4. Origin and Connection With the Shore.** The criteria of the origin of the island and resultant connection to the mainland is satisfied in general terms by the geological and geomorphological evolution of the Archipelago and the adjoining mainland, as discussed above. See supra at 14-19.

The marginal conditions within Rocky Pass and the relationship of the coasts forming the narrow, intervening channel present a compelling case for assimilation under each of the Court's factors. Because each factor is established more convincingly than in the Long Island case, the factors support assimilation of Kuiu Island to the mainland as extended by Kupreanof Island as a matter of law.

The three islands that form the peninsula extending from the mainland are readily perceived as part of a unified land form. Building from the Stikine River delta, whose constant flow of alluvium has nearly connected the mainland to the nearest island, this exceptional group of closely connected islands should, under this Court's precedents, be considered part of the mainland coast.

## **II. NORTH AND SOUTH BAY MEET THE SPECIFIC STANDARDS SET FORTH IN ARTICLE 7 AS A MATTER OF LAW**

When Mitkof, Kupreanof, and Kuiu Islands are recognized as an integral part of the mainland coast, the indentations formed to the north and south readily satisfy Article 7's two-part standard for recognition as legal bays. The first part asks whether the bay is "a well-marked indentation" or "a mere curvature of the coast," and whether the indentation's "penetration is in such proportion to the width of the mouth as to contain landlocked waters \* \* \*." Convention art. 7(2) (Ex. AK-127). The second part is the more objective semi-circle test, which compares the area of the bay to the area of a semi-circle built upon a diameter equal to the sum length of the lines across the entrances to the bay.

The material facts needed to apply these standards are not in dispute. The coast and islands have an unmistakable shape or configuration, and the distance between various points and the areas enclosed within the shores are not matters of serious debate. Minor differences of opinion that may exist have no effect on the satisfaction of the definitional standards for a legal bay. Both North and South Bays are deeply penetrating indentations containing landlocked waters that pass the semi-circle test.

The United States' opposition to recognition of North and South Bay is based on a novel interpretation of Article 7(2)'s ratio of penetration to width, that substitutes a fictional mouth for the actual mouths to the indentations. The

United States appears to have devised this interpretation just for this case. When Article 7 is applied properly, it becomes apparent that North and South Bay are legal bays.<sup>14</sup>

**A. North And South Bays Are Each Well-Marked, Deeply Penetrating Indentations Containing Landlocked Waters**

Under Article 7(2), “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.” While this test defies precise interpretation, it recognizes the interest of the mariner at sea in being able to identify inland or internal waters in order to avoid an unintended intrusion upon the sovereignty of the coastal nation. See Westerman, supra, at 83 (Ex. AK-128). The areas claimed as juridical bays by Alaska satisfy this interest. Passing through the well-marked entrances to any of the asserted bays, a mariner would reasonably expect that he is heading inland, to sheltered waters away from the sea. Indeed, even the United States endorsed that expectation as it has characterized the waters of the Alexander Archipelago as straits leading to inland waters, to which bay closing rules should be applied. See Ex. AK-9; Memorandum in Support of Alaska’s Motion for Summary Judgment on Count I at 43-44.

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<sup>14</sup> The Joint List of Subsidiary Issues, filed with the Special Master on April 16, 2001, states: “The parties expect to be able to reach agreement on the limits of any adjudicated juridical bay.” Joint Statement at 7.

The inquiry under Article 7 asks first whether there is “a well-marked indentation” or instead “a mere curvature of the coast.” To determine whether there is a well-marked indentation, Reed reports that the United States has found it useful to examine charts of the area with the coastal islands removed. Reed, supra, at 240 (Ex. AK-134). Alaska has prepared figures according to this suggestion for North and South Bay, which show the contours of the indentations into the mainland, without the distractions of the nearby islands. See Exs. AK-149 (North Bay), AK-150 (South Bay).<sup>15</sup> Each coast enjoys a configuration that is more than a mere curvature. Red dots on each figure highlight several noticeable shifts in direction away from the general trend of the coast. Both North and South Bay have obvious mainland headlands between which there are indentations too obvious and pronounced to be dismissed as mere bights in the coast.<sup>16</sup> Both North

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<sup>15</sup> Those islands properly considered a part of the mainland, discussed in Part I, are not removed from the figure. Alaska is not aware of any other islands in the area that the United States has deemed a part of the mainland. Although several islands within South Bay in particular are closely aligned with each other or the mainland coast, the natural depth and the utility of the intervening waters distinguishes them from the islands Alaska relies upon to form its peninsula. Apart from Douglas Island (near Juneau), Alaska does not find any of the other major islands in the area to be candidates for assimilation comparable to Mitkof, Kupreanof, and Kuiu Islands.

<sup>16</sup> The fact that South Bay has more than one head of deep penetration does not remove it from consideration as one large bay. Reed notes that commentators have found that an internal promontory should not be used as the shared headland for separate bays if to do so would result in the exclusion of landlocked waters from a potentially double-headed bay. Reed, supra, at 266 (Ex. AK-134). See also Robert

and South Bays are thus “well-marked indentations” rather than “mere curvatures of the coast.”

With the islands restored to the figures, see Reed, supra, at 240 (islands are restored to see whether they form multiple mouths) (Ex. AK-134), the indentations’ true exposure to the sea can be appreciated as the actual mouths or entrances to the bay are revealed. See Exs. AK-152 (North Bay), AK-153 (South Bay). For both North and South Bays, it is apparent that islands feature prominently in the formation of the mouths to the bays and also serve to shelter the waters enclosed. Lines across the natural entrances to the indentations are drawn on the figures noted above, and measurements and more detailed plots of the entrances are provided in Exhibit AK-154 (North Bay) and Exhibit AK-155 (South Bay). See also Ex. AK-141, ¶ 5 (affidavit noting method of locating the natural entrances). Based on these measurements, North Bay’s mouths have a total width of 30.67 nm;<sup>17</sup> South Bay’s have a total width of 47.49 nm.

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D. Hodgson and Lewis M. Alexander, Towards an Objective Analysis of Special Circumstances, Law of the Sea Institute, Occasional Paper No. 13, at 12 (1972) (where intervening waters meet the qualifications of a bay, “[n]ot to enclose them with a single line would be illogical and inequitable”) (Ex. AK-151). In South Bay, the presence of Prince of Wales Island, and to a lesser degree Gravina Island, serve to block the waters off the Cleveland Peninsula from the open sea, and establish the landlocked quality of the waters sheltered behind them. It would be illogical to divide South Bay by an internal promontory so removed from the open sea.

<sup>17</sup> With regard to North Bay, Alaska asserts that the natural entrance to Chatham Strait is between Cape Ommaney (at the tip of Baranof Island) and the

Alaska relies on these measurements to assess whether, for each indentation, the “penetration is in such proportion to the width of its mouth as to contain landlocked waters \* \* \*.” Convention art. 7(2) (Ex. AK-127). Alaska does not use the distance between the mainland headlands—as if the islands blocking entrance to the large bays did not exist—because both the Convention and this Court’s interpretation of it require that only the water openings to a bay be counted as the width of the mouth. Consistent with the Court’s “common-sense approach” in this area, Maine, 469 U.S. at 517, areas blocked by land should not be considered part of the “mouth” of a bay.

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northwest tip of Coronation Island. Additional narrow entrances exist between Coronation Island, the Spanish Islands, and Cape Decision (at the tip of Kuiu Island). See Ex. AK-154 at HW14404-05. Alaska’s treatment of Coronation Island and the Spanish Islands is consistent with the treatment of Buzzards Bay, which is formed by islands extending from the mainland headland on Cape Cod, Massachusetts. See Reed, supra, at 303 (Ex. AK-134). At Buzzards Bay, the presence of small openings between the islands extending from the mainland does not negate the sheltering effect of the string of islands as a whole. The islands were properly recognized as forming multiple mouths to the bay, which had the effect of extending the indentation’s mouth seawards and increasing the amount of inland waters potentially enclosed. Reed, supra, at 302-303. Coronation Island and the Spanish Islands warrant the same treatment in North Bay.

In order to avoid controversy over the ability of North Bay to satisfy the definitional standards for legal bays, Alaska uses an overstated width, incorporating the distance between Cape Ommaney and Cape Decision, rather than the lesser width achieved using Coronation Island and the Spanish Islands as the entrance to Chatham Strait. See Ex. AK-154.

This is clear in the Convention (Ex. AK-127). The width of the mouth is specifically considered in the context of the semi-circle test set forth in the second sentence of Article 7(2):<sup>18</sup>

An indentation shall not \* \* \* 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.

The width of indentations with multiple mouths is specifically addressed by Article 7(3):

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.

In other words, areas at the entrance to the bay blocked by islands are not included as part of the mouth of the bay.

In regard to this language, this Court has unambiguously ruled:

While the only stated relevance of such islands is to the semicircle test, it is clear that the lines across the various mouths are to be the baselines for all purposes. [Louisiana Boundary Case, 394 U.S. at 55 (emphasis added).]

“[A]ll purposes” necessarily includes determining the proportion of penetration to width under Article 7(2). The footnote appended to the quoted text reinforces the

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<sup>18</sup> This test is applied to North and South Bays infra at subsection II.B.

conclusion that the presence of islands creating more than one mouth affects the width of the bay for all purposes:

The 24-mile limitation, for instance, is applied to the aggregate lengths of the closing lines. See 1 Shalowitz, supra, n.7, at 221. See also the following Commentary of the International Law Commission:

“If, as a result of the presence of islands, an indentation whose features as a ‘bay’ have to be established has more than one mouth, the total length of the lines drawn across all the different mouths will be regarded as the width of the bay.” (1956) 2 Y.B. Int’l L. Comm’n 269. [Id. at 55 n.74.]

That this approach would affect the ratio of width to penetration was specifically recognized and intended. The Court considered the purpose of Article 7(3) to be expressed in the following passage from the 1956 Commentary of the International Law Commission:

[T]he Commission’s intention 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 of the ratio between the width and the penetration of the indentation. [Id. at 56 (emphasis added; citation omitted).]

The 1955 Commentary is consistent and notes that “[i]n such a case, an indentation which without islands at its entrance would not fulfill the necessary conditions is to be recognized as a bay.” U.N. Docs. of the 7th Sess., Rep. of the Comm’n to the Gen. Assembly, 2 Y.B. Int’l L. Comm’n at 37 (1955) (Ex. AK-156).



Thus, the Court has recognized that the proportion of an indentation's penetration to the width of its mouth is to reflect the true exposure to the sea and include as the width only the sum of the openings between islands that form more than one mouth. Alaska has adopted this approach.

Prior to this litigation, it appeared that the United States had as well. In Reed's new volume adding to Shalowitz's classic work Shore and Sea Boundaries, Reed quotes the passage of Article 7(3) discussed above and notes:

Although the Article 7(3) reference is to application of the semicircle test, it is understood that that the lines referred to are separate mouths for all purposes. [Reed, supra, at 297 n.302 (Ex. AK-134).]

And in the course of discussing an approach to deciding whether islands in fact create more than one mouth to an indentation, Reed observes:

If the islands form multiple mouths, the mainland-to-mainland closing line becomes irrelevant. The "openings" of the bay are now the gaps between islands (and the most landward islands and the mainland). [Id. at 299.]

Reed also acknowledges that islands may establish the landlocked nature of the enclosed waters. Id. See also id. at 301.

Consequently, it was a great surprise to receive the United States' answers to interrogatories stating that North and South Bay fail the standards for legal bays and are not "landlocked" because of a lack of sufficient penetration compared to the width of the mouth. Ex. AK-157 at 21 (United States answer to

interrogatory 15). In its answers, the United States presents the measurement of the penetration of North Bay as approximately 130 nm using a longest straight line method and 71 nm by the more conservative perpendicular method; for South Bay, approximately 124 nm and 79 nm using the same two methods. Id.<sup>19</sup> But the United States compared these figures to the length of the mainland-to-mainland line the Reed volume calls “irrelevant.” Id.; see Reed, supra, at 299 (Ex. AK-134).

Using the width of openings that you can actually sail a boat through without running into an island—30.67 nm for North Bay and 47.49 nm for South Bay—it is apparent that the penetration is sufficient to contain landlocked waters. Compare Ex. AK-157 (United States answer) with Exs. AK-158 (North Bay pen-

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<sup>19</sup> The straight line method reaches from any point on the closing line to the point of deepest penetration within the bay. The perpendicular method is more restrictive and uses a perpendicular line from any point on the closing line to a point of deepest penetration. Under either method, the lines should be drawn to the most inland point. See The Fisheries Case (U.K. v. Norway), 1951 I.C.J. 116, 141 (Dec. 18).

Alaska has made measurements of the penetration into North and South Bay using both methods, as well as a third method that records the shortest line from the point of deepest penetration within the bay to the closing line. These measurements and the plots of the lines are included in Exhibits AK-158 (North Bay), and AK-159 (South Bay). Because the penetration of the bays is so significant and Alaska could readily afford to use a method that understates the penetration, Alaska adopted the expedient of using the otherwise irrelevant line between the mainland headlands as a base for some of its penetrating lines.

etration), and AK-159 (South Bay penetration).<sup>20</sup> The ratio of penetration to width exceeds (by several fold) not only the 0.5:1 ratio attained by a semi-circular bay, but the 1:1 standard espoused by the United States for the straight line method. See Ex. AK-157. Therefore, as a matter of law the proportion of penetration to width is such that both North and South Bay contain landlocked waters.

This conclusion is buttressed by the fact that the waters in each indentation satisfy the general understanding of the term “landlocked.” While the Convention does not define “landlocked,” the Court has adopted a common sense meaning of the term:

We agree with the general proposition that the term “landlocked” “implies both that there shall be land in all but one direction and also that it should be close enough at all points to provide [a seaman] with shelter from all but that one direction.” [Maine, 469 U.S. at 525 (footnote and citation omitted).]

In its footnote to this passage, the Court quoted the following statement:

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<sup>20</sup> For North Bay, using Alaska’s measurements the results under the straight line and perpendicular methods are: 5.9:1 and 2.5:1; using the United States’ measurements the results are: 4.2:1 and 2.3:1. For South Bay, using Alaska’s measurements the results under the straight line and perpendicular methods are: over 2.5:1 and over 1.2:1; using the United States’ measurements the results are: 2.6:1 and 1.7:1. Differences of opinion (if any) over the starting or stopping points of any of the lines cannot change the fact that the ratios significantly exceed any reasonable standard.

“The concept of land-locked is imprecise and, as a result, may call for subjective judgments \* \* \*. Basically, the character of the bay must lead to its being perceived as part of the land rather than of the sea. Or, conversely, the bay, in a practical sense, must be usefully sheltered and isolated from the sea. Isolation or detachment from the sea must be considered the key factor.” Hodgson & Alexander 6, 8. [Id. at 525 n.19.]

The waters of the North and South Bay indentations satisfy this basic understanding of the term “landlocked.” Within the indentations, the open sea is blocked by land in at least three out of four directions—usually, because of the maze-like nature of the area, in all directions—providing a level of shelter and protection from the force and effects of the open sea not afforded by mere curvatures of the coast. See Exs. AK-152 (North Bay), Ex. AK-153 (South Bay). As discussed above, the presence of islands creating more than one entrance serves to enhance the landlocked quality of the waters contained behind them. In North and South Bay, the islands effectively block the open sea from crossing what would otherwise be wide entrances to the indentations. The Court has acknowledged this sheltering effect:

Just as the “presence of islands at the mouth of an indentation tends to link it more closely to the mainland,” so also do the islands tend to separate the waters within from those without the entrances to the bay. [Louisiana Boundary Case, 394 U.S. at 58 (citation omitted).]

John Muir eloquently captured the benefit of the waters’ isolation from the force of the sea in describing his 1879 trip through the Archipelago:

Gazing from the deck of the steamer, one is borne smoothly over calm blue waters, through the midst of countless forest-clad islands. The ordinary discomforts of a sea voyage are not felt, for nearly all the whole long way is on inland waters that are about as waveless as rivers and lakes. [Travels In Alaska 13 (Ex. AK-1).]

Besides the physical separation and shelter from the open seas, the landlocked quality of the waters is reflected in the affinity between the waters and the life on the shore, as compared to pursuits on open sea. See Westerman, supra, at 85, 90-92 (concept of landlocked reflects legal conclusion that the interests of coastal state are paramount) (Ex. AK-128). As discussed below, the waters of Southeast Alaska are so deeply entwined with the life of its coastal communities that it is difficult if not impossible to imagine one without the other. It should come as no surprise that the waters provide the ready connection between the people and the resources in an area such as Southeast, where much of the land is impassable and few roads exist. Under these circumstances, the waters are legitimately perceived as being more a part of the land than a part of the open sea.

In sum, by any measure or definition, North and South Bays satisfy the standards for legal bays contained in the first sentence of Article 7(2): both areas feature the requisite well-marked and deeply penetrating indentations containing landlocked waters. By no stretch of reasoning or imagination could the bays be described as “mere curvature[s] of the coast.” Convention art. 7(2) (Ex. AK-127).

**B. North And South Bays Meet The Semi-Circle Test By A Wide Margin**

The second part of the definition contained in Article 7(2) sets forth the objective semi-circle (areal) test:

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.

As noted, Article 7(3) provides direction on how to apply the semi-circle test and account for the presence of islands:

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 areas of the indentation.

The effect of these provisions is to relax the semi-circle test when islands are involved. This makes sense, given the recognition that the presence of islands in an indentation tends to link it more closely to the mainland.

Both of the island-related provisions affect the application of the semi-circle test to Alaska's advantage. As discussed above, both North and South Bays feature islands which create multiple mouths to the bay. As a result, the full distance between the mainland headlands is not used in constructing the diameter of the semi-circles. Instead, only the sum length of the water crossings between the islands are used, resulting in smaller semi-circles to compare with the water

areas contained in each bay. And in calculating that water area, the islands within the indentation count as water.

Following the directions for the application of the semi-circle test set forth in Articles 7(2) and 7(3), a simple visual comparison demonstrates that the water area contained in each indentation is as large or larger than the area of the corresponding semi-circle. See Exs. AK-152, AK-153 (figures for North and South Bay depicting the semi-circle drawn on a diameter equal to the sum width of the bay's openings). Measurements of the areas contained within each of the bays confirms that the semi-circle test is passed by exceptionally large margins. Ex. AK-160 (acreage calculations for North and South Bays).<sup>21</sup> For North Bay, a semi-circle with a diameter of 30.37 nm has an area of 369.39 sq nm. The area of North Bay, conservatively measured, is 5,592.86 sq. nm. For South Bay, a semi-circle with a diameter of 47.49 nm has an area of 885.65 sq. nm. The area of South

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<sup>21</sup> Alaska has adopted the United States's approach to determining which waters are properly excluded from the areal calculation:

If the connection were a narrow channel, the federal government took the position that the tributary water body should not be included as part of the area of the indentation under consideration. On the other hand, if the relationship were more in the nature of a bay opening into a larger bay, the areas would be combined. [Reed, supra, at 246 (Ex. AK-134).]

The Court has taken an approach consistent with this policy. Louisiana Boundary Case, 394 U.S. at 52-53.

Bay, conservatively measured, is 4,949.02 sq. nm. Remarkably, even if the islands within the indentations were not treated as water area as called for under Article 7(3), there is still enough water just in the channels and sounds between the islands for the indentations to pass the semi-circle test. See Exs. AK-152, 153; compare Ex. AK-160 (acreage calculations) and Ex. AK-161 (table listing areas of islands, from Southeast Alaska's Panhandle, 5 Alaska Geographic, No. 2 (1978)). Thus, both North and South Bay pass the semi-circle test as a matter of a law.

**C. Twenty-Four Mile Baselines Enclose Inland Waters In Each Bay**

Once the definitional requirements are met, and we know we are dealing with bays, Articles 7(4) and 7(5) provide for drawing closing or base lines that do not exceed 24 nm in length. Where the mouth of the bay is 24 nm or less in width, Article 7(4) provides that the closing line(s) be drawn across the opening(s), between the natural entrance points.<sup>22</sup> Where the width of the bay exceeds 24 nm, Article 7(5) directs that baselines not to exceed 24 nm be drawn within the bay in such a manner as to enclose the maximum amount of water area possible. North and South Bay fall under Article 7(5).

Application of Article 7(5) is largely a geometric exercise dependent on precise coastal surveys of the line of mean lower low water, but is not otherwise

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<sup>22</sup> The lines joining the natural entrance points are the same lines used for the diameter of the semi-circle under the areal test of Article 7(2) and the width of the mouth of the bay. See Louisiana Boundary Case, 394 U.S. at 55; supra at 32-34.



constrained. For instance, the final baselines need not use natural entrance points or enclose waters that satisfy the semi-circle test. Reed, supra, at 308 (Ex. AK-134). Due to the configuration of the coast and islands, the selection of baselines that would enclose the maximum area of water within North and South Bay should not be cause for debate. See supra n.14. For both bays, two alternate sets of base lines totaling approximately 24 nm or less were considered. For each bay, the two options were plotted and the areas between the two sets of lines measured (using the same methods used to calculate the area of the indentation). The measurements and plots for each are included in Ex. AK-162 (North Bay closing options) and Ex. AK-163 (South Bay closing options). See also Ex. AK-141. Even if more precise measurements indicated that the location of the potential baselines should be shifted, any such change is not likely to be of a magnitude to alter the choice between the options.<sup>23</sup>

While the exact locations of the 24 nm baselines should be determined based on the most recent available survey, a graphic illustration of reasonable

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<sup>23</sup> The so-called Cape Spencer option for North Bay's closing lines, Ex. AK-162, would be appropriate only if it were determined that Chatham Strait has just one entrance. See supra n.17. Even if it were determined that there is a factual question that prevents resolution of the location of the entrance or entrances to Chatham Strait, that would not raise a material issue of fact over the question of whether the indentation qualifies as a legal bay. In Maine, the Court determined that Long Island Sound qualified as a juridical bay before addressing whether Block Island formed one of its mouths and thus affected the bay's closing lines. 469 U.S. at 520.

estimates of the location of the baselines for each bay has been depicted on Ex. AK-164 (North Bay) and 165 (South Bay). The 24 nm base lines finally drawn under Article 7(5) will automatically serve as the seaward limits of inland waters.

**III. THE CONCLUSIONS DRAWN FROM APPLICATION OF ARTICLE 7 AND THIS COURT'S PRECEDENTS REFLECT THE REALITY THAT THE WATERS OF THE ALEXANDER ARCHIPELAGO ARE USED AS A BAY**

Although Article 7 contains no requirement focusing on the actual use of the waters, this Court noted in Maine:

Our conclusion that this area should be considered a bay is buttressed by the fact that as a result of the geographic configuration of Long Island, the enclosed water is used as one would expect a bay to be used. [469 U.S. at 519.]

Regardless of whether such a finding was necessary to the decision to treat Long Island as part of the coast, the waters of the Alexander Archipelago to the north and south of the peninsula are used as one would expect bays to be used, and “implicate the interests of the territorial sovereign to a more intimate and important extent than do the waters beyond an open coast.” Id. As explained in our introductory memorandum, inland water status properly reflects the close connection between life on the shore and the use of the waters in the Alexander Archipelago.

Throughout its history, the people of Southeast Alaska have depended on the protected waters as a vital link between the communities and to the resources. A report to Congress noted that “[w]ith navigation so important to

southeast Alaska, and fishing the principal industry, the use of boats is practically universal in the region.” H.R. Doc. No. 83-501, at 109 (Ex. AK-133). The area’s harbors are home to thousands of small boats, which have been recognized as of prime importance to the economic development of the area. Id. at 59, 68. As noted, the various straits, sounds, and canals serve as the area’s roads.

The waters of the Alexander Archipelago are typically the destination for the vessels that enter. Because its waters are not on the way to any other markets or ports, the Alexander Archipelago is bypassed by major shipping routes. See Hydrographer of the Navy, Ocean Passages of the World 141-142, 146, 162-163, 166, 168-176, and 260 ff. (diagram 10.132) (4th ed. 1987) (Ex. AK-166). Even the major Alaskan ocean traffic does not use the route. The container ships running regularly between Anchorage and Tacoma travel across the Gulf of Alaska. See, e.g., Ex. AK-167 (CSX/Sealand Route map). And oil tankers from Valdez headed towards West Coast refineries also steer outside the Archipelago. Ex. AK-168. See Maine, 469 U.S. at 519 (finding that Long Island Sound is a bay supported by fact that it “is not a route of international passage”). The waters’ lack of value to non-local shipping reflects the fact that—unlike straits which lie off open coasts—the maze of straits and sounds surrounding the Alexander Archipelago penetrate deeply inland. As a consequence, the waters’ principal

value is naturally felt by its coastal residents. These are the kind of waters Article 7 was designed to protect.

As with Long Island Sound, due to the geographic configuration of the coastline, including the islands forming the peninsula, “large pocket[s] of water \* \* \* [are] almost completely enclosed by surrounding land.” Maine, 469 U.S. at 518. That the enclosed waters contain areas labeled as straits is not inconsistent with bay status. Any bay that has islands creating more than one mouth presents a situation where the waters claimed may be both a legal bay and a geographic strait. See, e.g., Prince William Sound (depicted on Ex. AK-169). But if the area qualifies under Article 7’s standards as a legal bay, the area is enclosed as inland waters.

During the Convention deliberations, the United Kingdom proposed a different rule:

In the case of a bay which, because of the presence of islands, has more than one mouth, closing lines may not be drawn at all if the normal navigational route passes between the islands and the mainland. [Ex. AK-170 at 228.]

See also id. at 145-146. This proposal was rejected. Id. at 146. A legal bay may comprise straits without disqualifying the area from inland water status. Instead, the law recognizes the dominant sovereign interests of the coastal state in those deeply penetrating indentations that qualify as legal bays.

The conclusions drawn from application of Article 7 are also buttressed by the historical record. Given that the waters meet the test for juridical bays, one would expect that they might well have been regarded as inland over time. As explained in our memorandum on Count I, they have been so regarded, both by sovereigns Russia and the United States and by foreign nations. The Court can draw considerable comfort from the fact that the historical record confirms the result reached under Article 7, and from the fact that the reality on the ground confirms both history and theory: The waters of the Alexander Archipelago are inland waters.

#### **IV. SITKA SOUND AND CORDOVA BAY SATISFY THE STANDARDS FOR LEGAL BAYS**

There is no dispute that Sitka Sound and Cordova Bay, if considered indentations into the mainland, satisfy the standards for juridical bays. The United States admits that both bays satisfy the standards of the first sentence of Article 7(2). See Ex. AK-157 at 21-22 (United States answer to interrogatory 15). And it is beyond dispute that each area passes the semi-circle test, the second half of the Article 7(2) standard. Ex. AK-171 (Chart 17320 extract showing Sitka Sound with semi-circle described between mainland headlands),<sup>24</sup> Ex. AK-172

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<sup>24</sup> For Sitka Sound, the semi-circle is circumscribed directly across the mouths of the bay, without regard to the presence of islands creating more than one mouth to the entrance. This was done for expediency as even this simple exercise demonstrates that the areal test is unquestionably met.

(Chart 17400 extract showing Cordova Bay with semi-circle described between mainland headlands). The parties have also agreed that for any bay adjudged to be a juridical bay, they expect to be able to agree upon proper closing lines. See supra n.14.<sup>25</sup> Since the mouths of both Sitka Sound and Cordova Bay are less than 24 nm, Article 7(4) controls the drawing of closing lines between the natural entrance points.

As a result, the only contested issue with regard to these two smaller bays is whether the islands forming the indentations are realistically considered a part of the larger “mainland” coast. Because authoritative charts and historic reports provide all the material facts needed to assess the relevant factors,<sup>26</sup> it can be determined, as a matter of law, that Kruzof and Partofshikof Islands can be assimilated to Baranof Island to render Sitka Sound a juridical bay; and that Dall Island can be assimilated to Prince of Wales Island to render Cordova Bay a juridical bay.

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<sup>25</sup> Alaska has identified a set of closing lines for Sitka Sound that takes into account the fact that several islands in the string of Necker Islands form entrances to the indentation. Ex. AK-173 (Sitka Sound entrances, green line on HW14443).

<sup>26</sup> The question of the origin and resultant connection of the islands to the mainland is addressed supra at 14-19.

**A. Kruzof And Partofshikof Islands Can Be Assimilated To Baranof Island**

Sitka Sound involves the assimilation of two successive islands to the mainland represented by Baranof Island. Only one island, separated from Baranof Island by Neva Strait, demands close consideration. For the other, the Baseline Committee, comprised of various United States government agency officials, agreed that Partofshikof Island was properly considered a part of Kruzof Island. See Ex. AK-174 at 3. Reference to relevant authorities confirms that this conclusion is sound. A Federal Government chart shows the connection between Sukoi Inlet and Krestof Sound as being above the low water line. See Ex. AK-175. And the Coast Pilot notes that the intervening “waters” between the islands are passable by canoes only at high water. Coast Pilot, supra, at 232 (Ex. AK-132).

The remaining assimilation is between Partofshikof and Baranof Islands. The Baseline Committee considered this assimilation as well but rejected the option because it found the channel between the islands, Neva Strait, too broad and deep to be ignored, and also considered Neva Strait to be an important navigational channel. Ex. AK-174. The committee erred, however, in not considering Neva Strait in its original condition as required under Maine, 469 U.S. at 519. The following analysis will address each of the Court’s enumerated factors, see id. at 516-517, other than island origin, which has already been addressed in general terms. See supra at 14-19.

1. **Size and Distance From the Mainland.** The size of the island and its distance from the mainland are the first factors to consider. As is evident from NOAA Chart 17324, Ex. AK-175 (extract), the area of the island exceeds the area of the intervening water by large measure. The 1932 edition of the Coast Pilot reports that:

Neva Strait is 4 miles long \* \* \* and varies in width from 1/8 mile at Whitestone Narrows to 3/8 of mile at its northwest end at Entrance Island; it is narrow throughout and more or less foul, requiring careful piloting, especially in the narrows, where the channel is only 40 yards wide and will not permit of any deviation. [U.S. Dep't of Commerce, U.S. Coast Pilot Alaska Part I: Dixon Entrance to Yakutat Bay 381 (8th ed. 1932) (Ex. AK-176).]

Partofshikof Island is clearly situated close to Baranof Island.

2. **Depth and Utility of Intervening Waters.** The depth and utility of Neva Strait is the next factor to consider. Today the Strait is used by many vessels as a sheltered route from Sitka to Salisbury Sound and on to Chatham Strait. But the 1932 Coast Pilot description, quoted above, suggests a challenging passage. Like Wrangell Narrows before it was improved, Neva Strait and nearby Olga Strait were distinguished from other portions of the Inside Passage, as noted in the following from a 1954 report to Congress:

The Inside Passage provides more than 1,000 miles of protected water generally adequate for oceangoing vessels and present and prospective commerce, except for Neva and Olga Straits at Whitestone Narrows. Improve-



ments for deep-draft craft in these localities and for small boats at Sitka, Dry Pass, Douglas, and Juneau are being considered. [H.R. Doc. No. 83-501, at 4 (Ex. AK-133).]

In 1959, Neva Strait was improved by dredging a 200-foot wide and 24-foot deep channel at Whitestone Narrows, which required drilling and blasting to remove the rock. But even after those improvements, the Narrows was considered both to “seriously hinder traffic and pose [a] definite threat[ ] to life and property.” Report on Sergius Narrows and Whitestone Narrows, Alaska, S. Doc. No. 90-95, at 101 (1968) (Ex. AK-177). See also id. at 82.

The need to remove several rocks was recognized by the local users:

Requests for improvements at Whitestone Narrows centered mainly on the need for removal of the rock marked by a buoy at the south entrance to the Narrows, and also the removal of a rock east of the present channel at the north end of the Narrows. \* \* \* In justification of the requests, local interests stated that present waterborne commerce using the channels can only traverse the Narrows at or near slack water, incurring substantial delay costs waiting for favorable tide conditions. Also, \* \* \* several groundings at these locations have occurred in recent years resulting in large repair expenditures. [Id. at 12-13.]

At the time, most of the traffic using the inside passage from Sitka to the inside waterways of Southeast Alaska was contributed by Sitka and involved those in the local fishing and forestry industry or the passenger or freight service. Id. at 33. See also id. at 101 (fishing vessels and log tows generally would not chance the open ocean). Eighty-eight percent of the traffic was by vessels with a

draft of 14 feet or less. Id. at 38. Maritime regulations made use of the inside route mandatory for state ferries. Id. at 8. The draft of the state ferries was over 15 feet. Id. at 14. Large ocean going vessels did not use the route, and were not expected to even if improved. Id. at 8, 101.

In response to information called for by the Senate, Whitestone Narrows is described as follows:

A 200-foot wide, 24-foot deep channel was constructed through the Narrows by the Corps of Engineers in 1959 at a cost of \$155,009. Although providing sufficient depth, the channel is quite hazardous. The combined effects of strong tidal currents, the necessity of two mid-passage course changes and the narrowness of the channel make passage for large vessels difficult. Safe passage is limited to slack water tidal stages and even then requires skill and caution. [Id. at 101.]

Other descriptions in the report noted:

Whitestone Narrows is a navigation restriction that requires extreme caution on the part of mariners \* \* \*. [P]assage [is] hazardous at any tidal stage other than slack water. Tidal currents \* \* \* in combination with the extremely narrow channel and required maneuvering demands the utmost skill on the part of boat operators. [Id. at 16.]

Dredging of up to 26,100 cubic yards was proposed. Id. at 29-31,

103.<sup>27</sup> The dimensions of the projects were designed to accommodate traffic by

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<sup>27</sup> The current Chart for Neva Strait shows that the passage bears the improved course. Compare S. Doc. No. 90-95, at 95, Plate 2 (Ex. AK-177) with Ex. AK-178 (Chart 17324 extract showing Whitestone Narrows).

state ferries. Id. at 47. In fact, one of the tangible benefits listed for the project was:

With the State ferries transporting some 12,500 passengers through the hazard areas annually, the chance of a disastrous grounding must be considered as a distinct possibility. The project will greatly reduce the danger to human lives now inherent in traversing this passage. [Id. at 105.]

See also id. at 18. That danger was certainly real as the report includes letters from at least two shipping companies reporting accidents in Whitestone Narrows that resulted in severe damage. Id. at 79, 96. See also id. at 42-44 (table of undifferentiated costs and damages attributable to “extremely hazardous condition” in both Sergius and Whitestone Narrows).

It took substantial improvement to convert Neva Strait from a dangerous and constricted passage to one that could safely be relied upon to support the localized traffic between Sitka and the other growing communities located at points along the inside, protected waters of Southeast Alaska. In its original state, Neva Strait had a utility comparable to that of the East River prior to its improvement.<sup>28</sup>

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<sup>28</sup> Neva Strait serves a similar function as well. Just as the East River connects Long Island Sound to New York Harbor, Neva Strait, in combination with other waters, connects Sitka Sound to other Southeast Alaska ports.

**3. Shape and Relationship to Configuration of Coast.** The shape of Partofshikof Island, in combination with Kruzof Island, and its relation to the configuration or curvature of the mainland coast also support treatment of the combined islands as a unified form with Baranof Island. The considerable extent of the combined islands forms the west coast of Sitka Sound over a distance of about 20 nm. See Ex. AK-171 (Chart 17320 extract). The straight section of the east coast of Partofshikof Island matches, almost exactly, the alignment of the coast of Baranof Island between Zeal and Neva Points and creates the narrow Neva Strait. Ex. AK-175 (Chart 17324 extract showing Partofshikof Island). It is visually apparent that Neva Strait has the configuration of a riverine channel. As Reed observes, assimilation is more likely to be justified when the intervening waters are “long and narrow, rather than broad.” Reed, supra, at 296 (Ex. AK-134).

Reference to the ratio of channel length to width reinforces the case for assimilation. Using the wider of the 1932 Coast Pilot’s report on the range of widths in the strait (3/8 nm) to calculate the ratio of channel length to width results in a ratio of over 10:1, which is more than three times the 3:1 ratio Hodgson identified as indicative of a proper case for treatment as a part of the mainland.

The Baseline Committee erred in rejecting assimilation across Neva Strait. Neva Strait is a narrow and riverine channel, which in its original state was foul and inadequate to support vessels in the coastwise commerce. Even after

initial improvements were made, Neva Strait presented a hindrance to traffic and posed a threat to life and property. As the condition of Neva Strait appears no more favorable than that of the East River in the Long Island Sound case, treatment of Kruzof and Partofshikof Islands as part of Baranof Island is appropriate as a matter of law. The result is the formation of a legal bay.

**B. Dall Island Is Linked To Prince Of Wales Island To Form Cordova Bay**

1. **Size and Distance From the Mainland.** Dall Island and Prince of Wales Island fit together to form the jaws of Cordova Bay. See Ex. AK-172 (Chart 17400 extract showing Cordova Bay). The size and distance from the mainland support Dall Island's assimilation to Prince of Wales Island. The water channel separating the two land masses is dwarfed by the scale of the islands creating the indentation. See Ex. AK-172 (Chart 17400 extract), Ex. AK-179 (Chart 17407 extract showing area near head of bay). Dall Island is separated from Prince of Wales Island by Tlevak Narrows, known locally as the Skookum Chuck. See Ex. AK-180 (Chart 17407 extract with close view of Tlevak Narrows). This water is described as a "narrow and comparatively deep passage." Coast Pilot, supra, at 142 (Ex. AK-132). At Turn Point, Tlevak Narrows is approximately 1/3 nm wide. See Ex. 180.

2. **Depth and Utility of Intervening Waters.** The depth and utility of Neva Strait is the next factor to consider. As noted above, the waters are

comparatively deep, though narrow. The passage is used between Cordova Bay and Buccareli Bay by small vessels seeking a protected route. Coast Pilot, supra, at 143, 135 (Ex. AK-132). Foul ground extends 150 yards North and 300 yards Southeast from Turn Point. Id. at 142. The vicinity of Turn Point requires a 90° turn, where swirling currents cause whirlpools that can spin a boat around. Caution is advised. Id. Though the depth does not present an issue, the narrowness and configuration of the waters at the juncture between Dall Island and Prince of Wales make the utility of the passage a matter not to be taken for granted.

**3. Shape and Relationship to Configuration of Coast.** The shape of Dall Island and its relationship with Prince of Wales Island is the last factor to consider.<sup>29</sup> Dall Island forms the west coast of Cordova Bay for 29 nm from its mouth. See Ex. AK-172. Dall Island has a linear shape and its relationship to the configuration or curvature of the mainland coast plays a major role in defining the extent of the Bay.

At the junction of Dall Island and Prince of Wales Island, the coast gives the impression that between Cordova Bay and the confluence of Ulloa Channel and Meares Passage to the north, the shores have been pinched together. Ex. AK-179 (Chart 17407 extract). If Dall Island could be slid to the north, its

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<sup>29</sup> The origin and resultant connection to the mainland have already been addressed in general terms. See supra at 14-19.

Turn Point could fit into a notch along the opposite shore. Although the pinched area does not extend far enough to generate a ratio of length to width of more than 3:1, which would satisfy the Hodgson benchmark,<sup>30</sup> its character is different than the wider, more bay-like formations at either end.

The Coast Pilot entry and the NOAA Charts provide the facts necessary to appreciate the relationship between the islands and the character of the intervening waters. Because these facts are not in dispute, it is possible to determine as a matter of law whether Dall Island may be treated as a part of Prince of Wales Island. At the juncture between the two islands, the shores are close together and the waters between them constricted and subject to swirling currents, prompting the Coast Pilot to warn of the need to use caution. Under the Court's factors, there is justification for ignoring the intervening waters between the pinched coasts and treating the islands as a unified land mass. If that is done, the result is the formation of a legal bay.

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<sup>30</sup> Falling short of the 3:1 ratio is not decisive, as the Court has not specifically relied upon the Hodgson ratio. Reed, supra, at 278 (Ex. AK-134). Instead, the Court has made more general observations about the character of the intervening waters. Id.

## CONCLUSION

For the foregoing reasons, summary judgment should be granted in favor of Alaska on Count II.

Respectfully submitted,



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July 24, 2002