# Report Entitled:

# A Phase I Remote-Sensing Archaeological Survey of A Proposed Borrow Site in the Atlantic Ocean off Sea Island, Glynn County, Georgia

#### Submitted to:

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#### Abstract

Coastal Science and Engineering (CS&E) of Columbia, South Carolina is working with the Sea Island Company to identify and permit a sand source for a beach restoration project. A borrow source has been identified offshore of Sea Island, Glynn County, Georgia. In order to determine any effects on potentially significant submerged cultural resources, CS&E contracted with Tidewater Atlantic Research (TAR) of Washington, North Carolina to conduct a submerged cultural resource remote-sensing survey of the proposed borrow site. Work performed by TAR consisted of a background literature survey, historical research, and cartographical investigation. Field investigations focused on the remote-sensing survey. The proposed project methodology was discussed with and approved by Division Director and Deputy State Historic Preservation Officer David Colin Crass with the Historic Preservation Division of the Georgia Department of Natural Resources (David Crass, pers., comm., 9 January 2018). Remote-sensing survey operations were carried out between 31 January 2018 and 2 February 2018. Analysis of the acoustic data identified no sonar targets or subbottom features in the survey area. Analysis of the magnetic data identified four low intensity short duration anomalies. None of those represent more complex signatures associated with historical vessel remains and no avoidance buffers are recommended. Based on data generated by the remote-sensing survey, no potentially significant submerged cultural resources will be impacted by proposed project activities and no additional investigation in the borrow area is recommended.

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#### Introduction

Coastal Science and Engineering (CS&E) of Columbia, South Carolina is working with the Sea Island Company (SIC) to identify and permit a sand source for a beach restoration project. A borrow source has been identified offshore of Sea Island, Glynn County, Georgia. In order to determine any effect on potentially significant submerged cultural resources, CS&E contracted with Tidewater Atlantic Research (TAR) of Washington, North Carolina to conduct a submerged cultural resource remote-sensing survey of the proposed borrow site. Work performed by TAR consisted of a background literature survey, historical research and cartographical investigation. Field investigations focused on the remote-sensing survey.

The investigation was designed to meet survey criteria discussed with Division Director and Deputy State Historic Preservation Officer David Colin Crass of the Historic Preservation Division of the Georgia Department of Natural Resources and to comply with the National Historic Preservation Act of 1966, as amended, through 1992 (36 CFR 800, Protection of Historic Properties), the Abandoned Shipwreck Act of 1987 (Abandoned Shipwreck Act Guidelines, National Park Service, Federal Register, Vol. 55, No. 3, December 4, 1990, pages 50116-50145), the National Environmental Policy Act of 1969 (Public Law 11-190), Executive Order 11593, the Advisory Council on Historic Preservation Procedures for the protection of historic and cultural properties (36 CFR Part 800) and guidelines described in 36 CFR 64 and CFR 66. Results of the investigation were designed to furnish CS&E and SIC with archaeological data required to comply with State of Georgia and Federal submerged cultural resource legislation and regulations.

Work performed by TAR personnel consisted of a background literature survey, historical research and cartographical investigation. Field investigations focused on the remote-sensing survey. Remote-sensing survey operations were carried out between 31 January 2018 and 2 February 2018. To reliably identify anomalies associated with submerged cultural resources, survey equipment included both magnetic and acoustic remote sensing. Data was collected employing a cesium magnetometer, sidescan sonar, and sub-bottom profiler. Navigation and data collection was accomplished using differential global positioning and HYPACK survey software. To ensure sufficient data would be available to locate any potentially significant magnetic anomalies and sonar targets in the project areas, remote-sensing data were collected along parallel lanes spaced on 65-foot intervals. The areas surveyed also included a 200-foot buffer zone so that any magnetic anomalies or sonar targets located along the periphery of the borrow area could be identified and any impacts from dredging assessed.

Analysis of the acoustic data identified no sonar targets or subbottom features in the survey area. Analysis of the magnetic data identified four low intensity short duration anomalies. None of those represent more complex signatures associated with historical vessel remains and no avoidance buffers are recommended.

Based on data generated by the remote-sensing survey, no potentially significant submerged cultural resources will be impacted by proposed project activities and no additional investigation in the borrow area is recommended.

# **Sea Island Project Location**

The Sea Island borrow site under investigation lies in the Atlantic Ocean approximately 4.4 miles east-southeast of Sea Island in Glynn County, Georgia (Figure 1). The area surveyed by TAR archaeologists included a 200-foot buffer surrounding the borrow site.

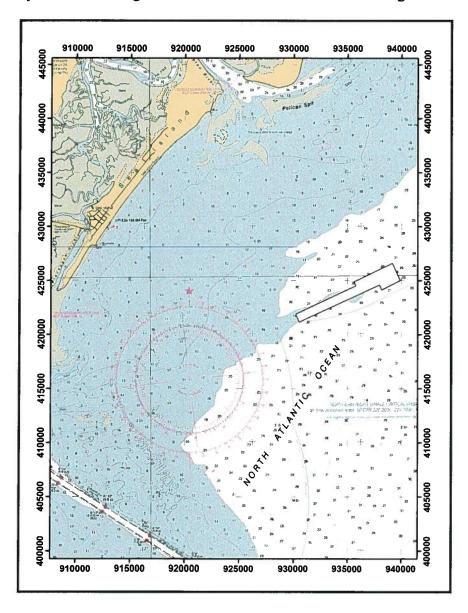


Figure 1. Sea Island borrow area location (extract of NOAA Chart 11506).

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The site surveyed is a 255-acre polygon that includes the 200-foot buffer. The polygon is identified by eight border points (Figure 2). Georgia East State Plane, NAD 83, U.S. Survey foot coordinates for the buffer points place the survey area in the Georgia geographical context (Table 1).

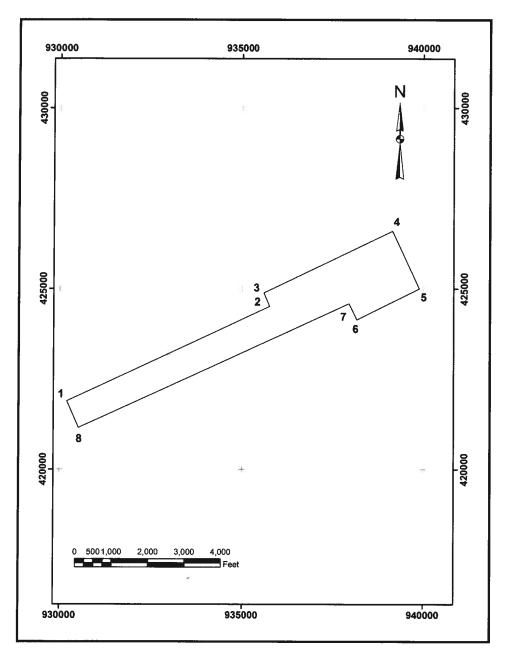


Figure 2. Buffer points for 2018 Sea Island survey area.

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<b>Buffer Point</b>	X Coordinate	Y Coordinate
1	929927.95	421987.65
2	935495.9	424609.39
3	935339.88	424983.93
4	939249.5	426865.79
5	940153.95	424910.75
6	938079.34	423871.54
7	937855.68	424324.15
8	930404.75	420882.57

Table 1. Sea Island borrow area buffer point coordinates.

#### Research Methodology

#### Literature and Historical Research

TAR historians have conducted numerous literature searches of primary and secondary sources to assess the potential to find significant historical and/or cultural resources off coastal Glynn County, Georgia. With respect to the current project area, the extant research was refined by reviewing contemporary scholarly publications and by accessing gratis and premium databases that archive newspapers, government documents, military records and other pertinent historical materials.

Surveys of historical sources focused on documentation of activities such as exploration, colonization, development, agriculture, industry, trade, shipbuilding, commerce, warfare, transportation and fishing that would have been contributing factors in the loss of vessels or presence of other submerged cultural resources in the vicinity of the proposed project area.

Preliminary wreck-specific information was collected from sources that include: Encyclopedia of American Shipwrecks (Berman 1972), Shipwrecks of the Civil War (Shomette 1973), Merchant Steam Vessels of the United States 1790-1868 (Lytle and Holdcamper 1975), Shipwrecks in the Americas (Marx 1983) and numerous historical newspapers. Additional information was reviewed in Shipwrecks of South Carolina & Georgia (Spence 1984), and A Historic Archaeological Resources Protection Plan and Geographic Information System for Shipwrecks in Georgia Waters Under the Jurisdiction of the United States Navy (Institute for International Maritime Research 2006). To determine if any known submerged cultural resources or historically documented shipwrecks are in the current project area, the restricted shipwreck database compiled by former U.S. Army Corps of Engineers archaeologist Judy Wood was also consulted.

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# **Remote-Sensing Survey**

In order to reliably identify submerged cultural resources, TAR archaeologists conducted a systematic remote-sensing survey of the borrow site. Survey activities were conducted from the 25-foot survey vessel *Tidewater Surveyor* (Figure 3). In order to fulfill the requirements for survey activities in Georgia, magnetic and acoustic remote-sensing equipment were employed. This combination of remote sensing represents the state of the art in submerged cultural resource location technology and offers the most reliable and cost-effective method to locate and identify potentially significant targets. Data collection was controlled using a differential global positioning system (DGPS). DGPS produces the highly accurate coordinates necessary to support a sophisticated navigation program and assures reliable target location.

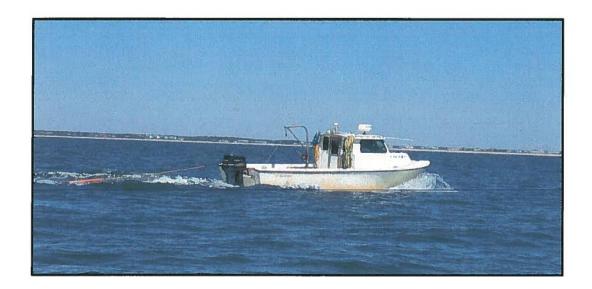


Figure 3. Twenty-five foot Parker survey vessel, Tidewater Surveyor.

An EG&G GEOMETRICS G-881 marine cesium magnetometer, capable of plus or minus 0.001 gamma resolution, was employed to collect magnetic data in the survey area (Figure 4). To produce the most comprehensive magnetic record, data was collected at 10 samples per second. The magnetometer sensor was towed just below the water surface at a speed of approximately four to five knots. Magnetic data were recorded as a data file associated with the computer navigation system. Data from the survey were contour plotted using QUICKSURF computer software to facilitate anomaly location and definition of target signature characteristics. All magnetic data were correlated with the acoustic remote-sensing records.

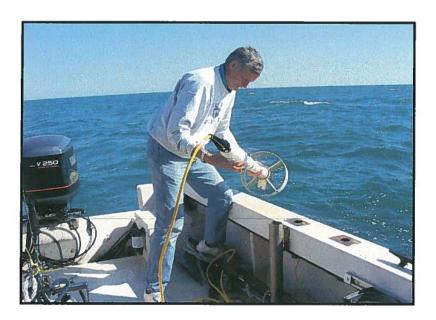


Figure 4. Geometrics G-881 cesium vapor magnetometer.

A 445/900 kHz Klein System 3900 digital sidescan sonar (interfaced with SonarPro Sonar Processing System) was employed to collect acoustic data in the survey area (Figure 5). The sidescan sonar transducer was deployed and maintained between five and seven feet below the water surface. Acoustic data were collected using a range scale of 50 meters to provide a minimum of 200% coverage and high target signature definition. Acoustic data were recorded as a digital file with SonarPro and tied to the magnetic and positioning data by the computer navigation system.

Acoustic sub-bottom data was collected using an EDGETECH 3100P Portable sub-bottom profiler with an SB-216S tow vehicle (Figure 6). The SB-216S provides three frequency spectrums between 2 and 15kHz with a pulse length of 20 msec. Penetration in coarse and calcareous sand is factory rated at 6 meters with between 2 and 10cm of vertical resolution. During the survey the sub-bottom transducer was deployed and maintained between three to five feet below the water surface. To facilitate target identification, sub-bottom sonar records were electronically tied to DGPS coordinates and recorded as a digital file using EDGETECH's DISCOVER software.

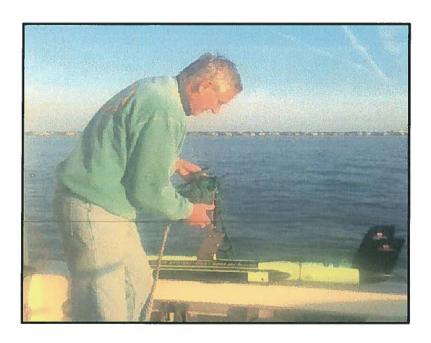


Figure 5. Klein System 3900 digital sidescan sonar.



Figure 6. EdgeTech SB-216S tow vehicle.

A TRIMBLE AgGPS was used to control navigation and data collection in the survey area. That system has an accuracy of plus or minus three feet, and can be used to generate highly accurate coordinates for the computer navigation system on the survey vessel. The DGPS was employed in conjunction with an onboard laptop loaded with HYPACK navigation and data collection software (Figure 7). Positioning data generated by the navigation system were tied to magnetometer records by regular annotations to facilitate

target location and anomaly analysis. All data is related to the Georgia East State Plane Coordinate System in NAD 83.



Figure 7. Computer navigation system located at vessel helm.

#### Analysis of the Survey Data

To ensure reliable target identification and assessment, analysis of the magnetic and acoustic data was carried out as it was generated. Using QUICKSURF® contouring software, magnetic data generated during the survey were contour plotted at 2-gamma intervals for analysis and accurate location of magnetic anomalies. The magnetic data were examined for anomalies, which were then isolated and analyzed in accordance with intensity, duration, areal extent and signature characteristics. Sonar records were analyzed to identify targets on the basis of configuration, areal extent, target intensity and contrast with background, elevation and shadow image, and were also reviewed for possible association with identified magnetic anomalies.

Data generated by the remote-sensing equipment were developed to support an assessment of each magnetic and acoustic signature. Analysis of each target signature included consideration of magnetic and sonar signature characteristics previously demonstrated to be reliable indicators of historically significant submerged cultural resources. Assessment of each target includes avoidance options and possible adjustments to avoid potential cultural resources. Where avoidance is not possible the assessment includes recommendations for additional investigation to determine the exact nature of the cultural material generating the signature and its potential National Register of Historic Places (NRHP) significance. Historical evidence was developed into a background context and an inventory of shipwreck sites that identified possible

correlations with magnetic targets (Appendix A). A magnetic contour map of the survey area was produced to aid in the analysis of each target.

## Sixteenth-Century Historical Overview

In Handbook of the American Frontier: The Southeastern Woodlands, Heard (1987:373) remarked that

Father Francisco de Velascola, a Franciscan missionary from Castro-Urdiales, Spain arrived in Florida in 1593. Stationed on St. Simons Island (Asao), in Georgia, he impressed the Indians favorably with his physical strength, as well as his piety. In 1597 a revolt against the missions erupted, led by an Indian who hated the priests because they opposed his elevation to chief of his village.

In the interim, Andrés de Segura [later known as distinguished hydrographer Fray Andrés de San Miguel] purportedly chronicled his experiences after being shipwrecked "on or near St. Simons" in 1595 according to historian John R. Swanton (Swanton quoted in: Jackson 1954:171, 177). In his "Early Florida Through Spanish Eyes," Jackson (1954:188) commented that the intrepid "lad, of some fifteen or sixteen years" wrote an "account full of gentle humor, observation and characterization of his companions." According to the author of *The Unsettlement of America* a

Spanish ship was carrying South American silver from Mexico and Havana to Spain when it hit a storm and then wrecked off the coast of what are now the Georgia Sea Islands. Those who made it to land feared both starvation and cannibals, but the Indians whom they encountered gave them food and shelter and helped them as they made their way southward (Brickhouse 2015:173).

#### **Seventeenth-Century Historical Overview**

The first European settlement in the Brunswick area appears to be a Franciscan mission placed on Jekyll Island in the 17<sup>th</sup> century. Swanton records a list of Franciscan missions from 1655 showing San Buenventura de Guadalquini in the Brunswick area and probably on Jekyll Island (Crook 1985:7). Pearson places European occupation earlier than 1600 on St. Simons by burial evidence at the Taylor Mound although this evidence may have been trade items (Pearson 1977:80).

## **Eighteenth-Century Historical Overview**

1733, the British, under the command of General James E. Oglethorpe established a settlement along the Savannah River. Shortly after the colony's founding, Oglethorpe

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erected a system of outposts and later, fortifications along the Savannah River and other coastal waterways. The initial British settlement in the Brunswick area began with the fortification of St. Simons Island and the construction of Fort Frederica by Oglethorpe in 1736 (Heard 1987:275). The fort and town were located on a bend in the river on the west side of island. A palisaded wall, made of cedar posts 12 inches thick and set upright in the ground, protected the town (Cate 1930:58). A ditch that could be flooded in times of emergency surrounded the wall and provided additional protection. Prior to its abandonment following the conclusion of hostilities with Spain, Frederica held a population of almost a 1,000 with another several hundred clustered around Fort St. Simons in the south (Vanstory 1981:130).

Additional fortifications were constructed at the southern tip of St. Simons and at the northern end of Jekyll Island. Fort St. Simons, originally called Delegal's Fort, consisted of parapets made of rows of barrels filled with earth and planted with thorns (Cate 1930:61). Its garrison mainly served as an early warning for the troops at Frederica. A road was cut through the forest to facilitate communication between the two posts. Major William Horton commanded the other outpost on Jekyll Island. The major had crops planted on the island shortly after the establishment of Frederica and also built a barn, a two-story tabby house and a brewery to provide food and beer for the soldiers stationed on St. Simons (Crook 1985).

Evangelists Charles and John Wesley spent time on St. Simons Island "when they preached to settlers and soldiers at Fort Frederica" (Davis 2013:x, 45). The British brothers were later credited with commencing the religious movement culminating into the "Methodist Church" (Davis 2013:x).

St. Simons became a major focus in the hostilities that erupted during the War of Jenkins Ear (1739-1748). An unsuccessful raid on St. Augustine in 1739 by General Oglethorpe and Georgian troops spurred a Spanish retaliatory raid on the English garrison located at St. Simons. Under the command of Governor Manuel Montiano, 3000 Spanish arrived off St. Simons Sound on 7 July 1742, and quickly seized Fort St. Simons, which had been abandoned by English soldiers. However, Heard (1987:46) related that

Oglethorpe's forces struck from ambush, killed 160 Spaniards and 40 Yamassee Indians and drove the survivors back to the protection of their warships. Oglethorpe's Indian allies included Yamacraws, Creeks, and Chickasaws. The Yamacraws, in particular, played an important role in the victory...Before the Spaniards returned to Florida, Oglethorpe's Indians prowled around their camp at night and collected more scalps.

The Battle of Bloody Marsh forced the Spanish to retreat back to St. Augustine and ended their claim to the Southern colonies. The battle also ended the future of Frederica. Once the Spanish threat was removed the garrison was gradually reduced and the town eventually abandoned. By 1760, the town had declined to a handful of dwellings.

Brunswick was established on the mainland in 1771. The legislative assembly of the Royal Province of Georgia purchased 1,000 acres of land along the Turtle River from Mark Carr for the site of the new town. Three hundred and eighty three of those acres were reserved for platting the town and the rest was utilized as a common area. Brunswick was named after the German Duchy of Brunswick-Luneberg, the ancestral home of King George III of England. One hundred seventy-nine of the town's lots had been granted, and a few dwellings erected before the Revolutionary War forced the abandonment of the area (Cate 1930:163; Gayner 1971:n.p.).

Glynn County, named for John Glynn, a British parliamentarian who supported American Independence and a man considered to be a special friend to the people of Georgia, was founded in 1777 as one of the original eight counties of the State of Georgia (Glynn County 1989:11-13, 11-14). Major settlement of the county followed the cessation of hostilities with Spain at the conclusion of the War of Jenkins Ear. James McKay received The English Crown Grant for Sea Island on 5 January 1768. McKay was granted "400 acres on Sea Island once known as Long Island and bounded on the north by Rainbow Inlet, west by marshes and creeks dividing the island from St. Simons Island" (Fortson and Bryant n.d.).

Major occupation of Jekyll Island began in 1796 with the purchase of the island by four Frenchmen: Houchet, de la Vauxe, de Chapedelaine and duBignon. Poulain duBignon later traded his share of Sapelo Island for complete control of Jekyll. The Crown also granted 35 parcels of land from 1755 to 1775 on St. Simons. Major land holders on the island were Raymond Demere, granted 300 acres of land in 1762-63; James Graham, granted 1,000 acres of land in 1773; John Graham, granted 1,082 acres of land in 1774; James McKay, granted 200 acres of land in 1772; Clement Martin, granted 400 acres of land in 1773; Lachlan McIntosh, granted 900 acres of land in 1771; John Perkins, granted 450 acres of land in 1765 and Jacob Whitter, granted 350 acres of land in 1770-71. Colonels Island grant in 1767 went to James Forrester who received 500 acres. The grant book indicates that Forrester owned all of Colonels Island (Fortson and Bryant n.d.).

The American Revolution disrupted the development of Brunswick and the sea islands. Georgia was not initially involved in the crisis between the American colonies and Great Britain that eventually lead to the outbreak of fighting. It was the only colony to enforce the Stamp Act and refused to send delegates to the Continental Congress (Bartley 1983:7). Most of Brunswick's inhabitants supported the royal government. When hostilities began, most residents left going either to loyalist Florida, the West Indies or England. Like Brunswick, most of the population of St. Simons remained loyal to England and abandoned the island.

The region saw very little activity during the war. In August 1777, British troops landed on St. Simons Island, making use of the naturally deep harbor as a base of operations. A year later in April 1778, Continental troops under Colonel Samuel Elbert captured three British ships at Pikes Bluff, north of Fort Frederica. At the conclusion of the war, the plantations were re-established and flourished after the introduction of Sea Island cotton. Brunswick, on the other hand, would take decades before its potential as a port would be

fully realized. Brunswick's natural harbor was ideal for the development of coastal and international trade networks. Early 19<sup>th</sup>-century development of the local economy included the trade of Sea Island long staple cotton, rice, timber and naval stores. Cotton encouraged establishment of large plantations and several were set up on the mainland. In conjunction with the proliferation of shipping activities in and around Brunswick, shipbuilding became a major industry of the region. Timber for ship construction, especially the live oak (*Quercus virginialia* species), was in vast supply throughout the region (Glynn County 1989:II-14). In addition to local use, live oak was shipped to northern shipbuilders and U.S. Naval shipyards, some of which was used during the construction of the USS *Constitution* (Coastal Georgia Historical Society [CGHS] 1999[1973]:6).

A chart produced ca. 1797 entitled An Accurate Survey of the Town and Commons of Brunswick in the County of Glynn and State of Georgia Agreeable to the original Plan by Geo. Purvis depicted two contemporary vessels. The referenced surveyor general elected to illustrate a sloop navigating the Brunswick River and a brig sailing in "Part of Turtle River" (Purvis 1797).

#### **Nineteenth-Century Historical Overview**

The first lighthouse was constructed on St. Simon's Island at Coupers Point in 1810. Plans for the structure called for a 75-foot-tall octagonal tower with a 25-foot base tapering to 10 feet at the top (CGHS 1999[1973]:16). The lighthouse was constructed in part of tabby from the ruins of Fort Frederica. James Gould, who supervised the construction of the beacon served as the first keeper, a post he would hold until 1837. The lighthouse continued in operation until retreating Confederate forces destroyed it in 1861 (Gearhart 1992:3-4).

Despite the prosperity on the Sea Islands and its excellent natural harbor, Brunswick grew slowly during the early 19<sup>th</sup> century. Development of a port was hampered by a number of factors. Shipping activities at the larger ports of Savannah and Charleston siphoned much of the surrounding trade. In addition, the Turtle River provided poor access to the interior. While the Altamaha River opened much of the region's hinterland, its confluence with the sea was at Darien where port facilities were inadequate to handle large volume shipping. Though its port facilities continued to export naval stores and cotton throughout the last quarter of the 18<sup>th</sup> century and into the 19<sup>th</sup> century, Brunswick was unable to approach the level productivity of Savannah and Charleston.

Efforts to develop the interior began in the 1820s. In 1826, William R. Davis and Urbanus Dart secured a charter to form the Brunswick Canal Company to build a canal between Brunswick and the Altamaha River. The company was reorganized in 1830, but mismanagement caused the enterprise to fold with little progress being made on the canal. In 1834, Thomas Butler King, a state legislator from the Brunswick area, secured renew backing for the project (Ginn 1998:9-10). With the help of investors from Boston, King expanded the canal and initiated the construction of a rail line along the coast. He

also organized a bank and real estate company in Brunswick to help fund the project. This new activity ushered in a brief boom for the town, which became incorporated in 1836. Construction began on a four-story luxury hotel, the Oglethorpe House, and the town's first newspaper, the *Brunswick Advocate*, began publication. Recreational boating, particularly yachting, became popular among the area's wealthy population during this period. Regattas, involving a variety of small rowing and sailing craft, were a common sight in the harbor. The economic effects of the Panic of 1837, however, eventually reached Brunswick pushing the town into depression and halting the canal just as it was nearing completion. The canal was later completed in 1854 but was abandoned once again by 1860.

During the fervor of Secession, "the Sea Islands off the coasts of Georgia and South Carolina were one of the last areas in the United States to see a continued arrival of Africans who had illegally been transported to the United States to be sold as slaves. The last ship on record to have 'imported' African captives is the slave ship, the *Wanderer*, which brought a cargo of 400 Africans to Jekyll Island, Georgia, in 1858" (Brøndum 1999:153).

The American Civil War contributed to the region's decline. Though a number of batteries were erected on St. Simons and Jekyll islands, Major General Robert E. Lee ordered the fortifications abandoned following the fall of Port Royal, South Carolina and Fort Pulaski, Georgia (Childs 1960:54). Brunswick was also abandoned following Federal occupation of St. Simons Island. On 9 March 1862, a naval force under the command of Commander Godon and consisting of the USS *Mohican*, USS *Pocahontas* and the USS *Potomska* took formal possession of St. Simons, Jekyll and Brunswick (Childs 1960:55, 58; Navy Department 1971:II-31). Brunswick was a quiet post for the U. S. Navy. On 1 February 1864, a boat expedition from the USS *Braziliera* under the command of Acting Master William T. Gillespie captured the blockade-runner sloop *Buffalo* while attempting to run out with a cargo of cotton. All other naval operations around Brunswick were routine (Navy Department 1971:IV-12).

Following the war, the economy of Brunswick suffered a severe depression (Childs 1960:vi.). The major industry, cotton production, was virtually destroyed. Efforts to expand the port by developing part of Colonels Island into a new city, to be named South Brunswick, failed with the collapse of the cotton trade. Brunswick turned to timber and tourism as its economic mainstays. Completion of the Brunswick-Macon Railroad (1869), the Brunswick-Albany Railroad (1871) and the Brunswick-Florida Railroad (1880) brought tourists and much needed commerce to the new "recreation area." The town and port began to grow with this shift in economy. Its population expanded from 2,500 in 1875 to 5,133 by 1884 (Ginn 1998:23).

The 1880s saw Brunswick first in lumber export, second in naval stores, third in cotton and fifth in phosphate on the Atlantic seaboard (Childs 1960:62-63). A new lighthouse was constructed on St. Simons in 1871 to meet the demands of the increased vessel traffic.

The decline of the plantation system opened the sea islands to development during the post war period. It soon became fashionable for wealthy Georgians to spend the summers amidst the cool ocean breezes of St. Simons. Beach cottages, boardinghouses and a number of luxury hotels, including the Hotel St. Simons [1888], sprang up all over the island. To cater to the influx of tourists, Brunswick opened the Oglethorpe Hotel in 1888 and added the 800-seat L'Arioso Opera House to accommodate the cultural needs of its wealthy visitors. Jekyll Island in turn developed into a retreat for the wealthy. In 1887, John E. duBignon sold the island to the Jekyll Island Club for \$125,000 (Crook 1985:8). The island became a place to hunt, fish and conclude business deals for its exclusive members including such names as the Morgans, Vanderbilts, Goodyears and Rockefellers (Ginn 1998:36; Glynn County 1989:II-14).

The economy was further stimulated by the expansion of the timber industry. Shortly after the Civil War, a number of lumber mills were established on St. Simons Island and the mainland. Principal among these were the Cook Brothers Mill (1866) in Brunswick, Gascoigne Mills (1874) and Dodge, Meigs Company (1876) on St. Simons. The repeal of the Federal Land Act of 1866 opened thousands of acres of timberland to the mills. Because of its deep harbor, Brunswick was able to tap into timber resources along the Altamaha and Satilla rivers with large rafts of logs a common sight along the region's coastal waterways. Ships from all along the east coast, Europe and South America called on the mills at Gascoigne Bluff and Brunswick. Forty vessels could be regularly seen loading or waiting to be loaded in the harbor (Fendig 1998:12).

This period was also the heyday of steam travel along the coast. A number of lines were established to carry passengers to the resorts on St. Simons and to handle the region's growing industrial infrastructure. In the 1870s, the Brunswick and Florida Steamboat Company (B&FSC), also known as the Cumberland Route, established regular service between Brunswick and Fernandina, Florida with stops at Jekyll Island and Dungeness on Cumberland Island (Fendig 1998:21).

Vessels operated by the B&FSC included the City of Brunswick, Hildegarde, Thomas Collyer, Passport, Hessie, Elaine, Cracker Boy, Seagate, Emmeline and Atlantic. Additional lines serving the region included the Brunswick, St. Simon and Darien Steamboat Company, the Satilla River Line and the Savannah Line. St. Simons Transit Company handled communication between Brunswick and the lumber mills on St. Simons Island. The company originally operated a small skiff between Gascoigne Bluff on St. Simons and Back Landing at Brunswick, but as the lumber business expanded, steamboats became a necessity to handle the increased passenger traffic and freight to the island.

In early spring 1896, esteemed Clarence Bloomfield Moore conducted brief excavations of two prehistoric mounds in southern Glynn County but dismissed both with similar language; specifically that there were no interesting discoveries (Larsen 1998:9). Previously, the 28 March 1896 edition of *The Darien Gazette* commented that

Professor C. B. Moore and Surgeon Miller, both connected with the Academy of Natural Sciences of Philadelphia, arrived here from Florida on Tuesday on the steamer 'Gopher.' Their mission is to explore the numerous Indian mounds located in the county [McIntosh] (In: *The Georgia And South Carolina Coastal Expeditions of Clarence Bloomfield Moore*, Larsen 1998:9)

For no discernable reason, Moore did not carry out surveys on St. Simon's Island. At that date, the "southern one-half of the island, unlike Jekyll and Cumberland islands, was divided into many small land holdings. It was also a much more densely populated area, which may have deterred Moore (Larsen 1998:9).

#### **Twentieth-Century Historical Overview**

Following the turn of the century, Brunswick continued its industrial expansion. Many of the South's major rail lines linked the city and most owned and operated ship terminals to carry products to markets in Europe and South America. Steamer service connected the city with markets through the region, Atlantic and Gulf coasts and foreign waters. Foreign and inter-coastal service was conducted by established names such as Bee, Strachen and Mallory/Clyde. By 1901, the value of goods imported and exported through the port exceeded 26 million dollars (Fendig 1998:104; Ginn 1998:90). This value reached a peak of 75 million by 1919.

The city moved heavily into the ship construction during the early years of the 20<sup>th</sup> century. In 1902, there were four small yards in Brunswick with a total capital of \$15,170. William S. Irvine, wrote to the Brunswick Board of Trade and commented on the immense amount of pine, ash, gum, cypress and oak passing through Brunswick bound for the northern and government shipyards and said that Brunswick was an excellent place for capitalists to invest in ship construction facilities (Irvine 1902). By 1917, six shipyards were operating in Brunswick producing cargo and naval vessels for the war effort.

Brunswick's shipyards produced a variety of vessel types. Because Germany employed magnetic mines many of the yards built in wood and concrete. The first concrete hulled vessel on the Atlantic coast was launched at Brunswick and Brunswick's first steel steamer, the W. B. Cox, was launched on 25 November 1917 at the Brunswick Marine Construction Plant (Brunswick News, 25 November 1917; Chamber of Commerce 1960). Economic growth due to ship construction fell off after World War I; however, growth was renewed in 1921 with the establishment of new ship facilities.

The City Directory of 1921 shows four construction companies still in operation: American Shipbuilding Company, Brunswick Marine Construction Company, Carter-Watkins Company and the United States Maritime Corporation (Childs 1960:vi; Chamber of Commerce 1921). The economic base of the city expanded with the establishment of the Hercules Powder Company and Brunswick Pulp and Paper Company in the 1930s (Childs 1960:vi).

During 1917, the B&FSC steamer *Emmeline* continued to transport passengers and cargo from the Port of Brunswick to islands lying off Glynn County. According to *Johnson's Steam Vessels of the Atlantic Coast*, the 137-ton vessel was built at Ashtabula, Ohio in 1890 and its dimensions [1917] measured 82.2'x22.9'x6.9' (Johnson 1917:23). Another Brunswick-based steamboat company, also under management of J. B. Wright, operated the 97'x20.1'x5.8' *Seagate*, which had been built at Newburgh, New York in 1894 (Johnson 1917:158).

The postwar prosperity ushered in a new period of tourism. By 1920, the "forerunner of the [Sea Island] beach club" served as an auspicious venue for its guests (Vanishing Georgia, Georgia Archives, University System of Georgia [USG] 1920). At this date, steamers, including the *Attaquin*, regularly ran from Brunswick to St. Simons Island to accommodate charters, picnic outings and fun seeking day trippers (USG 1900-1939).

In 1924, the Torras Causeway was built connecting St. Simon Island to the mainland. The new roadway reduced travel to St. Simons from one hour by steamer to 15 minutes by car (Ginn 1998:57). The increased access spurred new development on the island. In 1926, Howard Coffin purchased Retreat Plantation turning the once stately plantation into a world-class golf course. Coffin also added roads to connect his property with the new causeway and the pier at the southern end of the island. Howard Coffin also purchased Long Island (later named Glynn Island and currently called Sea Island) from a group of Georgia investors. In addition to a group of cottages already on the island, Coffin hired Addison Mizner of Palm Beach fame to construct a luxury hotel. The 46-room structure was built along the then popular Spanish style and was named "The Cloister" (Ginn 1998:64).

Owing to its prestige, local amenities like the Sea Island Yacht Club (SIYC) attracted wealthy celebrities and prominent figures such as National politicians. In 1927/1928, Howard Coffin and his spouse entertained President Calvin Coolidge and Grace Coolidge at their luxurious enclave (USG 1928).

Brunswick's ship building capacity increased with the construction of a larger, more modern facility at the outbreak of World War II. The 496-acre facility was built on Oglethorpe Bay by the Brunswick Marine Construction Corporation and was capable of launching six ships at a time. Although Brunswick Marine had almost completed the yard in 1942, the United States Maritime Commission judged its rate of ship construction unsatisfactory. The Commission forced the Brunswick Company to turn over the yard and its contracts to the J. A. Jones Construction Company, who in turn would compensate Brunswick Marine for the costs of construction (Lane 1951:535).

From 1942 to 1944, the shipyard produced a total of 99 vessels; 85 of which were liberty ships constructed for the United States military (Fassett 1948:155; Gearhart 1991:4-5; Lane 1951:826). The J. A. Jones Construction Company Shipyard at Brunswick was one of two shipyards operated by Jones. The other yard was located in Panama City, Florida. Jones moved from North Carolina where he had been a general contractor prior to the war. His primary experience with the military was the construction of Army installations

for the War Department. Jones had never constructed a ship before his recommendation in 1942 as a shipyard manager to Admiral Vickery by W. H. Harrison of the War Production Board (Lane 1951:148, 801). After the J. A. Jones company took over operation of the shipyard their performance was not always deemed acceptable to Admiral Vickery either, but the slow performance was tolerated since it was a large entity and could often utilize men from other sections of the company as needed. The majority of the men hired to work in the shipyard were unskilled laborers recruited from farms and small towns in Georgia and other southern states (Lane 1951:250, 535).

At the start, the Jones shipyard at Brunswick averaged 278 days from laying the keel to the time of launch - one of the highest for any shipyard. Later they had improved considerably and were averaging only 45 days per ship (Lane 1951:208). In terms of the actual number of man-hours spent per ship the yard averaged 584.3; only slightly above the contract estimate (Lane 1951:209, 475). The average cost per ship built at the Brunswick shipyard was \$1,999,800; again only slightly more than the cost at other southern shipyards (Lane 1951:826).

Following the war, the port declined dramatically. Efforts to improve the harbor by dredging and rehabilitating shore facilities did little to stop the decline. By 1953, only six commercial vessels called on the port's facilities. New industrial development brought revitalization to the port in the mid-1950s. In 1952, Babcock and Wilcox Company, a producer of steam-generating equipment, bought part of the Jones Shipyard. In 1955, Allied Chemical established a plant in the city. Other industries expanding or moving to Brunswick during this period included Dixie Paint and Varnish Company, Knight Saw Company, Kut-Kwick Corporation, Concrete Products Company, Bestwell Gypsum and Georgia Power Company. By 1960, 71 vessels were documented as clearing the port (Fendig 1998:107).

The fisheries industry also became important to Brunswick's economy after the war. The first quick-freeze shrimp plant was opened during the war and three additional plants opened soon after. The harbor also had two crab packing houses. Shrimp and crab products were shipped to consumers throughout the U. S. in refrigerated trucks or by air. During the peak fishing season, the industry employed 500 people and more than 100 shrimp boats (Gayner 1971:n.p.).

During the administration of Jimmy Carter, the President and First Lady often visited Musgrove Plantation located on St. Simon's Island. On 21-23 January 1978, the couple went boating and fishing aboard the *Helmsman* "on the inland waterways near Musgrove Plantation" in the company of a Brunswick optometrist, a Brunswick attorney, and a U.S. Secret Service agent (The White House [TWH] 1978a; TWH 1978b; TWH 1978c).

The Port of Brunswick has grown from a plantation to a deep-sea port that receives over 400 ships a year. It has expanded its capacity with three terminals, Mayor's Point, Marine Port Terminals and Lanier Dock, all under the management of the Georgia Ports Authority (Glynn County 1989:VI-4). During the 1980's port capacity increased further with the development of Colonels Island into a roll-on/roll-off and dry bulk handling

facility. By 1987, the port was providing 33,500 jobs and bringing in 3.5 billion dollars in revenue to the region (Fendig 1998:107).

# **Twenty-First Century Overview**

According to the current website maintained by "Golden Isles," Sea Island retains its prominence as "an internationally acclaimed resort" and features one of "the world's most exceptional destinations;" the Cloister Hotel (GoldenIsles.com). In 2004, "Sea Island was chosen to host the G8 Summit because of its remote, easily secured location, luxurious accommodations, service and and amenities" (GoldenIsles.com).

A contemporary description of the largest barrier island lying across "the immortalized Marshes of Glynn" follows

St. Simons Island, one of the famed and fabled Golden Isles that grace this corner of Georgia's coast, is especially alluring. St. Simons Island, called 'San Simone' by 16th century Spanish explorers, is now simply called 'wonderful' by those who retreat to its shores today. Visitors will travel back in time as they Explore [sic] the island's well-preserved history and abundant cultural attractions, heritage sites, monuments and parks (StSimonsIsland.com).

#### **Project Area Shipwrecks**

Extant historical sources for the earliest periods of exploration and colonization are extremely limited and contain few geographically specific details. This was primarily a factor of the state of the art of navigation. In later periods shipwreck references become more frequent, but until well into the twentieth century, location data was rarely accurate. This was because of the limitations of navigational accuracy and the methods of communicating and recording wreck-specific information. The loss of a vessel, cargo, and crew was more important than the precise location of the disaster. Those problems make exact correlation of historical shipwreck information with remote-sensing data difficult under most circumstances. However, a list of vessel losses (Appendix A) in the project vicinity provides a basis for preliminary vessel specific association with remote-sensing targets.

The remains of vessels provide valuable opportunities to examine and reconstruct important aspects of our maritime heritage that frequently have not survived in the written historical record. Historic shipwrecks contain information concerning the design and construction of vessels that is not included in the written record. Well into the twentieth century, shipwrights continued to build vessels without benefit of plans or documentation.

Although the displacement of shipwrights by engineers in the nineteenth and twentieth centuries brought increasing documentation, much of that evidence has not survived. This makes shipwrecks one of the most important sources of data concerning the evolution of vessel architecture and construction.

Ships and small vessels provided the most important element of trade and transportation system until late in the nineteenth century. They were the essential element of European exploration and development of the western hemisphere. Because of the instrumental role vessels played in that historical process, their remains contain an important record of the evolving material culture in the area. Artifacts associated with wrecks provide insight into shipboard life that permits the reconstruction of historic lifeways. Material carried as cargo reflects the development of the economic system that supported European development of North America. Cargo also reflects the development of technologies associated with virtually every aspect of life along the Atlantic seaboard.

## **Project Area Shipwreck Potential**

A survey of historical and archaeological literature and archival background research confirmed considerable evidence of maritime activity on St. Simons Sound and the surrounding coastal waters. From the late 16<sup>th</sup> century, coastal watercraft have operated in the area in support of transportation, communication, warfare, trade and fishing. Although the first European exploration of the Brunswick area was carried out by the Spanish in the 17<sup>th</sup> century, it was almost one hundred and fifty years before the English established a settlement in the Brunswick area. That settlement began with the fortification of St. Simons Island and the construction of Fort Frederica by General James E. Oglethorpe in 1736. Under the protection of the Fort Frederica garrison settlers immediately began to establish an agricultural foothold and the town of Brunswick was established in 1771. During this early period small vessels supported most of the commercial activities of the area. Small vessels that were operated on the creeks, rivers and sounds provided the most convenient means of transportation and commerce.

After the American Revolution maritime activity began to increase rapidly. Early in the 19<sup>th</sup> century the local economy was based on the production of Sea Island long staple cotton, rice, timber and naval stores. Large plantations were set up on Long Island, St. Simons and the mainland. In conjunction with the proliferation of associated shipping activities, shipbuilding became a major industry of the region. In spite of the apparent potential, maritime activity associated with development proceeded slowly and was eclipsed by the development of Savannah.

The Civil War and Reconstruction further undermined economic prosperity in Brunswick and interrupted the region's maritime commerce. However, after the war, wealthy Union industrialists and entrepreneurs began to invest in the region and develop the area's recreational and agricultural potential. The lumber industry created considerable economic stimulus and brought an influx of coastal vessel to Brunswick Harbor. Steam transportation facilitated that development and opened the interior to trade. In the 20<sup>th</sup>

century, shipbuilding became a major industry in Brunswick. By World War I, six shipyards were operating in Brunswick producing cargo and naval vessels to support America's role in that conflict. Following American entrance into World War II another shipyard was constructed on Oglethorpe Bay by the Brunswick Marine Construction Corporation and was capable of launching six ships at a time. By the end of the war over a hundred ships had been launched.

Following the war, the port declined dramatically. However, that proved to be a temporary trend and by 1953 industrial development brought signs of revitalization. In 1952, Babcock and Wilcox Company bought part of the World War II shipyard and began producing steam-generating equipment. In 1955, Allied Chemical established a plant in the city. Other industries expanding or moving to Brunswick during this period included Dixie Paint and Varnish Company, Knight Saw Company, Kut-Kwick Corporation, Concrete Products Company, Bestwell Gypsum and Georgia Power Company. Those industries were supported by inland barge traffic and by 1960, 71 vessels were clearing the port yearly.

Fishing also became an important post-war industry with more than 100 trawlers operating out of area. During the 1980s, the Brunswick port capacity increased significantly with the development of the Colonels Island roll-on/roll-off and dry bulk handling facility. By 1987, vessel traffic at the port provided 33,500 jobs and bringing in 3.5 billion dollars in revenue to the region.

As a result of centuries of maritime activity, St. Simons Sound and Brunswick Harbor form a complex and highly sensitive historical environment with a recognized potential for significant submerged cultural resources. Over 300 years of maritime activity has generated an important archaeological record that includes a wide variety of lost or abandoned ship and vessel sites, inundated terrestrial sites and structures, and riverine dumps. Historical research has documented at least 31 shipwrecks in Georgia coastal waters in the vicinity of shoals at the entrance to Brunswick Harbor (Appendix A). At least four of these historically documented wrecks date to the colonial and early Federal periods, another 17 have been documented as lost during the 19<sup>th</sup> century and 10 were lost during the modern era.

#### **Previous Surveys in the Project Vicinity**

In 1991, the U.S. Army Corps of Engineers, Savannah District (USACE-Savannah) proposed to carry out nourishment projects on portions of the St. Simon Island and Jekyll Island beaches in Glynn County. In order to identify potentially significant submerged cultural resources in three offshore borrow areas, the USACE-Savannah issued a work order under an open-ended contract with Gulf Engineers and Consultants (GE&C) of Baton Rouge, Louisiana. Under a subcontract with GE&C, Tidewater Atlantic Research (TAR) of Washington, North Carolina conducted a cultural resource remote-sensing survey using sidescan sonar and a marine magnetometer of select areas near Brunswick Inlet and Pelican Spit off the mouth of Hampton River in 1992.

One potentially significant target was identified during the investigation. It was located near the southeastern end of Survey Area III northwest of buoy "R" 8. Material generating the anomaly produced a dipolar magnetic signature of 103 gammas and over a duration period of 14 sample intervals. Sonar confirmed that material generating the signature was buried in coarse sand associated with a bar on the north side of the channel. As the target could be associated with shipwreck material, avoidance was recommended. In the event that avoidance was not possible, additional investigation of the target was recommended to identify material generating the signature and assess its eligibility nomination to the NRHP. No targets were identified in either the Pelican Spit or the Brunswick Channel Area II (Watts 1992).

In 2002, Olsen Associates of Jacksonville, Florida acted as the consulting engineer for the Georgia Department of Natural Resources for a proposed beach renourishment project off St Simons Island. The sand source material for the project was a borrow area located near the north breakers on the north side of the entrance channel to Brunswick Harbor approximately 1.3 miles southeast of St. Simons Island. In order to determine the proposed project's effects on potentially significant submerged cultural resources, Olsen Associates contracted with TAR to conduct a proton precession magnetometer and sidescan sonar survey of the proposed borrow area. Prior to the fieldwork, a program of historical and documentary research was conducted to provide a proper framework for submerged cultural resource assessment in the Brunswick/St. Simons area. Fieldwork activities were carried out between 25–26 October 2002. Analysis of the remote-sensing data revealed no magnetic and/or acoustic anomalies within the proposed borrow area. No further investigation is recommended in conjunction with the proposed project (Watts 2002).

#### Signature Analysis and Target Assessment

While no absolute criteria for identification of potentially significant magnetic and/or acoustic target signatures exist, available literature confirms that reliable analysis must be made on the basis of certain characteristics. Magnetic signatures must be assessed on the basis of three basic factors. The first factor is intensity and the second is duration. The third consideration is the nature of the signature; e.g., positive monopolar, negative monopolar, dipolar or multi-component. Unfortunately, shipwreck sites have been demonstrated to produce each signature type under certain circumstances. Some shipwreck signatures are more apparent than others.

Large vessels, whether constructed of iron or wood, produce magnetic signatures that can be reliably identified. Smaller vessels, or disarticulated vessel remains, are more difficult to identify. Their signatures are frequently difficult, if not impossible, to distinguish from single objects and/or modern debris. In fact, some small vessels produce little or no magnetic signature. Unless ordnance, ground tackle or cargo associated with the hull produces a detectable signature, some sites are impossible to identify magnetically. It is also difficult to magnetically distinguish some small wrecks from modern debris. As a consequence, magnetic targets must be subjectively assessed according to intensity,

duration and signature characteristics. The final decision concerning potential significance must be made on the basis of anomaly attributes, historical patterns of navigation in the project area and a responsible balance between historical and economic priorities.

Acoustic signatures must also be assessed on the basis of several basic characteristics. Perhaps the most important factor in acoustic analysis is the configuration of the signature. As the acoustic record represents a reflection of specific target features, wreck signatures are often a highly detailed and accurate image of architectural and construction features. On sites with less structural integrity acoustic signatures often reflect more of a geometric pattern that can be identified as structural material.

Where hull remains are disarticulated the pattern can be little more than a texture on the bottom surface representing structure, ballast or shell hash associated with submerged deposits. Unfortunately, shipwreck sites have been demonstrated to produce a variety of signature characteristics under different circumstances. Like magnetic signatures, some acoustic shipwreck signatures are more apparent than others. Large vessels, whether iron or wood, can produce acoustic signatures that can be reliably identified.

Smaller vessels, or disarticulated vessel remains are inevitably more difficult. Their acoustic signatures are frequently difficult, if not impossible, to distinguish from concentrations of snags and/or modern debris. In fact, some small vessels produce little or no acoustic signature. As a consequence, acoustic targets must be subjectively assessed according to intensity of return over background, elevation above bottom and geometric image characteristics. The final decision concerning potential significance of less readily identifiable targets must be made on the basis of anomaly attributes, historical patterns of navigation in the project area and a responsible balance between historical and economic priorities.

## **Project Data Analysis**

Magnetometer data was collected in the form of HYPACK raw data files. Each line file was reviewed by TAR archaeologists to identify and to characterize anomalies that could be generated by submerged cultural resources. Anomaly signatures suggestive of significant submerged cultural material were isolated and analyzed in accordance with anomaly intensity, duration, areal extent and signature characteristics suggestive of the material generating the anomalies. Analysis of each anomaly included consideration of magnetic and acoustic signature characteristics previously demonstrated to be reliable indicators of historically significant submerged cultural resources. Assessment of each anomaly included recommendations for additional investigation to determine the exact nature of the cultural material that generated the signature and its potential NRHP significance.

Using SURFER software, magnetic contour maps of the survey area were produced to aid in analysis and data representation. The contour map included target location coordinates in Georgia East State Plane, NAD 83, U.S. Survey Foot coordinates. To accompany the contour map, TAR prepared a table listing all magnetic anomalies located during the

survey (Appendix B). This table includes the anomaly name, identification number, signature characteristics, location coordinates, and assessment of the type of material generating the signature.

Acoustic sidescan sonar data was collected in the form of raw SonarPro XTF data files. Acoustic subbottom profiler data was also collected in the form of raw Explorer XTF data files. Each line of acoustic data was then reviewed by TAR archaeologists using SONARWIZ software to identify and to characterize targets that could be generated by submerged cultural resources. No sonar targets were identified in the data. Using SONARWIZ software, a sonar coverage mosaic map of the survey area was produced to aid in analysis and data representation.

# **Survey Data Analysis**

Magnetic and acoustic data were collected on 35 survey lines in the Sea Island borrow area (Figure 8).

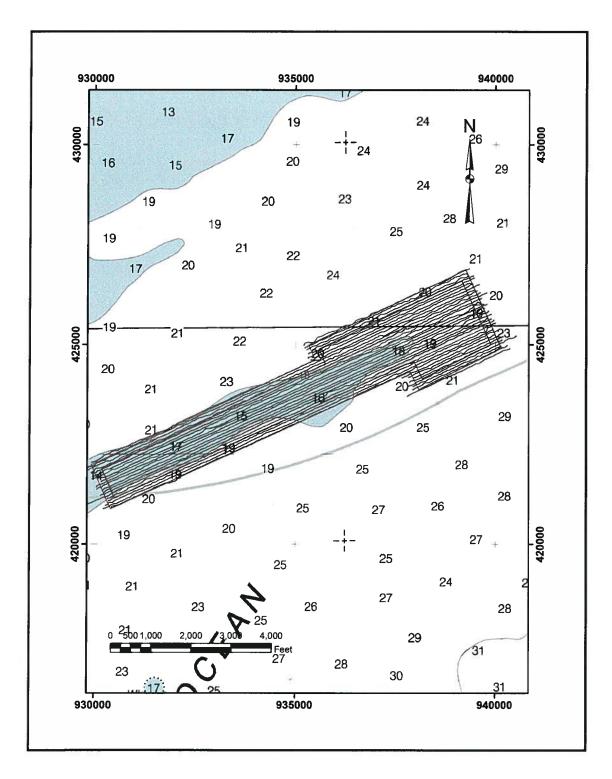


Figure 8. Sea Island survey as-run tracklines.

GA DNR APR 1 3 2018 Line-by-line analysis of the magnetometer data and contouring at two gammas identified four magnetic anomalies (Figure 9).

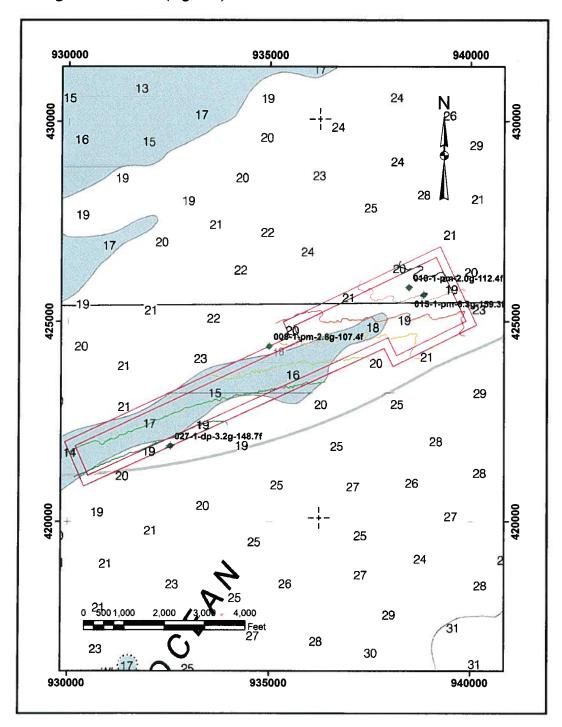


Figure 9. Sea Island survey magnetic contours and anomalies.

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Line-by-line analysis and mosaicking of the sonar data identified no targets (Figure 10). Likewise, no evidence of potentially significant targets or relict landform features was identified in the associated subbottom profiler records (Figure 11).

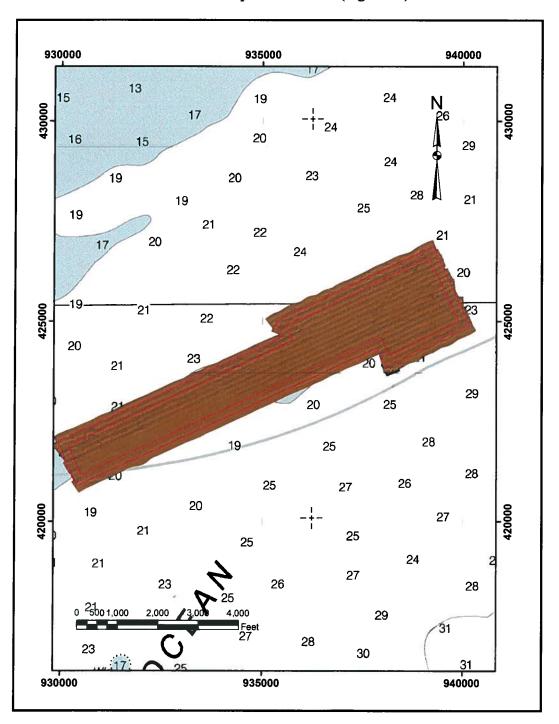


Figure 10. Sea Island survey area sonar coverage mosaic.

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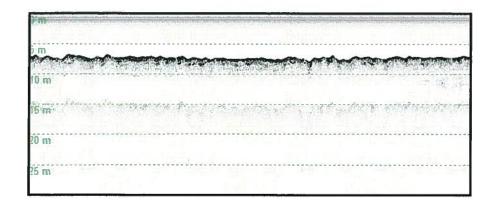


Figure 11. Sea Island survey area subbottom profiler data example.

#### **Conclusions and Recommendations**

A survey of historical and archaeological literature and background research confirmed evidence of sustained maritime activity associated with the southern coast of Georgia. Documented transportation activities along the coastal waters off Sea Island and neighboring waterways date from the first quarter of the sixteenth century.

Analysis of the acoustic data identified no sonar targets or subbottom features in the survey area. Analysis of the magnetic data identified four low intensity short duration anomalies. Only two of those magnetic anomalies lie in the borrow area. The other two anomalies are located in the 200-foot buffer surrounding the borrow area. All four magnetic anomalies have signature characteristics that can be reliably associated with small single ferrous objects such as traps, small boat anchors or other similar debris. None of those represent more complex signatures associated with historical vessel remains. Consequently, no anomaly avoidance buffers are recommended.

#### **Unexpected Discovery Protocol**

Based on data generated by the survey, no potentially significant submerged cultural resources are present in the borrow site. Consequently, no additional investigation is recommended in association with the proposed dredging. However, in the event that project activities expose potential prehistoric or historic cultural material not identified during the remote-sensing survey, the dredge company under contract should immediately shift operations away from the site and notify the respective Point of Contact (POC) for SIC, CS&E and the Georgia SHPO. Notification should address the exact location, where possible, the nature of material exposed by project activities, and options for immediate archaeological inspection and assessment of the site.

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# Appendix A

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# **Documented Shipwreck Sites in the Brunswick Region**

The following list of documented shipwrecks sites was compiled from several sources. Among the sources consulted were the Georgia Shipwreck Inventory Index, the Merchant Steam Vessels of the United States, Spence's List of Shipwrecks of South Carolina and Georgia, secondary sources, and regional newspaper accounts. The list is not offered as a comprehensive account of all shipwreck sites in the region, but rather an indicator of the types of resources lost in the vicinity.

<u>Year</u>	<u>Name</u>	<u>Comments</u>
1742	8 vessels	Unnamed vessels were all lost on southern end of St. Simons Island at the St. Simons Bar.
1742	Unknown	Unnamed sailing vessel lost off St. Simons Island.
1774	Unknown	Unnamed brigantine lost on St. Simons Bar.
1781	H.M.S. Hope	Lost in storm near St. Simon. The 14 gun sloop was bound from Charleston to New York.
1792	Conception	Lost while bound from Philadelphia to Brunswick.
1801	Ranger	Schooner bound from Jamaica to Wilmington, N.C. was cast away at St. Simons Island.
1803	Maringo	A French brig was cast away at Pelican Bank near Little St. Simons Island while bound to Santo Domingo.
1810	Intrepid	A sloop bound from St. Simons to St. Marys ran aground near St. Simons Island.
1811	Elizabeth City	A schooner was lost on the north breakers in Brunswick harbor.
1819	Cornelia	A schooner was lost at Sand Island off Little St. Simons Island.
1821	Jason	A British brig bound for Savannah from Falmouth, England ran aground in a thick fog on the south breakers off St. Simons Island.
1852	Magnolia	A side paddle wheel steamer bound from Palatka, Florida to Savannah blew up while near St. Simons Island.
1853	Brunswick	A sailing vessel was lost in the marsh near Brunswick.
1853	J. Webster	A schooner lost in St. Simons Sound.
1879	Sunbeam	A British bark bound from Brunswick to Rio de Janeiro ran ashore on the St. Simons bar.
1881	Valero	A brig that was lost on St. Simons bar.
1881	Unknown	Unnamed dredge lost in Brunswick.
1885	Hamilton	A steamer that wrecked on St. Simons Island.
1889	Samuel Wilpenny	A steamer that was lost in Brunswick harbor.
1890	Stephen J. Fooks	A schooner bound from Baltimore to Brunswick and carrying coal was lost in a storm in the vicinity St. Simons bar.
1891	Svalen	A bark lost on St. Simons Bar.

1891	Carrie A. Cookson	A schooner lost on the northern breakers in Brunswick Harbor.
1893	Gracie	Brunswick pilot boat capsized in a storm. The same storm drove pilot boats Glynn and Telegram ashore, as well as a large unknown schooner.
1897	R.K. Mabey	A sidewheel steamer was lost in Brunswick.
1898	Blanche Hopkins	A schooner ran ashore at Brunswick.
1898	Hamilton	A steamer ran ashore at Brunswick.
1898	Louise	A bark ran ashore at Brunswick.
1903	Roy F. Easton	An unknown type of vessel that was lost on the north
	,	breaker in Brunswick Harbor.
1906	Annie	A schooner lost near Brunswick.
1907	Lelia E. Rowley	A sloop lost in the Brunswick area.
1907	Dragoon	A gas screw vessel lost near Brunswick.
1907	Rose Innis	A barkentine sailing vessel lost off St. Simons Island.
1908	Redwing	A steamer lost in the Brunswick area.
1910	Messenger	A gas screw vessel lost near Brunswick.
1912	Midday	A gas screw vessel lost off St. Simons Island.
1913	Pat	A gas screw vessel lost off St. Simons Island.
1913	Mary H.	A schooner lost in the Brunswick area.
1914	Southern Belle	A gas screw vessel lost off St. Simons Island.
1914	Cat	A gas screw vessel lost off St. Simons Island.
1915	Adrienne	A gas powered yawl that was lost off St. Simons Island.
1915	Dorothy	A sidewheeler that was lost near Brunswick.
1917	Wanderer	A gas screw vessel lost in Jekyll Sound.
1918	Dixie	A gas screw vessel lost near Brunswick.
1919	Massosoit	A gas screw vessel lost in the Brunswick area.
1920	Fortune	A sidewheeler lost off Jekyll Island.
1921	May Garner	A screw steamer that was lost in the Brunswick area.
1930	Roamer	A gas-powered yawl lost near Brunswick.

# Appendix B

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# APPENDIX B: MAGNETIC ANOMALY TABLE

Anomaly	X Coordinate	Y Coordinate	Line Number	Anomaly on Line	Signature	Intensity	Duration	Anstvals	Slonificance
1-pm-6.3g-159.3f	938842.5	425663.9	5	-	Positive Monopolar	630	18 26	Small Single Object	Dahrie
1-dp-3.2g-148.7f	932544.6	421890.6	12	_	Dipolar	3.20	148.71	Small Single Object	Dehrie
1-pm-20g-1124f	938475.1	425845.3	9	_	Positive Monopolar	200	L	Small Single Object	Pohrie
1-pm-28g-107.4f	934992.1	424380.4	80	-	Positive Monopolar	280	1	Small Single Object	e inde

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