

No. 74, Original

Supreme Court, U.S.

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In The
Supreme Court of the United States

October Term, 1988

STATE OF GEORGIA,

Plaintiff,

v.

STATE OF SOUTH CAROLINA,

Defendant.

EXCEPTIONS AND BRIEF OF THE
STATE OF SOUTH CAROLINA

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STATE OF GEORGIA,

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v.

STATE OF SOUTH CAROLINA,

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Exceptions of the State of South Carolina

- I. The Special Master erred in concluding that the additions to the Denwill tract, formed by sedimentation and dredge deposits over a 40-year period, were avulsive. In so concluding, the Special Master erroneously awarded this land on the South Carolina side of the river to Georgia. In addition, the Special Master should have treated land similarly created on Bird Island in the same fashion as he treated the Denwill tract.
- II. The Special Master erred in concluding that the land created in the Horseshoe Shoal area was created by avulsive processes and should be placed in Georgia. As a result, the Special Master also erred in drawing a straight line connecting two segments of the boundary in the Horseshoe Shoal-Oyster Bed Island area.

- III. The Special Master erred in treating the additions to Bird Island differently from those to Denwill and Horseshoe Shoal, when all were formed by the same processes.
- IV. The Special Master erroneously drew the lateral seaward boundary north of the overlap of the coastal fronts of the two states, effectively causing the line to cut across South Carolina's coastal front.

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STATE OF GEORGIA,

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STATE OF SOUTH CAROLINA,

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BRIEF FOR THE STATE OF SOUTH CAROLINA
IN SUPPORT OF ITS EXCEPTIONS

STATEMENT

This case involves a boundary dispute of recent origin. It first surfaced in the early 1970's, when the United States Geological Survey suggested that the boundary line might be changed on a new set of maps which it was preparing.¹ The catalyst for the action, however, was a 1976 dispute about jurisdiction over commercial shrimping in the territorial sea east of the jetties where the Savannah River meets the Atlantic Ocean. *See First Report* at 101, n. 83.

¹ The Special Master commented that the methodology of the U.S.G.S. did not reflect "any marked degree of efficiency on the part of the U.S.G.S." *First Report* at 91.

In the summer of 1977, Georgia sought leave to file this action, which this Court ordered filed on October 31, 1977. 434 U.S. 917. The order of reference was entered in February, 1978. 434 U.S. 1057.

At issue between the parties are eight land areas, described more fully in *First Report* at 3, and the lateral seaward boundary. The Special Master held approximately three weeks of hearings as to the land areas in 1981. After requesting additional briefing several times, he issued his First Report in March, 1986. The hearings on the lateral seaward boundary occurred over several days in early 1987, and the Second and Last Report was issued in April, 1989. This Court, by Order dated April 24, 1989, set a schedule for the filing of Exceptions.² These Exceptions are filed pursuant to that Order.

The Special Master awarded most of the contested areas to South Carolina, and South Carolina will respond to any exceptions which Georgia might take as to those. The only areas to which South Carolina takes exception are the lateral seaward boundary, two narrow strips of land well downstream from the City of Savannah, the downstream area known as Horseshoe Shoal, and the line which resulted from the placement of Horseshoe Shoal in Georgia.

² Although the April 24, 1989, Order mentions only the filing of Exceptions to "the Report," presumably the Court intended to permit the filing of Exceptions to both Reports, as contemplated by the Motion to Defer Filing Exceptions to the First Report. See *First Report*, Appendix A. In 1986, this Court simply ordered the First Report filed.' 475 U.S. 1115.

SUMMARY OF ARGUMENT

I.

Several of the areas in dispute in this case consist of additional lands formed over a period of 30 to 40 years on the South Carolina side of the Savannah River and extending across the original centerline of the river. These formations occurred partly as a result of sedimentation caused by the erection of permeable structures in the Savannah River by the Corps of Engineers in the 19th century, and partly as a result of the deposit of dredge fill material behind those structures during the 20th century. The Special Master concluded without discussing the point that because these formations were the result of manmade structures, they were avulsive in nature and did not change the boundary. In so holding, the Special Master erroneously overlooked the unbroken line of precedent in this and other courts which holds that gradual additions to a riverbank, whether resulting from natural or manmade causes, move the boundary to the center of the river as altered.

II.

Under established principles of international law, the lateral seaward boundary is to be constructed by examining all relevant circumstances. In this case, the only relevant circumstances are the geography and geometry of the coasts of the two states. Recognized methods of analysis of the relevant geography identify a V-shaped area where the two coastal fronts overlap each other as the area reasonably in dispute. A line bisecting that area would be an equitable lateral seaward boundary. South

Carolina has proposed that the center of the navigation channel should be the boundary because it divides the area in dispute in the same proportions as a bisecting line, and has the additional advantage of being a well-marked line which is simple to identify. The line recommended by the Special Master is inequitable because it extends beyond Georgia's coastal front to the north and therefore cuts across South Carolina's coastal front.

ARGUMENT

- I. The Special Master erred in concluding that the additions to the Denwill tract, formed by sedimentation and dredge deposits over a 40-year period, were avulsive.

This case involves a relatively unusual form of river boundary. It is governed by the 1787 Convention of Beaufort between the two states, which provides that the boundary shall be:

"[t]he most northern branch or stream of the River Savannah . . . reserving all the islands in the [Savannah River] to Georgia."

See First Report at 8.

When a dispute requiring a more precise determination reached this Court in 1922, this Court held:

- (1) Where there are no islands in the boundary rivers the location of the line between the two states is on the water midway between the main banks of the river when the water is at ordinary stage;

- (2) Where there are islands, the line is midway between the island bank and the South Carolina shore when the water is at ordinary stage.

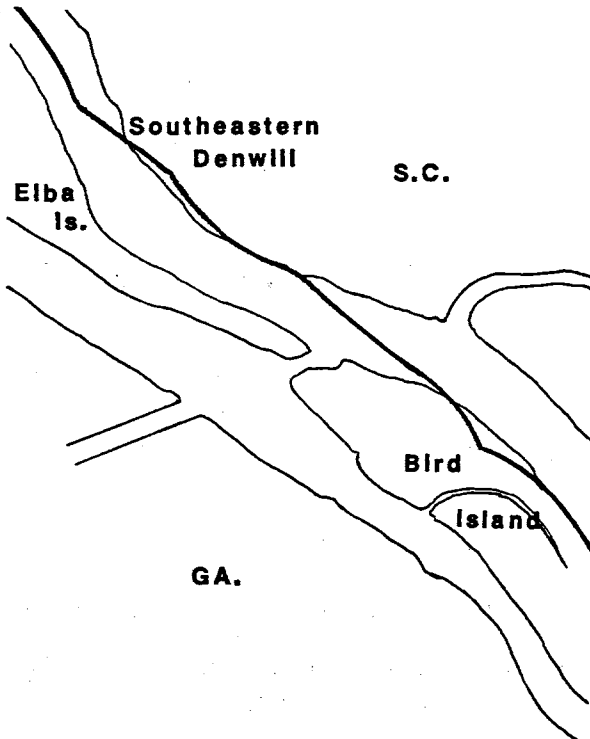
Georgia v. South Carolina, 257 U.S. 516, 523 (1922).

The Special Master, relying on this and other language in the 1922 case, concluded that the line was to be a line in the geographic center of the river, and not a thalweg-based line, i.e., a line based on the deepest channel or navigation channel. *First Report* at 10. The Special Master also found that the boundary is not at a fixed point forever, as was the case in *Ohio v. Kentucky*, 444 U.S. 335 (1980), but rather was subject to modification by the gradual processes of accretion and erosion as well as by prescription and acquiescence. *First Report* at 24, 35-37. Finally, the Special Master concluded that the most equitable way in which to draw the line around Georgia islands on what would otherwise be the South Carolina side of the river would be to draw a right angle line connecting the line between the island and the northern riverbank to the line between the northern and southern riverbanks. *First Report* at 23-31. The operation of this principle is illustrated by the way the Special Master drew the line around Pennyworth Island on Appendix F to the *First Report* (also shown, in more detail, on Appendices C and D to the *Second Report*).

South Carolina takes no exception to any of the above principles announced or reaffirmed by the Special Master. South Carolina's exception is to the application of the law of accretion and avulsion by the Special Master in the areas known as southeastern Denwill³ and Horseshoe

³ "Denwill" is the ancient name of the plantation bounding on the Savannah River, Fields Cut, the Wright River, and a land boundary near the west end of Elba Island. Only the land formed in this area after the 1870's is in dispute.

Shoal and on Bird Island, slightly downstream. The portion of southeastern Denwill which South Carolina submits was erroneously awarded to Georgia, is a narrow strip of land, best illustrated on Appendix D of the *Second Report*. On that map, the parcel in question is part of the South Carolina mainland somewhat west of Jones Island; the Special Master's line crosses into the South Carolina mainland just to the left of the letter "S" in the word "Savannah," and reenters the river just below the "V" in "Savannah." Approximately 1 mile of riverfront land on the South Carolina side of the river would be placed in Georgia if the Special Master's decision is confirmed. In outline form, the Special Master's line, *Second Report*, Appendix D, is as shown below (also shown is the area of Bird Island, to be discussed, which is in controversy):



Since the additions to Denwill took over 40 years to be formed, South Carolina submits that the Special Master was in error in concluding that this land was formed through sudden avulsive processes, and in further concluding that the boundary did not move as the land was created.

The addition to Denwill formed between the mid-1870's, when the first diversion structures were built in the area, and approximately 1924, when the former riverbed became entirely above water. The entire process is shown on Ga.Ex. 464, which will be discussed more fully below.⁴ The formation began in the mid-1870's when the Corps of Engineers erected wing dams to slow the flow of the river along the shore and concentrated the flow more toward the center of the river. As the Special Master noted, the purpose of all Corps modifications of the river has been to improve navigability for the port of Savannah, an effort from which "Georgia and its citizens derived a far greater benefit" than South Carolina. *First Report* at 74.

The formation of highland continued between the mid-1870's and 1924. Between 1891 and 1893, the two-mile-long North Elba Island training wall was constructed. Tr., 4/29/81-5/1/81 at 941. This training wall was permeable, *Id.* at 942, a fact which permitted sedimentation behind the wall even before dredging and filling occurred. Thus, by 1897, the Corps noted that shoaling was occurring, and that the area would soon

⁴ Although Ga.Ex. 464 is denoted "Jones Island, 1855-1978," it in fact concentrates on the Denwill area under discussion, and shows very little of Jones Island.

become a grass-covered marsh rather than a part of the river. *Id.* at 942-943; Ga.Ex. 307; *First Report* at 70. This was prior to the time when dredging had become significant. It is uncontroverted that the formation of land in this area resulted, in the words of Georgia's expert, from

a combination of causes, the sedimentation which was encouraged by the works placed by the Corps of Engineers and the placement of dredge material by the Corps of Engineers.

Tr., 4/27/81-5/1/81 at 975. Although the Special Master appears to recognize this twofold causation in one part of the Report, *First Report* at 70, on the very next page he apparently attributes the land formation entirely to hydraulic (dredge) fill. *Id.* at 71. This conclusion is simply contrary to the undisputed evidence as quoted above.

The entire metamorphosis of the area is shown on Ga.Ex. 464, a composite of the relevant area of U.S. Coast Survey navigation charts from 1855 through the present. In 1855 and 1867, the area in question consisted only of a wide spot in the river and a narrow westward extension of a part of Jones Island. The 1878 and 1886 charts show the first small dams or spurs built in the area, and also show some degree of shallowing in the area. The 1895 chart depicts the North Elba Island Training Wall, completed in 1893. Apparently no new depth soundings were taken for this edition of the chart; the soundings are unchanged from 1886, although the Corps, as previously mentioned, had commented just after this period on the shoaling which was occurring. In 1902, a small area above mean low water is shown, together with appreciable shoaling since 1895. The charts from 1911 through 1924 show increasing amounts of land being formed behind

the training wall, finally becoming a solid mass of land in 1924. No further change is shown after 1924, although in later years the elevation of the land became higher through continued deposits of dredge spoil.

Based on the above, most of which comes from Georgia's own witness and exhibits, it cannot reasonably be disputed first, that the training wall alone would have caused the riverbed to be transformed into marshland through sedimentation and second, that the full conversion to marsh (and then to high ground) occurred somewhat sooner because of the placement of dredge spoil behind the training wall. However, as the maps show, the entire process still took over 40 years.

The Special Master's error was in his implicit assumption (never specifically articulated) that the transformation process amounted to an avulsive change. At p. 72 of the *First Report*, the Special Master states that it is "well settled that the process of avulsion does not alter the boundary line." On p. 75, he states that awarding this tract to South Carolina "would effectively destroy the rule that avulsive processes do not change the boundary line." *Id.* at 75. But nowhere does he specifically state that the process was in fact avulsive, or why. After the hearing on the lateral seaward boundary, the Special Master commented "that there had been so much avulsion thrown here on southeast Denwill," Transcript of May 12, 1987, hearing at 119. Thus it is clear that he considered the process to be avulsive.

This Court has stated the general rules concerning formation of riparian land as follows:

[I]t is settled beyond the possibility of dispute that where running streams are the boundaries between states, the same rule applies as between private proprietors; namely that when the bed and channel are changed by the natural and gradual processes known as erosion and accretion, the boundary follows the varying course of the stream; while if the stream from any cause, natural or artificial, suddenly leaves its old bed and forms a new one, by the process known as avulsion, the resulting change of channel works no change of boundary. . . .

Arkansas v. Tennessee, 246 U.S. 158, 173 (1918). As a corollary to this principle, this Court has long held that:

whether [the change] is the effect of natural or artificial causes make no difference. The result as to the ownership in either case is the same.

St. Clair v. Lovington, 90 U.S. 59, 64 (1874). This rule was reaffirmed in *California ex rel. State Lands Commission v. U.S.*, 457 U.S. 273 (1982) (jetty construction caused rapid artificial accretion).

Georgia's only bases for contending that the land formed avulsively are that neither the construction of the training wall nor the deposit of fill material were gradual or imperceptible. As to the training wall itself, South Carolina makes no contention that the wall's construction alone changed the boundary. Rather, South Carolina contends that the resulting sedimentation and later filling by dredge changed the boundary.

Georgia's second and main argument is that the act of placing dredge spoil is itself sufficiently sudden as to constitute an avulsion. Neither Georgia nor the Special Master have cited any authority in support of this proposition, and virtually all the authority is to the contrary.

The core issue in cases of this nature is not whether the deposits are defined technically as accretions or as the result of an avulsion, but whether a party holding riparian land (whether as sovereign or as a private landowner) should lose riparian status because of the act of a third party who places fill material in the waterfront. South Carolina argued below, and reasserts here, that Georgia's status is in reality analogous to that of the person who causes the landfill to be so placed. The Special Master acknowledged that Georgia, the State whose major harbor was made accessible by the works in the river, "derived a far greater benefit" from the actions than South Carolina. *First Report* at 74. Most cases hold that one cannot extend one's own property into the water by landfilling or causing accretion. See Annot. 91 A.L.R.2d 857, 860-866 (1963). As one case has noted, "[o]therwise, there would be no limit but the length of the riparian owner's purse." *Seacoast Real Estate Co. v. American Timber Co.*, 92 N.J.Eq. 219, 113 A. 489, 490 (1920). The Special Master's rule would permit Georgia to acquire the entire northern bank of the Savannah in the same manner as the Denwill area.

In virtually all the decided cases, state and federal, it has been held that even though the landfilling process might not be completely analogous to accretion, the result should be the same, with the riparian owner's property moving toward the water with the fill. This Court has held this to be a correct statement of federal law in *Bonelli Cattle Co. v. Arizona*, 414 U.S. 313, 329 (1973):

The riparian owner is at the mercy, not only of the natural forces which create such intervening lands, but also, because of the navigational servitude, of

governmental forces which may similarly affect the riparian quality of his estate. Accordingly, where land cast up in the Federal Government's exercise of the servitude is not related to furthering the navigational or related public interests, the accretion doctrine should provide a disposition of the land as between the riparian owner and the State. See *Michaelson v. Silver Beach Assn.*, 342 Mass. 251, 173 N.E.2d 273 (1961).⁵

In *Michaelson v. Silver Beach Assn.*, 342 Mass. 251, 173 N.E.2d 273 (1961), perhaps the leading state case on the subject, the Court noted that if the rule were otherwise, the State or other owner of the submerged bed could simply "move along the entire . . . coast, piling up sand and rocks" and becoming the riparian owner in the process. 173 N.E.2d at 277. See also, as representative of a number of cases holding that filled lands belong to the riparian owner when created by someone else, *DeSimone v. Kramer*, 77 Wis.2d 188, 252 N.W.2d 653 (1977); *Harrison County v. Guice*, 244 Miss. 95, 140 So.2d 838 (1962); *Lake-side Boating & Bathing, Inc. v. State*, 344 N.W.2d 217 (Iowa 1984); *State v. Gill*, 259 Ala. 177, 66 So.2d 141 (1953); *Gillihan v. Cieloha*, 74 Ore. 462, 145 P. 1061 (1915); *Grant v. Fletcher*, 121 Mont. 534, 198 P.2d 769 (1948); *Tatum v. City of St. Louis*, 125 Mo. 647, 28 S.W. 1002 (1889); *Powell on Real Property*, ¶720[1] at p. 66-27 (1989) ("vast majority of courts have applied the general rule that the boundary line will move with the movement of the body of water" when fill is placed along the shore).

⁵ Although *Bonelli* was overruled on the choice of law question (state versus federal law) decided therein, see *Oregon ex rel. State Land Board v. Corvallis Sand & Gravel Co.*, 429 U.S. 363 (1977), it has never been disputed that *Bonelli* correctly sets forth the federal substantive law.

The Special Master simply avoided discussing the law applicable to the additions to this tract. Instead, he apparently assumed that since the additions were created in part (but only in part) by dredge spoil, they were products of an avulsion. *See Second Report* at 21. This conclusion was clearly in error in light of the overwhelming weight of the case law, and South Carolina submits that this Court should not follow it.

- II. The Special Master erred in awarding the area known as Horseshoe Shoal to Georgia when the evidence showed that that area was formed over several decades as a result of Corps of Engineers training works and the deposit of dredge fill.

The boundary recommended by the Special Master in the area downstream from Jones Island begins as a geographic centerline or median line between Long Island in Georgia and Jones and Turtle Islands in South Carolina, based on geographic conditions in 1855. *See First Report*, Appendix F; *Second Report*, Appendix D. Seaward of Turtle Island, the Special Master's boundary veers southeast at a 45 degree angle and returns to the present geographic center of the channel near the eastern end of Oyster Bed Island.

The area known as Horseshoe Shoal consisted during the 19th century of a broad and shallow expanse of open water. *See, e.g., Ga. Ex. 165*. However, as with Denwill, Corps training works and dredging led to sedimentation and filling. As a result, the area which bears the name "Horseshoe Shoal" is now an isthmus of high ground several miles long connecting Jones Island and Oyster Bed Island. As will be shown below, it was formed in the

same way, and over a comparable period, as the additional land on Denwill. Accordingly, under the authorities cited in the preceding section, this land also should have been held to be in South Carolina. This would eliminate the 45 degree connecting line drawn by the Special Master, and the resulting boundary would simply run through the present geographic center of the channel all the way from Denwill to the mouth of the river.

The major training work in this area is the North Long Island Training Wall, built between 1890 and 1894. Tr. of hearing, 4/27/81 - 5/1/81 at 939. It and several wing dams are first shown (directly below the eastern end of Jones Island and below Turtle Island) on the 1895 U.S. Coast Survey Chart. Ga. Ex. 317. Wing Dam 31 and an extension of it connecting Turtle Island and Oyster Bed Island were built during the same period. Georgia's witness on river formations testified that the placement of hydraulic fill in this area occurred between 1926 and 1931. *Transcript, supra*, at 940, 963. Before this had occurred, however, considerable sedimentation had occurred simply as a result of the presence of the training works. Thus, a comparison of the 1895 chart, Ga. Ex. 317, and the 1924 chart, Ga. Ex. 329 (the last chart before major dredging occurred) indicates that water depths in the area had decreased considerably. In 1895, most of the area was 4-5 feet under water at low tide, and the area between Jones Island and the training wall was 10 or more feet deep. By 1924, however, half of the area (including the area formerly 10 feet deep) was dry at low tide, and the rest was largely only a foot deep. Thus, even before large-scale dredging and filling began, the area was close to becoming a dry elevation solely as a result of

the 30 years of sedimentation caused by training works. Undoubtedly, it would indeed have become completely dry in a few more years even without the dredge fill which was placed there between 1926 and 1931.

As with Denwill, the Special Master concluded that the appearance of land in the Horseshoe Shoal area was the result of avulsive processes beginning in the nineteenth century. *First Report* at 87, n. 67. Also as with Denwill, there is no discussion as to why the formations were avulsive, other than the apparent assumption by the Special Master that any formation caused by a training work is necessarily avulsive.

The authorities cited above in support of South Carolina's position on Denwill apply with equal force to the land formed in the Horseshoe Shoal area, which was formed by completely similar processes and attached to South Carolina's Jones Island. South Carolina therefore submits that Horseshoe Shoal is in South Carolina, and that the boundary line should therefore run through the geographic center of present-day landforms from the Denwill area to the mouth of the river.*

III. The Special Master erred in treating the additions to Bird Island differently from those to Denwill and Horseshoe Shoal, when all were formed by the same processes.

The Special Master additionally erred in concluding that similarly-formed land on Bird Island should be

* This line proposed by South Carolina is shown on S.C. Ex. GM-42.

treated differently from the Denwill tract. Bird Island is now part of an elongated island several miles long, in the middle of the river across from Jones Island. As a result of Corps activities since the 1870's, it has probably quadrupled in land area and has become merged with Long Island, as clearly shown by Appendices C and D to the *Second Report*.

When the line recommended by the Special Master in the *First Report* was plotted on current-day maps, it was apparent that the line not only cut through the Denwill tract, but also cut through a portion of Bird Island. This area, at least one-half mile long, is shown on Appendix C to the *Second Report* just below the two "N" 's in the word "Savannah" which extends across Jones Island; see also the small outline map reproduced hereinabove.

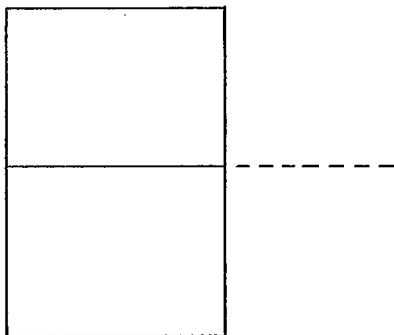
South Carolina submits that the great weight of authority calls for both the Denwill and Horseshoe Shoal accretions and the Bird Island accretions to belong to the state to whose land they are attached. Nevertheless, if the Court should conclude that the line must run through South Carolina's mainland and islands, then for the same reasons, the line should run through part of an island belonging to Georgia. The only reason stated by the Special Master for concluding that all of Bird Island should remain in Georgia was that "South Carolina has never attempted to claim [this] fill area by any action on its part." *Second Report* at 22. This is correct, but the fact that South Carolina did not anticipate the precise line originally drawn by the Special Master and all its attendant consequences should not foreclose South Carolina from

arguing that the same standard for drawing the line should apply to both states. South Carolina's primary contention, however, is that the accretions to both areas should belong to the states in which the original lands were located, as the case law clearly holds.

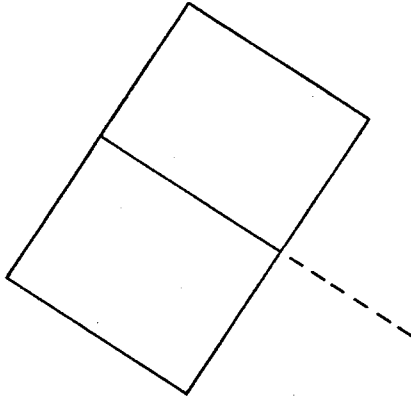
IV. The Special Master erroneously drew the lateral seaward boundary north of the overlap of the coastal fronts of the two states, effectively causing the line to cut across South Carolina's coastal front.

A schematic review of the pertinent geography indicates that the boundary recommended by the Special Master extends entirely into waters which lie opposite the coast of South Carolina and not opposite the Georgia coast. Since there are no identified natural deposits in the sea area to be divided, the boundary delimitation problem is simply a matter of making a graphic division of the area based on geometry and geography.

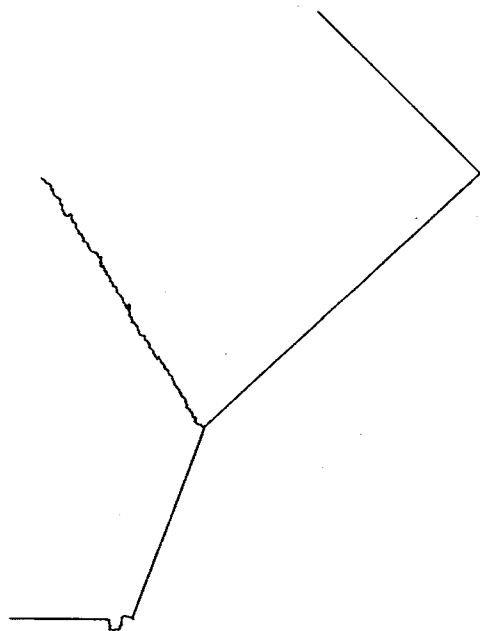
If the two states were simply adjacent rectangles, the seaward boundary would be an uncomplicated extension of their landward boundary, as shown below:



The same would be true if the two states were adjacent rectangles facing somewhat southeast as is the case with Georgia and South Carolina:

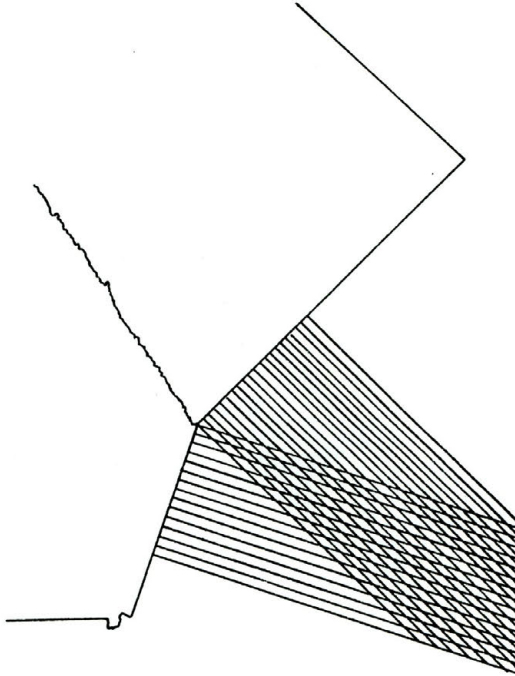


The situation in this case adds one more facet to consider because the states face the coast at slightly different angles, and the inland boundaries do not necessarily bear any relationship to the direction of the states' coastal front or to any other aspect of the coast, as shown below:⁶



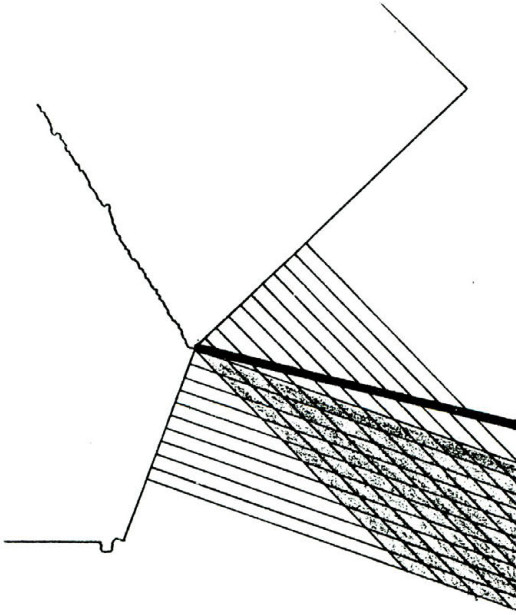
⁶ The map above is derived from information shown on S.C. Ex. II-1a, II-2a, and II-6a. The Savannah River is shown as a generalized line indicating the general direction of the river's flow.

As can be seen below by the parallel lines representing the extension of each state's coastal front, the coastal fronts of the two states overlap in the ocean to some degree:



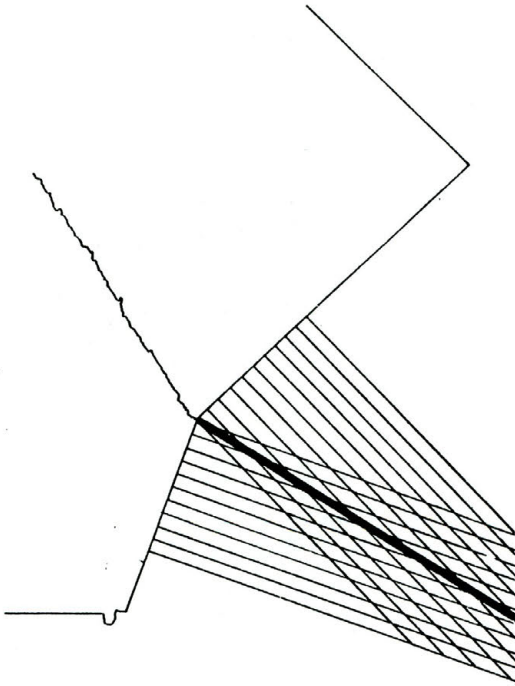
South Carolina submits that the area of overlap of coastal fronts is the only area reasonably in dispute in this case, as supported by the authorities to be discussed below. However, the line drawn by the Special Master lies entirely outside the area in dispute, running some 6 degrees northward of even the most favorable line which Georgia could expect to receive, i.e., a perpendicular to Georgia's coastal front. The inequity of this line is shown

by plotting the Special Master's line (azimuth 104 degrees) as it would appear on the above map depicting the coastal fronts (the overlap area is shaded for clarity):



It is readily apparent that the Special Master's line lies completely outside the area of overlap. The only reasons for it to present even an appearance of equity are that the Special Master defined it using a map (*Second Report*, Appendix B), which is too small to reflect the direction of the two states' coastal fronts, and because the eye naturally tends to view horizontal latitude lines as appropriate division points even though they bear no relation to the direction of the coastal fronts.

South Carolina submits that an equitable boundary line would be one which splits the area of overlap more or less equally. If this were done with mathematical precision, the line would be a 124 degree line (halfway between the 110 degree perpendicular to Georgia's coast and the 137 degree perpendicular to South Carolina's coast).⁷ Such a line would appear on the previous illustration as follows:



⁷ These and other degree measurements are made from the 12 o'clock position (0 degrees); a 6 o'clock position would be 180 degrees.

However, as the outline map on the following page shows, the established navigation channel in the area would split the disputed area in approximately the same proportion, and has the considerable advantage of being a non-abstract, clearly marked and established area. Such an "equal division of the area of overlapping created by the lateral superimposition of the maritime projection of the coasts of the two states" was used to locate the most inland portion of the lateral seaward boundary in *Case Concerning the Delimitation of the Maritime Boundary in the Gulf of Maine* (Canada/United States), 1984 I.C.J. 246, 331-332. For all of these reasons, South Carolina submits that equity, precedent and practicality support drawing the line in the middle of the navigation channel to the three-mile limit.⁸

The above illustrations show that the main problem in drawing a lateral seaward boundary is to determine the area reasonably in dispute. The equitable division of the area becomes almost self-evident once the area to be divided is itself identified.

As the Special Master held, it is well established that "any lateral seaward boundary line established in this case must be derived by the use of international law." *Second Report* at 3. Thus, as in *Texas v. Louisiana*, 426 U.S.

⁸ If it is necessary to extend the boundary to the twelve-mile limit, South Carolina would suggest that the line consist of an extension of the last leg of the channel, which begins at approximately the three-mile limit. This line would be a 122 degree line between the three-mile limit and the twelve-mile limit, slightly less favorable to South Carolina than the 124 degree which would evenly divide the area, but still the simplest and easiest line to identify on the ground.



465 (1976), the starting point is Article 12 of the Convention on the Territorial Sea and Contiguous Zones [1964], 15 U.S.T. (Pt. 2) 1606, T.I.A.S. No. 5639. Article 12 states that an equidistant line is to be drawn unless "it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two states in a way which is at variance with this provision."

In the practical application of this provision over the years, the median, or equidistant, line has enjoyed no preference over other methods of delimitation. Instead, the courts have simply interpreted the provision to require that the boundary produce an equitable result in light of all the relevant circumstances. *See, e.g., Case Concerning the Continental Shelf (Tunisia/Libyan Arab Jamahiriya)* 1982 I.C.J. 18; *Case Concerning the Delimitation of the Maritime Boundary in the Gulf of Maine (Canada/United States)*, 1983 I.C.J. 246, 293; *The United Kingdom of Great Britain and Northern Ireland and the French Republic, Delimitation of the Continental Shelf*, Decision of 30 June 1977, 18 I.L.M. 398, ¶70. Tr. II-227. These cases demonstrate that the use of the equidistant line is by no means required or presumed.⁹ As the Special Master held, "[i]t is

⁹ South Carolina opposes the use of the equidistant line (Line 5 on Appendix B to the *Second Report*) in this case because it does not accurately reflect the sum total of the circumstances (shown by general direction of the states' coasts and the land boundary). The equidistant line is based entirely on the geography of the immediate area. Since the general direction of the coast in the immediate area is aberrational when compared to the entire coast, the equidistant line unduly exaggerates this aberration. This difference in general direction can be seen on maps such as S.C. Ex. II-10a.

obvious that all international tribunals have avoided any specific formula in determining boundary delimitation questions." *Second Report* at 16. Under these circumstances, the main use of precedent is to gain guidance as to the factors to be considered in determining the area reasonably in dispute; these factors tend to indicate where the line should be drawn. The limited number of cases in this area have examined the following factors:

1. *Equidistant Line*. This is a line which is at all times equally distant from the coastlines of both states. The interest of proximity captured by this line assures that each state will have jurisdiction over those water areas that are closest to their land territories and internal waters. *Texas v. Louisiana*, 426 U.S. at 465, 468-69 (1976) (all parties agreed that the equidistance principle applied).¹⁰ *Canada/United States, supra*, 1985 I.C.J. at 300-301; *Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta)*, 1985 I.C.J. 13, 47.

The two states are in general agreement that an equidistant line drawn pursuant to the 1958 Convention would be as shown on South Carolina Ex. II-5. *See* Tr. II-138; *Second Report* at 15.

2. *Coastal Fronts*. The coastlines of each state face seaward in specific directions. The offshore areas of each

¹⁰ The Special Master may have overestimated the effect of *Texas v. Louisiana*, when he stated that the case "teaches us that the lateral seaward boundary shall be constructed by reference to the median line, or equidistant principle. *Second Report* at 4. The opinion in the case, however, notes that all parties agreed that the equidistant principle should be used. 426 U.S. at 468. The dispute was over the relevant coastline.

state ought to reflect these seaward directions. The direction of a state's coastal front can be identified by perpendiculars to straight lines drawn along the coastline of each state. *Tunisia/Libya, supra*, 1982 I.C.J. at 85; *Canada/United States, supra*, 1984 I.C.J. at 313, 319, 333; *Decision of the Permanent Court of Arbitration in the Matter of the Maritime Boundary of Norway & Sweden*, 4 Am.Jr1. Int. Law 226, 232 (1910); *New Hampshire v. Maine*, No. 64, Original, October Term, 1975, Report of Special Master at 53; Report of the International Law Commission to the General Assembly, II *Yearbook of the International Law Commission*, 272, 297-98 (1956).

The coastal front projections reveal that the coast runs in a pronounced southwest-northeast manner, even when relatively short segments of the coast are taken into account. The azimuths are 110 degrees for the perpendicular to the Georgia coast, and 137 degrees for the perpendicular to the South Carolina coast. Various shorter segments of coast produce azimuths in the same range, as South Carolina Exhibits II-11 through II-15 demonstrate.

Radii of circles that fit the coastlines in question also help to identify the seaward directions of the relevant coastlines. *Report on the New Jersey - Delaware - Maryland CEIP Delimitation Lines* (11/13/79); *Maritime Boundary between Guinea and Guinea-Bissau*, 15 I.L.M. 252 (1986). These lines, shown on South Carolina Exhibits II-4, II-4a, II-16, II-16a and II-25, fall within the same range as perpendicular lines to the coastal fronts.

3. *Natural Prolongation*. The general direction of the land boundary between the contesting states represents

the political division of the area. Projected seaward, that general direction reflects a continuation of that political determination and the natural prolongation of the territories of both states. *Tunisia/Libya, supra* 1982 I.C.J. at 43-44; II *Yearbook of the International Law Commission*, 272 (1956).

In this case, extensions of substantial portions of the inland boundary run at azimuths of 146 degrees (S.C. Ex. II-1) and 155 degrees (S.C.Ex. II-21). Even if only the short portion of the boundary from Pennyworth Island to the closing line were extended, the line still runs at a 112 degree angle (S.C. Ex. II-20).

Guided by the above principles, South Carolina drew a number of lines on exhibit maps. The most salient of these are found on S.C. Ex. II-8, Appendix B to the *Second Report*. Lines 1 through 6 depict the following (supporting exhibits are cited for each):

Line 1: The prolongation of the inland boundary (146 degrees). S.C. Ex. II-1, II-1a.

Line 2: The perpendicular to the South Carolina coastal front (137 degrees). S.C. Ex. II-2, II-2a.

Line 3: The line which follows the center of the navigation channel (this is the line which South Carolina advocates as the most appropriate boundary). S.C. Ex. II-3.

Line 4: The perpendicular of an arc that fits the coast between Folly Beach, South Carolina, and Jacksonville, Florida (the arc which best fits the longest segment of the coast; Tr. II-185) (128 degrees). S.C. Ex. II-4, II-4a.

Line 5: Equidistant line. S.C. Ex. II-5.

Line 6: The perpendicular to the Georgia coastal front (110 degrees). S.C. Ex. II-6, II-6a.

Line 7: The approximate location of Georgia's proposed line at the trial (later modified somewhat, but essentially the same in its eastern half).

South Carolina Exhibits II-11 through II-16 indicate that when shorter segments of coastline or larger arcs are used, the resulting lines are within the same general range. Clearly, the appropriate range for the boundary is between Lines 1 and 6, which represent perpendiculars to the two states' coastal fronts. Just as clearly, the navigation channel provides a well-marked practical line which equitably divides the area reasonably in dispute.

The line recommended by the Special Master is apparently a perpendicular to the Hilton Head-Tybee closing line. *Second Report* at 18. As previously mentioned, this line runs at an azimuth of approximately 104 degrees, which is north of even the perpendicular to Georgia's coastal front. However, the Hilton Head-Tybee closing line deviates from the general direction of the coast.

The Hilton Head-Tybee closing line runs at a 14 degree angle, as compared to a 38 degree angle for both coasts taken together (20 degrees for Georgia's coast and 47 degrees for South Carolina's coast).¹¹ The Special Master placed undue emphasis on the fact that the U.S. Baseline Committee drew this closing line presumably mindful of Article 4, paragraph 2 of the 1958 Convention, which requires that a straight baseline "must not depart to any appreciable extent from the general direction of the coast." *Second Report* at 13. Perhaps in the context of

¹¹ These degree measurements are computed by taking the difference between the azimuth and 90 degrees.

the coast of hundreds of miles, this six-mile-long closing line does not vary "to any appreciable extent." But this is not the same as saying that a six-mile-long closing line is an appropriate baseline for determining the boundary of two states when it does not accurately represent the overall direction of the coastline of either. The Special Master's recommended line might have been appropriate if Hilton Head and Tybee were adjacent municipalities with a boundary dispute; but it simply relies too heavily on an aberrational part of the coast to serve as the interstate boundary.

In the 1969 *North Sea Continental Shelf* case, 1969 I.C.J. 3, the Court summarized the general rule:

There is no legal limit to the considerations which states may take account of for the purpose of making sure that they apply equitable procedures, and more often than *it is the balancing up of all such considerations that will produce this result rather than reliance on one to the exclusion of all others.*

1969 I.C.J. at 50 (emphasis added). The coastal fronts, the arc of the coast, and the general direction of the landward boundary all point to a line in the range of 124 degrees; and the presence of the marked navigation channel in almost exactly the same area adds practicality to equity. For these reasons, South Carolina submits that the relevant factors overwhelmingly point to the navigation channel as the appropriate lateral seaward boundary between the states.¹²

¹² It is unknown at this writing whether Georgia will file an exception claiming that the boundary should be located along Georgia's proposed line. If Georgia takes such an exception, South Carolina's discussion of the Georgia line will be set forth in South Carolina's responsive brief.

CONCLUSION

For the foregoing reasons, South Carolina submits that the Court should hold that the inland boundary runs through the present geographic center of the Savannah River from Denwill to the mouth of the Savannah River, and that the lateral seaward boundary runs through the center of the marked navigation channel to the three-mile limit, continuing to the twelve-mile limit at the angle of the last segment of the channel. In all other respects, the recommendations of the Special Master should be confirmed.

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