
IN THE

SUPREME COURT OF THE UNITED STATES

October Term, 1985

No. 74, Original

STATE OF GEORGIA,

Plaintiff,

v.

STATE OF SOUTH CAROLINA,

Defendant.

FIRST REPORT OF SPECIAL MASTER

WALTER E. HOFFMAN
Special Master
314 U.S. Courthouse
Norfolk, Virginia 23510

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APPENDICES

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APPENDIX E — Ga. Ex. 364 — Map prepared by Office of Savannah District Engineer in 1966, revised in 1971 and 1972, showing boundary line north of Horseshoe Shoals

APPENDIX F — Same as Appendix B but contains boundary line as found by Special Master

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FIRST REPORT OF SPECIAL MASTER

A. PRELIMINARY STATEMENT

The Court will note that this is denominated a *First Report* of Special Master. Contemporaneously with the filing of this report the Special Master, with the agreement of the parties, has moved the Court to defer entering any order other than noting the filing of the report, to the end that a further hearing may be had to determine the lateral seaward boundary once the Special Master has determined all other issues in this case. The motion is shown in the Appendix as App. A. This will result in a very limited additional hearing, as contrasted with an extensive evidentiary presentation without knowledge as to the Special Master's findings and conclusions with respect to the principal issues discussed herein. It will save additional expense to the litigants and will not unduly delay the termination of this proceeding. It will also permit the possible intervention by the United States of America in that portion of the proceeding in which it is vitally

interested. The Special Master recommends that an appropriate order be entered granting said motion.

B. HISTORY OF THE PROCEEDING

This case involves the determination of the boundary line between the States of Georgia and South Carolina in the area denominated as the eastern end of the Savannah River, with particular reference to certain islands which were either *in or on* the Savannah River when the two states entered into the Treaty of Beaufort on April 28, 1787, an agreement which purportedly established the boundary lines between the two states. Allied to the foregoing issue are (1) the status of certain islands which emerged in the Savannah River after 1787, (2) the attachment of several islands to the mainland of South Carolina by the process of accretion or avulsion, and (3) the principles of prescription and acquiescence. To complete the picture, the Special Master is asked to determine the location of the mouth of the Savannah River and the lateral seaward boundary as it affects the two states.

This is the third time that the States of Georgia and South Carolina have been before this Court in related proceedings. See, *South Carolina v. Georgia*, 93 U.S. 4 (1876); *Georgia v. South Carolina*, 257 U.S. 516 (1922). The 1922 opinion will be discussed *infra*, but it is sufficient at this point to state that the Treaty of Beaufort, sometimes referred to as the Convention of Beaufort, is a controlling document for the basic purposes of this case.

In the final analysis, there is very little dispute as to the facts as they existed in 1787. What is in controversy is the interpretation of the Treaty of Beaufort as applied to the areas in dispute in this litigation with reference to the principles of law pertinent thereto.

This action was ordered filed on October 31, 1977. 434 U.S. 917. South Carolina filed an answer and counterclaim which essentially put in issue the same areas of dispute as con-

tended by Georgia. The order of reference to the Special Master was entered on February 21, 1978. 434 U.S 1057-58.

C. AREAS IN DISPUTE

Commencing at a small unnamed island immediately upstream or west of Pennyworth Island,¹ the areas in dispute are as follows:

1. The unnamed island mentioned above which emerged after the Treaty of 1787.
2. Another unnamed island which, for the purpose of reference, will be called Tidegate Island and which emerged after the Treaty of 1787.
3. The Barnwell Islands, in the order reached as one proceeds downstream, as follows:
 - (a) Rabbit Island;
 - (b) Hog Island;
 - (c) Long Island (emerged after Treaty of 1787);
 - (d) Barnwell No. 3 (emerged after Treaty of 1787).
4. Southeastern Denwill (as to portion emerging after 1787).
5. Jones Island.
6. Horseshoe Shoal (emerged after Treaty of 1787).
7. Oyster Bed Island (emerged after Treaty of 1787).
8. The mouth of the Savannah River.
9. The lateral seaward boundary.

¹ While South Carolina, by its counterclaim, originally contended that Pennyworth Island was a part of South Carolina, this contention was later abandoned by South Carolina's concession that it had never exercised any control or dominance over that island. Pennyworth Island is, therefore, an island in the State of Georgia.

The names given to the areas named above did not necessarily exist as of 1787, but these names were acquired at a later date. For convenient reference they are referred to in this manner.

The land areas which existed in 1787 consisted largely or entirely of marshlands. Obviously, they had little or no value as of that time. By reason of the extensive dredging activities by the Corps of Engineers during the latter part of the 19th Century and continuing to the present date, some of the marshlands and shoals have now been converted to high land fronting on the northern bank of the Savannah River (the South Carolina side), and are presumably prime prospective industrial sites.

D. PRE-1787 PERIOD

In 1732 the new Colony of Georgia was formed from the Colony of South Carolina, pursuant to a charter issued by the Crown. While the charter language did not mention the islands in the Savannah River, as contrasted with the sea islands which were mentioned, the charter described Georgia as "all those lands countreys and territorys situate lying and being in that part of South Carolina in America which lyes from the most Northern Stream of a River there Commonly Call the Savannah all along the Sea-Coast, to the Southward, unto the most Southern Stream of a Certain other great Water or River called the Altamaha, and Westward from the heads of the said Rivers respectively in direct line to the South Seas. . . ." Georgia contends that the use of the term "most northern stream" necessarily includes all islands which are separated by a "stream" or "creek" from the mainland of South Carolina. While this may be a correct interpretation of the charter, it is not in any sense conclusive.

The Colony of Georgia legislated with respect to the islands in the Savannah River. In 1758, the District of Savannah passed a law which included the islands in the River.

There is no evidence that South Carolina, during the pre-1787 period after Georgia's colonization, ever asserted jurisdiction over or otherwise settled or claimed any islands, although grants for large acreage had been made by the Governor of South Carolina in the western area of what is now Georgia, and these grants had been acknowledged in London.

The principal controversy between the Colonies of Georgia and South Carolina during the pre-1787 days involved the navigation rights on the Savannah River, with Georgia claiming exclusive navigation rights to the River. During the 1730's, an order of the Privy Council allowed South Carolina certain navigation rights in the "northern branch" of the River. South Carolina had appointed a committee to study the issue and, in a 1736 printed report, South Carolina, contending that the boundary could not pass by the charter, requested the Crown to give South Carolina the right to navigate the most northern stream of the River. However, General Oglethorpe, a prominent Georgian and its founder, declined to relinquish Georgia's claim to control the trade on the River. The resolution of the Royal Privy Council was that South Carolina had the right to use the most northern stream around Hutchinson Island — an island immediately opposite what ultimately became the City of Savannah — unless the boat had run on board. Apparently this was an attempted compromise which nevertheless recognized Georgia's superior claim to the River, even though it upheld South Carolina's right of navigation.

The continued controversy over the right of navigation in the River, and the increased interest in the settlement of the interior and western lands of Georgia and South Carolina, brought about the Treaty of Beaufort in 1787.

E. THE 1787 TREATY OF BEAUFORT

New settlers in the fertile area in the Savannah River Valley lying between the Tugoloo and Keowee branches of the Savannah River — many miles upstream from the area now in dispute — caused land grants to be made by both Georgia

and South Carolina. In 1785, the Georgia House of Representatives established a Committee to meet with South Carolina's representatives to discuss the problem. The Georgia Legislature instructed its Commissioners to claim a boundary along the north side of the Savannah River and up the most northern stream or fork of the River.²

South Carolina initially requested that the Continental Congress resolve the dispute, but Georgia rejected this proposal because of time, expense, and concerns about prejudices. South Carolina's petition to the Continental Congress, filed June 1, 1785, did not assert any claim to islands in the Savannah River. It alleged that the Savannah River lost that name at the confluence of the Tugoloo and Keowee Rivers, and claimed the lands between a line due west from the mouth of the Tugoloo River to the Mississippi.³

After some further negotiations, the General Assembly of Georgia appointed John Houstoun, John Haversham, and General Lachlan McIntosh as Commissioners to meet with the South Carolina delegates at Beaufort and to "settle and compromise all and singular the differences, controversies, disputes and claims which subsist between this state and the State of South Carolina relative to boundary and to establish and permanently fix a boundary between the two states. . . ." South Carolina designated three Commissioners, i.e., Pierce Butler, Charles C. Pinckney, and Andrew Pickens. The six delegates — three from each state — were undoubtedly highly qualified and competent to carry on the negotiations.

² The resolution contained the following description of the areas to be included as part of Georgia, as follows:

"From the mouth of the River Savannah along the north side of it and up the most northern stream or fork of the said river to its head or source from thence in a due west course to the Mississippi . . ."

³ The petition of South Carolina also claimed lands presently in Southwest Georgia which are not material to this controversy. The notes of Commissioner Pierce Butler of South Carolina tend to explain South Carolina's claim to this area.

The Commissioners met on April 24-28, 1787. Georgia contended that, by reason of its resolution of 1785, *supra*, and its earlier 1783 Act for opening a land office, the boundary should be "from the mouth of the River Savannah, along the north side thereof, and up the most northern stream or fork of the said river to its head or source." South Carolina claimed the land north of the confluence of Tugoloo and Keowee Rivers, the lands west of the heads of the Altamaha and St. Mary's Rivers,⁴ and the navigation rights on the Savannah River, as well as the recognition of possessory rights to certain lands south and west of the Altamaha River by reason of prior grants made by the Governor of South Carolina. The claims of South Carolina made no mention of any islands lying in the Savannah River.

By statute approved on February 10, 1787, Georgia enacted a toll on all shipping entering the Port of Savannah. Understandably, South Carolina wanted free and uninterrupted navigation rights on the River.

The Convention of Beaufort was finally agreed upon and signed on April 28, 1787, by all the Commissioners excepting Georgia's John Houstoun who dissented.⁵ It was subsequently ratified by the respective legislatures of each State, and by the Continental Congress. In establishing the boundary between the States in "Article the First," the Treaty recites the following:

⁴ Not relevant to this case. See n.3, *supra*.

⁵ The Houstoun dissent did not disagree with the boundary line in the Savannah River. He contended that Georgia had the *exclusive* right of navigation of the River, an issue on which the remaining Georgia Commissioners finally relented because of the equity and justice of South Carolina's claim to a right of navigation of the River.

The most northern branch or stream of the River Savannah from the Sea or mouth of such stream, to the fork or confluence of the Rivers now called Tugoloo and Keowee, and from thence the most northern branch or stream of the said River Tugoloo 'till it intersects the Northern boundary line of South Carolina, if the said branch or stream of Tugoloo **extends so far North, *reserving all the islands in the said Rivers Savannah and Tugoloo to Georgia***; but if the **head spring or source of any branch or stream of the said River Tugoloo does not extend to the north boundary line of South Carolina**, then a west line **to the Mississippi, to be drawn from the head spring or source of the said branch or stream of Tugoloo river**, which extends to the highest northern latitude, Shall forever hereafter form the separation, limit and boundary between the states of South Carolina and Georgia. (Emphasis added).

Article Two of the Treaty resolved the controversy over the free right of navigation by providing:

The navigation of the River Savannah, at and from the bar, and mouth, along the Northeast side of Cockspur Island, and up the direct course of the main northern channel along the northern side of Hutchinson's Island opposite the town of Savannah, to the upper end of the said Island, and from thence up the bed or principal stream of the said River to the confluence of the Rivers Tugoloo & Keowee and from the confluence up the Channel of the most northern stream of Tugoloo River to its source; And back again, and by the same channel to the Atlantick Ocean, Is hereby declared to be henceforth, equally **free to the citizens of both States, and exempt from all duties, tolls, hindrance, interruption, or molestation whatsoever, attempted to be enforced by one State on the Citizens of the other**; And all the rest of the river Savannah, to the southward of the foregoing description, is acknowledged to be the exclusive right of the State of Georgia.

There is, as noted, a distinction between the boundary line in Article I and the navigable channel referred to in Article II. This distinction was noted by the Supreme Court in *Georgia v. South Carolina*, 257 U.S. 516, 521 (1922). Likewise, the Commissioners did not define the terms “island in the River” or “mouth” of the River. The only reference to “islands” (except with respect to Hutchinson’s Island) is contained in Article I which, of course, is specific, even though the Treaty was primarily concerned with mainland property containing large acreage to the south and west of the area now in controversy.

F. THE 1922 DECISION OF THE SUPREME COURT

As noted above, the Treaty did not provide whether the boundary between the two States was located in the middle of the northernmost branch or stream of the Savannah River, or was on the South Carolina bank, or whether the river bed was to be held jointly.

In 1922, the Supreme Court met these issues in *Georgia v. South Carolina*, 257 U.S. 516 (1922). The 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.

Id. at 523.

This decision, binding upon the Special Master, did not touch upon the specific issues now presented in the lower Savannah River area; it did not mention that any specific property was to be considered an “island in the Savannah River” for the purposes of the Treaty; nor was the effect of activities by the States or their inhabitants in the areas now in dispute given any consideration. The decision failed to

discuss the status of islands emerging after the Treaty of 1787, and no chart or map indicated the boundary line.

Nevertheless, the 1922 opinion, while relating to a portion of the Savannah River upstream, gives no suggestion that the conclusion with respect to the establishment of the boundary line should be limited to the area then under consideration. Pertinent to this issue and the interpretation of the Treaty of Beaufort is the Court's statement:

Second. As to the location of the boundary line 'where the most northern branch or stream' flows between an island or islands and the South Carolina shore.

Obviously, such a stream may be wide and deep and may contain the navigable channel of the river, or *it may be narrow and shallow and insignificant in comparison with the adjacent parts of the river*. But such variety of conditions cannot affect the location of the boundary line in this case, because, by Article II of the Convention, equal and unrestricted right to navigate the boundary rivers is secured to the citizens of each state, irrespective of the location of the navigable channel with respect to the boundary line.

Id. at 521 (Emphasis added).

From the foregoing it may be seen that, at least with respect to the Treaty of Beaufort, navigability is not an issue in determining the boundary line between the two states.

Irrespective of the precise language in the Treaty of Beaufort which reserves "all the islands in the said Rivers Savannah and Tugoloo to Georgia," South Carolina persuasively argues that the drafters of the Convention of Beaufort could never have intended that a "wiggly line among marshlands," or a widely meandering line away from the river's main flowing portions to places where the water was insignificant in depth and quantity, would constitute the boundary lines between the two states. South Carolina relies upon *Handly's Lessee v. Anthony*, 5 Wheat. 374 [18 U.S. 374] (1820), an opin-

ion by Chief Justice Marshall. In effect, South Carolina argues that the boundary line was intended to be the most northern *flowing* channel and that we must disregard areas of marshland where some water exists, but does not freely flow.

In *Handly's*, the ejectment action pertained to a claim by the plaintiff under a grant from Kentucky against a defendant holding a grant from the United States as being a part of Indiana. The basis of both grants originated in Virginia's cession to the United States in 1781, when the Commonwealth of Virginia yielded to the United States "all right, title and claim which the said commonwealth had to the territory northwest of the river Ohio, subject to the conditions annexed to the said act of cession." One condition was that the ceded territory "shall be laid out and formed into states." As the Court stated, the intent was to make the great river Ohio a boundary between states which might be formed on its opposite banks, and not a narrow bayou into which waters occasionally run. The Court said:

It would be as inconvenient to the people inhabiting this neck of land, separated from Indiana only by a bayou or ravine, sometimes dry for six or seven hundred yards of its extent, but separated from Kentucky by the great river Ohio, to form a part of the last-mentioned state [Kentucky], as it would for the inhabitants of a strip of land along the whole extent of the Ohio, to form a part of the state on the opposite shore. Neither the one nor the other can be considered as intended by the deed of cession.

The Court, holding for the Indiana defendant, made a general statement as to the boundaries between two states, separated by a river, by noting:

When a great river is the boundary between two nations or states, if the original property is in neither, *and there be no convention respecting it*, each holds to the middle of the stream. (Emphasis added).

Thus, *Handly's* is readily distinguishable in that the present controversy involves a Convention specifically reserving the

islands to Georgia. Moreover, South Carolina's contention that the boundary was the middle of the "most northern flowing channel" is refuted by this Court stating "where there are islands the line is midway between the island bank and the South Carolina shore when the water is at ordinary stage." 257 U.S. at 523. See also, the divergent views of this Court as to the interpretation of *Handly's* in *Ohio v. Kentucky*, 444 U.S. 335 (1980).

The conclusion is inescapable that, in 1787, immediately after the Treaty of Beaufort became effective, the boundary line between the two States included the islands then *in* the Savannah River as being the property of Georgia.⁶ Since 1787 other islands have appeared. Whether these newly formed islands, by the process of nature or man-made, are to be included within the boundary of Georgia is one of the issues in this case. This, however, does not end the matter; nor does it foreclose consideration as to whether Jones Island was an island "on," as contrasted with "in," the Savannah River. See the further extended discussion of the 1922 opinion of the Supreme Court in Part H-1.

⁶ The contentions of South Carolina are very persuasive. But for the fact that this Court has previously interpreted the Treaty of 1787, subsequently approved by Congress, in its 1922 opinion, the Special Master may well have concluded to the contrary. Dr. Arthur H. Robinson, an undoubted expert in the specialized fields of geography, geomorphology and cartography (including thematic cartography) when questioned as to the Barnwell Islands being *on* the river but not *in* the river, responded: "A lot of the area around them was dry at low tide. . . . But when you talk about the stream of the river, you are talking about the main flowing portion. And so that if you were to go out in a boat in shallow water among those islands, you normally wouldn't consider yourself out in the river. You would just be in the backwater area. And that's not the same thing as being in the river. Being in the river is where the main flow is." (Vol. XVI, Robinson, p. 198).

Later, the same witness testified that the "Treaty makers used the word 'stream' to mean the flowing part of the river — not the back water," and "[i]t would be inconceivable that they [the Treaty makers] tried to define a boundary which wandered in and around marshlands without specifying it," and "they [the Treaty makers] could not possibly have been drawing a wiggly line in among marsh lands and saying it in such a general fashion." (Vol. XVII, Robinson, pp.29, 33, 83-84).

All witnesses generally agree that an "island" is defined as land surrounded by water, other than a continent. Article 10(1) of the Geneva

(continued on next page)

G. THE 1955 DECISION OF THE FIFTH CIRCUIT

While not in any sense binding upon the principles of *res judicata* or collateral estoppel, the decision of the United States Court of Appeals for the Fifth Circuit in *United States v. 450 Acres of Land, etc.*, 220 F.2d 353 (5th Cir. 1955), must be considered as it directly affects one or more of the Barnwell Islands. The opinion refers to the singular "Barnwell Island."⁷

The record⁸ in this case contains the brief for the State of Georgia, an intervenor in the above case (S.C. Ex. S), and

Convention on the Territorial Sea and the Contiguous Zone, defines an island as "An island is a naturally formed area of land, surrounded by water, which is above water at high tide." Thus, in his research study for the Bureau of Intelligence and Research, entitled "Islands: Normal and Special Circumstances," December 10, 1973, the late Dr. Robert D. Hodgson, former Geographer employed by the United States, said: "it must be kept in mind that the smallest rock which lies above mean high water is geographically and legally an island." The use of the words "other than a continent" in the definition provided herein includes, of course, many subcontinental land territories defined generically as islands, i.e., Greenland with 40,000 square miles. With respect to the islands in this case (the unnamed island west of Pennyworth; the unnamed island east of Pennyworth referred to as Tidegate; the four Barnwell Islands, Jones Island and Oyster Bed Island) there is no doubt, as to those existing in 1787 and as to those which emerged thereafter, that they were at certain times islands surrounded by water. That they may have been marshlands is of little or no consequence. This Court made no distinction between sea marsh islands and islands with a solid base in *Louisiana v. Mississippi*, 202 U.S. 1, 40 (1906).

⁷ It is agreed between the parties that Rabbit Island (one of the Barnwell group), the westernmost upstream island in the group, was not the subject of this condemnation proceeding as it had, long prior to the institution of the condemnation action, accreted by natural causes into the mainland of South Carolina.

The use of the singular "Barnwell Island" is due to the fact that when the complaint in condemnation was filed on December 11, 1952, all of the Barnwell Islands had become attached to South Carolina mainland, either by way of accretion as to Rabbit Island, or by way of avulsion through the dredging and fill conducted by the Corps of Engineers to the three other Barnwell Islands.

⁸ The record in the present proceeding is voluminous. It consists of 19 separate volumes of testimony, containing an aggregate of 2819 pages.

(continued on next page)

the file before the Supreme Court of the United States on the application for certiorari (Ga. Ex. 378).

Suffice it to say that the record in *United States v. 450 Acres of Land, etc., supra*, was indeed scanty. The State of South Carolina was *not* a party to this condemnation proceeding, as the Fifth Circuit so noted by saying:

The boundary line between Georgia and South Carolina is not in dispute as between these sovereigns.

220 F.2d at 356. While Pinckney, the sole defendant appearing in the case, attempted to establish title to the Barnwell Islands, he produced no deed from the Forfeited Land Commission of South Carolina. On the subject of prescription and acquiescence, the records show only that Pinckney relied upon the payment of taxes to Beaufort County, South Car-

The Special Master has placed, in chronological order, Roman numerals for the respective volumes numbered I through XIX. References to testimony will be made as previously indicated in footnote (6) where the testimony of Dr. Robinson was quoted from "Vol. XVI, Robinson, p. 198," etc. Likewise, two depositions were introduced by South Carolina, one of which was videotaped.

The exhibits in this case are equally voluminous. Georgia and South Carolina have respectively introduced approximately 472 and 352 separate exhibits, a few of which are duplications. Georgia's exhibits will be referred to as "Ga. Ex.____," giving a number or letter as marked. South Carolina adopted a different numbering system and has included various subparts with certain exhibits. They will be referred to as "S.C. Ex." followed by the lettering and numbering used by South Carolina counsel. Because of the duplications, no attempt will be made to emphasize which party introduced a particular exhibit.

Because of the probability that these exhibits and the testimony may be required for a further hearing with respect to the lateral seaward boundary, the exhibits and testimony will be retained by the Special Master pending the filing of his final report.

The United States of America, holding spoil easements on most of the property involved in this controversy, is interested in these proceedings. At the early stage of this case the office of the Solicitor General was advised of the pendency of this case. Copies of this *first* report and the final report will be forwarded to the Solicitor General by the Special Master. Counsel for the parties have reported to the Special Master that no attempt is being made to disturb or upset the interests of the United States in any of the areas involved, and the Special Master has proceeded on this assumption.

olina, for a period of about 10 years, together with the acts of the Sheriff of Beaufort County in destroying illegal whiskey stills between 1926 and 1932, and the assertion of jurisdiction in two or three criminal cases which were prosecuted in South Carolina.

On the record presented in *United States v. 450 Acres of Land, etc.*, the Special Master agrees with the Fifth Circuit in upholding Georgia's contention that the Beaufort Convention (The Treaty of 1787) specifically reserved all⁹ the islands in the Savannah River to Georgia and, in accordance with the reasoning of the Supreme Court in *Georgia v. South Carolina, supra*, this reservation was confirmed. Moreover, on the sparse record purportedly attempting to show the change of the boundary line by prescription and acquiescence, the Fifth Circuit was clearly correct in denying Pinckney's contention.

Certiorari was denied on Pinckney's petition for same. 350 U.S. 826 (1955). A few months thereafter, South Carolina, acting through its Attorney General, attempted to file a complaint in the original jurisdiction of the Supreme Court for the purpose of confirming the jurisdiction and sovereignty of South Carolina over the Barnwell Islands. The Supreme Court declined to allow the complaint to be filed, 350 U.S. 812 (1955), and later denied a second petition by South Carolina for leave to file, 352 U.S. 1030 (1957).

H. THE PARTICULAR AREAS IN CONTROVERSY

The Special Master now turns to a consideration of each of the areas in dispute.

⁹ The word "all" is an interlineation in the Treaty of 1787, having been written as an insert immediately before the word "islands" (Ga. Ex. 39); however, the Special Master places no emphasis on this insertion.

I. THE SMALL UNNAMED ISLAND UPSTREAM OR WEST OF PENNYWORTH ISLAND

Essentially no testimony was presented as to this island;¹⁰ nor as to the flow of the channel in that area although, as of this date, the channel is obviously on the southern or Georgia side of the island. As previously indicated, the island is slightly upstream or west of Pennyworth Island. The maps or charts do not show the existence of such island in 1787. While it definitely emerged as an island after 1787, and perhaps as late as 1860, there is nothing to indicate that it was created by dredging or other man-made activities. There is no suggestion of prescription or acquiescence as to this uninhabited island and, if anyone ever exercised any jurisdiction over it, the same does not appear in this record.

The island is a clearly defined marsh-type island as it now exists. South Carolina's only contention is that the island, as now formed, is slightly north (on the South Carolina side) of the middle of the Savannah River and, therefore, under the rule pronounced in *Georgia v. South Carolina*, 257 U.S. at 523, since the boundary line, absent any island, was "midway between the main banks of the river when the water is at ordinary stage," the island is on the South Carolina side. No survey indicates whether the entire island is on the South Carolina side "midway between the main banks of the river." Nor does *Georgia v. South Carolina, supra*, mention anything about islands emerging from natural causes after the Treaty of 1787. No individual or entity has ever asserted a claim to the island.

Georgia's contention rests upon the fact that the Convention of 1787, approved by Congress, reserved all islands in the Savannah River to Georgia.

¹⁰ Because we were dealing with two unnamed islands (one west and one east of Pennyworth Island), counsel and the Special Master have infrequently referred to the upstream island as "Hoffman Island" for identification purposes.

A. Emerging Islands Under *Texas v. Louisiana*

The issue of emerging islands was considered, but not definitely decided, in *Texas v. Louisiana*, 410 U.S. 702 (1973), involving the Sabine River which, at one time, constituted the boundary line between the United States and Spain, and with all islands in the Sabine River belonging to the United States; later, when Mexico declared its independence from Spain in 1821, the boundary was recognized as the west bank of the Sabine as established in the 1819 treaty with Spain; subsequently, Texas, after declaring its independence from Mexico in 1836, was recognized as an independent nation and again the same Sabine boundary was adopted by the United States and Texas. Texas was admitted as a state in 1845 and, in 1848, Congress gave its consent to Texas to extend its eastern boundary from the west bank of the Sabine to the middle of the river. As to Louisiana, when it was admitted to statehood in 1812, the boundary line commenced at the mouth of the Sabine River "thence by a line to be drawn along the middle of the said river, including all islands. . . ."

The Special Master in *Texas v. Louisiana*, *supra*, and the Supreme Court, found that the western boundary of Louisiana was the geographic middle of the Sabine River — not its western bank or the middle of its main channel, for the reason that Congress had the authority to admit Louisiana to the Union and to establish its boundaries.¹¹ Clearly, according to the Court, the western boundary of Louisiana did not extend to the west bank of the Sabine, but was along the "middle" of the Sabine. Thus, the Court, distinguishing *Iowa v. Illinois*, 147 U.S. 1 (1893), disregarded the *thalweg* rule which was to the effect that Congress intended the word "middle" to mean "middle of the main channel" in order that each State would have equal access to the main navi-

¹¹ Since South Carolina and Georgia were among the original states in the Union, this issue is not present in this case.

gation channel.¹² The Special Master ruled correctly, the Court said, as to all islands in the eastern half of the river as belonging to Louisiana, but the Special Master also held that all islands in the western half of the river were the property of Louisiana if they existed as of 1812 when Louisiana was admitted to the Union. The Special Master rejected the claim of Louisiana to islands formed after 1812 in the western half and held that these subsequently formed islands belonged to Texas.

The Supreme Court, on exceptions to the report in *Texas v. Louisiana*, *supra*, withheld judgment with respect to the ownership of all islands in the western half of the Sabine River, and remanded the case to the Special Master with instructions to permit the United States to present any claims it may have as to islands in the western half of the Sabine River.¹³ The Court pointed out the unquestioned rule that "States entering the Union acquire title to the lands under navigable streams and other navigable waters within their borders," citing *Scott v. Lattig*, 227 U.S. 229, 242-243 (1913), *County of St. Clair v. Lovington*, 23 Wall. [90 U.S.] 46, 68 (1874), and *Pollard's Lessee v. Hagan*, 3 How. [44 U.S.] 212,

¹² The Treaty of Beaufort notably made a distinction between the boundary line stated in "Article the First," and the equal access to navigation set forth in the Second Article. At that time the right of navigation was of prime importance but, of course, the adoption of the Constitution removed this item of its significance when the general government was delegated the right to "regulate commerce with foreign nations, and among the several states." See, *South Carolina v. Georgia*, 93 U.S. 4 (1876) (where South Carolina, in 1874, unsuccessfully sought to enjoin two appropriations made by Congress for the improvement of the Savannah harbor).

¹³ This was due to the fact that the Treaty of Amity, Settlement, and Limits, 1819, 8 Stat. 252, between the United States and Spain, provided that all islands in the Sabine belonged to the United States. In 1848, Congress passed an Act extending the eastern boundary of Texas to include one half of the Sabine. Thus, the unresolved question in *Texas v. Louisiana* was the ownership by the United States of islands in the western half of the Sabine, including islands formed after 1812. However, the Court assumed as "probably correct" that once the eastern boundary of Texas was extended to the middle of the river in 1848, Texas then became entitled to any islands in the west half which formed after the date of that extension.

228-230 (1845). But, the Court stated, this rule "does not reach islands or fast lands located within such waters," and that title to islands remains in the United States unless expressly granted along with the stream bed or otherwise.

On remand to the Special Master in *Texas v. Louisiana*, *supra*, a supplemental report was filed on March 15, 1975. While originally the United States had claimed more than one island in the west half of the Sabine River, the United States reduced its claim to one island known as "Sam." The Special Master thereafter denied the claim as to this island, principally because the island had been destroyed by the action of the Corps of Engineers, and it was unnecessary for the Special Master to consider the status of islands formed after the respective States were admitted into the Union. The Supreme Court overruled the exceptions to the report and approved the Special Master's findings and conclusions. 426 U.S. 465 (1976). A final decree was entered on May 16, 1977. 431 U.S. 161 (1977). Thus, the issue as to the status of newly formed islands was not resolved and we only have the Court's assumption as "probably correct" that Texas may have been entitled to the islands formed after 1848 in the western half of the river. See footnote 13, *supra*.

Technically, at least, the situation here presented as to a newly formed island is not "accretion or accreted islands." It is more properly "reliction" which is the term applied to land that has been covered by water, but which has become uncovered by the imperceptible recession of the water. *Black's Law Dictionary*, 5th Ed., p. 1161. However, the authorities confirm that the law relating to accretions applies in all its features to relictions. Accretions or accreted lands are additions to the area of realty from gradual deposit by water of solid material, whether mud, sand, or sediment, producing dry land which before was covered by water, along banks of navigable or unnavigable bodies of water.

B. The Effect of the 1922 Decision

Aside from the fact that this Court, in its 1922 opinion in *Georgia v. South Carolina*, *supra*, concluded that, where there are no islands, the location of the boundary line between the States is on the water midway between the main banks of the river when the water is at ordinary stage,¹⁴ it is the general rule that, with respect to islands recently formed, the law regards them as accretions to the bed of the river, lake, pond, or stream, and to award such newly formed islands to the one who owns the bed of the water. Your Special Master does not believe that the Treaty of 1787 granted to Georgia the entire bed of the water in the Savannah River; indeed, under any construction of the Treaty it granted to Georgia, at the most, the bed of the river which was south of the "most northern branch or stream" of the Savannah River which, where no islands existed in 1787, has been construed as the midway point between the main banks. Thus, to grant Georgia the ownership of the westernmost unnamed island merely because the Treaty reserved "all the islands in the said Rivers Savannah and Tugoloo to Georgia" would effectively grant to Georgia the entire underwater seabed.

Nor does the Special Master conceive that it was the intention of the framers of the Convention of Beaufort to include any islands to be thereafter formed within the reservation to Georgia of "all the islands in the said Rivers Savannah and Tugoloo." They presumably knew of the then existing islands and specifically included these islands, but none of the notes and legislative history will support the theory that, at some later date when a new island emerged, the boundary line would again be altered in accordance with the 1922 opinion of this Court in *Georgia v. South Carolina*, *supra*.

¹⁴ As the Special Master interprets the opinion in *Georgia v. South Carolina*, as applied to the unnamed island which ultimately was formed about 75 years after the Convention of Beaufort, the island appears to be on the South Carolina side of the midway point between the main banks of the river.

In the case at bar, Congress had before it on August 9, 1787, pursuant to a motion of the delegates of South Carolina and thereafter unanimously adopted, the precise wording of the Treaty of Beaufort, including "Article the First" establishing the boundary line between Georgia and South Carolina, and including the words "reserving all the Islands in the said Rivers Savannah and Tugoloo to Georgia." The Third and Fourth Articles of the Treaty of Beaufort also respectively provided that South Carolina "shall not hereafter claim any lands to the eastward[,] southward, south eastward or west of the boundary above established" and relinquished and ceded to Georgia any possible interest and jurisdiction and "all other the estate, property and claim which the state of South Carolina hath in or to the said land" and, as to "Article the Fourth," Georgia agreed to "not hereafter claim any lands to the Northward or Northeastward of the boundary above established" and, in like manner, relinquished and ceded to South Carolina "all other the estate, property and claim" which Georgia "hath in or to the said lands." On the motion of the South Carolina delegates, Congress approved the Treaty of Beaufort, saying that it

be ratified and confirmed and that the lines and limits therein specified shall be hereafter taken and received as the boundaries between the said states of South Carolina and Georgia for ever.

Journals of Congress, Vol. 23, pp. 466-474 (Ga. Ex. 45).

It is the view of the Special Master that the ratification and confirmation of the Treaty of Beaufort by the Congress constitutes an express grant of any interest of the United States in the islands then existing to the respective states according to their interests as reflected by the Treaty of Beaufort. As to the islands formed after 1787, since the Treaty of Beaufort spoke only as to "islands" in the Savannah River, it is the conclusion of the Special Master that, by reason of the Court's interpretation of the Treaty of Beaufort in *Georgia v. South Carolina*, *supra*, to the effect that the Court was speaking as of 1787, and not 1922 (as obviously islands had emerged and

also perhaps disappeared since 1787), although the Court did not mention these facts in its opinion, the unnamed island west of Pennyworth Island emerging after 1787 is within the boundary line of the State of South Carolina.

This issue is one of first impression according to the supplemental briefs requested by the Special Master and filed on November 21, 1983. While it is only incidentally material in determining the unnamed island west of Pennyworth Island (neither party has indicated any special interest in this particular island), it vitally affects other areas in dispute, especially the Barnwell Islands. The supplemental brief filed by Georgia contends that (1) the Treaty of 1787 was intended to include all islands emerging after 1787, (2) the method of demarcation of the boundary line between the two states should follow the median (or equidistant) line, except where special circumstances necessitate a different boundary, in accordance with Article 12 of *The Convention on the Territorial Sea and the Contiguous Zone*, and (3) the boundary line moves with accretion and erosion and the median line can be determined with reference to any newly-formed island, although Georgia, relying upon *Ohio v. Kentucky*, 444 U.S. 335 (1980), primarily urges that the boundary line between the states was fixed as of 1787 and did not move with accretion and erosion.

South Carolina, on the other hand, argues that the legal status of islands emerging gradually by reliction or accretion after 1787, where such islands emerge on the South Carolina or northern side of the river, is that they belong to South Carolina, and that the effect of the 1922 decree of the Supreme Court in *Georgia v. South Carolina*, *supra*, by inserting the words "formed by nature" does not relate to islands emerging after 1787.¹⁵ To be consistent with the prior expressed

¹⁵ As South Carolina states: "If taken to mean that Georgia was entitled to all islands formed from 1787 and forever into the future, the result would be an uncertain boundary, never settled and never known, now or at any time in the future. It would also conflict with the admission by Georgia in this case that the boundary is fixed." The Special Master

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views of South Carolina, the suggested demarcator was to draw the lines around the newly emerged islands, leaving an amount of water equivalent to half the distance between the island and the South Carolina shore as of 1787, with such waters connecting with Georgia's 1787 portion of the Savannah River where the island came closest to the then midpoint of the river. While such a suggestion is appealing from a standpoint of considering the boundary line around a territorial sea island, it is not persuasive in any interpretation of the Treaty of Beaufort and the 1922 opinion of the Supreme Court in *Georgia v. South Carolina*, *supra*.¹⁶

Acknowledging that any advancement of the right-angle principle in drawing the boundary line is, to say the least, unusual, the Special Master finds that, in order to comply with the 1922 Supreme Court opinion which interpreted the Treaty of Beaufort, it is necessary to invoke this principle. Following the 1922 opinion which declared, "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," the rights of the two States became vested as of the date of the Continental Congress approval of the Treaty of Beau-

concludes that the inclusion of the words "formed by nature" in the decree entered by the Supreme Court was meant to convey the well-settled principle of law that a boundary line does not change where an island is created by avulsion or is man-made. The record in the 1922 case does not reveal whether the words "formed by nature" were inserted for any specific purpose.

¹⁶ The parties indicate that they have found no support for the right-angle principle advanced by the Special Master in his letter to counsel requesting supplementary briefs. South Carolina, while contending that the right-angle principle is probably not appropriate, does concede that, as contrasted with the curved-line proposal submitted by Georgia, the right-angle principle is more likely to be consistent with the 1922 decision of the Supreme Court by constructing a right-angle from the midpoint of the mainstream to the midpoint between the island as it then existed and the South Carolina shore.

fort,¹⁷ subject to possibly being modified under the rule of erosion and accretion, or prescription and acquiescence. It is clear from the 1922 opinion of the Court that, at points where there were no islands in the river, the boundary line was not to run along “the most northern branch or stream,” but was to be placed along the “thread of the river — the middle line of the stream — regardless of the channel of navigation, the precise location to be determined when the water is at its ordinary stage, ‘neither swollen by freshets nor shrunk by drought.’ ” It is only when “the most northern branch or stream” flows between an island or islands and the South Carolina shore that this term becomes important to a determination of the boundary line. In the absence of an island or islands *in the river* as indicated above, the line runs down the middle line of the river, but where the river has several branches, it runs down the middle line of the northern branch. Thus, in 1787 after the effective date of the Treaty of Beaufort, the line ran down the middle of the northernmost branch of the river until an island was reached. In Georgia’s complaint in the 1922 case,¹⁸ Georgia requested that the Court should use slightly deflecting lines in the approach from the area where there were no islands to an area where there was an island. The Supreme Court rejected this request. The record in the 1922 case is unique in what it does not contain. As to the island involved in that case,¹⁹ there is no mention or

¹⁷ The 1922 opinion in *Georgia v. South Carolina*, *supra*, does not suggest that the Court’s views were intended to conflict with the well-settled principle of law that boundaries set by treaties are fixed as of the date of such treaties. *Ohio v. Kentucky*, 444 U.S. 335 (1980); *Minnesota v. Wisconsin*, 252 U.S. 273, 283 (1920); *Indiana v. Kentucky*, 136 U.S. 479 (1890).

¹⁸ Neither party has seen fit to introduce the record in *Georgia v. South Carolina* (the 1922 case decided by the Supreme Court), but the Special Master has examined the same and called it to the attention of counsel. The Special Master assumes that he may take judicial notice of this record as it appears to be pertinent to this case.

¹⁹ Approximately 200 miles west of the mouth of the Savannah River. The island was located thirty-five to forty feet from the South Carolina shore. Even the underlying case which gave rise to the 1922 decision in *Georgia v. South Carolina*, *Georgia Railway & Power Co. v. Wright*, 146 Ga. 29 (1916), sheds no light on the issue of whether that particular island existed in 1787, or emerged thereafter.

discussion as to whether the island existed in 1787, or emerged thereafter. Presumably, it existed in 1787. Nor does the 1922 record in *Georgia v. South Carolina*, *supra*, give any aid to the manner of demarcating the boundary line as no pertinent chart, survey, or plat was filed in the proceedings.

The Special Master's difficulty in resolving this issue is obvious. Under the 1922 opinion of the Supreme Court, where no islands were involved, the Court interpreted the Treaty of Beaufort to mean that the boundary line was "midway between the main banks of the river when the water is at ordinary stage." Thus, under the general rule of law applicable to this situation, the newly formed islands are awarded to the party, or State in this instance, who owns the bed of the water. To draw a demarcation boundary line in any manner other than at right-angles would deprive one State or the other of that portion of the bed of the river which was owned by the particular State. This would assuredly be the case if the Court should adopt South Carolina's contention that a circular line should be drawn around each island. While Georgia adopts the right-angle principle at the Union Causeway located near what was originally the westernmost end of Rabbit Island, which subsequently accreted to the South Carolina mainland by natural processes, it does not follow the same approach with respect to other islands, and Georgia proceeds on the erroneous assumption that "all the islands in the said Rivers Savannah and Tugoloo" are reserved to Georgia, even if said islands emerged after 1787.

At this point it seems appropriate to call attention to *Port of Portland v. An Island in Columbia River*, 479 F.2d 549 (9th Cir. 1973), a case which Georgia now contends was incorrectly decided. The Special Master does not agree with Georgia's contention, at least insofar as the status of emerging islands may be concerned. In *Port of Portland*, the object of the action was Sand Island, an island which emerged in the Columbia River as the result of alluvial deposits; first appearing on charts as sand bars and shoal waters, but forming as an island after both Oregon and Washington had been admitted to the Union. The Port of Portland claimed title to

the island under a 1970 deed from the State of Oregon. The defendants claimed title under a 1929 deed from the State of Washington. The issue was whether the State of Washington owned Sand Island in 1929. If so, the 1929 deed was effective; if not, the Port of Portland would prevail. In reversing the District Court, the Court of Appeals said (*Id.* at 551-52):

In our view the lower court erred in applying the "widest channel test" because Congress did not intend that islands such as Sand Island, formed after the admission of Oregon to the Union, should be considered in fixing the Oregon-Washington boundary.

If the island is formed by gradual deposits in mid-stream, it is equally well settled . . . that the island belongs to the owner of the river bed in the place where the island arose. If the river is the boundary between two states the island would belong to the state on whose side of the middle of the main channel it was formed. *St. Louis v. Rutz*, 138 U.S. 226, 11 S.Ct. 337, 34 L.Ed. 941 (1891); *Jones v. Soulard*, 24 How. [65 U.S.] 41, 16 L.Ed. 604 (1860); 5A Thompson on Real Property § 2564 at 620 (1957 ed).

The only distinction between *Port of Portland* and the case at bar is that, in the *Port of Portland*, the location of the main channel was a determining factor, whereas the 1922 opinion in *Georgia v. South Carolina*, *supra*, expressly rejects any application of the thalweg doctrine or where the main channel may have been located. Additionally, of course, *Port of Portland* did not involve a situation in which "all islands" are reserved to one state or the other. Nevertheless, it stands for the principle that an island, formed after the two states were admitted to the Union, belongs to the state which was the owner of the river bed in the place where the island arose. As the Special Master interprets the 1922 opinion in *Georgia v. South Carolina*, *supra*, this can only mean that the unnamed island west of Pennyworth Island belongs to South Carolina, if a survey reveals that it is on the South Carolina side of the midpoint of the river.

Likewise, of possible significance is the case of *Montana v. United States*, 450 U.S. 544 (1981), which involved a treaty with an Indian tribe and the ownership of the bed of the Big Horn River. In reversing the Court of Appeals, the Supreme Court said, at page 554:

The mere fact that the bed of a navigable water lies within the boundaries described in the treaty does not make the riverbed part of the conveyed land, especially when there is no express reference to the riverbed that might overcome the presumption against its conveyance.

The construction of treaties involving Indian Tribes is, of course, governed by different rules from those involved in the present case. As stated in *Choctaw Nation v. Oklahoma*, 397 U.S. 620, 631 (1970), "treaties with the Indians must be interpreted as they would have understood them . . . and any doubtful expressions in them should be resolved in the Indians' favor." Thus, in *Alaska Pacific Fisheries v. United States*, 248 U.S. 78 (1918), and *Skokomish Indian Tribe v. France*, 320 F.2d 205 (9th Cir. 1963), the appropriate test is whether the grant must be construed to include the submerged lands only if the Government was "plainly aware of the vital importance of the submerged lands and the water resource to the tribe at the time of the grant." *Puyallup Indian Tribe v. Port of Tacoma*, 717 F.2d 1251, at 1258 (9th Cir. 1983), *cert. denied*, 465 U.S. 1049, 104 S.Ct. 1324 (1984).

There are, undoubtedly, at least two unanswered questions arising out of the 1922 opinion of this Court in *Georgia v. South Carolina*, *supra*, same being (1) the status of islands emerging after 1787 where said islands emerge on the South Carolina side of the river, and (2) as to any island existing in 1787, does the boundary line between the island and the South Carolina shoreline leave that area after clearing the end of the island and go at approximate right angles to the midpoint of the river where there is no island, or does the boundary line merely continue on its extended course by deflecting slightly until it connects the midpoint of the river?

In the 1922 case, Georgia unsuccessfully attempted to get the Supreme Court to answer (2) above. Georgia's counsel suggested, without citation of any authority, that the boundary line, when drawn on a line midway between an island and the South Carolina bank, should continue on an extended course, only slightly deflecting, until the line connected with the midpoint of the river. The Special Master, in the 1922 case, had no occasion to consider the matter as he was merely directed to report the testimony and exhibits to the Court "without conclusions of law or findings of fact." The Court apparently thought that it was unnecessary to consider the question suggested by Georgia as there is no reference to same in the opinion. The day has now arrived when this question must be decided as it applies to the Treaty of 1787 and the 1922 opinion of this Court.

The accepted principle of law is that the owner in fee of the bed of a river, or other submerged land, is "the owner of any bar, island or dry land which subsequently may be formed thereon." *St. Louis v. Rutz*, 138 U.S. 226, 247 (1891). The title to the island would not change even if the thalweg rule applied and the main channel of the river changed from one side of the island to the other, *Id.* at 250, but, in the present case, the thalweg rule has been eliminated by the 1922 opinion of this Court.

In Hyde, *International Law*, Vol. 1, 2d ed. p. 355, it is said:

By virtue of a principle known as that of accretion, a State may be said to acquire with respect to the outside world an original and exclusive right of sovereignty over lands which, imperceptibly in their process of formation, are added to its coasts and shores, or *which so come into being as islands appendant thereto*. No formal acts of appropriation are required (Emphasis supplied).

To the same effect is Bouchez, *The Fixing of Boundaries in International Boundary Rivers*, 12 Int'l. & Comp. L.Q. 789, 817 (1968), which reads:

If a new island comes into existence it will fall under the sovereignty of the state in the area where it is situated.

When the complaint was filed by Georgia in the 1922 case, it made no reference to the Treaty of 1787 but did allege that Georgia should be given the entire underwater bed of the river. However, when Georgia later filed its brief in the 1922 case, after referring to the Convention of Beaufort, it then made the following concession (Ga. Br. p. 5, the 1922 case):

Counsel, therefore, do not now insist that the State of Georgia can successfully claim the entire bed of the river. . . .

Georgia then continued, *Id.* p. 6, "that the true line between the two States is midway between the two embankments of the Savannah River where this River is not broken by Islands, and, where it is broken by Islands, this line deflects and follows midway the most northern stream of this river between a given island and the South Carolina shore." The 1922 opinion of the Court did not use the word "deflects" but otherwise generally accepted Georgia's contention.

If we are to accept Georgia's present argument that all islands in the Savannah River belong to Georgia, including those islands emerging after 1787, we would be confronted with two problems: (1) the boundary line would change whenever a new island emerged on the South Carolina side of the midpoint of the river, and (2) South Carolina would lose its claim to the underwater bed as to that area where the island emerged and such other areas as may have been previously on the northern or South Carolina side of the midpoint between banks, except as to the underwater bed which remained on the South Carolina side of a line drawn midway between the island bank of the newly emerged island and the South Carolina shore when the water is at ordinary stage. As stated, the Special Master does not believe that this was the intent of the treaty makers in 1787.

With respect to the Treaty of Beaufort, not involving an Indian Tribe, the Special Master concludes that the purpose

of reserving all islands to Georgia was a compromise effort on the part of the treaty makers to give Georgia the then existing islands in the two rivers, in order to assure that Georgia's claim of the Savannah River could be upheld as nearly as possible to Georgia's stated contention, but without any thought as to islands which did not then exist. Assuredly, there is no suggestion that either Georgia or South Carolina attached any vital importance to the submerged lands or the water resource to the two States, except that South Carolina insisted upon the right of free navigation.

RECOMMENDATION: That the boundary line between Georgia and South Carolina near the unnamed island west of Pennyworth Island be placed at a point midway between the banks of the respective States, without regard to the thalweg, and upon proceeding eastwardly the line shall swerve at approximate right angles to the northeast when the point opposite the western end of Pennyworth Island is reached, and thence running midway between Pennyworth Island and the southern bank of South Carolina, all as approximately shown on Ga. Ex. 334 which in this particular area is essentially the same as Ga. Ex. 156 which has been generally accepted by the witnesses as indicating little or no change in this area between 1787 and 1855; that a survey be prepared to support the conclusion that the unnamed island in controversy is within the northern or South Carolina side of the midpoint between the banks of the respective States, unless the parties reach an agreement that the entirety of the unnamed island is on the South Carolina side of the midway point aforesaid.

Attached to this report as App. B is a reproduction of Ga. Ex. 156, the original of which is a large mounted chart. Ga. Ex. 156 does not show the unnamed island at the extreme upper left corner of same as the light area appears to be evidence of accretion to Pennyworth Island. The island in question, emerging shortly after the 1855 chart was prepared, is slightly upstream from the area evidencing accretion to Pennyworth Island and is clearly indicated on Ga. Ex. 334. However, Ga. Ex. 156 is a basic chart which the witnesses

and counsel agree represents substantially the entire area in controversy and with very little change since 1787 other than the accretion process relating to Rabbit Island, discussed *infra*, the appearance of Tidegate Island, and the emergence of Long Island and Barnwell No. 3 both of which are in the Barnwell group, *infra*, as well as Horseshoe Shoal and Oyster Bed Island.

II. THE UNNAMED ISLAND EAST OF PENNYWORTH ISLAND, REFERRED TO AS "TIDEGATE"

"Tidegate" is shown on Ga. Ex. 156 as an island in existence when the 1855 chart was published. It is also shown on Ga. Ex. 334, a more recent publication, and indicates the then recent construction of Tidegate, referred to as Tidal Gate. The island is located immediately east of Pennyworth Island.

Tidegate was actually constructed by the Corps of Engineers in the 1970's. The purpose of this massive structure was to control the ebb and flow of the tide and assist in controlling the amount of silting that accumulates in the deep shipping channel. Prior to the aforesaid construction, there was no lock or no high level bridge in that area. The precise date that Tidegate emerged is unknown, other than the fact that the island appeared on some date between 1787 and 1855, but the precise or estimated date of emergence is unnecessary for the purposes of this case.

While it appears that Tidegate, as it originally emerged, is approximately in the center or midway between the States of Georgia and South Carolina, no survey has been submitted which attempts to show the precise location of Tidegate as it existed in 1855 (Ga. Ex. 156), same being the chart showing the most accurate location of the island. As with respect to Part H-I, a survey will be necessary, unless the parties reach an agreement as to its location.

South Carolina claims only the northern half of Tidegate, i.e., the half of the island closest to the South Carolina bank. Georgia claims the entire island as having been reserved to it by the Treaty of 1787. By a "fee simple deed without warranty," Georgia conveyed said island to the County of Chatham, a political subdivision of the State of Georgia in which the City of Savannah is located, on December 10, 1969 (Ga. Ex. 228).²⁰ Prior to the execution of the aforesaid conveyance, the General Assembly of Georgia, by resolution approved April 28, 1969, declared the island as surplusage and authorized the conveyance to the County of Chatham (Ga. Ex. 227).²¹

The basic legal principles applicable to Tidegate are relatively the same as those discussed in Part H-I with respect to the unnamed island west of Pennyworth Island. Both islands emerged from the gradual and natural process of accretion or reliction. Wherever the boundary line existed as of the date of the emerging island, the line remains the same. As stated in *Tiffany, Real Property*, Ch. 28, § 1229 (3rd Ed.):

An island when formed in a stream or body of water by the deposit of alluvial matter therein, belongs to the owner of the land beneath the water, on which the island is formed, whether such owner be the state or an individual. So, if the island is on both sides of a line dividing the lands of different owners, the land belongs to both owners.

²⁰ Exhibit "A," purportedly attached to Ga. Ex. 228, is not included as a part of said exhibit.

²¹ The map referred to as a part of the resolution is not attached to Ga. Ex. 227. The resolution recites that "Chatham County, in cooperation with the United States of America, is sponsoring a Savannah River Harbor Improvement Project" and "certain construction is required on an unnamed island, the title to which is in the State of Georgia" and "consists of a mud flat in the Savannah River being of little or no value to the State of Georgia." This is apparently the first assertion of jurisdiction by Georgia over the island known as "Tidegate."

The Special Master does not especially favor the view that each State may have ownership in its respective one-half of the island depending upon what a survey may reveal.²² But in 1787, at the area in controversy, there was no island between the banks of the states and, therefore, in accordance with the 1922 opinion of this Court, the boundary line between the two States ran midway between the banks of Georgia and South Carolina. In the absence of some agreement to the contrary, the Special Master feels compelled to make this recommendation.

RECOMMENDATION: That, in the absence of agreement between the respective States, a survey be prepared at the joint expense of the parties, using Ga. Ex. 156 as a basic chart, to establish the point midway between the banks of the two States and, if said line bisects the island, or any part thereof, as it existed in 1855, the survey should demonstrate where, under existing conditions following the construction of the Tidal Gate, the boundary line is now fixed. Depending upon the result of such survey, in the absence of agreement between the parties, the Special Master will then recommend to the Court the precise point of the boundary line.

Since Pennyworth Island existed in 1787, the boundary line, as established by the 1922 case, must run midway between the bank of Pennyworth Island and the South Carolina shore when the water is at ordinary stage. The question then arises whether the boundary line, after clearing Pennyworth Island at its eastern end, reverts back to the midway point between the main banks of the river, or whether the boundary line around Pennyworth Island should be extended in a straight line until it reaches the midway point between the main banks of the river. While doubtful as to whether it is of importance in this case as to this island, the Special Master is of the opinion that the boundary line should revert back to the midway point between the main banks of the river as soon as the so-called "island line" has cleared the eastern

²² Nor does this report attempt to establish the rights of the parties as to jurisdiction or taxation.

end of Pennyworth Island, as this is the point of demarcation and there is no longer any island in the river at that point.

III. THE BARNWELL ISLANDS

The Barnwell Islands consisted of four in number, prior to the time that they all became merged into the mainland of South Carolina. Their history will be separately considered, although their relation and reference to the Barnwell family letters and the Mary Norvell Smith correspondence will, in the main, be discussed jointly as to the Barnwell Islands.

A. Rabbit Island

This island is the westernmost or upstream of the four Barnwell Islands. It existed at the time of the Beaufort Convention in 1787, and is shown on many of the maps or charts either pre-dating or post-dating 1787. By a survey prepared by certain officials of the Army and Navy and published by the U.S. Coast Survey Office in 1855 (Ga. Ex. 156),²³ the depth soundings at low-water between Rabbit and Hog Islands are shown at 2, 9 and 5 feet respectively. There are no depth soundings reflected in what may be a very narrow creek or strip between Rabbit Island and the South Carolina mainland. Thus, the Special Master concludes that Rabbit Island had substantially accreted to the South Carolina mainland by 1855 and, within a very few years thereafter, became permanently accreted.

²³ While many maps or charts pre-dating 1855 contain attributes of credibility and accuracy, it is generally conceded by the parties that this exhibit (Ga. Ex. 156) is an excellent survey of most of the areas in this controversy. It shows the then existing island east of Pennyworth Island, referred to as "Tidegate." As to the Barnwell Islands, it indicates that Rabbit Island is essentially accreted to the mainland, although there is some showing of a very narrow strip between the island and the mainland. The largest island of the Barnwell group (Hog Island) is clearly shown, and Long Island is reflected as immediately east of Hog Island. Barnwell No. 3 may be indicated in its formative stage.

Since the record does not demonstrate any dredging or man-made activities in the neighborhood of Rabbit Island at any time prior to the permanent accretion, the Special Master concludes that the erosion and accretion of Rabbit Island to the mainland of South Carolina was a gradual process, probably partially caused by the location of Rabbit Island at a bend in the Savannah River, by small imperceptible degrees. Thus, irrespective of the boundary line as it existed in 1787, Rabbit Island became a part of the State of South Carolina and the boundary line, as it may have existed in 1787 according to Georgia's contention, was altered. *County of St. Clair v. Lovington*, 23 Wall. [90 U.S.] 46, 66-67 (1874).

The foregoing conclusion obviates the necessity of discussing the doctrine of prescription and acquiescence and its applicability to Rabbit Island; all as stated, *infra*, with respect to the remaining at least two of the three islands in the Barnwell group but, if the Special Master has incorrectly set forth the facts and law in referring to Rabbit Island, the aforesaid doctrine would equally apply to Rabbit Island. Likewise, it should be noted that Rabbit Island was one of the two islands which was included in the grant to Edmund Tannant hereafter considered.

Georgia vigorously asserts that the "island rule" is applicable as an exception to the rule of gradual and imperceptible accretion, relying upon *Missouri v. Kentucky*, 11 Wall. [78 U.S.] 395 (1870), *Washington v. Oregon*, 214 U.S. 205 (1909), *Indiana v. Kentucky*, 136 U.S. 479 (1890), *Iowa v. Illinois*, 147 U.S. 1, 58 (1893), and *Uhlhorn v. U.S. Gypsum Company*, 366 F.2d 211, 218 (8th Cir. 1966), *cert. denied*, 385 U.S. 1026 (1967). The Special Master finds these authorities inapposite insofar as the factual situation relating to Rabbit Island may be involved. At the outset, despite South Carolina's argument to the contrary, this Court, in its 1922 opinion in *Georgia v. South Carolina*, *supra*, apparently rejected the thalweg rule where it concluded, in interpreting the Beaufort Convention, that where "there are no islands the location of the boundary line between the two States is the thread of the river — the middle line of the stream — regardless of the channel of navigation, the precise location to be determined when the water is at

its ordinary stage" and "Thus, Article II takes out of the case any influence which the Thalweg or Main Navigable Channel Doctrine . . . might otherwise have had upon the interpretation to be placed on Article I, by which the location of the line must be determined, and leaves the uncomplicated case of a boundary stream between two States quite unaffected by other considerations."

Missouri v. Kentucky, supra, distinguishes the "island" rule because it was predicated on a boundary established by a channel, not the middle of the river as in the instant case according to the 1922 opinion of this Court in *Georgia v. South Carolina, supra*. It concerned Wolf Island over which Kentucky had universally maintained jurisdiction, with the Court finding that the evidence failed to establish that the channel had always been on the east (Kentucky) side of the island. True, there had always been a change in the channel from the west (Missouri) side of the island to the east channel on the Kentucky side of the island, but the two channels remained as such and this was not a case of erosion and accretion as Wolf Island had not become permanently attached to the Missouri side.

In *Uhlhorn v. U.S. Gypsum Company, supra*, the Eighth Circuit discounted the application of the "island" rule by saying:

We are not impressed with the "island" rule argument. It is not applicable here as it only applies to maintain the boundary in case of a slow and gradual change *in the thalweg*. The change here was sudden, and in no sense gradual. (Emphasis supplied).

366 F.2d 211, at 220. Since this Court, in its 1922 opinion, held that the thalweg doctrine had no application to the Savannah River, it is of no consequence. Once again, *Uhlhorn* stands for the proposition that a river seeking a new *channel* does not compel a change in the boundary line where avulsive processes are the cause of the changed condition, but *Uhlhorn* does recognize that a gradual and imperceptible process of erosion and accretion may alter a boundary line of two states. *Id.* at 219.

Georgia cites *Washington v. Oregon*, 214 U.S. 205 (1909), as authority for the application of the "island" rule. The foregoing citation is on the petition for a rehearing following *Washington v. Oregon*, 211 U.S. 127 (1908). Suffice it to say that neither case discusses the "island" rule as the Special Master understands said rule as, once again, there was merely a change in the flow of water and traffic from one channel to another with no problem of permanent erosion and accretion. To the same effect is *Indiana v. Kentucky*, 136 U.S. 479 (1890), stressed in final argument by Georgia, where the course of the main channel around Green River Island changed from the north to the south channel to the extent that, during some parts of the year, it was possible to pass on foot from the island to the mainland over what was originally the north channel. Again, however, we are confronted with a channel boundary line, rather than the "middle of the stream" or "midway between the banks of the stream," as in *Georgia v. South Carolina*, *supra*. Lastly Georgia cites *Iowa v. Illinois*, 147 U.S. 1 (1893), but this authority was rejected as inapposite in the same 1922 opinion of this Court.

The Special Master concludes that the "island" rule has no application to this case insofar as the Barnwell Islands group may be concerned.

Since Rabbit Island was clearly an island in the Savannah River in 1787, and in light of this Court's interpretation of the Convention of Beaufort to the effect that, where there are islands in the river, the boundary line is midway between the island bank and the South Carolina shore when water is at ordinary stage, the Special Master finds that, in 1787, Rabbit Island was in Georgia, but the Special Master also finds that the boundary line has been altered by the gradual and imperceptible process of erosion and accretion, and that Rabbit Island, about 1860, permanently became a part of the State of South Carolina.

The prescription and acquiescence doctrine, hereinafter considered, would be equally applicable to Rabbit Island and to the other islands in the Barnwell group except Barnwell No. 3.

It is apparent to the Special Master that the Court in its 1922 opinion in *Georgia v. South Carolina*, *supra*, placed considerable emphasis on the fact that the Beaufort Convention reserved "all the islands in the said Rivers Savannah and Tugalo²⁴ to Georgia." It is assumed that Georgia, by agreement or purchase, could acquire ownership of an island located in South Carolina waters, but the Court's opinion treats the reservation of islands in the Savannah River to Georgia as being part and parcel of the established boundary line between the two states. If, of course, the boundary line could be drawn without regard to the presence of Rabbit Island, or Hog Island, these islands would clearly be on the South Carolina side of any northern stream of the river in the *navigable sense*.²⁵

In this case it is unnecessary, in the opinion of the Special Master, to determine the present title or ownership of the areas in controversy, and particularly whether the title is marketable. There is a suggestion by Georgia that, even if Rabbit Island accreted to the South Carolina mainland by a gradual and imperceptible process, the title to Rabbit Island is vested in the unknown heirs of Edmund Tannant whose interest in that island, as well as Hog Island, will be discussed *infra* or, if not, there is no showing of affirmative abandonment or relinquishment of the grant of said islands by the State of South Carolina to Hezekiah Roberts, also considered *infra*. Admittedly, the title to the area which was once known as Rabbit Island is of questionable marketability according to the testimony of Harvey, the witness for South Carolina who

²⁴ The spelling of the name of this river in the original draft of the Beaufort Convention was "Tugoloo," not "Tugalo" as stated in the 1922 opinion.

²⁵ Ga. Ex. 156, the 1855 chart, as previously noted, indicates no depth soundings between Rabbit Island and the mainland. The depth soundings between Hog Island and what was, at least prior to accretion, Rabbit Island, have been previously stated in this report. Mindful of the fact that vessels in 1787 were considerably smaller and with limited draughts, it is entirely possible that small boats could enter the waters between Rabbit and Hog Islands and the mainland in 1787, whereas in 1855 no boat could negotiate a passage between Rabbit Island and the mainland, and only a very small boat could pass between Hog Island and Rabbit Island.

made an exhaustive study of the titles to several of the areas. Some of these areas are affected by tax sales conducted by the Forfeited Land Commission, established by law in South Carolina to take title to, and hopefully thereafter to dispose of, lands which are not acquired by bidders at Sheriffs' tax sales. Some of these tax sales through the Forfeited Land Commission were as recent as 1945 and, with the doubts expressed by this Court as to validity of tax sales in the relatively recent case of *Mennonite Board of Missions v. Adams*, 462 U.S. 791 (1983), any reputable title examiner will pause before issuing a certificate of clear title occasioned by a tax sale. Even the expert title examiner concedes that, as to Rabbit Island, there may be an outstanding interest in the eastern one-half of Rabbit Island in the heirs of Helen Barnwell Geiger and, as to Mary Louise Thomas (Mrs. L.J. Thomas), who was apparently still living at the time Harvey testified, he expressed the view that, subject to a spoil easement, she definitely had an interest in all of Rabbit Island as recently as 1979 (Vol. XII, Harvey, pp. 70, 79).

The title to a particular piece of property is of interest, insofar as a boundary line dispute is concerned, only to the extent that it may show actual possession and the perception that the land may be in a particular State in considering the doctrine of prescription and acquiescence. While references may be made to certain titles and claimed ownership, this report is not intended to settle the title to any of the areas in controversy, and most assuredly should not be considered as a finding of marketable title in any person.

RECOMMENDATION: That Rabbit Island, through the natural process of erosion and accretion between 1787 and 1860 became permanently accreted to the South Carolina mainland, thereby establishing a new boundary line between Georgia and South Carolina.

B. Hog Island

Proceeding downstream Hog Island was, in 1787, the next island to Rabbit Island. At this point there should be some

discussion of the grants relating to these two islands which were the only existing islands of the Barnwell group in 1787.

In 1760 a grant of these two Barnwell Islands was made by the Colony of Georgia to Edmund Tannant of Savannah, and was accompanied by a survey (Ga. Ex. 94), dated May 19, 1760, but neither the grant nor the survey was ever recorded. The plat shows that Rabbit Island consisted of 46 acres, with a possible addition of about 10 acres consisting of three small masses of land area immediately to the west or upstream of Rabbit Island. Hog Island appears to contain 114 acres. The survey reflects 160 acres, thus obviously disregarding the 10 acres, and this is what the grant, signed by the Governor of Georgia on December 3, 1760, indicates (Ga. Ex. 95). During these days many plats were not translated into grants and a limitation of six months, several times extended by the Governing Council, was permitted to register the grants, but neither Tannant nor any member of his family after his death in early 1763 ever saw fit to effect a registration or recordation of the grant (Vol. VII, Thomas, pp. 787-793). Tannant's appraisalment of his estate did show "165 acres of marsh below the town" (Ga. Ex. 261). There was one effort to advertise the sale of the marshlands on October 9, 1774, but apparently there were no offers or bidders (Vol. VII, Thomas, p. 804). No deeds from Tannant or his estate²⁶ were ever found, nor was there any record located of any attempt by Georgia to regrant the two Barnwell Islands to anyone. Since the Tannant grant, and any activity thereafter with respect to same, all took place prior to 1787, there is no evidence that Georgia has claimed or exercised any control or alleged ownership (other than through the Treaty of Beau-

²⁶ Edmund Tannant died testate, but his will did not refer to the islands by name. His interest in the islands, if any, fell into the residuary clause of his will which left everything in trust for his two daughters. The estate of Edmund Tannant was reopened in the early 1800's, but there is no record of the disposition or sale of any of the Barnwell Islands by Tannant, his estate, or any of his heirs. Tannant came to Georgia in 1753 from the West Indies and became prominent in Georgia politics as well as Georgia life in general. He was a planter and slave owner and, in 1755, became a member of the lower House, as well as one of the three judges for the General Court.

fort) over any of the Barnwell Islands, with the possible exception of two years when the property appeared for taxation on the Georgia records pursuant to later South Carolina grants and, of course, after the 1955 opinion of the Fifth Circuit in *United States v. 450 Acres of Land, etc., supra*.

In 1795, South Carolina granted the two islands (Rabbit and Hog) to Hezekiah Roberts, then a resident of Beaufort, South Carolina. Roberts had prepared, or caused to be prepared, a map of the area (S.C. Ex. B-3) and, as Georgia's expert Dr. Louis DeVorsey concedes, the Surveyor General of South Carolina and Roberts "thought" that the two Barnwell Islands were in South Carolina (Vol. VI, DeVorsey, p. 645). As Dr. DeVorsey well said: "The attitudes and the perceptions of people in the past period, their knowledge and appreciation of areas in which they had an interest, and authoritative maps constitute valid historical evidence as to geographical conditions." However, if this be true, the perception occasioned by the grant to Edmund Tannant would leave at least Tannant and his family to believe that the two Barnwell Islands were in Georgia. Thus, at this particular period of time, 1760 to 1795, perceptions are not of great moment. Indeed, prior to the Treaty of 1787, many Georgians were of the view that Georgia's boundary line ran to the South Carolina bank with the entire river being located in Georgia, as evidenced by the letter of John Fallowfield to the Trustees, dated May 8, 1741, which indicated that there were many rice plantations in the [Barnwell Island] area, although not necessarily on a particular island (Ga. Ex. 15; Vol. VI, DeVorsey, p. 692-93).

In any event, Roberts did nothing with his grants from South Carolina and, like the Tannant grant, the Roberts' grants were never recorded.

Subsequent to 1795, but prior to 1813, the third Barnwell Island appeared, which will be referred to as "Long Island."²⁷

²⁷ Not to be confused with another island bearing the same name but not in the Barnwell group.

On April 5, 1813, the Governor of South Carolina granted to Archibald Smith *three* marsh islands "in Beaufort District on Savannah River" lying "between Fort Jackson in the State of Georgia and the lands of the said Archibald Smith"²⁸ (S.C. Ex. B-5, B-6). The three islands were described as containing 42 acres (Rabbit Island); 104 acres (Hog Island), and 16 acres (Long Island) — a total of 162 acres. Between Hog Island, Long Island and the South Carolina mainland are the words "Part of Savannah River," and the word "Creek" appears between Hog Island and Rabbit Island, as well as between Rabbit Island and the mainland. The river south of the three islands is marked "Savannah River or Black River." Further to the south is a line, after which is written "Fort Jackson in Georgia."

Archibald Smith, a resident of Savannah, did not convey the islands during his lifetime. He died testate and his will was probated in Chatham County, Georgia, on May 10, 1830, leaving the residue of his estate to be divided between his son Archibald Smith, and his daughter, Eliza Zubly Smith. However, on March 2, 1823, Smith executed an agreement with the adjoining landowners on the mainland, John Screven and Samuel M. Bond, and, by an attached plat, indicated the three islands as owned by Smith, with "Smith's Settlement" reflecting houses of some type erected thereon. Thus, it can be concluded from reasonable evidence that Smith physically occupied and possessed the area known as "Smith's Settlement" in 1823, and it is a justifiable inference that he also

²⁸ According to the plat annexed to the grant (S.C. Ex. B-7), it appears that Archibald Smith was the owner of land on the South Carolina mainland fronting on the Savannah River. The plat likewise points out "new road to Charleston" located approximately opposite the western end of Rabbit Island which was later known as "Ferry Road" or "Union Causeway." The lands indicated on the plat as "Lands of Archibald Smith, Esquire" were not actually owned by Smith at that time, but were later acquired and are referred to as "Blue Mud Plantation" and "Nullification Plantation." At least in 1823, Screven and Bond owned the land adjoining the "new road."

possessed the three islands, all of which were within a relatively few feet from "Smith's Settlement."²⁹ (S.C. Ex. B-9).

While there is some opinion to the contrary or, at least, uncertain opinion, the greater weight of the evidence established that persons on or near the Georgia mainland in Savannah and Fort Jackson could easily perceive the Barnwell Islands in 1787 "if you knew what you were looking for" (Vol. V, DeVorsey, p. 628). The Barnwell Islands were approximately two and one-half miles from the City of Savannah and probably less than one mile from Fort Jackson with nothing to interrupt the view. While it may have been too far to determine what precisely an individual may have been doing at a given time, the general area, the buildings in the area, and the extent of cultivation were readily determinable.

Upon the death of Archibald Smith in 1830, his estate passed under his will, as previously indicated, to his son, also named Archibald Smith (referred to herein as Archibald Smith, Jr.) and his daughter, Eliza Zubly Smith, who, in 1832, married Edward Barnwell, a prominent South Carolina planter living in Beaufort and holding numerous properties in that area. The marriage settlement agreement dated June 14, 1832, between Eliza Smith and Edward Barnwell provided that Eliza's property, inherited from her father, was to be held for the benefit of the children of the marriage, although it is apparent that Edward Barnwell exercised essentially full control over the property, at least during most of his lifetime, as the marriage settlement left the trust property, including the wharf and stores in Savannah, under the control of Edward Barnwell and the trustees, John Joyner Smith, a South Carolinian, and Archibald Smith, Jr., a resident of Georgia. Under the terms of the marriage settlement, the surviving children were entitled to their share of the trust estate upon reaching the

²⁹ The records of the Beaufort County office, where deeds, taxes, etc., were recorded; were destroyed during the Civil War. The agreement of March 2, 1823 (S.C. Ex. B-9) was apparently either rerecorded, or otherwise had not previously been recorded, in the Beaufort County Clerk's Office until July 25, 1881. The agreement refers to "Arthur Smith" but there is no doubt but that this was intended to be Archibald Smith as evidenced by Smith's signature on the plat.

age of majority or marrying, although the evidence discloses that at least two of the children did not exercise that right upon reaching the age of 21 as Edward Barnwell was still living at the time.

A chart showing the family tree of Archibald Smith with his two wives, Margaret Joyner Smith (first wife) and Helen Zubly Smith (second wife) has been presented as S.C. Ex. H. It reveals that from the marriage of Archibald Smith and Margaret Joyner Smith there was one child, John Joyner Smith, who married Mary Gibbs Barnwell, a half-sister of Edward Barnwell. After Margaret Joyner Smith died, Archibald Smith married Helen Zubly Smith and they had two children, Eliza Zubly Smith (born February 28, 1803, died March 18, 1846), who married Edward Barnwell in 1832, she being the second of Edward Barnwell's three wives, and Archibald Smith, Jr., who married Anne Margaret Magill.

The union between Edward Barnwell and Eliza Zubly Smith Barnwell resulted in seven children, with their approximate dates of birth and death, and the offspring of their resulting marriages as follows:

1. Archibald Smith Barnwell — born May 22, 1833; died May 7, 1917; who married Frances Morgandollar Riley, and had three children, namely Elizabeth Barnwell (born August 11, 1863; died June 27 1864); William Riley Barnwell (born April, 1866; died May, 1868), and Edward Williamson Barnwell (born August 26, 1869; died August 31, 1951).

2. John Smith Barnwell — born June 1, 1836; died May 20, 1887. The chart does not reveal whether John Smith Barnwell ever married.

3. Woodward Barnwell — born June 3, 1838; died January 4, 1927, who married Isabel Bacon O'Neill, and had six children, namely Woodward Barnwell (born October 12, 1874; died August 12, 1876); Louise Dickerson Barnwell (born October 26, 1876; died February 5, 1960); James O'Neill Barnwell (born January 9, 1879; died February 17, 1955); Archibald

Smith Barnwell (born March 1, 1881; died November 23, 1963); Edward Barnwell (born January 3, 1885; died March 19, 1886); and Woodward Flower Barnwell (born December 23, 1892; died March 15, 1937).

4. Helen Barnwell — born December 7, 1839; died February 5, 1879, who married Dr. Charles Geiger, and had two children, namely Charles Atwood Geiger (born May 15, 1866; died December 23, 1907), and Helen Caroline Geiger (born April, 1870 and died December, 1944).

5. Charlotte Cuthbert Barnwell — born January 29, 1842; died April 11, 1922. She apparently never married. She was a rather prolific letter writer and many of the Barnwell Family letters were written or received by her.

6. Stephen Bull Barnwell — born April 15, 1843; died October 21, 1862. This young man never married, and was killed in the Civil War.

7. Eliza Ann Barnwell, also referred to as Leila Barnwell — born March 18, 1846; died March 25, 1915. She apparently never married.

Since Archibald Smith, Jr., was also a child of the marriage between Archibald Smith and Helen Zubly Smith, we must consider his descendents from his marriage to Anne Margaret Magill. They apparently had five children, but the dates and names are not entirely known. The five children were as follows:

(a) Archibald Smith — dates of birth and death unknown. Marital status and children, if any, unknown.

(b) Helen Zubly Smith — dates of birth and death unknown. Marital status and children, if any, unknown.

(c) A son — name, dates of birth and death, marital status and children, if any, unknown.

(d) A son — name, dates of birth and death, marital status and children, if any, unknown.

(e) Elizabeth Ann Smith — dates of birth and death, marital status and children, if any, unknown.

As heretofore indicated, in a boundary line controversy such as this, questions of ownership and title are not necessarily determinative, but may be relevant in considering the issue of prescription and acquiescence.

The marriage settlement agreement, executed in 1832 (S.C. Ex. B-10(2)), was recorded in a book entitled "South Carolina Marriage Settlements," Vol. 12, pp. 1-9, located in the Archives of the State of South Carolina. Since the marriage settlement also involved land in Chatham County, Georgia, it was recorded in the records of Chatham County in book 2R, at page 256. The description of the land in South Carolina refers to 200 to 300 acres which, according to Harvey, the expert witness, consisted of the three Barnwell Islands (Rabbit, Hog and Long), together with the Nullification Plantation.³⁰

In 1867, the surviving heirs of Eliza Zubly Smith Barnwell requested the trustees to make a division of the trust lands located in South Carolina. In accordance with the request of Archibald Smith, Jr., as trustee of the Estate of Eliza Zubly Barnwell, the interested children drew lots and, on December 28, 1867, the division of the trust property in South Carolina was completed, with acknowledgments of the receipt of their respective shares being executed by the six remaining children of the marriage between Edward Barnwell and Eliza Zubly Smith Barnwell. Since the division of the trust lands also involved property in Chatham County, Georgia, the ac-

³⁰ S.C. Ex. B-33 is a letter from Edward Barnwell to Archibald Smith, dated February 13, 1835. He describes Nullification as containing 139 acres, all on the mainland, and the islands as being 146 acres as per one survey, and 149 acres by another survey, thus being a total of either 285 or 288 acres, and between 200 and 300 acres as referred to in the marriage settlement agreement. The acreage of Nullification also varied between 124 and 150 acres.

knowledge is recorded in the records of Chatham County in book 4A, at page 368 on June 3, 1868. The acknowledgment signed by the six children states that we "Do hereby acknowledge to have received from the said Trustees our and each of our respective shares and portions of all the said lands and real estate situate, lying, and being in the State of South Carolina which shares have been ascertained by a division had and made and drawing by lot by our united agreement and covenant [sic] and further that we have each and every one of us received from said Trustees title deeds for our respective portions as drawn by each by conveyances to us by said Trustees." (S.C. Ex. B-10(3)).

Only three deeds were found to be recorded in Beaufort County, South Carolina. The three deeds, all dated January 13, 1868, were from the trustees to Woodward Barnwell (S.C. Ex. B-10 (6)), A.S. Barnwell (S.C. Ex. B-10(7)) and E.A. [Eliza A.] Barnwell (S.C. Ex. B-10(8)). For some unknown reason these three deeds were not recorded in Beaufort County until November 17, 1930, after all grantees had died.³¹ Together with the recordation of the aforesaid deeds were found plats of the Hog Island Plantation, bearing an 1867 date, recorded in Beaufort County Plat Book No. 3, at page 73 (S.C. Ex. B-10(4)) and Rabbit Island Plantation, bearing a like date, recorded in Beaufort County Plat Book No. 3, at page 73 (S.C. Ex. B-10(5)). Hog Island was divided into thirds, with the eastern portion going to A.S. Barnwell, the center portion to E.A. [Eliza A. or Leila] Barnwell, and the western portion being allocated to John S. Barnwell. Rabbit Island, shown as S.C. Ex. B-10(5), was divided into halves, with Helen Barnwell Geiger receiving the eastern half and Woodward Barnwell receiving the western half. Also, Long Island went to Woodward Barnwell.³²

³¹ The Barnwell family letters make some reference to the possibility that the deeds had been lost or misplaced. If a member of the family effected the recordation in 1930, it would have been a grandchild of Eliza Zubly Smith Barnwell.

³² Recorded deeds were not found for conveyances to Helen Barnwell Geiger or John S. Barnwell.

Since no deeds were found or recorded as to the allocations to Helen Barnwell Gieger or John S. Barnwell, it is necessary, except for the acknowledgment of the receipt of the allocated lands, to look to the Barnwell family letters in support of their interests. Obviously, Charlotte C. Barnwell, by whom and to whom the letters were generally written, was of the opinion that all deeds had been recorded. The Special Master will not review all of these letters³³ but it is clear that they support the divisions of Hog and Rabbit Islands, the allocation of Long Island, and the interest of Charlotte in a portion of Nullification on the mainland (Vol. XII, Harvey, pp. 45-53). Thus, in 1868 five children of Eliza Zubly Smith Barnwell had interests in Rabbit Island, Hog Island and Long Island.

By deed dated February 27, 1871, recorded in the records of Beaufort County on July 12, 1871, A.S. [Archibald Smith] Barnwell and Woodward Barnwell mortgaged their interests in the islands to the sisters, Charlotte C. Barnwell and Eliza A. [Leila] Barnwell. Woodward Barnwell's interest consisted of the western half of Rabbit Island and all of Long Island. A.S. Barnwell conveyed by this mortgage the eastern one-third or part of Hog Island, including the western moiety of what was known as Battery Square.

Obviously, A.S. Barnwell and Woodward Barnwell could not pay their mortgage obligations to the lending institutions in Georgia. By deed dated August 17, 1896 (S.C. Ex. B-10(11), these brothers conveyed their entire interest in the subject property to Charlotte C. Barnwell and E.A. [Eliza or Leila] Barnwell. This deed was recorded in the records of Beaufort County on November 16, 1896, in Deed Book 22, at page 70. The conveyance also included the interest of the brothers in the wharf property in Chatham County, Georgia, and was recorded in Chatham Deed Book 7R, at page 159. The transfer also included other property in Beaufort County in Denwill and personal property at the Blue Mud Plantation.

³³ The letters do make reference to the interest of John S. Barnwell as being "ricelands." This covered the western portion, or third, of Hog Island.

By this time John S. Barnwell had died, unmarried, and without children. Since he died intestate on May 20, 1887, his interest passed by intestacy to his four surviving brothers and sisters, along with the children of his deceased sister, Helen Barnwell Geiger, who had passed away on February 5, 1879. However, the deed of the two brothers to the two sisters did not attempt to convey the undivided interest of John S. Barnwell which passed, upon John's death, in part, to A.S. Barnwell and Woodward Barnwell. In sum, the conveyance by the two brothers to the two sisters conveyed all of their interest in their Beaufort County property, except the interest of John S. Barnwell which passed, in part, to the two brothers and two sisters when John S. Barnwell died.

Following the 1896 conveyance to the two sisters, Charlotte and Eliza [Leila] Barnwell, no record conveyances of any of the island property was found until February 16, 1940, when the Sheriff of Beaufort County conveyed to the Forfeited Land Commission, 152 acres in the name of Charlotte C. Barnwell for delinquent Beaufort County real property taxes for the years 1932 to 1938. This deed is recorded in the records of Beaufort County in Deed Book 55, at page 306. Another deed, bearing the same date, conveyed property assessed in the name of E.A. [Eliza A.] Barnwell also conveyed 152 acres and is recorded in Deed Book 55, at page 308. Later, in 1945, the Sheriff of Beaufort County purportedly sold the interests of Helen Barnwell Geiger, Charlotte C. Barnwell and E.A. [Eliza A.] Barnwell for taxes, the deed containing 1519 acres which included a part of the Denwill tract. This deed contained the word "marshlands."

By a 1942 deed (S.C. Ex. B-10(14)), the Forfeited Land Commission sold the property referred to in the preceding paragraph to E.B. Pinckney³⁴. Thereafter in 1952, there existed

³⁴ E.B. Pinckney is the same party referred to as a defendant in the condemnation case decided by the Fifth Circuit, *United States v. 450 Acres of Land, etc.*, 220 F.2d 353 (5th Cir. 1955).

a recorded plat³⁵ in the records of Beaufort County (Plat Book 6, at page 84) showing the acquisition of a spoil easement extending over at least a portion of the Barnwell Islands, same being Hog Island and Long Island. As heretofore noted, this did not refer to Rabbit Island which had already accreted to the South Carolina mainland and which, according to the witness, Harvey, was the subject of a condemnation action filed in South Carolina against L.J. Thomas on October 1, 1959, who was then the purported owner of Rabbit Island. On November 16, 1956 (S.C. Ex. B-10(18)), Pinckney gave an option to L.J. Thomas and, on December 19, 1956, the option was exercised and a deed to L.J. Thomas was recorded in the records of Jasper County, South Carolina, in Deed Book 36, at page 174. South Carolina had created a new county, Jasper County, carved out of what was formerly Beaufort County. Thomas subsequently died, leaving a will of record in Jasper County probated in 1960, and his widow apparently inherited Rabbit Island.

On February 17, 1960, of record in Jasper County Deed Book 43, at page 158, Pinckney executed a quitclaim deed to Edens, Murdaugh and Eltzroth, for 450 acres of what was then Hog Island and Long Island. It was referred to as quitclaim deed because, by that time, the Fifth Circuit had held that these islands belonged to Georgia.

Thus, according to Harvey, the legal title to Rabbit Island is in Mrs. L.J. Thomas (Mary Louise M. Thomas), subject to a spoil easement in favor of the United States, although Pinckney purported to convey the same even though he never had title. The legal title to Hog Island and Long Island, subject to a like spoil easement, is, according to Harvey, vested in Edens, Murdaugh, and Eltzroth.

In any event, since 1813 until the hearing on May 21, 1981, there is no reference to the Barnwell Islands being in Georgia,

³⁵ No recorded deed was found. Apparently, this was the result of the condemnation action in the United States District Court at Savannah, Georgia, which was the same action which was decided by the Fifth Circuit in 1955.

except for the 1955 Fifth Circuit decision. All conveyances since 1813 and tax records through 1955 reflect that the Barnwell Islands are in Beaufort County, South Carolina and, about 1950, became a part of Jasper County, South Carolina.³⁶

RECOMMENDATION: For reasons heretofore and hereinafter stated *infra*, under the discussion of prescription and acquiescence, the Special Master recommends that Hog Island, although originally in Georgia pursuant to the Treaty of 1787, is now a part of South Carolina by reason of prescription and acquiescence, thereby establishing a new boundary line between Georgia and South Carolina.

C. Long Island

The third island of the Barnwell Islands group is Long Island, which emerged around 1796, about nine years following the Treaty of Beaufort. It was not included in the Georgia grant to Edmund Tannant in 1760, nor in the 1795 grant by South Carolina to Hezekiah Roberts.

It was included in the 1813 grant by South Carolina to Archibald Smith. At that time Long Island was described on a plat as containing 16 acres.

In the 1868 division of the properties among the members of the Barnwell family pursuant to the Marriage Settlement agreement of 1832, Long Island, as heretofore indicated, was allocated to Woodward Barnwell (S.C. Ex. B-10(b)). It was included as a portion of the 1871 mortgage from Woodward Barnwell and Archibald S. Barnwell, to Charlotte C. Barnwell and Eliza A. Barnwell, and in 1896 was conveyed outright by the same grantors to the two sisters, Charlotte C. Barnwell

³⁶ The tax records do reflect that returns for taxation purposes were made by Archibald Smith (or by someone for him), the original grantee, to Chatham County, Georgia, for the year 1825 which is referred to as 104 acres of "marshland." In the year 1831, after Archibald Smith died, there was a return for tax purposes to Chatham County under the name "Estate of Archibald Smith." A record of a return for 1824 in the name of Archibald Smith, to South Carolina taxing authorities was found in the Records of the Comptroller General on deposit with the South Carolina Department of Archives and History.

and Eliza A. Barnwell.³⁷ No subsequent deeds were found until February 16, 1940, when the interests of Charlotte C. Barnwell and Eliza A. Barnwell were conveyed, described as 152 acres, more or less, to the Forfeited Land Commission of South Carolina, and recorded in Beaufort County Deed Book 55, at pages 306 and 308 respectively. Each of these deeds described the property on the South, "bounded by Savannah River marshes, cuts, and slues." Later, the island property (purportedly consisting of the western half of Rabbit Island, 40.05 acres, all of Long Island, and 39 acres of Hog Island including the western half of Battery Square on Hog Island) was conveyed by the Forfeited Land Commission to Eustace B. Pinckney on January 6, 1942, together with what would appear to be Denwill according to its description. The witness, Harvey, refers to a large part of Denwill in the 1519 acres mentioned therein, as well as the interest of Helen Barnwell Geiger in the eastern half of Rabbit Island.³⁸

In the 1870's, the Auditor prepared the tax records. The County was broken down into townships and the Auditor

³⁷ After the 1896 deed to the two sisters, Charlotte C. Barnwell and Eliza A. (Leila) Barnwell, they jointly owned the following:

Hog Island — the eastern third formerly allocated to A.S. Barnwell; an undivided interest in the western third formerly allocated to John S. Barnwell who had died intestate, unmarried and without issue, which passed to his brothers and sisters along with the children of a deceased sister. E.A. (Eliza A. or Leila) Barnwell, was allocated the middle third of Hog Island, and owned the same in her own name as there is no indication that she ever transferred any interest in this middle portion of Hog Island to her sister, Charlotte C. Barnwell. The two sisters also jointly owned all of Long Island which was originally allocated to Woodward Barnwell. As to Rabbit Island, the sisters had acquired the western half which had been allocated to Woodward Barnwell. However, the eastern half of Rabbit Island, originally allocated to Helen Barnwell Geiger, apparently was never owned by or conveyed to either Charlotte C. Barnwell or Eliza A. Barnwell; nor is there any indication that the individual interests of the two brothers, A.S. Barnwell or Woodward Barnwell, and the undivided interest of the children of Helen Barnwell Geiger, or of John S. Barnwell's interest in the western third of Hog Island was ever conveyed to either Charlotte C. Barnwell or Eliza A. Barnwell.

³⁸ Harvey, the expert title examiner, testified that the Forfeited Land Commission has never conveyed the Helen Barnwell Geiger one-half interest in Rabbit Island.

published a notice as to when he planned to take returns for real property. While the Auditor sometimes assisted the landowners in preparing their returns, he accepted the word of the landowners as to the character of the property, i.e., timberland, marshland, grazing, arable, town lots, etc. Based upon the type and usage of the property, the Auditor fixed the value and then delivered the return to the Treasurer for the collection of the tax.

While the South Carolina tax records were destroyed during the Civil War, Harvey did find a few records prior to 1870 in the office of the Comptroller General. For instance, the 1865, 1866 and 1867 records show A.S. Barnwell assessed with 5000 acres, with a total valuation of \$1,000. This is presumably the Denwill tract, bounded on the south by the Savannah River, on the north by Wright's River, on the east by Mud River, and on the west by Wright's Cut. By a South Carolina grant dated February 13, 1860, A.S. Barnwell had acquired a "plantation or tract of land" containing 5825 acres, more or less. On February 7, 1872, A.S. Barnwell conveyed a one-half interest in the property to his brother, Woodward Barnwell. The same property, but now referred to as containing 5080 acres, was included in the conveyance of 1896 by A.S. Barnwell and Woodward Barnwell to the sisters, Charlotte C. Barnwell and Eliza A. Barnwell. In 1940, the interests of the two sisters, then described as 1519 acres each,³⁹ was conveyed by the Sheriff of Beaufort County to the Beaufort County Forfeited Land Commission.

The reason some of these inconsistencies are examined is that, in order to determine whether a particular island was listed for taxation in South Carolina, it is also necessary to note the surrounding properties which were listed in the name of the same landowner. For example, in 1865, 1866 and

³⁹ The transfer on the Beaufort County tax records from A.S. Barnwell and Woodward Barnwell to Charlotte C. Barnwell and Eliza A. Barnwell, although made in 1896, did not appear on tax records until 1899, although in the intervening years the property did appear in the names of A.S. Barnwell and Woodward Barnwell.

1867, A.S. Barnwell is shown as the owner of 5000 acres.⁴⁰ The 1870 tax records, after the division of the properties pursuant to the marriage settlement agreement of 1832, reveal that A.S. Barnwell returned 5040 acres of marsh (S.C. Ex. B-10(13)). The 1868 deed from the trustees under the marriage settlement agreement to Archibald S. Barnwell (S.C. Ex. B-10(7)) conveyed the eastern portion of Hog Island, described as containing 39 acres, including "the western half or moriety [sic] of what is known as Battery Square." Your Special Master believes it logical to infer that the increase of 40 acres from 5000 acres, even if erroneously calculated in 1865, is accounted for by the portion of Hog Island acquired by A.S. Barnwell.

Woodward Barnwell, by the 1868 allocation under the Marriage Settlement agreement, received the western half of Rabbit Island and all of Long Island. In 1870, 50 acres of arable land was reported for tax purposes.⁴¹ The 1868 deed from the trustees under the Marriage Settlement agreement described the western half of Rabbit Island as containing 40.05 acres, and then continued the conveyance by saying "and also the long narrow island East and South of Hog Island and known as Long Island." (S.C. Ex. B-10(6)). The acreage of Long Island is not indicated on the survey dated December 24, 1867 (S.C. Ex. B-10(5)), and it is certainly a reasonable assumption to conclude that Woodward Barnwell estimated the same as 10 acres when he filed his 1870 return of real property owned by him.

Following the same deductions with the various members of the Barnwell family making tax returns for the year 1870, the Special Master finds that Rabbit Island, Hog Island, and Long Island were each reported and assessed for tax purposes to South Carolina authorities, at least from the year 1870 if not prior to that date, with some reasonable degree

⁴⁰ Denwill was a vast open expanse of land, referred to as "wasteland." No metes and bounds descriptions were shown on any plat. All anyone knew is that the four boundaries of Denwill were bodies of water.

⁴¹ By 1870, Rabbit Island had accreted to the South Carolina mainland.

of accuracy and continuity through the year 1956, following the 1955 decision of the Fifth Circuit in the condemnation case. And during this substantial period of years, and prior thereto except for the years 1825 and 1831 (see footnote 36), Georgia made no effort to assess or tax the three islands in question; nor did Georgia make any attempt to exercise any dominion and control over said islands in any manner.

Aside from the fact that Georgians, on the mainland of Georgia, could readily see what was going on with reference to the Barnwell Islands, it is significant to note that the original Archibald Smith, the grantee under the 1813 South Carolina grant, and his son, Archibald Smith, Jr., were residents of Georgia. As Dr. DeVorse correctly stated, their perception as to the state wherein the Barnwell Islands were located "would be significant" (Vol. VI, DeVorse, p. 673). The first Smith, definitely a resident of Savannah, ran a business on the wharf at Savannah, and lived there until his death (Vol. VII, Thomas, p. 884). There is no evidence that either of the Smiths, father or son, ever applied to the State of Georgia or any of its agencies to obtain title or to perfect title, to any of the Barnwell Islands. In fact, until the 1955 decision of the Fifth Circuit, there is no evidence that anyone even suggested that the Barnwell Islands were a part of Georgia, other than the Tannant grant of 1760 which was either never delivered or picked up and, in any event, was never recorded. The 1823 agreement between Screven and Bond, on the one hand, and Arthur Smith on the other, is a clear indication that Archibald Smith (see footnote 29) had at least taken legal possession of the three Barnwell Islands and suggests the presence of a canal separating the three islands and the South Carolina mainland (S.C. Ex. B-9).

The Special Master concludes, and so finds, that the 200 to 300 acres in South Carolina, referred to in the marriage settlement agreement and in the later conveyance by Archibald Smith [Jr.], (S.C. Ex. B-81), includes the three Barnwell Islands, namely, Rabbit Island, Hog Island, and Long Island. This conclusion is supported by S.C. Ex. G-11(39), and more particularly by a letter dated February 13, 1835, from Edward

Barnwell describing the acreage on the mainland (Nullification) as 139 acres and the acreage of the islands at either 149 acres or 145 acres, according to which of two surveys was accepted, thereby making the total acreage between two hundred and three hundred (S.C. Ex. B-33), (Vol. XII, Harvey, pp. 31, 32).

The evidence of rice cultivation on Rabbit, Hog, and Long Islands is of utmost importance in determining the knowledge by citizens of Georgia as to the occupation of the islands. True, this may not constitute knowledge that the title to the islands was in South Carolina, but the proximity of the islands to the South Carolina mainland would be notice to Georgians that persons were actually cultivating rice fields in what at least appeared to be fringe islands within a few feet of the South Carolina mainland. Anyone, without knowledge of the Treaty of 1787 and its provision stating that all islands in the Savannah River were reserved to Georgia, would normally assume that the Barnwell Islands were in South Carolina, especially when the main channel flowed south of the Barnwell Islands. Indeed, the rice cultivation evidence discloses that, by 1874, the dikes appeared on all three islands (Ga. Ex. 173). While precise dates of rice cultivation are unavailable, Georgia concedes (Ga. post-trial brief, Vol. II, p. 101) that "Hog Island may have been cultivated for some period prior to the Civil War" and, after the war, "Hog Island was cultivated during certain years until 1882." As to Rabbit Island and a portion of Long Island, Georgia concedes that these islands were "diked for cultivation at some later date [following the Civil War] and by 1874 were also cultivated, especially Rabbit Island, for some years until 1882" (Ga. post-trial brief, Vol. II, p. 101). Nevertheless, the family letters reflect evidence of a lease of Hog Island in 1911-1912 for \$125 annual rent, and in 1916 evidence of an offer to lease Hog Island and Long Island for three or five years at \$125 per annum. Then, in 1921, a letter indicates that the islands are "not rice land now as it has not been planted for many years and the tides go over at high water" (S.C. Ex. B-21(74)). The author of that letter mentions that "it is really marshland and has now no buildings on it that are properly so called . . . ,"

same being an indication that one or more buildings existed on one or more of the Barnwell Islands at some prior time.

While it is impracticable to find, on the evidence presented, that the three islands were in a continuous state of rice cultivation from about 1796 (when Long Island emerged) until the islands were all merged with the South Carolina mainland in the period between 1920 and 1955, the Special Master does find that the islands were devoted to rice cultivation for a substantial period of time, at least 30 to 40 years, by persons with joint interest in Georgia and South Carolina, and that even the ones with a primary interest in Georgia believed the islands to be in South Carolina.

Because Georgia has emphasized that only the Smith-Barnwell families had the perception that the Barnwell Islands were in South Carolina, and recognizing the importance of this statement, it is appropriate to comb the record for contrary inferences. Some of them are listed below:

(1) Immediately after acquiring his grant of the three Barnwell Islands, the first Archibald Smith entered into an agreement with the Union Road Company to build a "road and canals through part of . . . his land in Carolina adjoining Major John Screven Land" (S.C. Ex. B-6 and B-8). In this agreement, Smith reserved landing and boating privileges from the road, "the creek to my settlement being sometimes dry," thus reflecting that Smith intended to use the islands. The record does not indicate the persons comprising the Union Road Company but, whoever they may have been, it at least can be argued that they knew that Smith believed the islands to be in South Carolina.

(2) In 1823, the first Archibald Smith entered into an agreement with Screven and Bond, both residents of Savannah and leading Georgia citizens, establishing a private boundary line (S.C. Ex. B-9), which appears of record in South Carolina on July 25, 1881, after the South Carolina records were re-established following their destruction during the Civil War. As it involved what the parties believed to be South Carolina

property, there was no recordation in Chatham County, Georgia.⁴² The boundary line refers to "Boundary Creek" as separating the three marsh islands and the eastern boundary of the tract of land sold by Smith to "Mep. & Jon Screven, Jos. Bolton and R.R. Richardson." At the very least, the agreement and plat demonstrated that the adjoining land-owners recognized Smith's ownership of the three islands to be property in South Carolina.

(3) The 1832 marriage settlement agreement was recorded in Chatham County, Georgia, because it included the wharf and store property owned by Smith in Savannah. It referred to the "undivided moiety" containing 200 to 300 acres as being in the "district of Beaufort, State of South Carolina." The same description was used in 1838 when Archibald Smith, Jr. conveyed his one-half interest in the South Carolina property and, as heretofore indicated, included Nullification and the three Barnwell Islands (S.C. Ex. B-81).

(4) As early as 1852, there is affirmative proof by a Coast Survey Manuscript map showing rice dikes and canals on Hog Island (Ga. Ex. 152, 153).

(5) In 1850, Dr. James P. Screven, the son of John Screven, caused a "Plan and Resurvey" to be prepared, showing his land "situated on the water of Savannah River, St. Peters Parish, Beaufort District, State of South Carolina" (S.C. Ex. B-11). Hog Island was designated "Capt. Barnwell's Island" and the other two were marked "Barnwell's." In 1854, Dr. Screven referred to the plantation of Capt. Barnwell in his Plantation Journal (S.C. Ex. B-39).

(6) Shortly after 1860, Louis Manigault published his "Records of a Rice Plantation" for 1860 (S.C. Ex. B-79). Manigault, although a resident of Charleston, South Carolina, operated a rice plantation on Argyle Island in the Savannah River, and he listed the "Ricelands planted on the Savannah and Ogeechee Rivers." Under his column entitled "On Carolina Side

⁴² Georgia's records remained intact and were not destroyed during the Civil War.

of Savannah River," he specified that Barnwell "plants 250 acres" on "Carolina Side of Savannah River," which obviously included the three marsh islands as Barnwell had said that his mainland property was only 139 acres (S.C. Ex. B-33).

(7) The two batteries, constructed during the Civil War, referred to Hog Island as being on the Carolina side of the Savannah River by a Confederate commander, Edward Anderson, who served as the Mayor of Savannah before and after the Civil War (S.C. Ex. B-41).

(8) The 1867 request for distribution of the property under the 1832 marriage settlement referred to the property as being in South Carolina, and the instructions by Archibald Smith, Jr., provided for the division of the property into eight parts as follows: Nullification (3 parts); Hog Island (2 parts); Rabbit Island (2 parts), and "the long narrow islands east and south of Hog Island" (1 part) (S.C. Ex. B-28). A subsequent plat entitled "Plat of Four Tracts" (S.C. Ex. B-10) shows the apportionment of the nine parts. While only three of the deeds finally appeared of record in 1930, the five children, shown on the plat as receiving portions of the islands, acknowledged receipt of their deeds to the property by a document recorded in Chatham County, Georgia, in 1868 (S.C. Ex. B-10(3)), which referred to this property being in South Carolina. The document was recorded in Georgia because it also involved the wharf and store property, admittedly in Chatham County, Georgia.

(9) In December, 1866, Archibald Smith Barnwell was selected to serve on a committee to frame by-laws of the Rice Planter's Association, to be presided over by John Screven, the son of Dr. James P. Screven. It is not difficult to draw a conclusion that those interested in rice planting would discuss the locations of their rice fields. Under date of December 13, 1866, a news article appeared in the Savannah Daily News stating the formation of the Rice Planter's Association and describing the "large meeting" (S.C. Ex. B-20(5)).

(10) During the 1870's, the Barnwell family used J.H. Johnston, a prominent Savannah businessman and a Savannah city official, as their rice factor. He had occasion to pay taxes on the island property to South Carolina for the benefit of the Barnwell family (S.C. Ex. B-21(8)). Another agent, John Sullivan and Co. of Savannah, kept business records and deeds for the Barnwell family (S.C. Ex. B-29(A)), (S.C. Ex. B-21(44)). Clearly, well known residents of Savannah and citizens of Georgia were possessed of information showing the three Barnwell Islands to be in South Carolina.

(11) The relationship between the Barnwell children and the Screven family was close and long lasting. Thomas Screven and John Screven served as prominent Georgia officials.⁴³ According to the Barnwell family letters, the two families, on occasion, discussed a possible sale of the mainland property and the Barnwell Islands to the Screvens (S.C. Ex. B-21(28)); (S.C. Ex. B-21(32)). There was evidence that property was leased to the Screvens, but it is unclear as to whether the islands were included.

(12) The 1896 conveyance from Woodward Barnwell and A.S. Barnwell to Charlotte C. Barnwell and Leila A. Barnwell specifically mentioned the islands by name, referring to them as being in South Carolina, but this conveyance also included interest in property in Savannah and the conveyance was recorded in both the Beaufort District in South Carolina and Chatham County, Georgia.

(13) In 1875, Charles G. Platen, caused a textbook to be published for use in the Chatham County School System, same being titled "Oecography, The Geography of Home, Chatham County, State of Georgia" (S.C. Ex. G-9). Under "Lesson VI" on "Islands," Platen listed ten islands by name as being "in the Savannah River," but did not include any

⁴³ Thomas Screven was an official in the city government of Savannah. John Screven served as Mayor of Savannah and as a member of the Georgia legislature.

of the Barnwell Islands or Jones Island as being in Georgia.⁴⁴ Moreover, a map showing Chatham County was bound in the textbook (S.C. Ex. G-11). The coloring of the map shows the Barnwell Islands (apparently Barnwell No. 3 may have emerged by this date) to be the same coloring of the South Carolina mainland.⁴⁵

(14) The taxation of the islands by South Carolina which has been previously discussed, along with the failure of Georgia to tax said islands, including the fact that no dispute about the islands' location or South Carolina's right to tax the property is ever mentioned in the family letters.

(15) The acquisition of spoilage easements as to the dredging of the islands and the placing of the spoilage on the South Carolina side was at the urging of the City of Savannah, commencing in 1952 "for the proper maintenance of the depth of the Savannah River" at which time the Mayor advised that the [Barnwell Island] "lies in the State of Georgia, although there may be some contention that it lies also in the State of South Carolina." The request to the federal authorities was to institute legal proceedings to acquire such easements. The Mayor stated that the City had attempted to negotiate with the apparent owners to acquire permanent spoilage easements but that no reasonable price could be agreed upon and, furthermore, the City was in doubt, due to the absence of complete land records, as to whether the purported owners could convey such easements "for the reason that other persons may have some interest or title" (S.C. Ex. B-58). This letter was the forerunner of the 1952 condemnation action filed by the United States in the Southern District of Georgia

⁴⁴ Among the ten islands listed, Platen did include "Hog." It is South Carolina's contention, and the Special Master agrees, that this "Hog Island" was shown on Platen's map as being upstream of the City of Savannah.

⁴⁵ The Special Master agrees with Dr. DeVorse that too much emphasis may be placed upon the coloring shown on a map. A map may be colored to increase the sale value. However, the purpose of the Platen map was for use in the Chatham County, Georgia, School System, and, as such, would probably have colored all possible Georgia claims with Georgia coloring.

which led to the 1955 opinion of the Fifth Circuit in *United States v. 450 acres*, *supra*.

The foregoing fifteen listed events or factors are suggested to refute Georgia's contention that only the Smith-Barnwell families entertained the perception that the Barnwell Islands were in South Carolina. There are undoubtedly others that could be enumerated.

RECOMMENDATION: For reasons previously mentioned, and those hereinafter considered under the doctrine of prescription and acquiescence, the Special Master recommends that Long Island, which emerged after the Treaty of 1787, has been continuously considered to be a part of South Carolina since, at least 1813, and was furthermore a part of South Carolina by prescription and acquiescence until it was merged into the mainland of South Carolina by the avulsive process employed by the Corps of Engineers during the mid-half of the twentieth century.

The Court will note that the Special Master does not rely upon the fact that Long Island emerged after the Treaty of 1787. Although it was probably located on the South Carolina side of the midpoint of the Savannah River, it appears from Ga. Ex. 156 that the easternmost point of Hog Island may overlap with the westernmost point of Long Island and, applying the right-angle principle to this situation, would tend to confuse the issue if, in fact, the boundary between Hog Island and the mainland (as it existed in 1787) ran in the manner heretofore described.

C-1. Prescription and Acquiescence

At this point it may be well to give further consideration to the doctrine of prescription and acquiescence.⁴⁶

⁴⁶ Prescription and acquiescence has already been applied to Rabbit Island (but only to the extent necessary to mention same as it seems clear that Rabbit Island completed its accretion to the South Carolina mainland about 1860), Hog Island, and Long Island. The doctrine of prescription and acquiescence will also be considered, to a limited extent, in the discussion involving Southeast Denwill and Jones Island.

The Supreme Court has applied the prescriptive right of one state against another state in many cases. *Missouri v. Kentucky*, 78 U.S. 395 (1870) (relating to the granting of the land); *Indiana v. Kentucky*, 136 U.S. 479 (1890) (referring to the recordation of the transfer of property interests in the land); *Louisiana v. Mississippi*, 202 U.S. 1 (1906) (the taxation of real property); *Michigan v. Wisconsin*, 270 U.S. 295 (1926) (the exercise of judicial jurisdiction); and *Arkansas v. Tennessee*, 310 U.S. 563 (1940) (necessary Governmental service). The Court has never fixed a specific period of time which is necessary to establish a prescriptive right, but the authorities recognize that a period of 60 years has been stated to be sufficient. *Michigan v. Wisconsin*, *supra*. In *Indiana v. Kentucky*, *supra*, the period was 70 years, and in *Louisiana v. Mississippi*, *supra*, the period was 93 years. Certainly as to Rabbit Island, Hog Island, and Long Island, the prescriptive right was well established within the foregoing framework. As stated in Blum, *Historic Titles In International Law*, 118 (1965), "the frequency and intensity of the manifestations of State authority and the nature of the acts required as proof for the establishment of State authority vary according to the circumstances and the character of the territory in question." Bearing in mind that we are here dealing with marshland, uninhabited and probably of no use except for rice cultivation until the Confederate Army constructed two batteries for wartime use in the days of the War Between the States, there were nevertheless requisites of sovereignty which South Carolina performed tending to establish its claim to the islands in question. *Id.* at 112.

Of course, the claim of the prescriptive right must be undisputed over a long period of time. *New Jersey v. Delaware*, 291 U.S. 361, 376-77 (1934). While Georgia admittedly disputed South Carolina's claimed prescriptive right to the "Barnwell Island" when the United States filed its condemnation case in the United States District Court for the Southern District of Georgia against *450 Acres of Land, etc.*, 220 F.2d 353 (5th Cir. 1955), the evidence is sadly lacking as to any issue in dispute between 1831 (when the last tax on the islands was paid to Chatham County, Georgia, by the Estate of Archibald Smith) and the time the complaint was filed in

the condemnation case aforesaid.⁴⁷ The Special Master therefore concludes that South Carolina's claim of prescriptive right was undisputed at least between 1831 and the early 1950's, a period of approximately 120 years.

The requirement of acquiescence is far more difficult to prove than the claim of prescriptive right. It is also the factor deemed most important under the authorities. At the outset it should be noted that there is no factual dispute regarding the many, continuous years of Georgia inactivity as to all areas in dispute with the exception of Jones Island and to the east thereof. The basic sovereign functions consist of granting, taxing, and the maintenance of records in the particular state. Where there is a lapse of a sufficient amount of time, it raises an inference that a state knew, or should have known, of events detracting from its sovereignty and, if the state failed to act, it may be considered as having acquiesced. *Rhode Island v. Massachusetts*, 15 Pet. [40 U.S.] 233, 274 (1841); *Indiana v. Kentucky*, 136 U.S. 479, 510 (1890). And the failure of Georgia to tax the islands in dispute, whereas South Carolina did tax same, over a long period of time is sufficient to indicate acquiescence. *Vermont v. New Hampshire*, 289 U.S. 593, 616 (1933). As stated by Blum, *Historic Titles In International Law*, 133 (1965), complete inaction "cannot be regarded as devoid of any meaning, and from [such] conduct an inference of . . . acquiescence in the new situation may properly be drawn."

Tested by these principles, Georgia, at the very least, is called upon to explain its lapse until the 1955 decision of the

⁴⁷ In its brief, Georgia makes the general assertion that "(t)he specific location of the boundary between Georgia and South Carolina in the lower Savannah River has been a matter of continuing controversy between the States." The record does not support this statement. In Ga. Ex. 16 (Plaintiff's Response to Defendant's Third Interrogatories, No. 56), Georgia cited only Jones Island and the 1883 condemnation case filed in South Carolina as the only instances of dispute. Even that reference hardly constitutes a dispute as the United States was attempting to obtain certain beacon sites on Jones Island, and, upon referring the matter to the United States Attorney in South Carolina, the latter concluded that Jones Island was in South Carolina. The matter involving Jones Island will be discussed, *infra*.

United States Court of Appeals for the Fifth Circuit. Even after the 1922 opinion of the Supreme Court, there is no showing in this record that Georgia took any action to assert the right of sovereignty over the areas in dispute in this case, save and except Jones Island discussed *infra*. That prominent Georgians knew of the cultivation of rice fields on the three islands (Rabbit, Hog and Long) is rather obvious as mentioned, *supra*. While it may be argued that Georgia citizens were unaware of any assertion of sovereignty by South Carolina, it is a conclusive fact that certain documents, referring to the islands being in South Carolina, were recorded in Chatham County, Georgia, due to the fact that the wharf and store property was admittedly in Georgia. Thus, anyone examining the public records in Georgia would have discovered that certain persons involved in these documents were treating the islands as being in South Carolina. A further check of the Georgia tax records would disclose that, except for the years 1825 and 1831 (see footnote 36), there was no effort on the part of Georgia to tax, assess, or collect taxes, on any of the areas in dispute in this case other than possibly Jones Island.

The Special Master therefore concludes that the essential criteria for acquisition by South Carolina of the three islands (Rabbit, Hog and Long) have been fully met under the doctrine of prescription and acquiescence.

D. Barnwell No. 3

This island, located slightly eastwardly of the eastern area of Long Island, did not exist in 1787. The precise date that it emerged as an island is unknown, although in 1875 it may have appeared on the Platen map (S.C. Ex. G-11). In any event Barnwell No. 3⁴⁸ emerged between 1873 and 1878.

⁴⁸ The island was given the name "Barnwell No. 3" presumably because Rabbit Island, one of the Barnwell group, had been permanently accreted to the South Carolina mainland about 1860. Thus, Rabbit Island was no longer an island, and Barnwell No. 3 became the third island in the Barnwell group. See Ga. Ex. 181.

There is no evidence in this record that Barnwell No. 3 was ever granted by any State. Likewise, there is no evidence that it was ever owned or occupied by anyone; nor was it taxed by any State; nor was there any evidence of rice cultivation or any other use of the island. In the meantime, during the expansive dredging operations by the Corps of Engineers, the island has disappeared by avulsive processes which do not, of course, alter any boundary lines. Ga. Ex. 334, a survey prepared by the Coast and Geodetic Survey team in 1977, demonstrated that, in 1977, none of the Barnwell Islands was then in existence. Even the overlay shown on Ga. Ex. 214 does not reflect the location and existence of Barnwell No. 3. Essentially no reference has been made to this island in the exhaustive briefs which have been filed. Counsel have dealt with the Barnwell Islands as a group, but what may be applicable to Rabbit, Hog and Long Islands may not necessarily be applicable to Barnwell No. 3, especially in consideration of the doctrine of prescription and acquiescence. There were no conveyances which referred to Barnwell No. 3. The most that can be said for this island is that it probably emerged at a point slightly north (on the South Carolina side) of the midpoint of the Savannah River. If that be true, it was the property of South Carolina under the authorities heretofore mentioned. Barnwell No. 3 is clearly shown on Ga. Ex. 181, same being Progress Sheet No. 3, prepared in 1883 and, from the distance between Elba Island and the South Carolina mainland, it appears that Barnwell No. 3 may have been located slightly north of the midpoint between Elba Island and the South Carolina mainland.

In any event the island in question no longer exists.

RECOMMENDATION: If it is deemed of importance to the Court or the parties, in the absence of any agreement, a survey should be prepared, using Ga. Ex. 181 as a basic map, to establish the precise location of the island known as Barnwell No. 3. If the island is determined to be north of the midpoint between Elba Island and the South Carolina mainland, it would be declared to be the property of South Carolina. If the midpoint shall be determined to be south of the

line midway between Elba Island and the South Carolina shore line, the island, as it existed when it emerged, would be the property of Georgia. As intimated above, the solution to this issue is basically academic as the principles of equity would prevent the Court from determining what part of Barnwell No. 3 now constitutes the northern half of the Savannah River.

IV. SOUTHEASTERN DENWILL

The area known as Denwill is admittedly in South Carolina. Even Georgia concedes this point. What is involved, however, is the fill area fronting on the northern side (South Carolina side) of the Savannah River, where the spoil from the dredging operations was deposited. This created a separate area from Denwill as it existed in 1787, and for years subsequent thereto, until the massive dredging operations took place many years later. What now exists in the Southeastern Denwill area is a high bank fronting the river.

The area affected which indicates the changes made between 1855 and 1977 are perhaps best indicated by Ga. Ex. 316 which, according to Georgia's witness, Colonel Paul W. Ramee, a former District Engineer of the Savannah District and now a consulting engineer in private practice, represents the status of the islands and land areas in 1855 when the map recognized by all as reasonably accurate (Ga. Ex. 156-App. B) was prepared. Colonel Ramee also prepared Ga. Ex. 320, an overlay which he then placed over Ga. Ex. 316. The cross hatched sections disclose the land shown in 1977 but not shown in 1855. The relatively few black sections show the land shown in 1855 but not in 1977. Ga. Ex. 320 (the overlay) is also reproduced and is attached as App. C, because of the necessity of disclosing the fact that, as the areas now exist, there are material changes in the width of the northern branch of the Savannah River in the Barnwell Islands area and in the Southeastern Denwill area, and to a somewhat lesser extent in the areas of Jones Island, Horse-

shoe Shoal, and Oyster Bed Island.⁴⁹ Thus, as the Special Master concludes, all of the dredging materials taken from the Savannah River in the 1950's and 1960's were not deposited on what was the mainland of South Carolina in 1787 or 1855 accepting, as the Special Master does, that there were no material changes in the River or the mainland between 1787 and 1855, other than certain emerging islands subsequent to 1787 and the obvious accretion of Rabbit Island to the mainland, but a portion of the redeposited material was placed in landfill areas created in what was a part of the Savannah River in 1855. The United States, through its Corps of Engineers, had also acquired permanent⁵⁰ spoilage easements on certain properties on the mainland of South Carolina as it existed in 1855. This brings us to a discussion of what occurred by reason of the activities of the Corps of Engineers between 1878 and 1977.⁵¹

While there had been very minor attempts at dredging and some little construction prior to 1878, the record reflects that this was of no consequence. The construction of the first wing and closing dams by the Corps of Engineers was commenced in December, 1878 (Ga. Ex. 308, Report of the Chief of Engineers, U.S. Army, for fiscal year ending June 30, 1886, covering a summary of operations for period from December, 1878 to June 30, 1886). The first dam constructed was a closing dam at Cross Tides joining Hutchinson Island with Argyle Island. During that period of time, two closing dams were

⁴⁹ There is no credible evidence contradicting the testimony of Colonel Ramee as to the facts disclosed by the overlay of Ga. Ex. 316. The Special Master accepts the facts found by Ramee, the consulting engineer.

⁵⁰ Temporary spoilage easements were also acquired, generally for ten year terms.

⁵¹ The testimony of Colonel Paul W. Ramee appears in Vol. VIII. It is complex and difficult to follow — in fact, almost impossible to follow without the aid of the many charts and maps prepared by the Corps of Engineers. Ramee served as District Engineer for the Savannah District between August of 1963 until February of 1966 (Vol. VIII, Ramee, p. 901), but he was well acquainted with the history of the Savannah River Project.

erected in the Barnwell Island area; six wing dams were also constructed in the Upper Flats area.⁵²

If additional concentration of the river was needed, training walls were constructed. They served to further restrict the flow of water, especially areas which had already been restricted by wing dams. Training walls consisted of a flat layer of logs tied together by stringers. Between the stringers are bundles of brush, called "fascines." Rocks and stones are then placed upon the layer which has a thickness of about two feet.

Spur dams were erected to control erosion. They were built adjacent to the shore where it may have been eroding. A few spur dams may be observed as small tick marks in the area of Jones Island, north of the tip of Bird Island.

According to Colonel Ramee, the wing dams so constructed were subjected to substantial erosion after approximately three years (Vol. VIII, Ramee, p. 925). In an effort to repair same, new earth was placed behind the wing dam to make it operational. A wing dam was constructed off the tip of Barnwell No. 3 about 1882 for the purpose of concentrating the flow of the river; then in 1894 when it was discovered that the wing dam was not accomplishing its purpose, a training wall was erected. Training walls were later con-

⁵² A closing dam is generally described as a dam joining two bodies of land for the purpose of diverting the water from one channel of a river to another. In the Barnwell Island area, two closing dams were erected connecting Hog Island and Long Island and also connecting Long Island with Barnwell No. 3. In Colonel Ramee's testimony, he refers to Barnwell Island No. 1, which is Hog Island; No. 2, which is Long Island, and No. 3, which is Barnwell Island No. 3, although he refers to another island which he describes as the "northernmost" Barnwell Island. If by "northernmost," Ramee meant Rabbit Island, he is in error on this point as Rabbit Island had permanently accreted to the mainland by that time.

A wing dam runs, as a rule, perpendicular to the riverbank but does not connect with another body of land. The purpose of the wing dam is to focus the flow of water at the particular location desired. It may be in the center of the natural stream, or it may be on either side. It has a bend in it so that the water end of the dam is perpendicular to the desired channel. It could, of course, run from an island as well as the mainland.

structed a distance of two miles or more, extending past Jones Island and ultimately approximately two miles east of the Oyster Bed training wall, which was erected about 1890, and on the south to the Cockspur Island training walls, constructed about 1895. The Cockspur Island training wall was necessary as the Oyster Bed training wall was not deemed sufficient to concentrate the flow of the water.

While the training walls were less impervious to water than the wing dams, none of the training walls, including the wing dams, were sufficient to keep out the flow of water. The water depths shallowed substantially. In his report of July 3, 1897 (Ga. Ex. 307), the District Engineer noted the rapid shoaling which had taken place between the training walls, and called particular attention to the North Elba Island training wall where marsh grass was beginning to grow between the training wall and the old shore line. The District Engineer predicted that, in a few years, the grass-covered marsh would cease to form a part of the river. This was due mainly to the sedimentation which is accentuated by the training works installed, and by the deposit of dredge material behind the training walls.

Subsequent to 1900, there were only a few new constructions of training works. The Corps of Engineers had shifted its emphasis from construction of training works to a combination of maintaining of training works and to dredging as required. While there was some reinforcement of the old training works, the primary emphasis was on dredging, either through the use of a clam-shell dredge, a hopper dredge, and finally in 1908 and thereafter, the hydraulic pipeline dredge. Originally, there were efforts made to keep the dredge material and deposit it where it would do no more damage to the navigation channel, and the Corps was not particularly concerned about the consequence of filling up the area behind the training walls. Subsequent to 1912, in the Barnwell Island area, the closing dams previously erected were not as effective as desired, and it was decided to reinforce these closing dams using hydraulic fill. By 1920 (Ga. Ex. 440), the four Barnwell Islands are shown joined together, thereby

reducing the water area between what was the Barnwell Islands and the Georgia shore line. Likewise, by 1921 (Ga. Ex. 328), land had formed behind the North Elba Island training wall as a result of the hydraulic fill placed at the training wall location. Later, in 1926 or 1927, and completed in 1931, the hydraulic fill reinforcements extended all the way to Oyster Bed Island (Ga. Ex. 330).

In sum, we find the present width of the northern stream of the Savannah River to be sharply reduced between 1855 (Ga. Ex. 156) and 1977 (Ga. Ex. 316, 320), supported also by the Project Map, dated January 13, 1966 (Ga. Ex. 363); the true extent of the reduced width should be determined by a qualified civil engineer. This is true not only with respect to the Barnwell Island area, but also in the area of Southeastern Denwill, the Jones Island area, and the width of the river in the Horseshoe Shoal and Oyster Bed Island location.

It is conceded that Georgia and the citizens of Savannah at all times were primarily interested in diverting the flow of the water in the Savannah River from the northern stream to the southern stream (Front River) running adjacent to and immediately north of the City of Savannah. Even though the Back River (on the South Carolina side) was the area of the greatest natural flow of water in 1855 and other early years, the reduction in the width of the most northern branch of the Savannah River (known as Back River) caused a substantial portion of the natural flow to be diverted through the Front River (Vol. VIII, Ramee, p. 982).⁵³

While there is some evidence in the record indicating accretion to the mainland of South Carolina (other than with respect to Rabbit Island in the Barnwell group), especially in

⁵³ As the Special Master interprets the answer of Colonel Ramee on p. 982, a comparison of the flow of the water between the Front River and Back River, *prior* to the extensive dredging by the Corps of Engineers, was that the natural flow of the Back River constituted approximately two-thirds of the total flow, with the remaining one-third flowing through the Front River. Ramee also indicated that there was very little concern about the growth of the new land areas brought about by the operations of the Corps of Engineers.

the area of what formerly constituted Mud River, the same being the westernmost boundary of Jones Island in 1855 and prior thereto, it cannot be successfully argued that accretion played any great part in the attachment of land to the South Carolina mainland as it existed in 1787 and 1855.⁵⁴ Any land which was subject to accretion other than as noted in footnote 54, *supra*, was negligible and essentially impossible of precise determination.

The Special Master is of the view that equitable principles should be applied in determining the ownership of the lands immediately south of the former shore line of Denwill and, to a lesser extent, the status of the island known as Barnwell No. 3. It is, of course, well settled that the process of avulsion does not alter the boundary line. Therefore, in order to fix the boundary line, it is necessary to revert to the 1855 chart (Ga. Ex. 156), drawing the line "midway between the main banks of the river when the water is at ordinary stage" where there are no islands, and where there are islands, as there would be in the consideration of the area referred to as Southeast Denwill, the line is to be drawn "midway between the island bank and the South Carolina shore when the water is at ordinary stage." The Special Master is without the benefit of a survey covering this issue, but it would appear that a survey may well reveal that the Savannah River shore line, as it now exists, includes land areas which were placed on what would have originally been on the Georgia side of the river. Thus, it is probable that Georgia may now claim ownership of at least a portion of Southeast Denwill, including probably the area now fronting on the northern bank of the Savannah River. Thus, South Carolina would have lost such riparian rights, if any, to the Savannah River in the Southeast Denwill area.

⁵⁴ The exceptions to this rule would be the newly formed islands emerging on the South Carolina side of the midpoint of the Savannah River, Rabbit Island, and the lands acquired by South Carolina by prescription and acquiescence prior to the commencement of the avulsive procedures by the Corps of Engineers.

In considering some state authorities, we find a tendency to protect a riparian owner even in cases of accretion because "[n]atural justice requires that such accretions should belong to the upland owner so that he will not be shut off from the water," *Steers v. Brooklyn*, 101 N. Y. 51 (1885), and "[o]nce a riparian proprietor, always so," *Kraut v. Crawford*, 18 Iowa 549, 87 Am. Dec. 414 (1865). Similarly, there is authority to the effect that the right to possible additions to the riparian owner's land are vested, *Brundage v. Knox*, 279 Ill. 450, 117 N. E. 123 (1917). However, for what it may be worth, the grantees of Denwill and subsequent conveyances make no mention of riparian rights. Whether the Denwill grant and later conveyances extended the land to the water's edge may be debatable.

Assuming *arguendo* that the owners of Denwill were entitled to riparian rights, or that the State of South Carolina may properly claim riparian rights in the bed of the river, we are confronted with whether the doctrine of apportionment of additions should be applied in a case involving avulsion. There are authorities upholding the right of a court to accomplish an equitable division by apportioning the water frontage between the new owner and the party or State which formerly had such frontage. But, for reasons hereinafter stated, the Special Master holds that the doctrine of apportionment should not be applicable to the Southeastern Denwill area if, in fact, a survey reveals that the new shore line invades the Georgia side of the midpoint between islands in that area and the South Carolina shore line as it existed in 1855 and 1787.

Referring initially to *South Carolina v. Georgia*, 93 U.S. 4 (1876), the opinion of Justice Strong makes clear that, irrespective of the Treaty of 1787, Congress has the "power to order obstructions to be placed in the navigable waters of the United States, either to assist navigation or to change its direction by forcing it into one channel of a river rather than the other." *Id.* at 11. Likewise, "[w]hy may it [the Congress] not confine the navigation of the river to the channel south of Hutchinson's Island; and why is this not a regulation of

commerce, if commerce includes navigation?" *Id.* at 12. Since at least 1874, Congress has made numerous appropriations "for the improvement of the harbor of Savannah, Georgia," and the "mode of improving the harbor was left to . . . the Secretary of War, and the mode adopted under his supervision plainly tends to the improvement contemplated." *Id.* at 13. Thus, despite the fact that Georgia and its citizens derived a far greater benefit by reason of the continuing efforts to divert the flow of the river from the north to the south channel, there was nothing illegal or improper in taking such actions.

If we should apply equitable principles, the Special Master is of the opinion that, with respect to the Southeastern Denwill area, the equities rest with Georgia, bearing in mind that the shore line as it existed in 1787 and 1855 on the South Carolina side consisted of nothing but marshland and was uninhabited and uncultivated.⁵⁵ Moreover, the precise dimensions of what constituted the original Denwill are very vague. As the witness, Harvey, identifies the Denwill area (Vol. XII, Harvey, p. 80), it is bounded on the south by the Savannah River, on the north by Wright (or Wright's) River, on the east by Mud River, and on the west by Wright's Cut. Later descriptions were inaccurate. As Georgia states in its rebuttal brief (p. 52), "The Denwill tract as granted to Archibald Smith Barnwell is clearly in South Carolina and Georgia has never claimed otherwise." Any claims by South Carolina by way of prescription and acquiescence as to the "fill area" could not be considered until approximately 1924 when the marsh island formed behind the training wall became affixed to the Denwill tract. Likewise, the tax records relied upon by South Carolina do not reveal any taxes assessed or paid by the original Denwill owners and their successors in title as to the filled area. In fact, the original grant showed that the Denwill tract consisted of more than 5,000 acres; later it was reduced to 5,000 acres; and finally reported by

⁵⁵ One of the Barnwell family letters from Woodward Barnwell discloses that there were no rice fields or cultivation in what was the original Denwill, and there is no showing that any of the filled area was ever subject to cultivation (S.C. Ex. B-21 (17), letter dated March 25, 1889).

the subsequent owners, Charlotte and Lelia (Eliza) Barnwell, as 1,519 acres each. Any payment of taxes by the record title owners could not, under any stretch of imagination, constitute notice to Georgia that South Carolina claimed jurisdiction over the filled area. As indicated, there is no showing of possession or inhabitation by anyone. All that we have to rely upon are the grant, the subsequent conveyances, the inaccurate description, and the assessment and payment of taxes on the original Denwill area.

We revert, therefore, to the fundamental rule that avulsive processes do not alter the boundary line between the two states. The result may, and probably will, show that Georgia owns the land area of the fill fronting on what is now the northern side of the Savannah River, but it is also true that some of the filled area will belong to South Carolina by reason of the 1922 opinion of the Supreme Court in *Georgia v. South Carolina*, *supra*. We must reject, therefore, that, as applied to this case "natural justice requires that such accretions [or land acquired by avulsive processes] should belong to the upland owner so that he will not be shut off from the water." To say that South Carolina is entitled to all of the land created by the fill area would be unjust and would effectively destroy the rule that avulsive processes do not change the boundary line.

RECOMMENDATION: That the boundary line between Georgia and South Carolina in the area known as South-eastern Denwill be placed at a point midway between the islands to the south in the northern branch of the Savannah River as it existed in 1855 and the South Carolina shore line; that a survey be prepared at the joint expense of the parties revealing the precise line; that any now existing land lying south of said midway line shall belong to Georgia; that any now existing land lying north of said midway line shall belong to South Carolina; that the survey to be prepared show the now existing property and how the boundary line bisects said area if, in fact, it does bisect the same. The survey should also show, to the extent possible, the southern line of South Carolina in the original Denwill area as it existed in 1855.

V. JONES ISLAND

Georgia's claim to Jones Island is predicated upon a grant to one Noble Jones on June 7, 1768, from the Crown, along with subsequent conveyances from the heirs of Jones which were recorded in Chatham County, Georgia, and taxes that had been paid or were due to Georgia taxing authorities until 1873. There was no grant of Jones Island, either from the State of South Carolina or from the Crown for the Colony of South Carolina.

South Carolina responds by saying that Jones Island was never a part of Georgia; that the grant to Noble Jones was void as Jones Island was in South Carolina at the time of the grant as well as in 1787 when the Treaty of 1787 became effective; that the subsequent grants were of no effect; and, finally, the payment of taxes by the alleged owners of Jones Island to Chatham County, Georgia, terminated in 1873, and from 1880 to the present date the taxes on Jones Island have been assessed and paid or were due, initially to Beaufort County, South Carolina, and more recently to Jasper County, South Carolina.

While at least three of the older maps do not show the entire waterway around Jones Island (Ga. Ex. 47, 49, 52), the overwhelming weight of the evidence substantiates that Jones Island was surrounded by water in 1768, 1787, and all years thereafter with the possible exception of a brief period following the Civil War when Mud River, the western boundary of Jones Island, became impassable due to sedimentation which may be called accretion and which thereafter led to the construction, about 1900, of Field's Cut, a part of the Intercoastal Waterway which was slightly east of Mud River at parts thereof. For the purposes of this report, the Special Master finds that, at all times pertinent, Jones Island constituted an island.

The Treaty of 1787 reserved to Georgia all of the islands *in* the Savannah River. It did not reserve to Georgia all islands *fronting on* the Savannah River. For example, Turtle Island,

an island immediately to the east of Jones Island and separated from it by the Wright River, also fronts *on* the Savannah River, although it could be argued that Turtle Island fronts *on* the mouth of Wright River because the Wright River and the Savannah River converge in this area. Georgia makes no claim that Turtle Island lies within the confines of the State of Georgia.

Attached hereto as App. D is a reproduction of the purported survey of Jones Island, allegedly containing 800 acres of marshland, same being Ga. Ex. 103, and being a survey made by or for Noble Jones, the original grantee. On one side of the triangle, there is written "Savannah River." On another side, the words "North branch of Savannah" appear. Finally, on the third side of the triangle is the word "River." According to Oertel, the Coastal Geologist, what was later known as "Mud River" carries the label "North branch of Savannah River," and what is and was known as "Wright River" was designated as "River" which, Oertel explains, may have been merely a continuation of the words "North branch of Savannah." Assuming *arguendo* the correctness of the interpretation by Oertel, what is known as Wright River is approximately the same width as the area marked "Savannah River." (Vol. I, Oertel, p. 90).⁵⁶ The major discrepancies in the total acreage of Jones Island will be later mentioned but, by a comparison of Ga. Ex. 103 (see App. D) and Ga. Ex. 182, made in 1886, Oertel stated that Jones Island had more than doubled in size in a northerly and north-westwardly direction and, to a lesser extent, in an easterly direction. As Oertel pointed out, Ga. Ex. 182 shows sedimentation on the south end of Turtle Island (Vol. I, Oertel, p. 96). However, Oertel estimated that there had been a rapid accretion of marshland between 1768 and 1945 when an aerial photo was taken of Jones Island (Ga. Ex. 289). He estimated that, as of 1981, Jones Island consisted of more than 2,000 acres. He also suggested that the Wright River was probably of more ancient origin than the Savannah River (Vol. I, Oertel, p. 123).

⁵⁶ Ga. Ex. 103, the Noble Jones survey, contains no scale and obviously was not drawn with a scale in mind.

Dr. DeVorsey, Georgia's expert historical geographer, initially contended that Wright River carried the name "Back River," and that it was not until 1874 (Ga. Ex. 172) that the first use or placement of "Wright's River" appeared on any plat, map or chart. However, on cross-examination, he conceded his error when shown the 1818 map (Ga. Ex. 110; S.C. Ex. GM-10A) clearly showing the words "Wright River," and further demonstrating by color that Jones Island was in South Carolina.^{57,58} (Vol. V, DeVorsey, p. 583-584). Dr. DeVorsey also conceded that if the plat of Noble Jones (Ga. Ex. 103) had not shown the Savannah River as flowing all around Jones Island, there would have been no basis for applying for a Georgia grant. He further stated that the Noble Jones plat (Ga. Ex. 103) was the only plat in existence which showed the name "Savannah River" along the north side of Jones Island (Vol. V, DeVorsey, p. 633-634; Vol. VI, DeVorsey, p. 635), and that no chart or map, excluding the Noble Jones plat (Ga. Ex. 103), placed a label on Mud River as the "Savannah River." Finally (Vol. VI, DeVorsey, p. 657), the witness admitted his previous error in stating that Wright River did not exist by that name during the latter years of the 18th Century.⁵⁹

It is not unlikely that Noble Jones first conceived the idea that the marshland, which later became known as "Jones Island," was in Georgia shortly after Henry Yonge presented his report to the president, assistants, and Council of the Colony of Georgia (Ga. Ex. 48) with regard to a plat which

⁵⁷ See footnote 45 as to the effect of coloring on a map.

⁵⁸ Shown a publication of a Savannah newspaper in 1774 (S.C. Ex. J-1), Dr. DeVorsey then noted that the newspaper made specific reference to "Wright River" (Vol. VI, DeVorsey, p. 654).

⁵⁹ Following the concession of his error, Dr. DeVorsey nevertheless expressed the opinion that since the words "Back River" were used for the northern portion of the Savannah River in the area north of Hutchinson Island, and also used further upstream beyond the areas now in dispute, the fact that "Back River" was occasionally used in the area now known as Wright River, reflects the use of the words "Back River" to mean "the most northern stream or branch" of the Savannah River. The Special Master disagrees.

Yonge had prepared (Ga. Ex. 47),⁶⁰ at which time Noble Jones was recorded as being in attendance at the session. While what is known as "Jones Island" is not shown on Ga. Ex. 47, it has appropriate indentations showing the entrance to what is now known as "Wright River" and it shows the area where what was later known as "Mud River" joined with the Savannah River. The coloring on the map (if it existed at that time) might well have led Jones to believe that an island existed between these indentations, and that what is known as "Wright River" was merely a branch of the Savannah River. Moreover, Yonge bore an excellent reputation as a mapmaker and, in 1752, Georgians were told that they owned to the South Carolina shoreline and, in effect, wherever water flowed into or out of the Savannah River, this was sufficient to claim that body of water as a branch or stream of the Savannah River. As Dr. DeVorsey said, terms such as "branch," "stream" or "creek" are difficult to define even today, to say nothing as to the difficulty in 1787 (Vol. VI, DeVorsey, p. 637).

Noble Jones came to Georgia with General Oglethorpe in 1733. He was considered to be a very prominent citizen, serving as a member of the Council most of the time, as the Treasurer of Georgia, as a judge of the General Court, and as a *surveyor* at times. He died in 1775 after living a life of service to the Colony of Georgia (Vol. VII, Thomas, p. 827). By his will, Jones Island was left to the heirs of his daughter, Indigo Jones, who, in turn, was survived by five children.⁶¹

The Noble Jones plat (Ga. Ex. 103), according to the witness, Holland, whose present working title is State Cartographer for South Carolina, used 20 chains to an inch. Had the surveyor used 30 chains to an inch, it would have resulted in an area of 1,935 acres (Vol. IX, Holland, p. 59). The Noble

⁶⁰ While the parties refer to Ga. Ex. 47 as a 1751 map, the legend and signature of Henry Yonge bears the date of June 1, 1752.

⁶¹ The witness, Thomas, refers to Indigo Jones as being the "daughter" of Noble Jones. The title examiner, Harvey, states that Noble Jones left Jones Island by his will to his "son," Indigo Jones, in trust for Indigo's five children (Vol. XIV, Harvey, p. 45). The Special Master sees no need to resolve this conflict in testimony.

Jones plat measured 21.5 square inches, or 860 acres, at 20 chains to an inch. Mud River measured 2,046 feet across the river at one point, and 2,310 feet at another point (Vol. IX, Holland, pp. 52-55). The area of Jones Island, according to the 1855 plat (Ga. Ex. 156, App. B) was 1,926 acres, and an 1898 chart scaled Jones Island at 1,868 acres, thus indicating that Jones Island was substantially stable from 1855 to 1898 (Vol. IX, Holland, pp. 55-56).⁶² Also, with respect to the width of the Mud River according to the 1855 chart it would have been 611 feet, whereas, according to the Noble Jones plat (Ga. Ex. 103) at 30 chains (as stated in the transcript) to an inch, the width would have been 3069 feet, a distance which the witness agreed was "preposterous" (Vol. XIV, Holland, pp. 111, 112).

The major discrepancies between the Noble Jones plat (Ga. Ex. 103, App. D) cannot be reconciled by stating that, between 1768 and 1855, Jones Island had more than doubled in acreage. The Special Master cannot accept this purported explanation and accordingly finds that the Noble Jones plat (Ga. Ex. 103, App. D) was wholly inaccurate and not worthy of consideration in the determination of measurements of Jones Island. There was, as hereinafter noted, some evidence of accretion to the areas of Jones Island and Turtle Island, but it was essentially minor, other than in the area of the mouth of Mud River and the "tongue" of Jones Island.

The conveyances of Jones Island subsequent to the death of Noble Jones are not complete, but Harvey testified that the granddaughter of Noble Jones married Bell and, in October, 1850, one Jones Bell conveyed Jones Island to John Stevenson, which was followed by a quitclaim deed from Joshua L. Bell to John Stevenson in September, 1851, all being recorded in Chatham County, Georgia. Harvey, according to his testimony (Vol. XIV, Harvey, p. 47), expressed the opinion that there were some deeds of conveyance by the heirs or children of Indigo Jones, all referring to Jones Island being

⁶² The witness does not indicate whether he took into consideration, in measuring Jones Island on the 1855 or 1898 charts, the so-called "tongue" of Jones Island.

in Chatham County, but these deeds could not be located. By 1852, John Stevenson had conveyed a one-half interest in Jones Island to John S. Faye, at which time the property was referred to as Jones Island or Cabbage Island. Stevenson died, and by his will probated in Chatham County in November, 1879, he left his one-half interest in Jones Island to his three children, i.e., Catherine A. Ulmer, E.F. Rose, and his son, John A. Stevenson. The co-owner or a relative, Faye (referred to as Joseph A. Faye), by deed dated in November, 1881, recorded in the office of Beaufort County, South Carolina, in D.B. 12, p. 493, conveyed his one-half interest to Catherine Ann Ulmer and Ella Frances Rose, the two daughters of John Stevenson. This conveyance was the *first* time that Jones Island ever showed up in *deed books* as being in South Carolina, and it never again appeared on the records of Chatham County, Georgia (Vol. XIII, Harvey, pp. 19-24), except as noted in footnote 64, *infra*.

Shortly following 1881, the United States wanted to obtain three small beacon sites on Jones Island, and referred the matter to the United States Attorney in South Carolina, who made an abstract of title which included the deed from Faye to Ulmer and Rose. The United States Attorney concluded that Jones Island (if in fact it was an island or, if it was an island, whether it was *in* the Savannah River), was in South Carolina, and thereafter a condemnation action was filed in the South Carolina federal court.

Catherine Ann Ulmer was the wife of Benjamin F. Ulmer. They paid taxes on Jones Island to the tax authorities in Beaufort County, South Carolina. Benjamin F. Ulmer died in 1891 and the inventory and appraisal of his estate shows that he paid taxes to Beaufort County, and the appraisal of the Estate of Dr. Benjamin F. Ulmer shows 700 acres, more or less, in Beaufort County, known as Jones Island or Venus Point (S.C. Ex. J-33). Shortly after Dr. Ulmer died,⁶³ the Sheriff sold the property for taxes to John H. Estill (S.C. Ex. J-36), the deed

⁶³ There is no explanation as to how Dr. Ulmer acquired the title of Jones Island from his wife, Catherine Ann Ulmer.

describing Jones Island as containing 1,500 acres. One year later, in 1892, Estill conveyed either all or a part of Jones Island, referred to as 800 acres of marshland, back to the Estate of Benjamin F. Ulmer. Apparently, the taxes were again not paid and, in 1899, the Sheriff sold back to J.H. Estill the northern one-half of Jones Island. Accordingly, the entire record title to Jones Island was then united back into J.H. Estill (S.C. Ex. J-35) (Vol. XIII, Harvey, pp. 25-29).

Mesne conveyances followed as hereinafter noted. In 1926, the Estate of J.H. Estill conveyed to L.H. Smith. The same year Smith conveyed a one-half interest to H.P. Howard and T.F. Cook. In 1931, Howard and Cook conveyed their one-half interest to U.H. McLaws. In 1942, L.H. Smith conveyed his one-half interest to LaFayette McLaws as Executor under the will of U.H. McLaws. In 1949, the Executor of the Estate of U.H. McLaws conveyed, with the acreage then increased to 2,000 acres, to Leila McLaws Lovett and Gertrude McLaws Boone⁶⁴ (Vol. XIII, Harvey, pp. 30-32).

By an action entitled *United States of America v. 6,667 acres*, filed in 1952 in South Carolina federal court, the United States acquired a spoil easement over the entirety of Jones Island. This easement is still outstanding and the witness, Harvey, expressed the opinion that the title to Jones Island is vested in Leila McLaws Lovett and Gertrude McLaws Boone,⁶⁵ subject to the spoilage easement, although Harvey concedes that there are "gaps" in the chain of title between the time of the devise from Noble Jones to Indigo Jones until it was later picked up by the grandchild under the conveyance from Jones

⁶⁴ This deed, while reciting that the property was located in Yemasee Township, Beaufort County, South Carolina, was recorded in Chatham County, Georgia. Harvey expressed the view that the deed was recorded in Georgia because the Estate of U.H. McLaws was being handled there.

⁶⁵ Beginning with the year 1952 and thereafter, the tax records appear in Jasper County, a newly created County in South Carolina. In 1957-58, Jasper County began tax-mapping and the plenumetered acreage of Jones Island was shown as 2005½ acres. In 1965, Jasper County decreased the acreage to 1005 acres, and it remained at that acreage until 1976 which was the termination of the title search.

Bell to Stevenson. Likewise, there is no recorded conveyance to Benjamin F. Ulmer from the true owner, Catherine Ann Ulmer.

The first entry in the tax records of Beaufort County, South Carolina, appeared in 1880 under the name of William H. Rose as Administrator of the Estate of John Stevenson, indicating the ownership of 800 acres. With the exception of 1885 when there was no entry, the taxes thereafter appear in the Beaufort County and Jasper County, South Carolina records,⁶⁶ although the quantity of acreage varied between 800 acres and 1,860 acres (Vol. XIII, Harvey, pp. 44-52).

As noted, no plats, charts or maps have ever reflected that Jones Island was in Georgia, except a few maps having their inception after this action commenced. To uphold Georgia's contention would mean that the boundary line would run north-westwardly up the Wright River from the north branch of the main portion of the Savannah River, continuing around the northern tip of Jones Island, and then running south-westwardly along Mud River to the point where Mud River formerly joined the main northern portion of the Savannah River. For many years, near the point of the northern tip of

⁶⁶ On February 15, 1985, the Special Master received from South Carolina a Motion to Admit Additional Evidence. Attached to same is a document entitled Department of Transportation, Right of Way Deed, dated December 12, 1984, between the grantors, (Lallie McLaws Lovett, individually, and Francis Andrews Maddox and Trust Company of Georgia Bank of Savannah, N.A., as Executors of the Will of Gertrude McLaws Boone, deceased) and the grantee (Department of Transportation, State of Georgia). The right of way deed, more accurately described as a deed of bargain and sale, conveying the entirety of Jones Island (excepting a small portion lying between what is now Field's Cut at its southern end and what was the southern end of Mud River as it existed in 1855), refers to a plat attached showing that the property conveyed consists of 829 acres in the Containment area and 1162.57 acres in the Non-Containment area, or a total of 1991.57 acres, more or less, or roughly 2,000 acres. The reproduced map does not reflect the yellow coloring as referred to in the deed, and it is impossible to determine whether the grantors also intended to convey the areas known as Horseshoe Shoal and Oyster Bed Island, but it is possible that these areas were intended to be conveyed by the deed although the description in the deed does not so indicate. The deed was recorded in the Clerk's Office of Jasper

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Jones Island, the Wright River extended westwardly into the State of South Carolina for a substantial number of miles.

Jones Island in 1768, and continuing thereafter to the present date, has apparently never been under cultivation; it is wholly unimproved except for the beacon sites mentioned above; and, so far as this record indicates, has never been the subject of actual occupation by anyone. As of 1883, the only evidence of use has been a place for the deposit of ballast stone. Of course, it has been used as a deposit for spoilage after the 1952 condemnation proceeding, and presumably these deposits are still continuing or contemplated. Stated otherwise, Jones Island has been noted by all mapmakers as being located in the State of South Carolina.

In *New Jersey v. Delaware*, 291 U.S. 361 (1934), it was said that for the purpose of an inquiry into the boundaries between colonies or states, questions of private ownership of the original proprietor are of secondary importance. *Id.* 372. Thus, the fact that Noble Jones may have seen fit to place names on at least one river, which was known by another name within six years thereafter according to the local news-

County, South Carolina, on January 2, 1985, in Book 88, at page 65. According to an affidavit attached, the true consideration given for the property was \$240,650. The deed refers to Jones Island being located in South Carolina.

South Carolina contends that Georgia has now clearly recognized the legitimacy of the claim of title which places Jones Island in South Carolina, and that the deed is an effective renunciation of any claim Georgia may have heretofore asserted that Jones Island was and is in Georgia. The State of Georgia objects to the Motion to Admit Additional Evidence as being untimely and of no relevance because what occurred some eight years after the commencement of the action has nothing to do with prescription and acquiescence, in the same manner as the filing of an action will suspend the running of the statute of limitations in adverse possession proceedings.

Your Special Master is of the opinion that Georgia is probably correct in its contention. Georgia has never claimed that it owned Jones Island, but merely asserts that the property was in Georgia. Nevertheless, the Special Master will mark the Motion and attachments, together with the respective briefs, as South Carolina Ex. W to make same a part of the record, and may refer to the plat attached to the deed as it obviously furnishes a present more accurate description of Jones Island, Horseshoe Shoal and Oyster Bed Island.

paper published in 1774, is assuredly not conclusive against the claim which is to the contrary. *Horne v. Smith*, 159 U.S. 40 (1895).

In the final analysis, it is said that governments, as well as individuals, are bound by the practical line that has been recognized and adopted as the boundary. *Oklahoma v. Texas*, 272 U.S. 21, 44 (1926); *Missouri v. Iowa*, 7 How. [48 U.S.] 660, 670 (1849); *New Mexico v. Colorado*, 267 U.S. 30, 40 (1925). The practical line with respect to Jones Island is that the boundary runs along the main part of the northern branch of the Savannah River — not along Wright River which certainly existed under that name in 1787 (if not prior to that date) when the Treaty of Beaufort became effective.

The Special Master sees no need to enter into any extended discussion of the doctrine of prescription and acquiescence as to Jones Island. True, it was owned according to Georgia records by Georgians apparently, from 1768 to 1879, and presumably was taxed as property located in Georgia. But, commencing in 1880 until this action was filed in 1977, deed records, taxes, etc., were all recorded in South Carolina. Thus, we have two intervals of approximately 100 years each where the record titles and taxes appear in each respective state. The critical factor against applying the rule of prescription and acquiescence is, however, the complete absence of any dominion and acquiescence as to either state. The explanation of South Carolina's failure to tax Jones Island until 1880 is understandable because of the manner in which real property was reported to the taxing authorities, at least during the latter years of the Nineteenth Century and prior thereto.

We are not concerned with the present ownership of Jones Island. Assuming *arguendo* that a Georgia colonial grant may nevertheless convey good title to innocent grantees and their successors in title even though the land is located in another colony or state, it would appear that the Department of Transportation of the State of Georgia is the present owner of Jones Island (See footnote 66). If the grant to Noble Jones could not legally pass any title, then Jones Island would be

owned by the State of South Carolina, as all record owners rest their claim of title going back to the Noble Jones grant of 1768. Any ownership is subject to the spoilage easement in favor of the United States.

The Special Master notes that the most recent conveyance of Jones Island (see footnote 66) describes the western boundary of Jones Island as being Field's Cut, the present Inter-coastal Waterway. However, while Field's Cut and Mud River may have been the same boundary in the northern portion of what was once Mud River (as it appears that from the northern tip of Jones Island, Field's Cut has apparently tracked the old course of the Mud River in a southerly direction for a substantial distance), the evidence conclusively shows that the southern and southwestern areas of the Mud River became impassable from accretion shortly after the Civil War and prior to any avulsive processes employed from 1878 down to the present date. Thus, we have a situation in which the southern end of the Mud River was fully accreted by natural and imperceptible means prior to avulsion taking over. Since the Special Master has found that Jones Island is in South Carolina, the owners of that portion of Jones Island which extends westwardly along what was formerly the Mud River, including the "tongue" of Jones Island as shown by Ga. Ex. 156 (App. B) are entitled to this property. The western end of Jones Island will stop at the point where Mud River formerly joined with the Savannah River. Any area west of the foregoing point, if any, shall be land accreted to Denwill.

RECOMMENDATION: That, irrespective of the past or present ownership of Jones Island, including the area immediately west of Field's Cut which separates Field's Cut from what was formerly the Mud River, Jones Island at all times has been, and is now, property located in the State of South Carolina. The accretion as noted in Ga. Ex. 156 (App. B) shall be included as a part of Jones Island within the State of South Carolina.

The boundary line, in accord with Ga. Ex. 156 (App. B) shall run along the southern extremity of Jones Island, in-

cluding its accretions as of 1855, at a point which is equal distance between Jones Island and the islands to the south which are admittedly in Georgia.

VI. AND VII. HORSESHOE SHOAL AND OYSTER BED ISLAND

These two areas, Horseshoe Shoal and Oyster Bed Island, are discussed together as they are now physically joined, largely by reason of the avulsive processes conducted by the Corps of Engineers.⁶⁷

Attached hereto, marked Ga. Ex. 364 (App. E), is a project map originally prepared by the Corps of Engineers on January 13, 1966, but apparently revised as late as 1972, showing a "revised" Georgia-South Carolina boundary line with a notation as indicated in the margin.⁶⁸ This map shows the approximate location of the Georgia-South Carolina boundary line along the mid-stream of what is apparently the channel for navigation purposes to a point marked "175," at which point the boundary line diverts sharply to the northeast,

⁶⁷ That there may have been some natural accretion to the eastern end of Jones Island and the western end of Horseshoe Shoal, at some time between 1855 and 1878 (when the avulsive processes commenced) is quite likely, but the difficulty in attributing such areas to natural accretion or avulsion cannot be resolved. Thus, the Special Master accepts the basic map (Ga. Ex. 156, App. B) as the true location of Jones Island, subject to the natural accretion occasioned by the "tongue" of Jones Island and the closing of Mud River at its southwestern end, as the situation which existed in 1787.

⁶⁸ The notes on the project map (Ga. Ex. 364, App. E), reveal the following legend:

"(2) The boundary line of this project is based on Legal Descriptions, Plats, and Aerial Photographs.

(3) a: The Georgia-South Carolina State Line has been located in accordance with the Beaufort Convention of 1787, which shows in part: 'Article The First — Reserving all the islands in the said rivers Savannah and Tugaloo to Georgia' and further stated 'shall forever hereafter form the seperation [sic] limit and boundary between the States of South Carolina and Georgia.'

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running on the north side of Horseshoe Shoal and Oyster Bed Island, thus placing these areas in Georgia.⁶⁹

In the legend mentioned on Ga. Ex. 364, App. E, there is a reference to a U.S. Coast and Geodetic Chart No. 155, dated 31 March 1921, showing the thread of the last stream separating Horseshoe Shoal and Oyster Bed Island from Jones and Turtle Islands. This is shown on what has been marked as Ga. Ex. 328, and also on Ga. Ex. 438 (1970). The thread of the main north channel is clearly shown as passing to the south of Oyster Bed Island and continuing to the east, extending eastwardly off the northern tip of Tybee Island, at which point it diverts in a southeasterly direction into the Atlantic Ocean. As indicated in footnote 68, your Special Master believes, and finds, that in preparing Ga. Ex. 364, App. E, the Corps of Engineers concluded that the Treaty of 1787 "included" all islands formed *after* 1787, thus placing the boundary line north of Horseshoe Shoal and Oyster Bed Island. As further noted in footnote 68, if the Corps of Engineers is correct in so interpreting the Treaty of 1787, then the Special Master is in error in holding that islands emerging after 1787 belonged to the state on whose side of the river the island emerged. The legend or explanation on Ga. Ex. 438, a 1970 chart referring specifically to Chart No. 155 (Ga. Ex. 328), has this explanation of the boundary line:

Georgia-South Carolina State line added, between Jones Island and Turtle Island, South Carolina, and Oyster Bed Island, Georgia. 9 Oct. 1970. J.D.P.

b: The location of the state line was determined by a study of various old maps, particularly U.S. Coast and Geodetic Chart No. 155, dated 31 March, 1921, which shows the thread of the last stream separating [sic] Horseshoe Shoal and Oyster Bed Island from Jones and Turtle Islands."

It is apparent from the foregoing legend that the Corps of Engineers interpreted the Treaty of 1787 as including all islands "found thereafter" to be within the State of Georgia. If the Corps of Engineers is correct in this interpretation, then the boundary line would definitely be north of Oyster Bed Island, and the Special Master is in error.

⁶⁹ It is noted, however, that Ga. Ex. 364, App. E, did not locate Jones Island as being in Georgia, except for the extreme southeastern portion thereof.

Following the Fifth Circuit opinion in *United States v. 450 Acres of Land, etc.*, 220 F.2d 353 (5th Cir. 1955), differences started to exist as to the proper boundary line between the two states. For example, in the combined exhibit showing Ga. Ex. 216, 217 and 218, a U.S. Geological Survey map published in 1955, the Barnwell Islands, the entirety of the Tybee National Wildlife Refuge area (the major portion of which is the Horseshoe Shoal area), and Oyster Bed Island, are all shown to be in Jasper County, South Carolina. Later, in 1971, the 1955 map (Ga. Ex. 216, 217, 218) was "photo-revised," and it is shown as Ga. Ex. 219, 220, and 221. On this "photorevised" edition, the U.S. Geological Survey team inserted what is described thereon as an "Indefinite Boundary" showing the location of the boundary line between the states to be at the approximate line shown in Ga. Ex. 364, App. E. Likewise, Ga. Ex. 433, a U.S. Department of Interior Geological Survey map compiled in 1932, but reprinted in 1959 after the 1955 decision of the Fifth Circuit, shows the Barnwell Islands to be in Georgia, but Oyster Bed Island to be in South Carolina.⁷⁰

⁷⁰ This is in accordance with Georgia's rebuttal witness, Peter F. Bermel, now Assistant Chief of National Mapping Division, U.S. Geological Survey, Department of Interior, and, prior to 1980, Chief of the Eastern Mapping Center, which included Georgia and South Carolina. (Vol. XVIII, Bermel, p. 55). The exhibit, Ga. Ex. 433, is what is referred to as a state-based map, and it is difficult for the Special Master to determine for certainty that Oyster Bed Island is placed in South Carolina. However, the Special Master will accept the expertise of the witness for this purpose.

Indeed, the only map, prior to 1955, noting the location of the boundary line to be north of the Barnwell Islands is Ga. Ex. 425, a U.S. Army map published in 1920, which discloses what apparently would be Rabbit Island, Hog Island, and perhaps Long Island (although, if Long Island is shown it is combined with Hog Island). The boundary line drawn on Ga. Ex. 425 does show that the Barnwell Islands were in Georgia. The map does not extend eastwardly to the Horseshoe Shoal or Oyster Bed Island. The Army map, Ga. Ex. 425, predated the first U.S. Geological Survey map in that area, as the Army map was compiled in 1912 by Company B of the First Regiment of Engineers, although it was not published until 1920. The delay of eight years in publication may account for the presence of what appears to be two Barnwell Islands. Although we do not know the precise date, the islands may well have been in existence in 1912, and perhaps in 1920. They no longer existed as islands when the Fifth Circuit rendered its 1955 decision.

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In 1966, the U.S. Geological Survey was preparing a description of the legal boundaries of all of the states throughout the country. As a result of the study done at that time, among other reasons, the U.S. Geological Survey team decided to change the boundary in the lower Savannah River area. Thereafter, in 1970, the U.S. Geological Survey took a state-based map, compiled in 1963 but published in 1970 (Ga. Ex. 434), which shows both Barnwell Islands and the Oyster Bed Island area to be in Georgia. That same year, 1970, a state-based map of South Carolina was compiled and published (Ga. Ex. 435), and the Barnwell Islands and Oyster Bed Island are shown to be in Georgia, although Jones Island is shown to be in South Carolina (Vol. XVIII, Bermel, pp. 62, 63). This last map, Ga. Ex. 435, was sent to Dr. Norman Olson, State Geologist for South Carolina, for review and comment. While Dr. Olson responded, the record does not show the nature of the response.

After publication of the maps showing the Barnwell Islands and the Oyster Bed area as being located in Georgia, the U.S. Geological Survey (USGS) received resolutions from the Congressional delegation representing the State of South Carolina and/or a resolution from the South Carolina Legislature requesting that the USGS should begin consultation with the authorized representatives of both Georgia and South Carolina in order to correct, what South Carolina claimed, was an erroneous delineation of the boundary line (Vol. XVIII, Bermel, pp. 68-69). The USGS quickly discovered that it had shown the boundary a number of different ways, and convened a meeting in April, 1977, to discuss the matter with the representatives of the two states. Subsequent to that meeting what has been introduced as a combined exhibit (Ga. Ex. 219, 220, 221) has been reprinted and now appears as Ga. Ex. 2, 3 and 4, which maps do not show the boundary lines as the two states could not agree as to the appropriate

Similarly, Ga. Ex. 436, another map prepared by USGS in 1967 and a limited revision of a 1957 map, displays the Barnwell Islands as being in Georgia, but the Oyster Bed area being in South Carolina. In 1974, the USGS published Ga. Ex. 437, a state-based map, which showed both the Barnwell Island area and the Oyster Bed area to be in Georgia.

designation, one suggestion being that the map would show the boundaries as claimed by each state.

If the method and manner of ascertaining the boundary line in the area of Horseshoe Shoal and Oyster Bed Island is as described by Peter F. Bermel, it does not appear to the Special Master as any marked degree of efficiency on the part of the USGS. While USGS has no legal authority to fix a boundary line between two states, it is a settled principle of law that the expertise of the USGS constitutes a persuasive factor in determining any boundary line. Indeed, since USGS first started publishing maps in the 1880's, boundary lines have generally been shown thereon.⁷¹

At the outset Bermel relied upon Ga. Ex. 52, a 1780 map prepared by DesBarres, surveyed by Joseph Avery and others, entitled "The Coast, Rivers and Inlets of the Province of Georgia." The crucial factor supporting Georgia's contention that the boundary line, after leaving the southeasterly tip of Jones Island as it existed in 1855 (and presumably also in 1787), diverted to the northeast entering the water area south of Turtle Island and north of Horseshoe Shoal and Oyster Bed, ⁷² was due to the fact that the USGS believed that the boundary line should run northeastwardly from Jones Island because the USGS relied essentially on the contour and placing of the words "Savannah River" in large letters on Ga. Ex. 52 by the cartographer. The indefinite boundary line was marked as such, according to Bermel, because the northern

⁷¹ Bermel testified that there were from eight to ten areas in the United States where there is some degree of difficulty in locating a boundary line (Vol. XVIII, Bermel, p. 48). Further, under P.L. 208, 79th Cong., 1st Sess., approved October 31, 1945, section 105 authorizes, empowers and instructs the USGS "to survey and properly mark by suitable monuments the said boundary line as described in Section 101." Shalowitz, *Shore and Sea Boundaries*, Vol. II, p. 509.

⁷² Ga. Ex. 52 (1780) does not show the location of what later developed to be Horseshoe Shoal and Oyster Bed Island.

boundary of the Tybee National Wildlife Refuge area⁷³ was not then known by USGS. Because of the existence of a boundary line shown on Ga. Ex. 369, referring to the creation of the Tybee Migratory Bird Refuge in 1938, Bermel expressed the viewpoint that the boundary line between the two states would, of necessity, have to be north of Horseshoe Shoal and Oyster Bed Island; otherwise, Georgia would not have had the legal authority to transfer the area to the Department of Agriculture, subject to the primary jurisdiction of the Department of Commerce and also the War Department.

The Special Master is of the opinion that any reliance on the manner of placing the words "Savannah River" on Ga. Ex. 52, a 1780 map, is far too slim a reed to support a contention that the boundary line between the two states is located north of Horseshoe Shoal and Oyster Bed Island.⁷⁴

⁷³ The Tybee National Wildlife Refuge area was created on May 9, 1938, by the Executive Order of President Franklin D. Roosevelt (Ga. Ex. 371). The Executive Order referred to it as the "Tybee Migratory Bird Refuge." It also refers to the area as being in Chatham County, Georgia, and Ga. Ex. 369 shows an obvious boundary line north of Horseshoe Shoal and Oyster Bed Island. By a proclamation dated July 25, 1940, the name of "Tybee Migratory Bird Refuge" was changed to "Tybee National Wildlife Refuge." (Ga. Ex. 372).

⁷⁴ As Dr. DeVorsey testified (Vol. III, DeVorsey, pp. 273, 274): "Centuries ago the techniques of surveying were not advanced" and "the material we work with has to be used with a great deal of reservation and skill and forethought." His advice to "anyone using historical maps" is to the effect that he must keep in mind "the purpose and intent of the mapmaker." With respect to Ga. Ex. 52, also S.C. Ex. GM-9, made by DesBarres in 1780, Dr. DeVorsey testified that this was a British military map and that DesBarres was probably never in either Georgia or South Carolina (Vol. V, DeVorsey, pp. 578-579). When questioned as to whether the words "Savannah River" could have been located on the map for artistic purposes, Dr. DeVorsey agreed that the location of the words could have been for that purpose (Vol. V, DeVorsey, p. 581). Interrogated with respect to the placement of names on maps, Dr. DeVorsey testified (Vol. VI, DeVorsey, pp. 723-724): "Again this is a significance that has to be weighed and balanced very carefully. The placement of names, topographical names and other names and [should be "on"] historical map [sic] does reflect again many aspects of mapmaking. The general aim of the cartographer is to place the name close to the feature so that easy identification is guaranteed to the reader of this map. However, other considerations sometimes enters [sic] in. If a map begins to get rather cluttered, it is often the case that a name is shifted a fair distance

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Oyster Bed Island first emerged as an island in the 1870's or 1880's. In the middle of the 18th Century it is shown on Ga. Ex. 47 as a symbol of marsh vegetation surrounded by a sand deposit flat and a shoal, shallow area between what Dr. DeVorsey states to be "between the channels of the river," and was subject to "high erosion" (Vol. III, DeVorsey, p. 386). Apparently, what Yonge, the mapmaker, had previously seen in Ga. Ex. 47 had eroded by 1776, as Oyster Bed is not shown on any map closer to 1787. Likewise, Ga. Ex. 47 may be interpreted as a possible channel north of the Oyster Bed area. Later, in 1853, Ga. Ex. 154 displays Oyster Bed in a prominent shoal position which was exposed except at high tide, but Dr. DeVorsey testified that it was not truly an island at that time (Vol. XV, DeVorsey, p. 445), and by the same map, Ga. Ex. 154, Horseshoe Shoal is shown as abreast of Elba Island⁷⁵ as a shoaling area.

By 1886, Oyster Bed Island had been formed as the Quarantine and Custom House Quarters were shown thereon (Vol. IV, DeVorsey, p. 472), it having been selected as a site for a Quarantine Station in the 1870's and, in 1878, it was recommended that a wharf be constructed near the Quarantine Station, and that a hospital building be built. Whatever was constructed in those days in that area necessitated the use of piling. However, in 1881, the buildings were destroyed or wrecked by a storm and, following the rebuilding by the City of Savannah in 1882, the buildings were again destroyed in 1893 (Vol. IV, DeVorsey, pp. 499-505).

from the actual feature. Sometimes names are placed so as to have an aesthetic appeal. The mapmaker was a scientist as well as an artist, so aesthetics enter in so that one approaches this aspect of historical maps with great care and attempt [sic] to interpret each one on its own merits."

Without any knowledge as to the intent and purpose of DesBarres, the mapmaker of Ga. Ex. 52 (1780), and bearing in mind that it was a British military map prepared by one who has probably never been in the area, the Special Master can attach no proper inference to the true location of the Savannah River as being at the location shown by these words.

⁷⁵ Horseshoe Shoal is considerably east of Elba Island as shown on most maps. However, Elba Island and other islands to the east, all in Georgia, later became one long island.

In the 1880's and 1890's training walls were constructed from Jones Island to the Horseshoe Shoal and on to Oyster Bed Island. Likewise, a training wall was built in an easterly direction from Oyster Bed Island, running approximately parallel to the Cockspur Island training wall, to an area nearly north of the tip of Tybee Island. To support the training walls, it was necessary to "fill" and, within a short period of time, Horseshoe Shoal, Oyster Bed Island and Jones Island were "hooked together" as one big island. (Vol. XVI, Brush, p. 93).

The issue for determination relates to where the vessels customarily traversed the area in 1787 when the Treaty was executed. In Ga. Ex. 207 and 208 (1879 and 1880 charts respectively), there are markings indicating an "old channel" proceeding north of Oyster Bed Island and then swinging to the southwest beyond Oyster Bed Island, and also a marking indicating "new channel" proceeding a short distance south of Oyster Bed Island. While the purpose of these charts was to show the improvement then in progress, and not primarily the drawing of channel lines, there should be some explanation of the terms "old channel" and "new channel." In the interim, between 1787 and 1879, there was the Civil War which involved considerable action in the Savannah River area.⁷⁶ If there was an "old channel" which existed, its course

⁷⁶ As with respect to the Revolutionary War, shortly prior to the Treaty of 1787, changes in the customary channel had come about. (See Ga. Ex. 105, Journal of the Siege of Savannah, p. 30, where it describes that an English vessel was sunk in the channel on September 20, 1779, to obstruct the river against the approach of the French fleet). In the Civil War, the Union forces decided to initially occupy Tybee Island and thereafter, in order to attack Fort Pulaski located on Cockspur Island, to approach the area through New River, Wall's Cut, and an ultimate passage through either the Wright River or Mud River. The Mud River, although essentially impassable at that time, was selected by the Union forces. At extreme low tide, the Mud River had a depth of only 1½ feet of water, with a very soft, almost semi-fluid bottom. The landing of guns on Jones Island, from Mud River, was effected by hauling the guns over the marsh of Jones Island, rather than towing the guns into the Savannah River in flats as was initially contemplated. The flats containing the guns were actually towed by rowboats. The Union forces took over Tybee Island on February 21, 1862, and the siege of Fort Pulaski took place on

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showed that it did not encompass Horseshoe Shoal, as it passed within one-half mile of the northwestern side of Oyster Bed Island in joining what is indicated as the "new channel" (Ga. Ex. 207, 208). An 1890 chart (Ga. Ex. 213) shows "Jetty II (constructing)" in the approximate location of the "old channel" on Ga. Ex. 207, 208, and further displays the channel to be running immediately south of Oyster Bed Island where the Quarantine and Customs Quarters are shown.

It is quite probable that the course designated by the words "old channel" was brought about by the fact that Wall's Cut, an artificial channel connecting New River and Wright River, was at one time impassable and thus prevented the inland water passage between Charleston, South Carolina, and Savannah, Georgia. Thus, persons making a water passage by and between Savannah and Charleston were unable to traverse the shortest water passage and, in all probability, the "old channel" existed at that time and continued until Wall's Cut became passable.⁷⁷ Since the customary channel was never to the north of Oyster Bed Island, your Special Master finds that this is the most plausible explanation of the designation of the "old channel" being north of the Oyster Bed Island area. On the other hand the experts have testified that the "old channel" probably existed many years prior to 1787. In any event, the "old channel" was not perceptively known or used in 1787 and the years immediately prior and subsequent thereto.

In his work on *Shore and Sea Boundaries*, the recognized authority on the subject, Aaron L. Shalowitz, mentions this Court's opinion in *Georgia v. South Carolina*, *supra*, by saying:

April 10-11, 1862. To what extent, if any, vessels were wrecked in the area described in Ga. Ex. 207 and 208 as the "new channel" is not known, except for the fact that the Confederate forces had gunboats in that area (Ga. Ex. 160, Gillmore, *Siege and Reduction of Fort Pulaski*, p. 12).

⁷⁷ Wall's Cut was obstructed by the Confederate forces during the latter part of 1861 by placing an old hulk and numerous heavy piles therein. These obstructions were removed by the Union forces in January, 1862 (Ga. Ex. 160, p. 12).

In construing a boundary convention between Georgia and South Carolina, the Supreme Court held the boundary line to be the thread of the Savannah and other rivers — the middle of the stream — when the water is at ordinary stage, regardless of the channel of navigation.

Id. Vol. II at p. 374, referring to the geographic middle of a river as being “*medium filum aquae*” or “*filum aquae*.”

Shalowitz continues by pointing out that the rule of “*medium filum aquae*” had for its principal objection, at least insofar as navigable rivers were concerned, the fact that it disregarded the main channel, thereby resulting in inequities to the nation or state which happened to be more remote therefrom. He suggests that this result brought about a new rule, known as the *thalweg*, at the beginning of the 19th century. *Id.* Vol. II at 374.

When this Court, in 1922, decided *Georgia v. South Carolina*, *supra*, it had no occasion to consider the water area near the mouth of the Savannah River. The area involved was approximately 200 miles to the west of that point. Land areas in Georgia and South Carolina were on the respective sides of the river as one proceeds downstream until one passes the tip of Turtle Island. From that point eastwardly, there is no appropriate measurement to determine the rule of the “*medium filum aquae*,” or the “thread” of the Savannah River. The result is that, if we strictly apply the 1922 decision of this Court to the water area east of the tip of Turtle Island, we have created an inequity to South Carolina as the more remote state.

Moreover, your Special Master thinks that the framers of the Treaty of 1787 never intended, as to the water area between the mouth of the Savannah River and, at least, the southern tip of Turtle Island, to draw a boundary line extending northwardly and “looping” around to the north of where Oyster Bed Island thereafter appeared. It is true that, in 1787, there was a water passageway to the south of Dau-fuskie and Turtle Islands (on the eastern side of said islands), and Georgia may argue that this waterway was the “most

northern branch or stream of the River Savannah from the Sea or mouth of such stream," but such an interpretation would make the entire water area involved the "mouth" of the river. Vessels approaching the Savannah River from the Atlantic Ocean at the "mouth" of the river were accustomed to using the channel immediately north of the eastern end of Tybee Island, and this fact was known to all navigators, and presumably known by the negotiators of the Treaty of 1787. It is true also that the Treaty of 1787 rather loosely uses the words "from the Sea or mouth of such stream" and, from this language, it can be argued that anyone interpreting the Treaty may have an option to draw the boundary line from any area east in the "Sea" to any point near the southern tip of Turtle Island.

The 1922 decision of this Court did not require any consideration of this particular problem. In *Iowa v. Illinois*, 147 U.S. 1, 8-9 (1893), the Supreme Court cited Creasy, *First Platform of International Law* (1876), for the statement that the *medium filum aquae* "will be regarded *prima facie* as the boundary line, except as to those parts of the river as to which it can be proved that the vessels which navigate those parts keep their course habitually along some channel different from the *medium filum*." (Emphasis supplied). Shalowitz, *Shore and Sea Boundaries*, Vol. II, p. 374, n.32. Moreover, in discussing the thalweg doctrine, described by Shalowitz as "one of equality and justice," Shalowitz says that "where there is more than one channel in a river and if the boundary reference is merely the center of the channel, then the boundary would be held to be the center of the *main* channel."⁷⁸

⁷⁸ In *Washington v. Oregon*, 211 U.S. 127 (1908), the Court held that the boundary between the states was the middle of the north channel of the Columbia River because this was so provided in the statute admitting Oregon as a state. The Court further said: "The courts have no power to change the boundary thus prescribed and establish it at the middle of some other channel. That remains the boundary, although some other channel may in the course of time become so far superior as to be practically the only channel for vessels going in and out of the river." *Id.* at 135.

Tested by these principles, and without knowledge as to whether the treaty makers had ever heard of what developed as the *thalweg* doctrine a very few years after the Treaty of 1787, your Special Master finds and concludes that the boundary line ran from the mouth of the Savannah River, slightly south of what later developed as the Oyster Bed Island, thus placing the principal portion of Oyster Bed Island in the State of South Carolina and the main part of Horseshoe Shoal in the State of Georgia, due largely to the efforts of the Special Master to comply with this Court's 1922 opinion in *Georgia v. South Carolina*, *supra*, to the southern tip of Turtle Island, from which said point the boundary line will essentially follow the northernmost line of the main channel of navigation to the mouth of the river.⁷⁹

It is undoubtedly true that whatever dominion and control over Horseshoe Shoal and Oyster Bed Island was exercised, it was by the State of Georgia. South Carolina at no time ever attempted to exercise any dominion or control over these areas. As heretofore mentioned, Georgia caused beacons to be placed in the area of what later developed to be Oyster Bed Island as early as 1820.⁸⁰ About 60 years later, Georgia

⁷⁹ Essentially all of the maps, before and after 1787, show the "mouth" of the Savannah River to be very slightly east and to the north of the easternmost tip of Tybee Island. The maps or charts likewise show that a vessel, with its destination as Savannah or to a point west of Savannah, after clearing Tybee Island and approaching Cocks spur Island, was confronted with two channels, one to the north and one to the south. Apparently the south channel was not navigable to what later became the City of Savannah, presumably because of wrecks in the river following the Revolutionary War. The treaty makers accordingly determined that the boundary line should follow the "most northern branch or stream from the Sea or mouth of such stream." The words "such stream" indicate to the Special Master the "northern channel," rather than the "south channel."

⁸⁰ The General Assembly of Georgia, assented to by the Governor of Georgia on December 22, 1820, passed an Act ceding to the United States of America, the interest of the State of Georgia, and its jurisdiction to, "certain cites [sic] on the Savannah River, whereon beacons have been erected." It should be noted that beacon sites had been ceded which included certain sites clearly in Georgia, as well as in the Oyster bank and the White Oyster Bank, and Georgia ceded only such right, if any it had, in all of the sites.

caused a Quarantine Station and Customs Quarters to be erected on Oyster Bed Island around 1880.⁸¹ In 1938, Georgia ceded the two areas to the United States as the Tybee Migratory Bird Refuge. In the early 1970's, the Georgia Port Authority obtained a permit from the Army Corps of Engineers to construct a LASH (Lighter Aboard Ship) facility on Oyster Bed Island (Ga. Ex. 373, 374, 375, 376, 377). The LASH facility has been constructed and is maintained by Georgia. South Carolina never attempted to cede or grant either area, although in later years the tax records of Jasper County carried Oyster Bed Island as "exempt."

We are not, however, concerned with prescription and acquiescence; nor need we bother with problems arising by reason of Georgia having ceded the two areas to the United States. On April 20, 1981, the Special Master approved, at the request of the parties, a stipulation, reading in part as follows:

1. The State of Georgia contends that all areas in dispute in this litigation are located within the boundaries of the State of Georgia by virtue of the Convention of Beaufort of 1787 and the correct interpretation and application of the Convention of Beaufort to changing topography in the lower Savannah River.
2. Georgia does not contend that any area in dispute in this litigation is located within the boundaries of the State of Georgia by virtue of prescription and acquiescence in derogation of the Convention of Beaufort.

Thus, it appears from the foregoing stipulation that the Court is foreclosed from considering the possibility of prescription and acquiescence.

Even if South Carolina is legally entitled to the area pres-

⁸¹ After the storm which destroyed the buildings on Oyster Bed Island in 1893, the Quarantine Station was moved to Cockspur Island, clearly in Georgia.

ently known as Oyster Bed Island, as being within the boundary of the State of South Carolina, the parties have agreed that there shall be no impairment of any claims or interests of the United States, and that any decree entered would not prejudice the rights of the United States.⁸²

As Boggs has stated in his work entitled *International Boundaries — A Study of Boundary Functions and Problems*, originally published in 1940 and reprinted in 1966, "water boundaries are characterized by peculiar problems, of both definition and demarcation" and "demarcation questions are peculiar, generally speaking, in part because it is seldom practicable to mark the turning point of boundaries in the water, and it is frequently not feasible to mark them on land by means of reference monuments and lights." *Boggs*, p. 176. As Boggs explains, water boundaries in lakes, straits, and rivers fall into four categories: (1) the shore (which was adopted by the Supreme Court in the 1922 case), (2) the median line, (3) the navigable channel or thalweg, or (4) an arbitrary geometrical line such as a parallel of latitude or an azimuth line. *Boggs*, pp. 177-178.

Other than the purpose of navigation in 1787, the Special Master can conceive of no other possible purpose in drafting the Treaty of 1787 insofar as it involves the extreme eastern area of the Savannah River, with the possible exception of fishing rights in the mouth of the river or lower end of same. This is answered by the fact that, at least in 1853, Georgia prohibited fishing in the Savannah River and, in 1853, South Carolina unsuccessfully requested the Governor of Georgia to appoint Commissioners to consider modifying the Treaty of 1787 permitting the citizens of South Carolina to have the

⁸² By his letter of June 26, 1978, sent to the Special Master, with a copy being forwarded to counsel for the parties, the then Solicitor General Wade H. McCree, Jr., advised that the parties had an informal agreement with the United States. Judge McCree requested an extension until July 15, 1978, to determine whether the United States would intervene. He also referred to a stipulation which would be prepared and filed, but the Special Master notes that no *formal* stipulation has been filed; nor did the Solicitor General thereafter contact the Special Master. See footnote 8.

"rights of fishing" in the Savannah River, and to use or draw off "the waters of said river for the purposes of navigation or manufacturing" (Ga. Ex. 416, 417). It was not, therefore, any purpose other than navigation which prompted the treaty-makers to establish the boundary line as they did in 1787. As far as we are able to determine, it was not until the boundary line was established in 1922 by this Court's opinion in *Georgia v. South Carolina*, *supra*, that the citizens of South Carolina ever firmly established their fishing rights, in the area of the river lying north of the established boundary line.⁸³

It is, in all probability, impracticable, if not impossible, to establish a precise boundary line in navigable rivers. If the measurement is taken from the shore line or bank, as it was applied in the 1922 decision of this Court, we know that erosion or accretion may occur on one bank but not on the other. If the boundary line is governed by the thalweg, i.e., the channel continuously used for navigation, we know that the channel, or valley, will frequently change. Commentators suggest that the thalweg, or valley, is the line of the deepest soundings at low water level of the river. The lack of stability of the river always affects any precise boundary line.⁸⁴ Thus,

⁸³ While not in this record except as set forth in Georgia's Brief in Support of Motion for Leave to file Complaint, it is common knowledge that this case is known as the "Shrimpers" case, because it arose out of an incident of June 29, 1977, when a commercial shrimp fisherman, licensed by South Carolina, was arrested for allegedly engaging in illegal fishing in Georgia waters which were then closed to commercial fishing. The South Carolina fisherman allegedly resisted arrest, assaulted the Georgia law enforcement officers, and fled to South Carolina. On July 15, 1977, the Governor of Georgia requested the Governor of South Carolina to extradite the South Carolina fisherman to Georgia to stand trial on charges of obstruction of officers, simply battery, and illegal commercial fishing. The Governor of South Carolina refused extradition claiming that the fisherman was in South Carolina waters at the time of his arrest. The present action followed.

⁸⁴ For an interesting discussion of the problems, see Bouchez, *The Fixing of Boundaries in International Boundary Rivers*, 12 Int. & Comp. L. Quarterly, pp. 789-817. He argues that "what appear to be natural boundaries are often border areas rather than boundary lines," *id.* p. 790, and even if the thalweg principle is adopted, "[i]t is highly questionable whether

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when the boundary line proceeds eastwardly from the tip, or extreme southern point, of Turtle Island, the purpose of navigation is the sole, dominant factor between the end of Turtle Island and the mouth of the Savannah River, and this factor should primarily determine any boundary line between Georgia and South Carolina in this area.

In drawing the boundary line at the extreme eastern end of the Savannah River, it is recognized that there were two channels at or near the mouth. Clearly, the treatymakers had selected the most northern branch or stream of the river to be the boundary line, and had rejected the southern branch or stream which may have taken vessels in a more direct course to what ultimately became the City of Savannah. For navigation purposes, the larger vessels, at least, would seek the portion to navigate which may possess the deepest areas or greater soundings. Therefore, as Bouchez argues (*Id.* p. 797) (see footnote 84):

The function of a river — the manner in which a river is used — should be the determining factor in deciding which type of boundary will be applied *in concreto*. The function itself will in practice often be influenced by the natural properties of the river. Only if the function of the river is seriously considered in fixing the boundary line will the boundary be in accordance with the real interests of the border States. The interests of the riparian States should be the guiding principle in the fixing of boundaries in general, but particularly so with regard to rivers. (Emphasis in original).

It is with these principles in mind that the Special Master has attempted to arrive at the approximate boundary line between Georgia and South Carolina in the area from the

it is of great value to fix a precise boundary line in navigable waters," *id.* p. 793. He urges that the use of the channel of the river is more suitable as a boundary "area" as a vessel will never navigate without interruption on the one side of the boundary line, but will invariably navigate partly on one side and partly on the other side of any precise boundary line. *Id.* at 793-794.

mouth of the river to the area directly south of the eastern end of Turtle Island.

Attached hereto is App. F which constitutes the best estimate of the Special Master as to the true boundary line existing in 1787 (as modified by the accreting of Rabbit Island and the prescription and acquiescence of Hog and Long Islands) to and including the mouth of the Savannah River at its eastern end of the river.⁸⁵ It has been drawn on a reproduction of Ga. Ex. 156, App. B, which is the most reliable plat, map or chart of the entire area in 1855, and apparently is the closest available representation of the geographic conditions as they existed in 1787, subject to minor exceptions previously noted.

RECOMMENDATION: That the boundary line between the eastern end of Jones Island, as it existed in 1855 and presumably 1787 as well, and the mouth of the Savannah River be adopted as the nearest precise boundary line between the states of Georgia and South Carolina, and that the area now known as Horseshoe Shoal (to the extent that it is south of the boundary line fixed in App. F) is within the State of Georgia, and that the area now known as Oyster Bed Island (to the extent that it is north of the boundary line fixed in App. F) is within the State of South Carolina. A detailed survey of the areas in question is required to establish any precise line.

VIII. MOUTH OF THE RIVER

Dr. DeVorsey presented Georgia's contention and testified that the "mouth" of the Savannah River was at the "opening from the southern point of Hilton Head to the northern tip

⁸⁵ See, also, Ga. Ex. 320, App. C, showing the land shown in 1977 but not shown in 1855, discussed at some length under the heading "South-eastern Denwill."

of Tybee Island." (Vol. III, DeVorsey, p. 312).⁸⁶ With all due respect to Dr. DeVorsey's exceptional ability as a historical geographer, the Special Master merely states that the witness has confused the "mouth" with the possible establishment of a baseline.⁸⁷ Indeed, Dr. DeVorsey stated that the line drawn between Tybee Island and Hilton Head Island would also be the closing line to determine the three-mile limitation (Vol. VIII, DeVorsey, p. 746). The distance between Hilton Head Island and Tybee Island is 5.9 miles, and from Tybee Island to Daufauskie Island is slightly over 4 miles (Vol. IX, Holland, pp. 31-32).

When asked "when you can't identify that the water is the water of that river, doesn't it [the river] lose its identity," Dr. DeVorsey responded in the affirmative by saying that was "the end of the river" (Vol. V, DeVorsey, pp. 607-608). He further agreed with the other experts to the effect that the "mouth" was "where the waters of the river meet the sea" (Vol. V, DeVorsey, p. 526). He agreed that "where a river mixes with a larger body of water or the sea, this is the mouth" (Vol. V, DeVorsey, p. 561). But he also contended, without citation of authority or any such definition existing in 1787, that the "mouth" of a river requires two headlands (Vol. V, DeVorsey, p. 588). The Special Master disagrees with this latter argument, although it is conceded that, in particular circumstances, a "mouth" could generally have two headlands.

All witnesses, including Dr. DeVorsey, are in general agreement that the greatest velocity, or flow, of the water occurs in a deep water channel. Dr. DeVorsey agreed that most of the descriptions indicated the "mouth" to be close to Tybee Island where the deep water was located, and which

⁸⁶ In the olden days Hilton Head Island was known as "Trench's Island." "Peeper" was the early name for Cockspur Island (Vol. III, DeVorsey, pp. 313, 314).

⁸⁷ Since the determination of the lateral seaward boundary has been deferred to a later report, the Special Master makes no suggestion as to where the baseline should be fixed.

was the best entrance for ships, generally approaching from the south (Vol. III, DeVorsey, p. 315).⁸⁸

In Dr. DeVorsey's detailed and exhaustive recitation of the history of the "mouth" of the river, following the colonization of Georgia, and his summarization of what each particular chart or map contained (Vol. III, DeVorsey, pp. 296-351), Tybee Island is described as "at the mouth" of the Savannah River or, on occasions, "at the entrance to the Savannah River."⁸⁹ It is significant to note that one of the treaty-makers representing Georgia was General Lachlan McIntosh and, during the Revolutionary War, he had occasion to write several letters respecting the location of British Naval forces in the area. In Ga. Ex. 81, a letter dated April 28, 1776, McIntosh reports the presence of "two ships of war which remained now-stationed at Tybee in the mouth of the Savannah River." Ga. Ex. 82, a letter from General McIntosh dated July 25, 1776, refers to information received that someone had seen "a fifty-gun ship yesterday afternoon sailing over our bar into the river." The following day, July 26, 1776, General McIntosh confirmed his letter of the previous day by saying "that a large ship composed of fifty guns was off Tybee Bar and sailing up." These three letters from a signator of the Treaty of 1787 (eleven years later) would indicate that McIntosh, at least, considered the "mouth" of the Savannah River to be off Tybee Island.

⁸⁸ Dr. DeVorsey refers to a letter from General Oglethorpe to the Trustees, dated June 9, 1733 (Ga. Ex. 65), which states in part: "You may judge of the value of your lands here by the price on Trench's Island [Hilton Head Island] which lies at the mouth of the Savannah River on the Carolina side." (Vol. III, DeVorsey, p. 320). General Oglethorpe built the original lighthouse on Tybee Island (Vol. III, DeVorsey, p. 321). However, at a later date, General Oglethorpe referred to Tybee as the "mouth" on several occasions. (S.C. Ex. 15 and Vol. XV, Merrens, p. 7-59; S.C. Ex. 17 and Vol. XV, Merrens, p. 7-62, 63).

⁸⁹ Sir James Wright was the Royal Governor of Georgia during the latter part of the colonization period before the American Revolution. On September 30, 1773, he reported to the office in England by referring to "Tybee Inlet at the entrance of Savannah River" (Vol. III, DeVorsey, pp. 339, 340). He attached what has been introduced as Ga. Ex. 79, a 1773 chart prepared by William Lyford. The depth soundings shown on Ga. Ex. 79 are in fathoms, not feet. Ga. Ex. 79 is the same as S.C. Ex. MM-3.

Dr. DeVorsey, in addition to his reliance upon General Oglethorpe's letter (footnote 88), referred to Ga. Ex. 74, an extract from a book edited by Dr. DeVorsey entitled "DeBrahm's Report of the General Survey in the Southern District of North America." DeBrahm was designated by the Crown as Surveyor General of the Southern District of North America but, prior to 1764 when he left Georgia, he was a surveyor of prominence in both Georgia and South Carolina. This report refers to the Savannah Sound — not the Savannah River (Vol. III, DeVorsey, pp. 327-332). Whether the Atlantic Ocean is the same body of water described by DeBrahm as the Savannah Sound is largely immaterial, as there can be no doubt but that the Savannah River flowed into the same, and that the Sound or Ocean was a larger body of water than the Savannah River.

To determine the location of the "mouth" of the Savannah River in 1787, the most pertinent charts, sketches or maps are Ga. Ex. 79 (a 1773 drawing by Lyford and mentioned in footnote 89); S.C. Ex. MM-3 (the same as Ga. Ex. 79, but more legible, although incorrectly marked as a 1776 drawing but it is the Lyford drawing of 1773);⁹⁰ S.C. Ex. MM-2 (DeBrahm drawings of 1772 with distances shown in chains⁹¹ and depth soundings in feet); and finally, S.C. Ex. MM-1 (the DeBrahm sketches of 1762 showing what apparently was a drawing of Fort George, constructed by the British on Cockspur Island to protect the south channel which, in those days, was the preferred or main channel but which, by 1787, was no longer the main channel).

Dr. William P. Cummings, an expert in the field of historical cartography having done extensive research in the area

⁹⁰ Your Special Master finds that he possesses two exhibits numbered S.C. Ex. MM-3. They appear to be identical except that one is listed as "Lyford — 1776" and contains the legend by Lyford. The other was originally listed as "Lyford — 1776," but was changed to "1772." In any event Lyford's legend, handwritten on Ga. Ex. 79 and printed on one of S.C. Ex. MM-3, gives the date as "13 Dec. 1773."

⁹¹ One chain equals 66 feet. One fathom equals five to six feet; generally six feet is the nautical measurement. *Black's Law Dictionary*, 5th Ed.

of the southeastern coast of the United States, testified at length with respect to Jones Island and the mouth of the Savannah River. While the Jones Island testimony is relevant, we are now primarily considering the location of the mouth of the Savannah River. He suggests three alternative locations of the mouth, same being: (1) at the opening from the southern point of Hilton Head to the northern tip of Tybee Island, as advanced by Dr. DeVorse; (2) between Turtle Island and headed slightly west of Cockspur Island to the southern bank of the Savannah River; and (3) at a point approximately five and one-half miles east of the Tybee Lighthouse, immediately east of the North and South breakers in the Atlantic Ocean as shown on S.C. Ex. MM-3 and Ga. Ex. 47 (the two charts are the same) and as marked at the easternmost depth sounding "36" on S.C. Ex. MM-2. Dr. Cummings argued that alternative (3) above was his choice because the presence of shoal areas on the north and south sides of the channel gave rise to another conception of where the "mouth" existed in the Savannah River (Vol. X, Cummings, p. 83). Dr. Cummings does state correctly, the Special Master believes, that the volume of water at the "mouth" is dependent upon both the depth and width of the area.

Examining the measurements of the distance between the northern line of Tybee Island as shown on Ga. Ex. 79 and the shoal area opposite thereto, we find this distance to be slightly more than a half mile. This is the width of the channel as shown on Ga. Ex. 79, and the two S.C. Ex. MM-3. But the Tybee Lighthouse is apparently slightly south of the southern edge of the channel, and this may mean that the channel is wider than as noted above. In examining Ga. Ex. 333, a 1944 USGS chart, it is noted that the scale is 40,000 but it is also given in nautical miles and yards. The basic map, Ga. Ex. 156, App. B, gives the scale at 40,000. This confusion is explained by Shalowitz, *Shore and Sea Boundaries*, Vol. II, p. 502, where he says:

For an actual map location of the boundary line with respect to geographic coordinates, the charts are of too small a scale (1:40,000, or 1 in. = 3,333 ft.) to

represent with accuracy a boundary along the low-water line. The map delineation can at best be considered pictorial only.

Your Special Master has, therefore, attempted to use a measurement of 1 inch equals 3,333 feet with respect to any map or chart adopting 40,000 as the scale.

Bearing in mind the obvious inaccuracies existing in all charts and maps prior to the middle of the 19th century, and relating Ga. Ex. 79 (as well as the two exhibits marked S.C. MM-3) to Ga. Ex. 333, a 1944 USGS chart (which uses Ga. Ex. 156, App. B, as its basic source of information), the Special Master believes that the channel in 1944 is in relatively the same position as it was in 1773 when Lyford prepared Ga. Ex. 79. True, in 1944 the channel appears to be wider, perhaps as much as 2,500 feet from the north to south training walls, but it is also probably true that the shoal area directly opposite the Tybee Lighthouse was dredged to some extent to permit the widening of the channel.

Other witnesses testified with respect to the location of the "mouth." Dr. Harry Roy Merrens, an expert historical geographer, cited approximately 16 references of historical significance which would indicate the probable location of the mouth.⁹² Dr. Lucien M. Brush, Jr., an expert in the field of geomorphology, stated that without the existence of S.C. Ex. MM-3 (the same as Ga. Ex. 79), he would place the "mouth" close to Tybee Island but, because of S.C. Ex. MM-3 (Ga. Ex. 79), he would locate the "mouth" between the north and south breakers and perpendicular to the channel (Vol. XVI, Brush, p. 77-86). Dr. Brush agreed that the "bar" and the "mouth" generally have different meanings (Vol. XVI, Brush, p. 135).

Dr. Arthur H. Robinson, whose outstanding qualifications

⁹² Of these references, 12 indicated that the "mouth" was in the area of Tybee Island or Tybee Lighthouse; 3 pointed to Cockspur Island as the mouth where the north and south channels are joined; 1 suggested the 5½ or 6 mile expanse of water between Hilton Head and Tybee Island.

as an expert have been heretofore noted in footnote 6, refers to S.C. Ex. MM-1 (the DeBrahm sketches of 1762) as the "emboushure" map, a French word used since the 16th century reflecting a place where a river discharges into the ocean or lake, sometimes also into another river (Vol. XVI, Robinson, pp. 175-176). S.C. Ex. MM-1 points to the north and south channels of the Savannah River discharging into the Savannah Sound. Robinson refers to the cartographer's designation of 31 degrees, 57 minutes, as running through the base of the Tybee Lighthouse. He contends that "if the mouth of the river were any further to the east than the Tybee Lighthouse, it wouldn't be a map of the mouth" (Vol. XVI, Robinson, p. 177). He also refers to S.C. Ex. N, Morse, *The American Geography*, published in 1789, where the author states (pp. 442-445) that the Tybee bar, at its entrance at latitude 31 degrees, 57 minutes, has 16 feet of water at half-tide. This article contains the Treaty of Beaufort at page 441.

Robinson discusses S.C. Ex. MM-2, a DeBrahm chart of 1772. He points out that, at the extreme lower right side of these drawings appear the words "Carolina Side." He says that it is proper to extend these words up the chart in a westerly direction as some evidence of the boundary line. Finally, questioned as to where the Savannah River was mixing with another body of water, Robinson said: "just to the north and perhaps a little bit to the east of Tybee." This location existed, according to Robinson, in 1787 *and now* (Vol. XVI, Robinson, p. 210).⁹³

With respect to the contentions of other witnesses, Robinson contradicted Dr. DeVorsey who had previously testified that two headlands are needed for the mouth of a river (Vol. XVI, Robinson, p. 210); that the jetties in the 1787 area extended eastwardly only as far as Tybee, and east of that point

⁹³ Dr. Robinson concedes that the words "Carolina Side" on S.C. MM-2 was not to show the jurisdictional boundary as "often times in these days of the rivers — were sort of common property like the air, and the lands on either side were given some sort of ownership, whereas the rivers weren't . . . this map simply tells you that if you see some open water in here, if you see land or marsh on the north side as you're looking, that's Carolina" (Vol. XVII, Robinson, p. 80).

were buoys (Vol. XVI, Robinson, p. 212); and, agreeing with others, said that shoals can restrict and confine the flow of a river. When shown Ga. Ex. 12, a Bowen map of 1748, he agreed that the words "Part of Carolina" and "Georgia" on opposite sides of a dotted line may indicate a boundary, but an examination of the map does not show where such a line is located with reference to the areas in controversy.

Robinson defines the "mouth" of the river as being "where the river enters another body of water." He agrees that if the "mouth" is to be defined as being where the *main flow* of the river enters the body of water, then anyone would have to place the mouth *north* of Tybee (Vol. XVI, Robinson, p. 206). Actually, Dr. Robinson makes no distinction between the location of the "mouth" of the Savannah River in 1787 and 1981 at the time he testified. As to the "bar," Dr. Robinson described it as "a submerged banklike formation which is a combination of sediment that has been deposited by waters of the river, but also helped along by wave actions and the movements of offshore currents." (Vol. XVI, Robinson, p. 208). Thus, the "bar" could have been the precise point where the river flows into another body of water, and although Robinson said that it would be preferable to designate an area by a circle or rectangle, the Special Master has nevertheless arbitrarily drawn a boundary line across the "mouth" of the river. To the east of that line would perhaps be the territorial sea; to all areas south of the northern point of said line would be Georgia waters; to all areas north of the northern point of said line would be South Carolina waters; if a controversy should develop as to an incident occurring between the northern and southern points of said line, it will be considered to be in Georgia waters.

It is probably true that the "mouth," during the 1787 period, was located slightly south of where the Special Master has marked the same on App. F. It is also true that the channel of navigation usually traversed by larger vessels was not a straight line (or nearly so) as shown on App. F. The Special Master believes, however, that between the "mouth" of the Savannah River to a point opposite the southern tip

of Turtle Island, the treaty-makers could not have intended a strict boundary line to be drawn to follow either the "mouth" or the "channel." The objective of the framers of the Treaty was to reach the "northern branch or stream" and, from that point, to follow the "thread" of the Savannah River to a point opposite the southern tip of Turtle Island. The framers of the Treaty could not, in considering the expansive water area east of the southern tip of Turtle Island, have had in mind that the boundary would follow the meanderings made necessary for vessels to traverse because of deep soundings in one area and insufficient soundings in another area. As shown on Ga. Ex. 208 (where the "new" and "old" channels are marked) vessels, in traversing the "new" channel used in 1787, were required to pass to the immediate south of Oyster Bed, then divert in a southwesterly direction to an area immediately north of Long Island (not the Long Island in the Barnwell group), and from there in a northwesterly direction to the Jones Island area.⁹⁴

As the commentators have all noted, it is next to impossible to designate precise boundary lines in water areas. It would be far preferable for the parties to agree upon such a boundary line but, in the absence of agreement, the Court must act. The Special Master rejects the theories advanced by certain witnesses that the "mouth" is five and one-half miles east of Tybee Island because of the existence of shoals on both sides of the channel. While shoals⁹⁵ are to some extent confining and do tend to restrict the flow of water, there can be little doubt that the Savannah River entered a different body of water as it flowed eastwardly past Tybee Island. Shoals, according to Dr. Robinson, are nevertheless affected by wave action, even though shoals may limit that effect.

⁹⁴ On Ga. Ex. 208 (1880), the distance between the Tybee Light and the "channel" is slightly in excess of one mile. From the "channel" line to the easternmost tip of Tybee Island is approximately three-fourths of a mile.

⁹⁵ The only evidence with respect to the shoals in this area is that they are covered by five to six feet of water.

RECOMMENDATION: That the mouth of the Savannah River be designated at the approximate location of the channel as shown on Ga. Ex. 333 (App. F), a 1944 chart, which the Special Master, after reviewing all the pertinent older maps and charts and considering the deficiencies in surveying during the latter part of the 18th century, deems the channel to be in relatively the same location as shown on Ga. Ex. 333 (1944), although probably slightly to the north of the channel as it existed in 1787. The line so designated on App. F is the recommended boundary line between the two states.

IX. LATERAL SEAWARD BOUNDARY

No evidence has been submitted on this issue which, as noted, is of particular importance to the United States. It will be the subject of a final report of the Special Master, unless the parties are granted leave to withdraw this issue from the Court's determination of this case, or otherwise reach an agreement which should involve the United States.

I. SUMMARY OF MAJOR LEGAL ISSUES

For the convenience of the Court and counsel, the Special Master herewith attempts to summarize the major legal issues confronting the Court. They are as follows:

1. Did the Treaty of 1787, in reserving all islands in the Savannah River to Georgia, intend to include not only the then existing islands, but also all islands thereafter emerging by natural processes on the South Carolina side of the river? If the answer is in the affirmative, how can the 1922 decision of this Court be reconciled?

2. Is the Special Master correct in determining that the right-angle principle should be invoked by the demarcator in drawing the boundary line around islands on the South Carolina side of the "thread" of the Savannah River, because

of the "special circumstances" existing by reason of the preclusive effect of the 1922 Supreme Court decision as it interpreted the Treaty of 1787?

3. Has the Special Master correctly ruled that Rabbit Island accreted to the State of South Carolina, and whether the "Island Rule" is applicable?

4. Has the Special Master correctly decided that Hog Island and Long Island have been acquired by the State of South Carolina under the doctrine of prescription and acquiescence? The Special Master notes that, even though Hog Island (in existence in 1787) was acquired by South Carolina under the doctrine of prescription and acquiescence, there remained at that time a creek separating Hog Island from the mainland and it was not until the spoilage had been dumped by avulsive processes that Hog Island became a part of the South Carolina mainland.

5. Has the Special Master correctly ruled that the area known as Southeastern Denwill, if it presently encroaches on the southern side of the mid-point of the Savannah River as it existed in 1787, now belongs to Georgia?

6. Has the Special Master correctly ruled that Jones Island, at all pertinent times, was in the State of South Carolina?

7. Did the Special Master err in diverting from the doctrine of *medium filum acquae* as established by the 1922 decision of this Court, in proceeding eastwardly after leaving the southern tip of Turtle Island?

8. Has the Special Master fixed a reasonably approximate location of the mouth of the Savannah River and the boundary line between the two states?

Respectfully submitted,

Walter E. Hoffman
SPECIAL MASTER
314 United States Courthouse
Norfolk, Virginia 23510

APPENDIX A

IN THE
SUPREME COURT OF THE UNITED STATES
NO. 74, ORIGINAL

STATE OF GEORGIA,

Plaintiff,

v.

STATE OF SOUTH CAROLINA,

Defendant.

App. A
MOTION TO DEFER FILING EXCEPTIONS

M O T I O N

Pursuant to Rules 9(2), 35(3), and 36(9), the undersigned Special Master moves the Court to enlarge any and all time limits with respect to the filing of (1) exceptions to the First Report of the Special Master, and (2) such briefs, pleadings, or other papers as may be required by the Supreme Court Rules, until such time as the Special Master files his Second and Final Report, and in support of said motion, states:

(1) The motion is being filed with the consent of the parties to this action in which the Supreme Court of the United States has original jurisdiction.

(2) The parties, by their counsel, have approved of this motion indicating that they agree to, and join in, said motion.


(3) The controversy involves the establishment of the boundary line between the States of Georgia and South Carolina, and particularly the ownership of certain islands, or alleged islands, presently or heretofore in the Savannah River area.

(4) The First Report will dispose of all phases of the case except the establishment of the lateral seaward boundary line.

(5) Counsel requested the Special Master to bifurcate the issue of the lateral seaward boundary line from the remaining issues. Counsel have represented to the Special Master that, when the remaining issues have been concluded by the Special Master, the evidence with respect to the lateral seaward boundary line can probably be concluded within two to three days, whereas, if the remaining issues have not been determined by the Special Master, the evidence relating to the lateral seaward boundary line would be extensive and time-consuming. The Special Master has heretofore agreed with this arrangement.

(6) Since the case will ultimately be considered by the Court on the First and Second Reports of the Special Master, and the exceptions thereto, if any, the Special Master and counsel for the parties respectfully move that all time limits for filing exceptions, briefs, pleadings and other papers be enlarged or deferred until such time as the Special Master files his Second and Final Report, at which time the parties may file such exceptions, if any, directed to both of said reports as ordered by the Court.

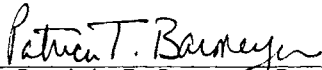
Respectfully submitted,



Special Master
425 Post Office Building
Norfolk, VA 23510

At Norfolk, Virginia

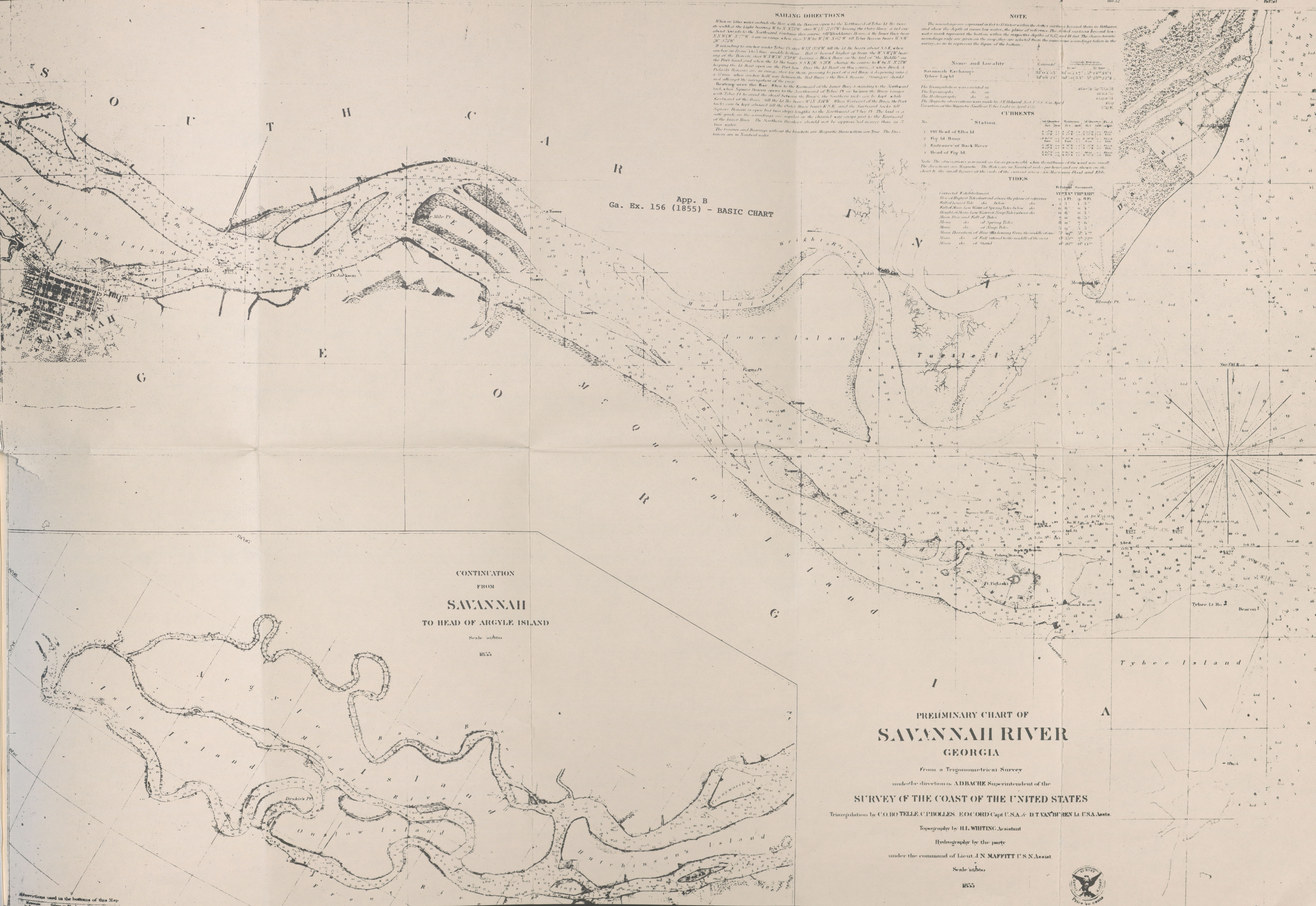
December 2nd 1985

We consent to, and join in, this motion:

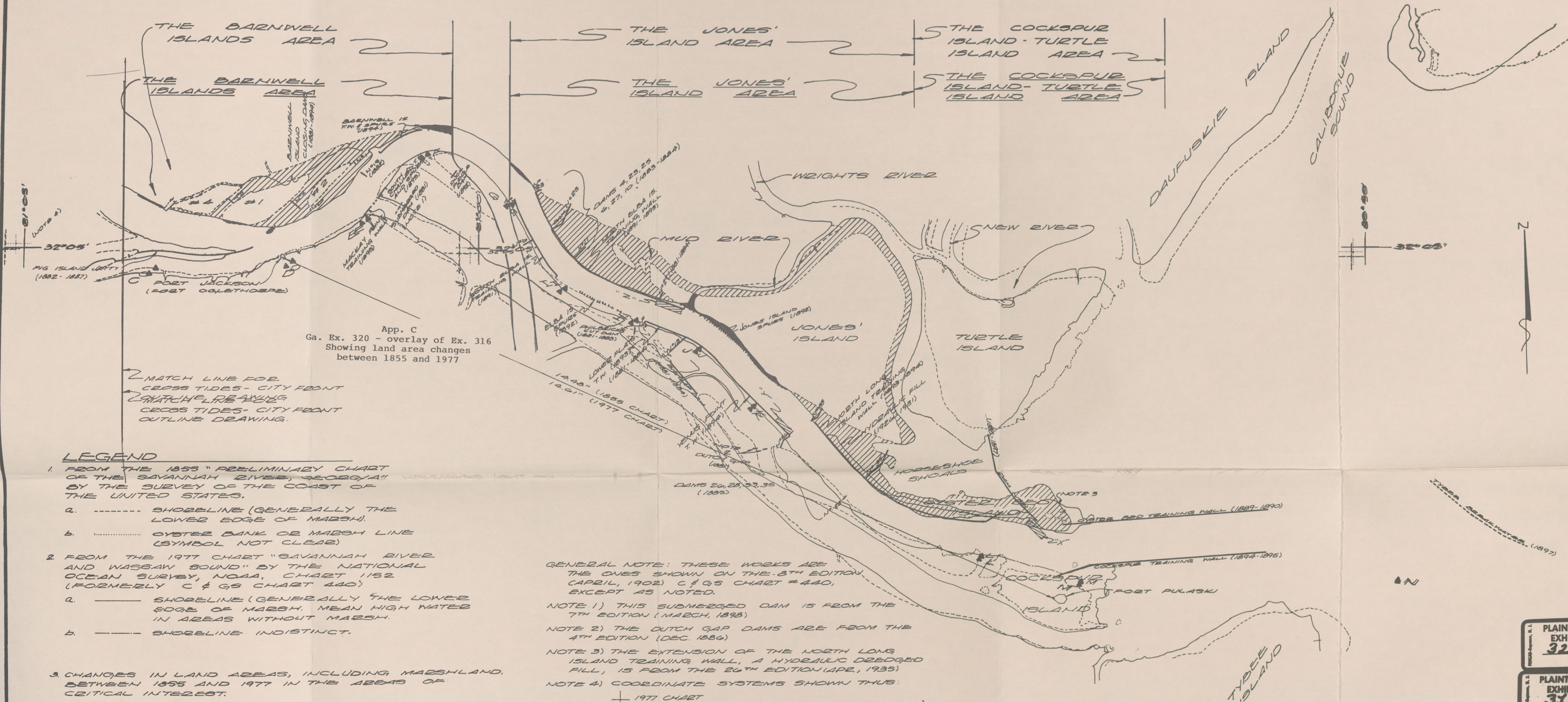

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Assistant Attorney General of the
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Frank K. Sloan, Esq.
Deputy Attorney General
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Columbia, SC 29211

APPENDIX B



APPENDIX C



LEGEND

1. FROM THE 1855 "PRELIMINARY CHART OF THE SAVANNAH RIVER, GEORGIA" BY THE SURVEY OF THE COAST OF THE UNITED STATES.
 - a. ----- SHOEBELINE (GENERALLY THE LOWER EDGE OF MARSH).
 - b. OYSTER BANK OR MARSH LINE (SYMBOL NOT CLEAR)
2. FROM THE 1977 CHART "SAVANNAH RIVER AND WASSAW SOUND" BY THE NATIONAL OCEAN SURVEY, NOAA, CHART 1152 (FORMERLY C & GS CHART 440)
 - a. ----- SHOEBELINE (GENERALLY THE LOWER EDGE OF MARSH, MEAN HIGH WATER IN AREAS WITHOUT MARSH).
 - b. ----- SHOEBELINE INDISTINCT.

3. CHANGES IN LAND AREAS, INCLUDING MARSHLAND, BETWEEN 1855 AND 1977 IN THE AREAS OF CRITICAL INTEREST.
 - a. LAND SHOWN IN 1977 BUT NOT IN 1855
 - b. LAND SHOWN IN 1855 BUT NOT IN 1977

4. COORDINATE SYSTEMS SHOWN THUS
 - + 1977 CHART
 - + 1855 CHART

5. CHANNEL REACHES

- C-D WRECK'S CHANNEL
- D-E FIVE FATHOM HOLE
- E-F OBSTRUCTIONS
- F-G BIGHT
- G-H UPPER FLATS
- H-I DOCKET BETWEEN FLATS
- I-J LOWER FLATS
- J-K DOCKET AT VENUS POINT
- K-L LONG ISLAND CROSSING
- L-M QUARANTINE CHANNEL
- M-N TYBEE KNOLL

NOTE: SEE SECTION IV OF THE REPORT FOR FURTHER COMMENTS.

GENERAL NOTE: THESE WORKS ARE THE ONES SHOWN ON THE 8TH EDITION (APRIL, 1902) C & GS CHART # 440, EXCEPT AS NOTED.

NOTE 1) THIS SUBMERGED DAM IS FROM THE 7TH EDITION (MARCH, 1898)

NOTE 2) THE DUTCH GAP DAMS ARE FROM THE 4TH EDITION (DEC. 1886)

NOTE 3) THE EXTENSION OF THE NORTH LONG ISLAND TRAINING WALL, A HYDRAULIC DREDGED FILL, IS FROM THE 26TH EDITION (APR, 1935)

NOTE 4) COORDINATE SYSTEMS SHOWN THUS:

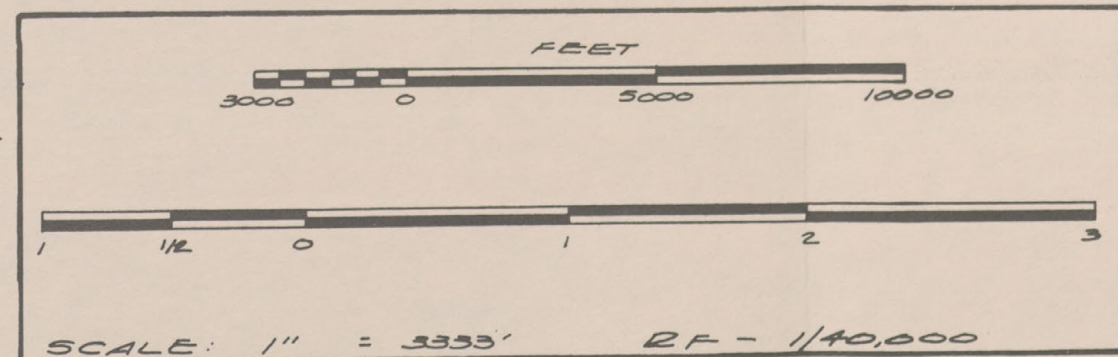
- + 1977 CHART
- + 1902 CHART
- + 1855 CHART

NOTE 5) NUMBERS IN PARENTHESES GIVE DATES STRUCTURES WERE INITIALLY CONSTRUCTED.

- NOTE 6) CHANNEL REACHES
- C-D WRECK'S CHANNEL
 - D-E FIVE FATHOM HOLE
 - E-F OBSTRUCTIONS
 - F-G BIGHT
 - G-H UPPER FLATS
 - H-I DOCKET BETWEEN FLATS
 - I-J LOWER FLATS
 - J-K DOCKET AT VENUS POINT
 - K-L LONG ISLAND CROSSING
 - L-M QUARANTINE CHANNEL
 - M-N TYBEE KNOLL

NOTE 7) DUMPING GROUND

- "X" RED LIGHT
- "Y" JONES ISLAND (OR VENUS POINT)
- "Z" MUD RIVER (OR FIELD'S CUT)



CHANGES IN TOPOGRAPHY FROM 1855 TO 1977 IN AREAS OF CRITICAL INTEREST ALONG THE GEORGIA-SOUTH CAROLINA BOUNDARY

TRAINING WORKS IN THE SAVANNAH RIVER IN THE AREAS OF CRITICAL INTEREST ALONG THE GEORGIA-SOUTH CAROLINA BOUNDARY.

ENCLOSURE #2 TO AN ENGINEERING REPORT BY PAUL W. RAMBE, CONSULTING ENGINEER, 26 FEBRUARY, 1979.

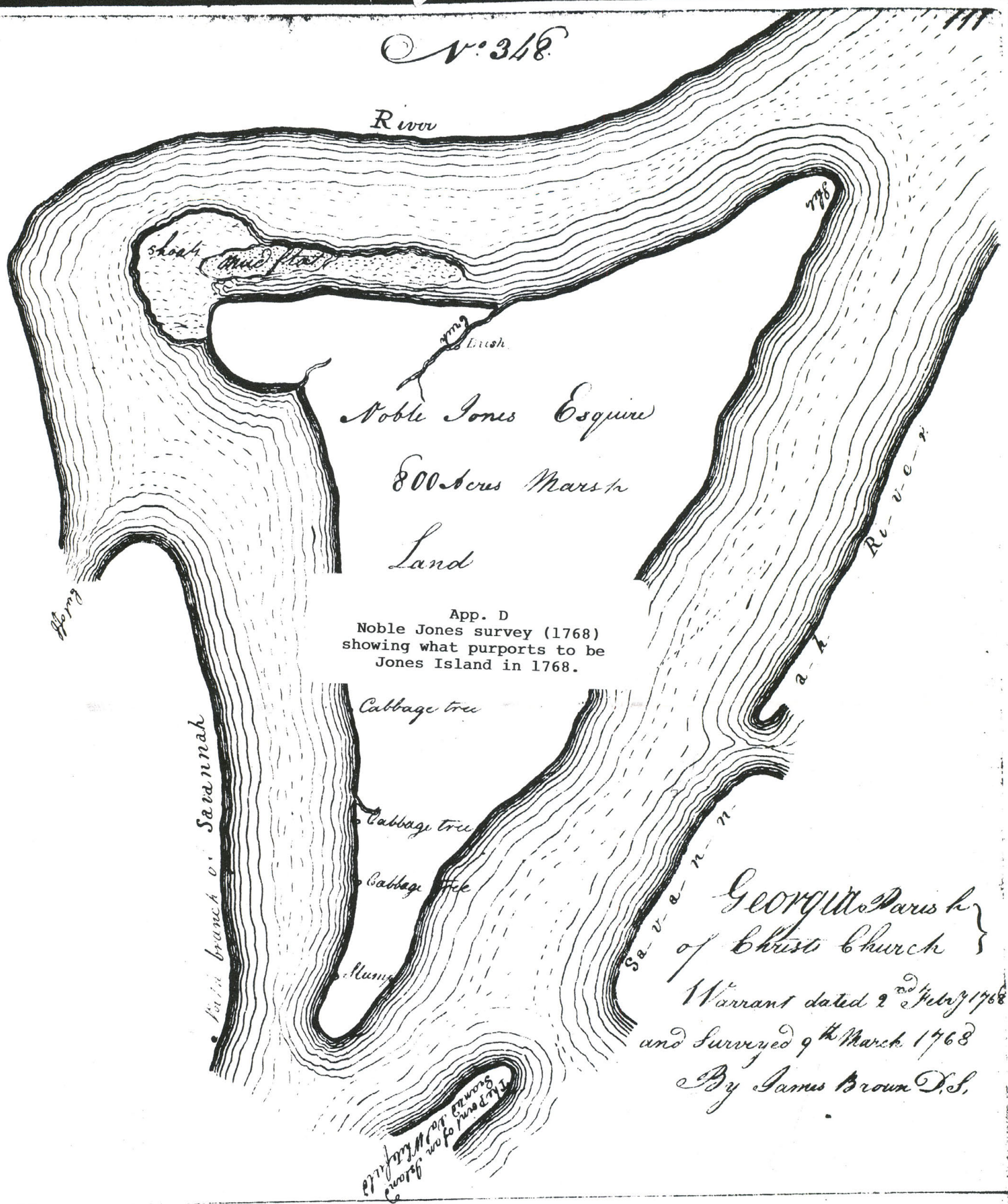
ENCLOSURE #1 TO AN ENGINEERING REPORT BY PAUL W. RAMBE, CONSULTING ENGINEER, 15 JUNE, 1978. (REV. TO ADD MATCH LINE, FEB. 26, 1979)

PLAINTIFF'S EXHIBIT 320

PLAINTIFF'S EXHIBIT 316

APPENDIX D

1768



Public. Road

Abraham Reblers Land

John Jamerson 50 Acres Land

at 72 w. 20 cc

Bolingers Land

V. 349

Georgia Parish of Christ Church

Warrant dated 4th February 1772 and Surveyed 15th February 1772

By John Douglass D. Sur.

Sec: 20 6th p. In

APPENDIX E



ACQUISITION TRACT REGISTER

| AUTH | TRACT NO. | LAND OWNER | ACREAGE | | | | | LICENSE |
|---------|-----------|--|---------|--------|--------|----------|------|---|
| | | | FEE | PERMIT | TRANS. | EASE | | |
| (A) (D) | A | U. S. Coast Guard | 8.93 | | | | | Transfer letter dated 12-30-57 |
| | B | U. S. Coast Guard | | | 1.00 | | | Spoilage disposal use permit from 12-23-57 |
| (A) (C) | A-100-E | LaFayette McLaws, et al | | | | 2,177.07 | | C. A. 3490, Perp. Spoil. Disp. Ease. from date of Judgment 5-29-58 |
| (A) (B) | 401-L | Savannah Beach, Tybee Island | | | | | 0.02 | License for Survey Tower, from 10-24-62 for indefinite Period |
| | D | Dept. of Interior, National Park Service | | | 42.24 | | | Perp. Ease. Reserved in Transfer, Act of Congress Approved 26 June 1936 (49 Stat. 1979) |

NOTES:

(1) This Project Map (in 5 sheets) supersedes and contains all pertinent data shown on Real Estate drawing of the same name, and drawing number, dated 4-6-52 (sheet J of I) as revised 8-13-62.

(2) The boundary line of this project is based on Legal Descriptions, Plats, and Aerial Photographs.

(3) a: The Georgia-South Carolina State Line has been located in accordance with the Beaufort Convention of 1787, which states in part: "Article The First--Reserving all the islands in the said rivers Savannah and Tugaloa to Georgia" and further stated "shall forever hereafter form the separation limit and boundary between the States of South Carolina and Georgia".

b: The location of the state line was determined by a study of various old maps, particularly U.S. Coast and Geodetic Chart No. 155, dated 31 March 1921, which shows the thread of the last stream separating Horseshoe Shoal and Oyster Bed Island from Jones and Turtle Islands. *James D. O'Brien 12-29-71*

APP. E

Ga. Ex. 364 - Map prepared by Office of Savannah District Engineer in 1966, revised in 1971 and 1972, showing boundary line north of Horseshoe Shoals and Oyster Bed Island

ACQUISITION AUTHORIZATION

House Document No. 283, dated 20 Apr. 1939
76th Congress, 1st Session
House Document No. 227, dated 9 May 1945
79th Congress, 1st Session
House Document, No. 678, dated 1 Apr. 1946
79th Congress, 2nd Session
House Document, No. 110, dated 6 June 1952
83rd Congress, 1st Session
(Resolution by Mayor & Aldermen,
City of Savannah, Ga., dated 15 May 1951
& Letter of Assurance dated 9 June 1951
4th Ind. OCE, dated 8 Dec. 1952
dated 28 July 1952
DI Ltr., OCE, to U.S. Coast Guard, dated 22 Nov. 1957

PROJECT MAP

DEPT. OF THE ARMY

USING SERVICE CORPS OF ENG.

LOCATION OF PROJECT

STATE SO. CAROLINA -- GEORGIA

COUNTY JASPER, S.C. -- CHATHAM, GA.

DIVISION SOUTH ATLANTIC

DISTRICT SAVANNAH

ARMY AREA FIRST

AT SAVANNAH, GEORGIA

MILES OF

TRANSPORTATION FACILITIES

RAILROADS S.A.L. & CENTRAL OF GA.

STATE ROADS 21, 25 & 26

FEDERAL ROADS 17 & 80

AIR LINES DELTA, EASTERN & NATIONAL

ACQUISITION

TOTAL ACRES ACQUIRED

FEE

PUBLIC DOMAIN WITHDRAWAL

USE PERMIT (OTHER THAN P. D.)

TRANSFER

LEASE

LESSER INTERESTS

DISPOSAL

TOTAL ACRES DISPOSED OF

SOLD

PUBLIC DOMAIN WITHDRAWAL

USE PERMIT (OTHER THAN P. D.)

TRANSFERRED

LEASES TERMINATED

LESSER INTERESTS TERM.

REASSIGNED

OTHER

LEGEND

EXCEPT FOR THE SPECIAL SYMBOLS SHOWN BELOW MAP SYMBOLS ARE STANDARD IN ARMY MAP SERVICE TECHNICAL MANUAL NO. 23.

| | |
|----------------------------------|-----|
| RESERVATION LINE | --- |
| RESERVATION LINE (Actual Survey) | --- |
| TRACT BOUNDARY LINE | --- |
| TRACT NUMBER | 100 |
| CONTOUR LINE | --- |
| DISPOSAL | --- |

SEGMENT "4"

DEPARTMENT OF THE ARMY
OFFICE OF THE SAVANNAH DISTRICT ENGINEER
SOUTH ATLANTIC DIVISION

REAL ESTATE

SAVANNAH HARBOR

DRAWN BY: R. J. N.

TRACED BY: R. J. N.

CHECKED BY: R. J. N.

SUBMITTED BY: R. J. N.

CARTOGRAPHIC/GEN.

RECOMMENDED BY: R. J. N.

CHIEF, REAL ESTATE AUDIT

OFFICE, CHIEF OF ENGINEERS, WASHINGTON 25, D. C.

AUDITED

INSTALLATION OR PROJECT NO. K6-2-0001

APPROVED BY: R. J. N.

DISTRICT REAL ESTATE OFFICER

DATE 1-13-66

Scale: 1" = 1000'

1000 500 0 1000 2000

SHEET 4 OF 5 DRAWING NO. 20

ENR 405-1-200

1 MAY 66

PREVIOUS EDITION MAY BE USED

PLAINTIFF'S EXHIBIT 364

34

APPENDIX F

[illegible]

NOTES

| Name and Locality | Latitude | | Longitude | |
|-------------------|-------------|-------------|-------------|---------|
| | to arc | to base | to arc | to base |
| Savannah Exchange | 32° 0' 53" | 81° 0' 17" | 81° 23' 24" | 24 17" |
| Tybee Light | 32° 03' 24" | 81° 05' 15" | 81° 23' 22" | 24 27" |

The triangulation was executed by the Engineers, also in the Astronomical, also in the Magnetic observatory.

The Magnetic observations were made by J. E. Howard, 1st Lt. U. S. A. in April

Variation of the Magnetic Needle (Tybee Light) in April 1852

| | | CURRENTS | | | |
|-----|------------------------|-----------------------|--------------------|-----------------------|-----------------|
| No. | Station | at Quarter Net Jan | Maximum Net Jan | at Quarter Net Jan | Flow Net Jan |
| 1 | Off Head of Elba Id | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | Flow |
| 2 | Fig Id Buoy | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | Flow |
| 3 | Entrance of Back River | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | Flow |
| 4 | Head of Fig Id | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | Flow |

Note. The observations were made as far as practicable when the influence of the wind was small. The directions are Magnetic. The Rates are in Nautical miles per hour and are shown on the chart by the small figures at the ends of the current arrows for Maximum Flow and Ebb.

| TIDES | | P. P. P. P. Savannah. | |
|--|----------|-----------------------|----------|
| General Establishment | | VI 12 34 | VI 12 34 |
| Rise of Highest Tide above the plane of reference | 10 12 34 | 0 10 | 0 10 |
| Fall of lowest Tide <i>do</i> below <i>do</i> | 10 12 34 | 2 3 | 3 |
| Rise of Mean Low Water of Spring Tides below <i>do</i> | 10 12 34 | 0 4 | 4 |
| Fall of Mean Low Water of Spring Tides below <i>do</i> | 10 12 34 | 0 3 | 3 |
| Rise of Mean Low Water of Neap Tides below <i>do</i> | 10 12 34 | 0 4 | 4 |
| Fall of Mean Low Water of Neap Tides below <i>do</i> | 10 12 34 | 7 0 | 6 3 |
| Mean <i>do</i> of Spring Tides | 10 12 34 | 0 0 | 0 0 |
| Mean <i>do</i> of Neap Tides | 10 12 34 | 5 7 | 5 7 |
| Mean Duration of Rise & Fall during the middle of | 10 12 34 | 1 30 | 1 30 |
| Mean <i>do</i> of Fall during the middle of the wet | 10 12 34 | 1 30 | 1 22 30 |
| Mean <i>do</i> of Stand | 10 12 34 | 0 20 | 0 20 |

CONTINUATION
FROM
SAVANNAH
TO HEAD OF ARGYLE ISLAND
Scale 1:600
B55

From a Trigonometrical Survey
under the direction of ADOLPHE Superintendent of the
SURVEY OF THE COAST OF THE UNITED STATES
Triangulation by C. BO TELLE, C. P. BOLLES, E. COORD Capt. U.S.A. & D. T. VAN BUREN Lieut. U.S.A. Assist.
Topography by H. L. WHITING Assistant
Hydrography by the party
under the command of Lieut. J. N. MAFFITT U.S.N. Assist.
Scale 1:40,000
1855

