APPENDIX C

Draft TAR/Geodynamics Remote-Sensing Archaeological Survey

Wrightsville Beach Coastal Storm Risk Management Emergency Repair – Evaluation of Borrow Area Alternatives New Hanover County, North Carolina

JANUARY 2023

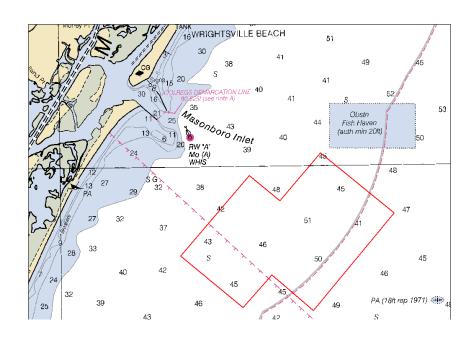


Prepared by:

Environmental Resources Section U.S. Army Corps of Engineers, Wilmington District

Report entitled:

A Phase I Remote-Sensing Archaeological Survey of Proposed Borrow Site Located off Masonboro Inlet, New Hanover County, North Carolina



[Volume I: Submerged Cultural Resources Technical Assessment]

Prepared for:

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Submittal Date:

15 July 2022

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Volume I: Cultural Resources Technical Assessment

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Abstract

Geodynamics LLC, A NV5 Company (Geodynamics) of Newport, North Carolina is working with the U.S Army Corps of Engineers-Wilmington District (USACE-W) to identify and permit a sand source for the Wrightsville Beach Coastal Storm Risk Management project. The primary borrow source has been identified as a 4.4 square mile site located approximately 3.5 miles southeast of Masonboro Inlet. In order to determine any effect on potentially significant submerged cultural resources, Geodynamics contracted with Tidewater Atlantic Research (TAR) of Washington, North Carolina to analyze the magnetic and acoustic remote-sensing data and generate a report document. Work performed by TAR consisted of a review and assessment of the sidescan sonar, cesium magnetometer, and sub-bottom profiler data. TAR's review and assessment of the Geodynamics data was designed to identify and evaluate sonar target features, subbottom features, and magnetic anomalies that could be associated with potentially significant submerged cultural resources. In addition to the remote-sensing data assessment, TAR carried out a comprehensive archival and literature survey, historical background research, and investigation of relevant cartographical sources (Volume II: Historical Maritime Overview). Analysis of the sonar data carried out by Geodynamics identified hundreds of tires. Analysis of the sonar data carried out by TAR identified only 16 features that could have an association with potentially significant submerged cultural resources. Comparison of the sonar data from those 16 sites with anomalies in the magnetometer data indicates that none of the features are associated with submerged cultural resources. Analysis of the magnetometer data identified 1,698 anomalies in the survey area. Virtually all were characterized by low-intensity short-duration signatures that do not appear to have an association with potentially significant submerged cultural resources. Likewise, analysis of the sub-bottom profiler data identified no features with a potential association with significant submerged cultural resources. Based on the remotesensing data assessment and associated archival research, the proposed borrow location represents the site of an artificial reef created using thousands of vehicle tires. When the chain and cable employed to assemble the tire reef structure deteriorated, natural elements redistributed the tires over much of the proposed borrow site. Concentrations of tires and magnetic anomalies associated with the reef render much of the borrow site unacceptable. The USACE-W determined that lower tire density areas in the southwest and northeast could be utilized as sources of suitable beach nourishment material. However, the density of magnetic anomalies in those areas could be an additional consideration. Based on both the acoustic targets and magnetic anomalies in the remotesensing data, those areas do not contain signatures that appear to represent potentially significant contain submerged cultural resources. As a consequence, no additional investigation or avoidance sites are recommended.

Table of Contents

	Page
Abstract	
List of Figures	ii
Introduction	
Remote Sensing Survey Data Collection	3
Survey Data Analysis	4
Magnetic Data Assessment	9
Sonar Data Assessment	9
Conclusions and Recommendations	12
Unexpected Discovery Protocol	13
Appendix A	14

List of Figures

		Page
Figure 1. Wrightsvill	e Beach project survey site location	1
Figure 2. Project surv	vey vessel RV Benthos	3
Figure 3. Survey equ	ipment employed for Wrightsville Beach survey project.	3
Figure 4. Survey and	tie lines for Wrightsville Beach survey	4
Figure 5. Sonar imag	e example of tires in the Wrightsville Beach survey area.	5
Figure 6. Tire density	in Wrightsville Beach survey area with survey trackline	es5
Figure 7. Distribution	of reef tires	6
Figure 8. Sonar cover	rage mosaic with acoustic target locations.	7
Figure 9. Magnetome	eter data example from Survey Line Number 73	8
Figure 10. Distributio	n of magnetic anomalies in survey area	8
Figure 11. Sub-Areas	identified as sources of beach nourishment material	9
Figure 12. Magnetic a	nomalies identified in Area NE-A	10
Figure 13. Magnetic a	nomalies identified in Area NE-B	10
Figure 14. Magnetic a	nomalies identified in Area NE-C	11
Figure 15. Magnetic a	nomalies identified in Area SW.	12

Introduction

Geodynamics LLC-A NV5 Company (Geodynamics) of Newport, North Carolina is working with the U.S. Army Corps of Engineers-Wilmington District (USACE-W) to identify and permit a sand source for the Wrightsville Beach Coastal Storm Risk Management Project. The primary borrow source was identified as a 4.4 square mile site located approximately 3.5 miles southeast of Masonboro Inlet (Figure 1).



Figure 1. Wrightsville Beach project survey site location (Courtesy of Geodynamics).

In order to determine any effects on potentially significant submerged cultural resources, Geodynamics contracted with Tidewater Atlantic Research (TAR) of Washington, North Carolina to analyze the magnetic and acoustic remote-sensing data and to generate a report document.

The research performed by TAR consisted of a review and assessment of the sidescan sonar, cesium magnetometer, and sub-bottom profiler data. TAR's review and assessment of the Geodynamic data was designed to provide accurate and reliable identification, assessment and documentation of submerged cultural resources in the Wrightsville Beach-Masonboro Inlet study area. The assessment methodology was developed to comply with the criteria of the National Historic Preservation Act of 1966 (Public Law 89-665), 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), the updated guidelines described in 36 CFR 64 and 36 CFR 66, Archaeological Resource Protection Act (16 USC 470), "Abandoned Shipwreck Law" (North Carolina General Statute [NCGS] 121, article 3) and the North Carolina Archaeological Resources Protection Act (NCGS 70, article 2). Results of the TAR data assessment were designed to furnish the USACE-W and Geodynamics with the archaeological data required to comply with Federal and State of North Carolina submerged cultural resource legislation and regulations.

Analysis of the sonar data carried out by Geodynamics identified hundreds of tires. Analysis of the sonar data carried out by TAR identified only 16 features that could have an association with potentially significant submerged cultural resources. Comparison of the sonar data from those 16 sites with anomalies in the magnetometer data indicates that none of the features are associated with submerged cultural resources. The most prevalent sonar target images in the data are associated with tires. Analysis of the magnetometer data identified 1,698 anomalies in the survey area. Virtually all were characterized by low-intensity, short-duration signatures that do not appear to have an association with potentially significant submerged cultural resources. The distribution of those anomalies is clearly associated with tires identified in the sonar data. Likewise, sub-bottom profiler data analysis identified no features associated with potentially significant submerged cultural resources.

Based on the remote-sensing data assessment and historical research (*Volume II: Historical Maritime Overview*), the proposed borrow location represents the site of an artificial reef created using tens of thousands of vehicle tires. When the chain and cable employed to assemble the tire reef structure deteriorated, natural elements redistributed the tires over much of the proposed borrow site. Concentrations of tires and magnetic anomalies associated with the reef render much of the borrow site unacceptable. The USACE-W District determined that lower tire density areas in the southwest and northeast could be utilized as sources of suitable beach nourishment material. However, the density of magnetic anomalies in those areas could be an additional consideration. Based on the remote-sensing data those areas do not contain acoustic or magnetic signatures that represent potentially significant submerged cultural resources. As a consequence, no additional investigation or avoidance sites is recommended.

Remote Sensing Survey Data Collection

The survey data provided by Geodynamics was collected using its aluminum catamaran hull survey vessel *RV Benthos* (Figure 2). For the Wrightsville Beach survey *RV Benthos* was fitted out with a full suite of remote-sensing and positioning equipment (Figure 3). Field operations were carried out as weather permitted from 5 March through 12 April 2022.



Figure 2. Project survey vessel RV Benthos (Courtesy of Geodynamics).

Equipment List		
Sensor Group	Equipment	Model
Positioning	Primary	Applanix POSMV
SVP	Sonde	AML BaseX2
SVP	MBES Head Sensor	AML Micro SV
MBES	PU-Primary	Kongsberg 2040PU Slim
MBES	Sonar Heads	Kongsberg 2040C
SSS	Primary Towfish	Edgetech 4205
TVG	Magnetometer	Geometrics G-882; 1.5 m TVG Frame
SBP	Sub-bottom Profiler	Edgetech SB-216S

Figure 3. Survey equipment employed for Wrightsville Beach survey project (Courtesy of Geodynamics).

The Wrightsville Beach remote sensing was carried out on northeast to southwest orientation 30-meter survey line spacing. Tie lines to assure quality control were carried out on northwest to southeast orientations on 1,250-foot intervals (Figure 4).

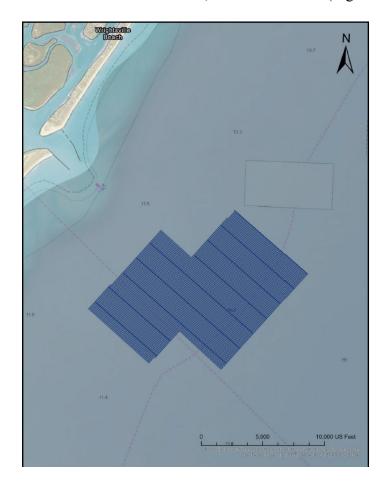


Figure 4. Survey and tie lines for the Wrightsville Beach survey (Courtesy of Geodynamics).

Survey Data Analysis

Data generated by the remote sensing 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. The magnetic data were examined for anomalies that were 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.

Analysis of the sonar data was initially carried out by Geodynamics to identify and locate thousands of tires that were associated with the artificial reef previously constructed at the site (Figure 5). Plotting of the exposed tires clearly identified areas of the survey site where tire density precluded any option to recover material suitable for beach nourishment (Figure 6).

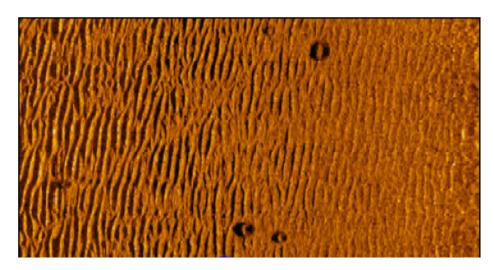


Figure 5. Sonar image example of tires in the Wrightsville Beach survey area.

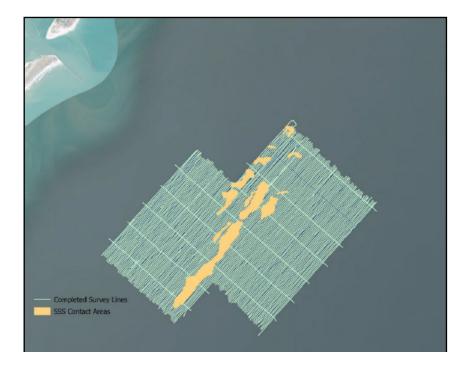


Figure 6. Tire density in the Wrightsville Beach survey area with survey tracklines (Courtesy of Geodynamics).

Geodynamics also plotted all of the individual sonar tire images on the survey area tracklines (Figure 7). That image more effectively illustrates the volume and location of identified tires. In addition, the image illustrates the extent of the area surveyed where tire residue effectively eliminates a source of beach nourishment material.

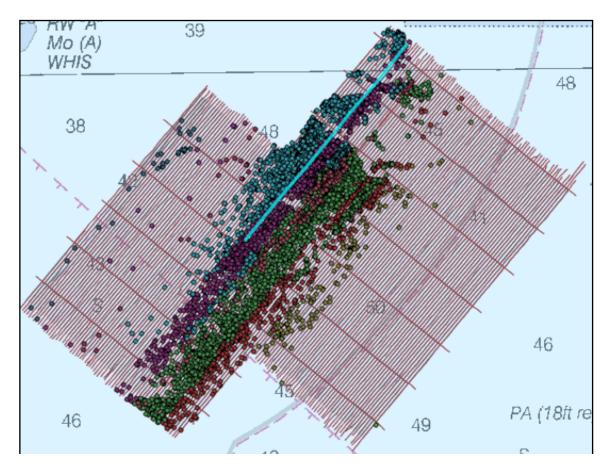


Figure 7. Distribution of reef tires and area they eliminate as source of beach nourishment material (Courtesy of Geodynamics).

Sonar data was analyzed in Chesapeake SonarWiz Version 7.7.7 on a line-by-line basis. Analyzed data was utilized to create a full coverage mosaic. Sonar data analysis focused on identification of features that could be associated with submerged cultural resources and not tires. That analysis identified 16 features (Figure 8). Those features are identified with images in Appendix A: Table 1.

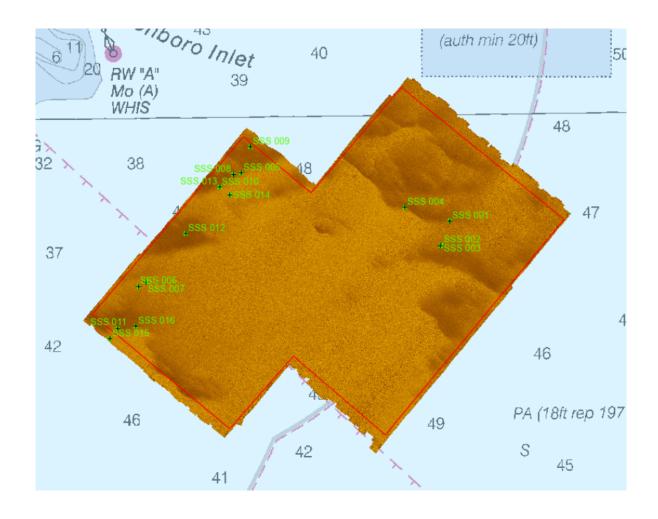


Figure 8. Sonar mosaic with acoustic target locations (Courtesy of Geodynamics).

TAR analysis of the magnetometer data was carried out using HYPACK 2016a software. Each line of data was reviewed and anomalies were identified and assessed (Figure 9). That analysis confirmed at least 1,689 magnetic anomalies in the survey area (Figure 10).

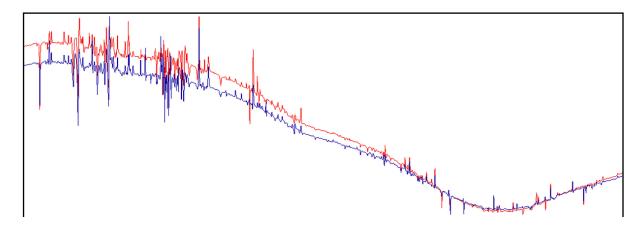


Figure 9. Magnetometer data example from Survey Line Number 73.

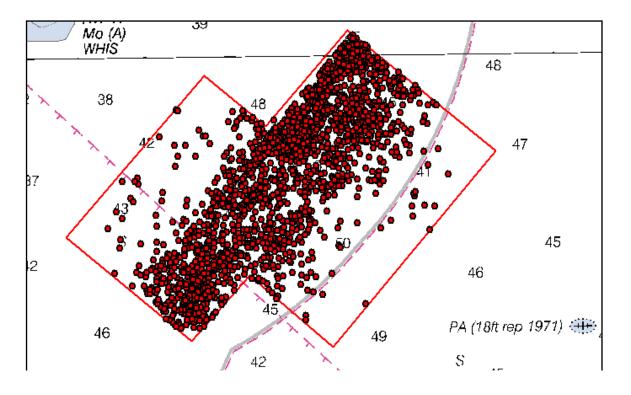


Figure 10. Distribution of magnetic anomalies in the Wrightsville Beach survey area.

Magnetic Data Assessment

With few exceptions, magnetic anomalies proved to be a combination of low-intensity and short-duration signatures. None of those exceptions represent ferrous material potentially associated with vessel remains.

Sonar Data Assessment

Based on analysis of the sonar data in the project area, four sub-areas were identified by the USACE-W District as possible sources of beach nourishment material. Those areas were identified based on the low density of tires identified on the bottom surface (Figure 11).

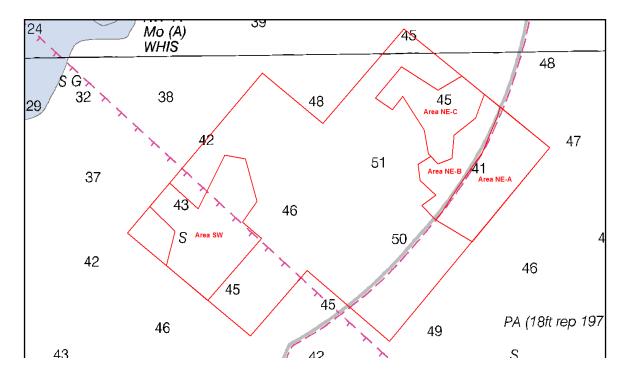


Figure 11. Sub-Areas identified as potential sources of beach nourishment material.

In Area NE-A a total of 15 magnetic anomalies were identified (Figure 12). Based on their signatures, all of those anomalies appear to be associated with ferrous material such as steel belted tires, chain, and cable used to secure tires in the artificial reef (Appendix A: Table 2).

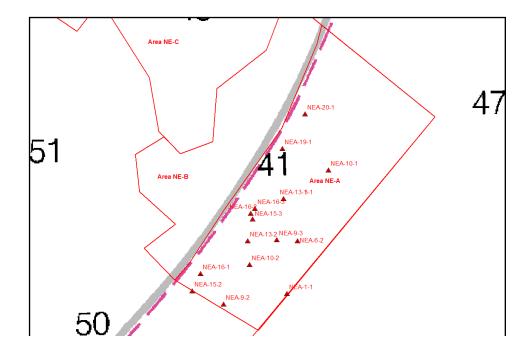


Figure 12. Magnetic anomalies identified in Area NE-A.

In Area NE-B a total of 36 magnetic anomalies were identified (Figure 13). Based on their signatures all of those anomalies appear to be associated with ferrous material such as steel belted tires, chain, and cable used to secure tires in the artificial reef (Appendix A: Table 3).

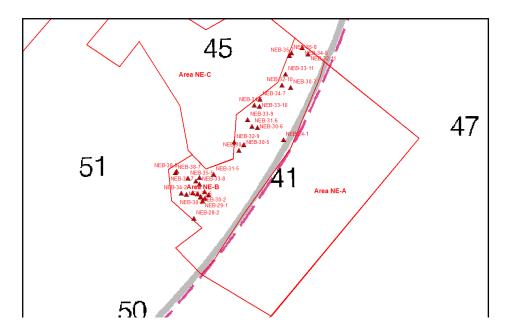


Figure 13. Magnetic anomalies identified in Area NE-B.

In Area NE-C, a total of 183 magnetic anomalies were identified (Figure 14). Based on their signatures all of those anomalies appear to be associated with ferrous material such as steel belted tires, chain, and cable used to secure tires in the artificial reef (Appendix A: Table 4).

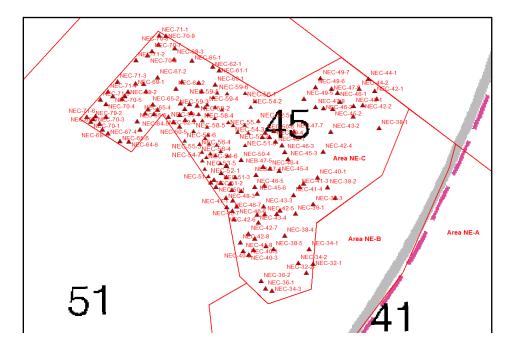


Figure 14. Magnetic anomalies identified in Area NE-C.

In Area SW, a total of 89 magnetic anomalies were identified (Figure 15). Based on their signatures all of those anomalies appear to be associated with ferrous material such as steel belted tires, chain, and cable used to secure tires in the artificial reef (Appendix A: Table 5).

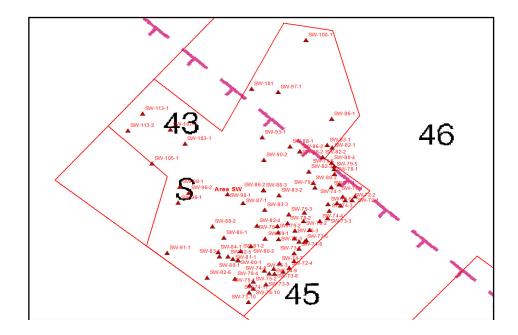


Figure 15. Magnetic anomalies identified in Area SW.

Conclusions and Recommendations

Based on historical research, thousands of tires and other material were employed to create the Wrightsville Beach artificial reef. According to the North Carolina Department of Environmental Quality (NCDEQ), the state's artificial reef program evolved from the 1940s when sportsmen sought fishing grounds that were accessible by small watercraft. A contemporary NCDEQ (n.d.) publication comments that "Early attempts at reef construction were haphazard affairs. Automobile bodies, washing machines, old automobile tires, scrap concrete and numerous types of other materials were dumped at selected locations offshore in an effort to provide areas where recreational fishermen in small boats could fish".

In 1964, the USACE granted a Federal permit to a Morehead City fishing club ... "to construct an artificial reef about 2 miles off Atlantic Beach". During the same period, "fishermen established two ad hoc fishing reefs off New Hanover County. Founders of these reefs marked locations off Wrightsville Beach and Carolina Beach, and constructed habitat using their personal boats to transport small items such as weighted automobile tires, old stoves, and washing machines" (NCDEQ n.d.).

Per the *Greensboro Daily News* (*GDN*) issue dated 30 July 1978 (p. 8), "Since 1974, the state has placed more than 500,000 tires, three surplus military ships and four scrapped boats on nine ocean reefs and two located in estuarine waters". A follow-up story commented that "North Carolina's coastal area will have more artificial fishing reefs constructed of old automobile tires and sunken ships in September... Fishermen took more than 100 tons of fish from the reefs near Wrightsville Beach and Atlantic Beach

from 1975 through the summer of 1977. Those two reefs contained 56 per cent of the discarded tires used in reef building in North Carolina waters" (*GDN* 13 August 1978:39). [See *Volume II: Historical Maritime Overview* for more details].

Today that material is spread over much of the proposed Wrightsville Beach proposed borrow site. Clearly, deterioration of the chains and cables employed to create clusters of tires and natural elements associated with storms have broken the reef features apart. The result is a massive concentration of tires and other debris stretching northeast to southwest along the centerline of the area surveyed. That debris eliminated much of the proposed borrow site as a potential source of beach nourishment material.

In addition to the tires that are exposed on the bottom surface and were identified by sonar, magnetic data indicates that additional steel belted tires, the chains and cables that connected them and additional debris may survive below the bottom surface. In the four sub-areas identified by USACE-Wilmington District as potentially acceptable sources of sand, magnetic anomalies associated with steel belted tires, chain, cable and other material could require reevaluation. Anomalies in sub-areas NE-A and NE-B are marginal compared to the density in areas NE-C and SW.

In the final analysis, artificial reef material is distributed over the entire survey area. While that material could mask the signatures of small vessel remains, none of the sonar targets and magnetic anomalies in sub-areas NE-A, NE-B, NE-C, and SW have signature characteristics that clearly indicate the presence of potentially significant submerged cultural resources such as shipwreck remains. Based on comprehensive review and analysis of the available survey data no potentially significant submerged cultural resources will be impacted by utilization of any of the four sub-areas identified by the USACE Wilmington District.

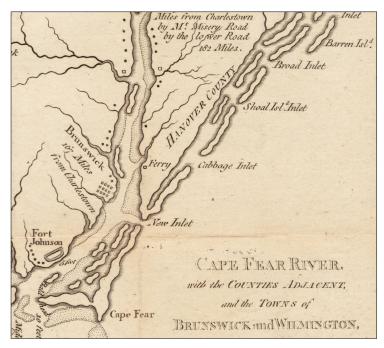
Unexpected Discovery Protocol

Finally, in the event that any project activities expose prehistoric or historic cultural material not identified during the remote-sensing survey, the dredging company under contract should be required to *immediately* notify the designated point of contact for the USACE-W District, the Town of Wrightsville Beach, the North Carolina State Historic Preservation Office (Raleigh), and the North Carolina Underwater Archaeology Branch (Kure Beach). Notification should address the location, where possible, the nature of material exposed by the project activities, and options for *immediate* archaeological inspection and assessment of the site(s).

Appendix A

Report entitled:

A Phase I Remote-Sensing Archaeological Survey of Proposed Borrow Site Located off Masonboro Inlet, New Hanover County, North Carolina



[Detail of 1781 British chart (Courtesy of the Norman B. Leventhal Map & Education Center, Boston Public Library)]

Volume II: Historical Maritime Overview

Prepared for:

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Table of Contents

	Page
List of Figures	iv
List of Tables	vii
Literature and Historical Research Methodology	1
National Register of Historic Places Evaluation	2
North Carolina Department of Natural and Cultural Resources Archives	2
North Carolina Digital Collections	3
North Carolina Underwater Archaeology Branch Consultation	3
Institutional Archive Collections	3
Aerial Photographical Sources	3
Cartographical Sources	3
Office of Coast Survey, Wrecks and Obstructions Database	4
Previous Cultural Resource Management Studies	4
Historical Maritime Background.	6
Contact Period and Seventeenth-Century Maritime Overview	6
Eighteenth-Century Maritime Overview	8
Establishment of New Hanover Precinct (1729)	8
Relevant Eighteenth-Century Real Estate	9
Colonial Mid-Century Shipping	10
Local Reaction Against Stamp Act	12
Commercial and Military Shipping	14
The Quasi-War Period (1798-1801)	18
Nineteenth-Century Maritime Overview	22
Naval War of 1812	23

	Nineteenth-Century Navigational Concerns	24
	Relevant Coastwise Shipping	27
	Carolina Yacht Club Formation (1853)	30
	Antebellum Shipping & Maritime Casualties	32
	American Civil War Era (April 1861-April 1865)	33
	Wreck of the USS Columbia (14 January 1863)	38
	Destruction of Salt-Works at Masonborough Inlet (21 April 1864)	46
	Reconstruction Era (April 1865-1877)	55
	Reconstruction Era Shipping	58
	Late-Nineteenth-Century Maritime Advice	59
T	wentieth-Century Maritime Overview	63
	Barkentine Glad Tidings Maritime Event (1902)	64
	Lumina Pavilion Grand Opening.	65
	The Great War Period	69
	Initial Beach Erosion Study and Infrastructure Development	72
	World War II Period	77
P	ost-World War II Period	84
	Postwar Shoreline Oversight	85
	Hurricane Hazel Event (15 October 1954)	86
	U.S. Coast Guard Station Wrightsville Beach	88
	Early Hurricane and Shore Protection Projects	89
	Local Cutting-Edge Desalination Project	93
	Historic Shipwreck Legislation and Judicial Rulings	94
	Masonboro Inlet Hydraulic Studies	94
	Artificial Reef-Building Program	98

Contemporary Beach Renourishment	
References Cited and Consulted	105
Shipwreck Inventory	122
Appendices	123

List of Figures

	Page
Figure 1. Detail of Mercator-Hondius map produced in Amsterdam ca.1607	6
Figure 2. Detail of 1673 John Ogilby map "New Description of Carolina	7
Figure 3. Detail of 1736 Herman Moll map entitled "Carolina."	9
Figure 4. Detail of 1758 Bowen-Gibson chart.	11
Figure 5. Ca. 1769 plan of Wilmington	13
Figure 6. New Hanover brigantine owner (Grimes 1910:248).	15
Figure 7. Detail of A General Map of the Southern British Colonies	16
Figure 8. Cape Fear River, with the counties adjacent.	19
Figure 9. U.S. Navy directive for Wilmington customs collector (ORN&L 1935:92)	20
Figure 10. "Calamity" at Wilmington (ORN&L 1935:211).	20
Figure 11. French Navy presence at Wilmington (ONR&L 1935:462).	21
Figure 12. Outfitting the Wilmington galleys (ONR&L 1935:506-508)	22
Figure 13. U.S. frigate United States capturing HBM frigate Macedonian	25
Figure 14. American privateer General Armstrong off Fayal (Azores)	26
Figure 15. Tonnage of American vessels as of September 1821	27
Figure 16. Comparison of domestic and foreign shipping as of 30 September 1821	28
Figure 17. Detail of A Chart of the Coast of North Carolina comprising the three Capes	29
Figure 18. Detail of chart Showing the Gulf Stream.	30
Figure 19. Extract from "Carolina Yacht Club Beach's Social Center"	31
Figure 20. Libel against cargo of Alexander Wise (WDJ 11 April 1860:2)	33
Figure 21. April 1861 cartoon map featuring Winfield Scott's Anaconda Plan	34
Figure 22. Map of the Cape Fear River and Approaches to Wilmington, N.C	36
Figure 23. 1861 Lloyds Map of the Southern States	37
Figure 24. Ca. 1862 engraving of former blockade runner Columbia	38
Figure 25. Detail of Military Department of North Carolina (Courtesy of the LOC)	39
Figure 26. Preliminary Chart of Frying Pan Shoals and Entranced to Cape Fear River	42
Figure 27. Detail of 1863 U.S. Coast Survey chart emphasizing Masonboro Inlet	43
Figure 28. Germane diplomatic correspondence (Seward 1864a; Seward 1864b)	45
Figure 29. Destruction of Masonborough Inlet salt-work (USWD 1891:307)	47

Figure 30. Destruct	ion of sawmill near Masonborough Inlet	. 47
Figure 31. General	Order No. 18; issued 22 October 1864.	. 49
Figure 32. "Hampt	on Roads, Virginia. Fleet of Fort Fisher expedition"	. 50
Figure 33. Confede	erate army messages before the Fall of Fort Fisher (USWD 1893:1284)	. 51
Figure 34. Article 1	published by Evansville Daily Journal (Courtesy of CA, LOC)	. 54
Figure 35. Promine	nt postwar Water Street factor (Wilmington Journal 1866:1)	. 55
Figure 36. Coastwis	se shipping September 1866 (Wilmington Journal 1866:3).	. 56
Figure 37. Wilming	gton signal officer log for mid-March through September 1873	. 57
Figure 38. Improve	ment of Cape Fear River as of June 1876 (USWD 1876:65)	. 59
Figure 39. Contemp	oorary navigational data about Masonborough Bar and inlet	. 59
Figure 40. Detail o	f 1881 Gray & Gray atlas map).	. 61
Figure 41. Detail o	f 1897 USCS chart entitled Masonboro Inlet to Shallotte Inlet	. 62
Figure 42. Fourth of	of July yachting off Wrightsville Beach.	. 66
Figure 43. Early Jul	ly 1905 market report	. 66
Figure 44. Summer	r 1909 ad presented in The Robesonian of Lumberton.	. 67
Figure 45. June 19	09 Goldsboro Semi-Weekly Argus article.	. 68
Figure 46. Historic	1918 image of U-Boat lying near 19th-schooner.	. 69
Figure 47. Ca. 191	7 postcard entitled Lumina, Best Dancing Pavilion	. 70
Figure 48. Ca. 191	8 Interior view (Courtesy of the ECU Digital Collection)	.71
Figure 49. Birming	ham Age Herald published 2 July 1922 (Courtesy of the LOC)	. 72
Figure 50. Groin re	epair at Wrightsville Beach (Presented in: Hartzer 1984:84).	. 72
Figure 51. Detail o	f 1923 USCS chart identifying navigable inlets in the project vicinity	. 73
Figure 52. Detail of	f chart entitled New River Inlet To Southport (USC&GS 1936)	. 75
Figure 53. 1939 pol	litical lobbying for Wrightsville Beach USCG station	. 76
Figure 54. Esso Ba	yway "came through the war unscathed"	. 77
Figure 55. June 194	40 ad in Wilmington Morning Star (Courtesy of the LOC)	. 77
Figure 56. June 194	40 image of numerous sail boats off Wrightsville Beach.	. 78
Figure 57. Female	anglers headed out Masonboro Inlet during June 1940	. 79
Figure 58. SS Esso	Baltimore ca. 1944 bound for Oran, North Africa	. 79
Figure 59. Launch	of the USS Zebulon B. Vance (Courtesy of the LOC)	. 80
Figure 60 Local im	npact of August 1944 Hurricane	83

Figure 61. Pre-WWII Tichnor Brothers postcard of popular Ocean Terrace Hotel	83
Figure 62. CYC regatta entries (WMS 23 August 1946:9)	84
Figure 63. 1954 damage to Carolina Yacht Club compliments of Hurricane Hazel	86
Figure 64. Detail of 1955 Sanborn Fire Insurance map featuring Wrightsville Beach	87
Figure 65. Flagship Q-91 shown anchored at MHC (NCDCD 1954:29).	88
Figure 66. Wrightsville Beach berm and dune before February 1965 (91
Figure 67. Post dune and berm construction at Wrightsville Beach	92
Figure 68. Construction of Masonboro Inlet south jetty completed 1980.	96
Figure 69. Basic methods to utilize old tires (As presented in: Reedy 1973:20)	99
Figure 70. Research vessel Dan Moore on standby as Firefighter sinks.	100
Figure 71. "This jumble of old tires is off Wrightsville Beach".	100
Figure 72. Sinking 90-foot barge	102
Figure 73. Tug Sicany sinking.	102
Figure 74. Scene before sinking Firefighter.	103
Figure 75. FIREFIGHTER goes down to become part of a reef at Wrightsville Beach	103
Figure 76. Tug Stone Brothers before sinking.	104

List of Tables

	Page
Table 1. War of 1812 Royal Naval captures of relevant shipping (NSVAC 1911:passim).	24
Table 2. Nassau, Bahamas register identifying blockade runners arriving from Wilmington	n 40
Table 3. "American" vessels listed in The Mercantile Navy List	52
Table 4. Wilmington District customs' personnel as of July 1873 (USTR 1873:129)	57
Table 5. Relevant sixth lighthouse district personnel as of July 1873 (USTR 1873:163)	57
Table 6. Sample of foreign barques at the Port of Wilmington.	60
Table 7. 22 February 1900 marine directory (WMS 1900e:2)	63
Table 8. Early twentieth-century lumber shipments originating in North Carolina ports	63
Table 9. Storms passing Masonboro Inlet (As presented in Fear 2008:89)	89
Table 10. Local built watercraft details (USCG 1976:passim).	97
Table 11. Artificial reefs in the vicinity of current 2022 survey project area (NCDEQ n.d.)) 102

Literature and Historical Research Methodology

Maritime intelligence for the Cape Fear region was reviewed in primary sources that include; *Memoirs of the War in the Southern Department of the United States* (Lee, 2 vols., 1812a; 1812b); The Royal Navy, A History From the Earliest Times to the Present (Clowes, vol. I, 1897); The Royal Navy, A History From the Earliest Times to the Present (Clowes, vol. IV, 1899); Wrecks and Derelicts in the North Atlantic Ocean, 1887 to 1893, inclusive. Their Location, Publication, Destruction, Etc. (U.S. Hydrographic Office 1894); Derelicts, An Account of Ships Lost at Sea in General Commercial Traffic and a Brief History of Blockade Runners Stranded Along the North Carolina Coast 1861-1865 (Sprunt 1920); Wreck Information List (U.S. Hydrographic Office 1945); Naval Documents of the American Revolution (U.S. Navy Department [11 vols.] 1964-2005): Documents of the American Revolution, 1770-1783 (Colonial Office [London] Series [7 vols., Davies, ed.] 1976); The Naval War of 1812 (Naval Historical Center [Dudley, ed.], 2 vols., 1985/1992); Bristol, Africa and the Eighteenth-Century Slave Trade to America (Bristol Records Society [Richardson, ed.], 4 vols. 1986-1996); Official Records of the Union and Confederate Navies in the War of the Rebellion [31 vols.], National Historical Society 1987); Official Records of the Union and Confederate Armies [republication of original 70 vols., 1880-1901] (Broadfoot Publishing Company 1997); and Documents Illustrative of the History of the Slave Trade to America (Donnan 2002).

Wreck-specific information and general shipping data were surveyed in secondary sources that include; Merchant Steam Vessels of the United States 1807-1868 (Lytle and Holdcamper 1952); "A List of Vessels Probably Lost on the North Carolina Coast" (Stick 1959); Historic Wilmington-New Hanover County, North Carolina (Kellam 1960); A Guide to Sunken Ships in American Waters (Lonsdale and Kaplan 1964); Military Operations of the Civil War. A Guide-Index to the Official Records of the Union and Confederate Armies, 1861-1865 (Civil War Centennial Commission 1968); Encyclopedia of American Shipwrecks (Berman 1972); Shipwrecks of the Civil War (Shomette 1973), Merchant Steam Vessels of the United States, 1790-1868, "The Lytle-Holdercamper List" (Mitchell, 2 vols., 1975), North Atlantic Seaway (Bonsor 1979); Shipwrecks in the Americas (Marx 1983); National Register of Historic Places Nomination, Cape Fear Civil War Shipwreck District (Wilde-Ramsing and Angley 1985); Lost Ships of the Royal Navy 1793-1900 (Gosset 1986); Naval Accidents 1945-1988 (Arkin and Handler 1989); Register of Ships of the U.S. Navy, 1775-1990, Major Combatants (Bauer and Roberts 1991); Shipwrecks of North Carolina: from Hatteras Inlet South (Gentile 1992); From Cape Charles to Cape Fear: The North Atlantic Blockading Squadron during the Civil War (Browning 1993); Mid-Atlantic Shipwreck Accounts to 1899 (Charles 1997); Mid-Atlantic Shipwreck Accounts II to 1914 (Charles 1999); Encyclopedia of Civil War Shipwrecks (Gaines 2008); Bibliography of North Carolina Underwater Archaeology (Brooks, Merriman, Spencer, and Wilde-Ramsing 2009); and Shipbuilding in North Carolina, 1688-1918 (Still and Stephenson 2018).

Select annual reports prepared by the Secretary of the Navy [American Civil War period]; U.S. Army Corps of Engineers (USACE) [Wilmington, Charleston, and Norfolk Districts]; U.S. Coast Survey (USCS); U.S. Revenue Service; U.S. Lighthouse Service; U. S. Army Signal Corps; and U.S. Coast Guard (USCG) [e.g., "Summary of Derelict Operations"] were surveyed for historical wreck and obstruction data.

Miscellaneous publications that provided valuable information included; *The Maritime Association of the Port of New York, Its Charter and By-Laws, List of Officers and Members, Annual Reports, Statistics, Etc., Etc., I883.* (Maritime Association of the Port of New York); *Ports of the United States* (Bureau of Foreign and Domestic Commerce 1916); and *To Great and Useful Purpose: A History of the Wilmington District, U. S. Army Corps of Engineers* (Hartzer 1984).

Premium/gratis digital databases were queried for relevant maritime items, shipwreck information, abandoned watercraft, and references for jettisoned cargos, cannon, vessel components, etc. Historical/scholar-based providers that were consulted included: Academia.edu; American Battlefield Trust; Ancestry.com; British Library dissertation index <ethos.bl.uk>; British Newspaper archive <www.britishnewspaperarchive.co.uk/>; Cambridge Journals; Center for Digital History at the Washington Library <www.mountvernon.org/library/digitalhistory/>; Documenting the American South [Colonial and State Records of North Carolina]; Historic American Newspapers Chronicling America, Library of Congress; Fold3 (historical military records); Genealogy Bank; Google News Archive; Guildhall Library's Lloyds List Index https://registers.cityoflondon.gov.uk/applications/lloydslist/; HathiTrust.org; American History; JSTOR; Naval History and Heritage Command; Library of Congress [multiple catalogs]; Navy Records Society (United Kingdom); Newspaper Archive; Newspapers.com; National Archives and Records Administration; Office of the Historian, U.S. Department of State https://history.state.gov/>; Rootsweb.com [Ancestry.com associate]; Sea History https://seahistory.org/">; tDAR ("the digital archaeological record"); New York Public Library manuscript and image collections; *The New York Times*; and Shipindex.org.

National Register of Historic Places Evaluation

As previously mentioned the *National Register of Historic Places Nomination, Cape Fear Civil War Shipwreck District* (Wilde-Ramsing and Angley 1985) was consulted. The National Register of Historic Places (NRHP) database was queried for "North Carolina and New Hanover County". The current "Title List Display" confirmed two underwater sites; the USS *Peterhoff* [August 1975], and Cape Fear Civil War Shipwreck Discontiguous District [December 1985]. A "Pending List" [14 March 2020] stated that additional documentation is required for additions to the "Masonboro Sound Historic District", which is comprised of terrestrial sites. The associated listing published by the North Carolina State Preservation Office reported 26 terrestrial and 2 underwater sites as of July 2022. Links to examine NRHP nomination forms for the USS *Peterhoff* and the Cape Fear Civil War Shipwreck Discontiguous District are provided for further study.

North Carolina Department of Natural and Cultural Resources Archives

The Colonial Records Project's "Shipwrecks" document was consulted to gather preliminary information related to maritime losses off the coast of New Hanover County, North Carolina. The eighteenth-century accounts [1730-1800] were compiled by Jan-Michael Poff, who served [2008] as editor of the Historical Publications Section, North Carolina Office of Archives & History, North Carolina Department of Cultural Resources, Raleigh [now North Carolina Department of Natural and Cultural Resources (NCDNCR)].

North Carolina Digital Collections

The North Carolina Digital Collections website is sponsored through a partnership of the State Library of North Carolina and the State Archives of North Carolina. Colonial judicial and court manuscripts ("Maritime: Ships, Shipping, and Wrecks, 1677-1762 Collection") were surveyed with a view to identify an association with "Cape Fear" shipping.

North Carolina Underwater Archaeology Branch Consultation

Relevant underwater archaeological site files retained by the North Carolina Underwater Archaeology Branch (UAB) at Kure Beach, North Carolina were reviewed [through appointment] by Dr. Gordon Watts during January 2022.

Institutional Archive Collections

Additional sources of historical and maritime data associated with the project area were examined in the online collections of Joyner Library, East Carolina University (ECU), Greenville, North Carolina; the University of North Carolina at Chapel Hill; and Duke University, Durham, North Carolina. Several onsite visits were made to the University of North Carolina at Wilmington and to Joyner Library (ECU**). Particular attention was given to specific dates and periods associated with commercial shipping, military operations, and storms that would naturally result in more ship disasters. **Former ECU professor William N. Still was consulted regarding his extensive research with respect to coastal New Hanover County maritime history and vessel construction.

Aerial Photographical Sources

A 1978 report submitted to the North Carolina Division of Archives and History featured aerial photographs of Masonboro Inlet taken over a 37-year period. The images are identified by date as follows; March 1938, October 1944, January 1945, November 1949, March 1951, May 1953, November 1953a, November 1953b, March 1956, May 1958, October 1958, August 1959, December 1960, January 1961, March 1962, May 1962, April 1964a, April 1964b, May 1964a, May 1964b, March 1969, April 1969, April 1970, October 1970, December 1970, February 1972, October 1972a, October 1972b, October 1973, November 1973a, November 1973b, and November 1975 (Pleasants 1978). Federal online sources that archive aerial photography produced during the 1930s, 1940s, and 1950s by the U.S. Army, U.S. Department of Agriculture, and U.S. Navy were consulted for relevant imagery.

Cartographical Sources

TAR archaeologists examined [pre-Covid outbreak] relevant cartographical records preserved in the Cartographic Branch of the National Archives (Washington, DC and College Park MD); the Mariners Museum (Newport News VA); the North Carolina Division of Archives and History

(Raleigh); East Carolina University (Greenville NC); University of North Carolina (Chapel Hill); and Duke University (Durham NC). A significant number of rare charts and maps were copied for the extensive collection retained at TAR. Digital map sources such as the Office of Coast Survey's *Historical Map & Chart Collection* https://historicalcharts.noaa.gov/; "Record Group 77 Office of the Chief of Engineers, Maps and Drawings" (National Archives and Records Administration); Library of Congress, New York Public Library, David Rumsey Cartographical Collection, and "Norman B. Leventhal Map & Education Center at the Boston Public Library", were consulted.

Office of Coast Survey, Wrecks and Obstructions Database

The "Coast Survey's Automated Wreck and Obstruction Information System (AWOIS) contains information on over 10,000 submerged wrecks and obstructions in the coastal waters of the United States" and was consulted with respect to the ongoing Masonboro Inlet-Wrightsville Beach project. However, the current listing is not "comprehensive" and updates were discontinued during 2016. Despite those limitations, AWOIS is recognized as a "valuable tool and information source for marine archaeologists and historians"... (Office of Coast Survey n.d.).

Previous Cultural Resource Management Studies

In 1977, the North Carolina Underwater Archaeology Unit (UAU; now UAB) conducted a magnetometer survey of Masonboro Inlet on behalf of the USACE-Wilmington District. According to the final report, the subject survey revealed four targets; 1- the "remains of a side paddle wheel steamer"; 2- a site "scheduled for further investigation"; 3- "an object composed of wood and metal construction, possibly that of a modern vessel"; and 4- the site "revealed no evidence of cultural material" (Tidewater Atlantic Research [TAR] 1994:5-6).

During 1978, Gulf South Research Institute (GSRI) conducted a remote-sensing survey of Masonboro Inlet for the U.S. Army Corps of Engineers-Wilmington District (USACE-W). The purpose of this investigation was to locate significant cultural resources which might be impacted by the proposed jetty construction and channel realignment and deepening. The subject 1978 survey located five targets. One target was located on the tip of Masonboro Island. The remaining four were submerged; Site A was located outside the project area north of the existing jetty; Site B and Site D were located within the existing channel; and Site C was located at the seaward edge of the existing jetty. None of the targets were positively identified as representing significant cultural resources. However, Site C was thought to be the possible remains of the paddle wheel steamboat *Fannie and Jenny*, lost during February 1864 (TAR 1994:6).

In 1980, I. J. Won conducted a magnetic survey (on behalf of the USACE-W) of the aforementioned target [1978 GSRI investigation] located on the tip of Masonboro Island. The survey revealed an unknown object measuring about 140 feet long, possibly a composite iron structure (TAR 1994:6).

During 1984, the UAU conducted a magnetometer survey of known magnetic targets located between the north jetty at Masonboro Inlet and Mercer's Pier. Six targets were investigated. Diver investigation of the target at the end of the north jetty revealed the presence of a least five large

iron I-beams driven into the sand. The site [as of 1994] was sometimes referred to as the *Columbia* wreck site, and the beams may represent the remains of that Civil War era vessel (TAR 1994:6). During February 1994 and March 1994, underwater archaeologists a magnetometer and sidescan sonar investigation on behalf of the USACE-W. The abstract of the final report entitled "A Remote Sensing Archaeological Survey and Diving Target Reconnaissance in the Vicinity of Masonboro Inlet, New Hanover County, North Carolina" (submitted on 27 May 1994) follows.

The U.S. Army Corps of Engineers, Wilmington District, has proposed to remove sand from the south side of the south Masonboro Inlet Jetty to renourish the beach at Wrightsville Beach, North Carolina. In order to determine any effects of the proposed project on submerged cultural resources a magnetic and acoustic remote sensing survey was carried out by TAR of Washington, North Carolina. The investigation was designed to provide accurate and reliable identification and remote sensing documentation of submerged cultural resources located within the proposed borrow area. The remote sensing survey was accompanied by a diving reconnaissance designed to identify cultural material generating a target signature off the east end of the north jetty. Four magnetic targets were identified during the survey. Target MI-01 contained characteristics suggestive of a potentially significant submerged cultural resource and should be avoided unless inspection confirms that material generating the signature is not historic and ineligible for nomination to the National Register of Historic Places. The signature generated by material at Target MI-02 appears to be a small single object, perhaps debris associated with construction of the south jetty. Targets MI-03 and MI-04 appeared to be associated with sunken navigational references lying along the channel alignment. Diver inspection of a previously identified magnetic and acoustic anomaly, MI-05, located near the seaward end of the north jetty confirmed that the anomaly was generated by modern debris. (TAR 1994:i)

In July 1994 and August 1994, underwater archaeologists under the supervision of principal investigator Gordon Watts were authorized by the USACE-W to perform additional diver investigations of Anomaly MI-01 and Anomaly Site 3 [magnetic target complex] identified during the February/March 1994 investigation. Material generating the signatures at Site 3 was located by probing at a depth of 22 feet below mean low water. Probing at the site of Target MI-01 revealed no cultural material within a depth of 30 feet below mean low water. Due to the depth of material generating signatures at Target MI-01 and the depth of proposed dredging no additional investigation of that target was recommended. Although probing of targets at Site 3 washed up a small amount of additional modern debris, the nature and intensity of the southern magnetic signature suggests that the target could be associated with a historic shipwreck. The intensity and duration of the signature was sufficient to represent a vessel the size of the USS *Columbia* or an iron hull blockade runner. As a result, it was recommended that the southern magnetic target associated with Site 3 be monitored for impacts during and at the conclusion of future dredging activities within the navigational channel (TAR 1995:18-19).

Historical Maritime Background

Contact Period and Seventeenth-Century Maritime Overview

Extant sources suggest that Italian explorer Giovanni Verrazzano navigated along the low relief of Masonboro Island ca. March 1524 during a reconnaissance funded by the French Crown. European settlement of the Cape Fear region began as early as 1526 when Lucas Vásquez de Ayllón led an expedition from Florida into the area. One Spanish vessel was recorded lost near the mouth of the Cape Fear River, referred to by the Spanish as the Jordon River. During the brief existence of the Spanish settlement, the area was known as the "Land of Ayllón" (Lee 1965:3-4). A detail of the historic Mercator-Hondius atlas map entitled *Virginiae Item et Floridae Amercae Provinciarum, nova Descriptio* based on sixteenth-century navigational sources is presented in Figure 1. This aspect clearly illustrates the coast of North Carolina under consideration.



Figure 1. Detail of Mercator-Hondius map produced in Amsterdam ca.1607.

The next attempt to settle the Cape Fear region was almost a century and a half later with the arrival of the English. Settlers from the New England colonies came to the area eager to establish a Puritan colony in the less harsh climate of the south. Under the leadership of Captain William Hilton, an advance group arrived in the summer of 1662 to find a suitable location. Debarking at the river "Cape Fear" as he called it, this party remained for three weeks during which time they purchased the surrounding area from local Native Americans. Protestant settlers that followed during winter 1662 remained for only a brief interval before abandoning the area (Lee 1965:4-5).

In early 1663, King Charles II granted territory south of Virginia to eight noblemen in tribute for restoring the Stuart dynasty to the monarchy. That conveyance included the area from Georgia to the Albemarle Sound region of North Carolina. The territory was divided into three counties: Albermarle [Albemarle Sound area], Clarendon [Cape Fear region] and Craven [South Carolina]. Shortly after, the Lords Proprietors received a proposal from a group of Barbadians for a settlement

within the Cape Fear region. In late spring 1664, 200 settlers, under the command of John Vassall, established a colony at the confluence of the Charles [modern Cape Fear] River and Town Creek (Potter 1993:5-6). The capital of Charlestown was the first English town in Carolina (Lee 1965:5). The colony was reported to have reached a population of 800 and extended some 60 miles along the river at its zenith. By October 1665, a second expedition by the Barbadians was launched with the intent of establishing a colony in the vicinity of Port Royal. A small fleet consisting of a frigate, sloop and a flyboat, under command of Sir John Yeamans, stopped at the Charlestown settlement after an arduous journey from Barbados. While entering the river, the flyboat, carrying the new colony's armament, ran aground on the shoals on the west side of the channel [modern Jay Bird Shoals] and foundered (Potter 1993:9, 29). The loss of vital cargo abruptly ended the Port Royal venture.

Within another two years Charlestown would also be abandoned. Difficulty in obtaining supplies, differences between the proprietors and settlers over land policies and hostilities with local Indigenous peoples resulted in the colony being generally deserted by late 1667 (Potter 1993:10-11). The territory south and west of the Cape Fear river was named Clarendon County and extended to Florida. Albemarle and Clarendon were established in 1664, and Bath in 1669 (Figure 2).

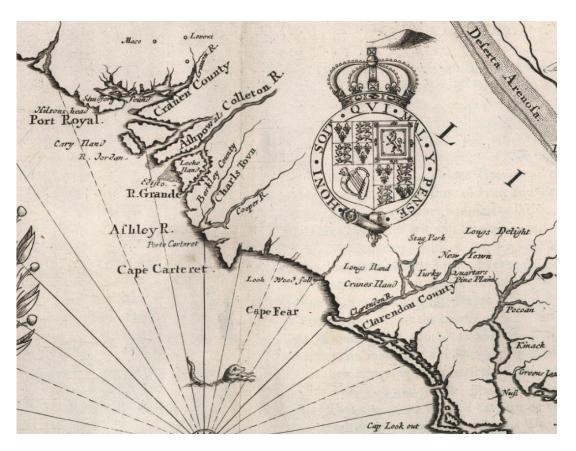


Figure 2. Detail of 1673 John Ogilby map "New Description of Carolina.

Eighteenth-Century Maritime Overview

In 1726, permanent settlements on the lower Cape Fear were established by South Carolina and upper North Carolina colonists (Lee 1977:7). On the west bank of the river, about 12 miles above its mouth and several miles below a shoal in the river called "the Flats," Maurice Moore established the town of Brunswick. A shoal located at the mouth of Town Creek impeded larger ships from venturing further upstream. Situated below "the Flats", Brunswick was accessible to vessels of large or small size (Lee 1977:12). By March 1727, the "General Court" of North Carolina [convened at Edenton] minutes memorialized the importance of the southern coast of the colony in that

It being represented to this Court that it is highly necessary that a ferry should be settled over Cape Fear River, and that part of the province not being laid out into precincts, therefore it is by this Court ordered that the ferry be kept for that river by Cornelius Harnett from the place designed for a town on the west side of the river to a place called the haule-over, [nearly opposite Brunswick] and that he receive the sum of five shillings for a man and horse, and half a crown for each person, and that no person to keep any ferry within ten miles of the said place. (Waddell 1910:10-11)

Early customs records confirmed that the *John and Catherine* (of Barbados) imported 23 captive Africans into New Jersey during 1722. The interesting fact is that the subject vessel was built in North Carolina ca. 1715 (Donnan 2002:473-474, 511). In May 1729, the *Mary* transported two slaves from North Carolina to New Jersey. At that date, the sloop was owned and commanded by "Jon. Vanpelt" (Donnan 2002:486).

Establishment of New Hanover Precinct (1729)

In the first subdivision of that part of the province of 'Carolina' which has since the year 1729 been known as North Carolina, all the territory south of Albemarle and extending to the Cape Fear River was called Bath County, but its limits were undefined toward the South. This southern part was, however, by an Act of Assembly, passed in July 1729, 'erected into the precinct of New Hanover,' the boundaries of which were prescribed to be 'to the Northward by the Haule-over and Little Inlet, and to the Southward by the Southernmost bounds of the Province. (Waddell 1910:7)

By April 1733, another community was established 15 miles upstream from Brunswick. The new settlement became known as New Town or Newton to distinguish it from the "old town" of Brunswick. In 1740, the town was incorporated and the name was changed to Wilmington (Lee 1977:12). Ca. 1733, the "New Carthage" community emerged in what is modern New Hanover County principally developed by James Wimble, John Watson, Joshua Grainger, and Michael Higgins. Over the course of time, the settlement was referred to as "New Liverpool, New Town, Newton, and finally Wilmington, named for Spencer Compton, Earl of Wilmington, a prime

minister of England" (Wilde-Ramsing, Beddoes, Wilde-Ramsing, Asbury, Martin, Stiles, Landis, and DeWitt [Wilde-Ramsing et al.] 1978:17). During 1734, a young Englishman visited the Cape Fear region and observed ... "several vessels lying before the town of Brunswick. His amplified description of contemporary eighteenth-century shipping and plantations on the Cape Fear follow.

The river is wonderfully pleasant, being, next to Savannah, the finest on all the Continent. We reached the forks, as they call it, that same night, where the river divides into two very beautiful branches, called the Northeast and Northwest, passing by several pretty plantations on both sides. We lodged that night at one Mr. John Davis's, and the next morning proceeded up the Northwest branch; when we got about two miles from thence we came to a beautiful plantation, belonging to Captain Gabriel [Joshua Gabourel, b. Isle of Jersey], who is a great merchant there, where were two ships, two sloops, and a brigantine loading with lumber for the West Indies; it is about twenty-two miles from the bar. (Anonymous quoted in: Waddell 1910:20)

At this date, Brunswick County landowner John McDowell owned the schooner *Jolly Batchelor* then "riding at anchor in the Cape Fear River, But of Brunswick"... McDowell may have hailed from Dover, Delaware as his last will and testament suggested with respect to bequests (Grimes 1912:229; Figure 3).



Figure 3. Detail of 1736 Herman Moll map entitled "Carolina."

Relevant Eighteenth-Century Real Estate

In *Between the Creeks, A History of Masonboro Sound*, Hewlett (1985:13) confirmed that Richard Mullington conveyed a 640-acre tract to John Rice during 1737. Rice, the son of Governor Nathaniel Rice, purportedly purchased the real estate as a consequence of a speculative scheme. A New Hanover County archaeological report submitted by Wilde-Ramsing et al. (1978) to the then North Carolina Division of Archives and History commented that

The location of [eighteenth-century Domestic Sites], particularly the earlier ones, tend to be around water outlets of the creek, river or sound areas, the reason being that water outlets were for sometime a better and quicker mode of travel for earlier settlers and later residence [sic] of New Hanover County. The majority of the standing structures were plantation houses or summer residences for local Wilmingtonians. [p. 89] Eshcol, or Anderson cottage as it is some times referred to, may be the oldest standing structure on the sound. The exact date is not known but is believed to have been build by Caleb Grainger, owner of what was once Masonborough Plantation. It is possible that the cottage was used only during the summer. [pp. 93-94] William Purviance bought 440 acres of what was called the Mullington Grant. In 1767, he began to build a year round residence on the mouth of present day Whiskey Creek. It is suggested by Mrs. C. W. Hewlett that sandstone was used in the foundation and was built with view, utmost comfort and room in mind. He lived here until his death in 1787. The only signs left of the old Castle Finn, which it was named by Purviance, is a small section of possible chimney remnants. [p. 91] Another prominent sound area home was Finian. The property was bought in 1773 and was that of William Hooper, a signer of the Declaration of Independence. It was also a probable meeting place for the masonic lodge during this period. [p. 100 Prior to 1785, Henry Toomer bought seven acres of land on Toomer's Mill Creek, a branch of present day Hewlett's Creek. Using the water current for power, he ran his mill. The earthen dam constructed for the mill can be seen today [1977/1978] [p. 105]

Colonial Mid-Century Shipping

Outbound and inbound shipping for this period mentions regular coastwise navigation and frequent Bahamian and Caribbean voyages conducted aboard sloops, schooners, and brigs. In October 1750, the New York registered *Prudence* sailed from North Carolina to New Jersey with two enslaved "Negroes". At the time of the voyage, the sloop was commanded by Jacob Anderson and owned by John Foreman. The *Prudence* was built during 1743 at a New Jersey shipyard (Donnan 2002:512). In 1760, the *Charming Sally* was built in North Carolina. Some three years later, the brig imported 103 captive Africans into New Jersey (Donnan 2002:509).

During 1762, Thomas Godfrey's search in Philadelphia for "more lucrative employment" failed so the young poet "procured some small commissions, and went, as a supercargo, to the Island of New-Providence [Bahamas]" but soon thereafter sailed, once more, to North-Carolina" (Gegenheimer 1943:26). The 1758 Bowen-Gibson map entitled *Carolina and Georgia* alludes to the principal commodities of those colonies carried on Colonial Era sail (Figure 4).

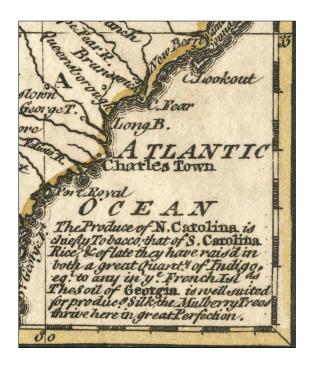


Figure 4. Detail of 1758 Bowen-Gibson chart.

Charles Christopher Crittenden's article "Ships and Shipping in North Carolina, 1763-1789" provided an excellent overview of the subject period. Writing for the *North Carolina Historical Review*, he remarked that

Although North Carolina was handicapped by a dangerous seacoast and by a lack of safe, deep harbors, the great majority of the vessels of the eighteenth century found it possible to put into her waters. As early as 1689 there were on the high seas merchant vessels of as many as 1,300 tons, and one hundred years later there was launched a merchantman whose tonnage was no less than 1,612; but most of the ships of the period were much smaller. A study of *Lloyd's Register of Shipping* for the years 1764-1800 makes it clear that by far the greater portion of British trading vessels were of not more than 300 registered tons. Since ships as large as this could put into the cape Fear River, and since those of 250 registered tons or more could sail through Ocracoke Inlet and even through the Swash, North Carolina was not as isolated from the main routes of ocean commerce as might be thought. The types of vessels which entered North Carolina ports were the schooner, the sloop, the brig or brigantine, the snow, and the ship. Of them all, by far the most common were the first two. The schooner of that date, noted for being a fast sailer, was a vessel with only two masts, whose main and fore-sails were suspended by gaffs, reaching from the mast toward the stern. The sloop, although similarly fore-and-aft rigged, differed mainly in that she had only one mast. The size of most of these craft, judged even by contemporary standards, was small. [1931:1]

According to Crittenden (1931:2-3), vessels clearing the Cape Fear district in 1767 (late summer to early autumn) were comprised of brigs averaging 45 tons, schooners averaging 30 tons and sloops averaging 27 tons. However, the 20-ton sloop *Patience* (Cape Fear for Philadelphia); 15-ton schooner *Betsey* (Cape Fear for Boston; Cape Fear for Bath); and the 10-ton sloop *Two Brothers* (Cape Fear for Currituck) successfully ventured out in that same period. Snows or ships navigating to and from the Cape Fear for the same interval generally averaged between 100 to 200 tons and two were identified as the 120-ton snow *Charley* and 120-ton ship *Caser* (Crittenden 1931:4-5). A contemporary view of Willmington [sic] "Survey'd and Drawn in December 1769, C. J. Sauthier [for] George III, King of Great Britain" is presented in Figure 5. The key identifies a church, court house, goal, "tann yard" and "still house". Numerous governmental, commercial, and residential structures are also shown along with several significant roads leading to the Brunswick Ferry, the Sound, and New Bern. Eagle Island is a predominant landmark.

Local Reaction Against Stamp Act

In March 1765, Parliament passed the detested "Stamp Act" which was not unexpected among American statesmen and other Colonial stakeholders. "Knowing the popular sentiment and desiring to find out what would be the probable action of the [North Carolina] Assembly", newly appointed Governor Tryon interviewed the body's speaker immediately. Colonel John Ashe replied that the act would be resisted with arms—or as tradition has preserved his reply, 'to blood and death'. (Ashe quoted in: Waddell 1910:26) The author of *A History of New Hanover County and the Lower Cape Fear Region, vol. I, 1723-1800* surmised that

The facts developed by the indisputable records prove beyond the shadow of a doubt that the only people in America who resisted with arms the landing of the stamps on their soil, and the first who defied British power with guns in their hands more than ten years before the Declaration of Independence, were the people of the lower Cape Fear. (Waddell 1910)

On 28 November 1765, the Royal Navy sloop-of-war *Diligence* ... "arrived at Brunswick with the stamps, and was greeted by an assembly of citizens with guns in their hands. The stamps were not landed". Governor Tryon later explained that there was no Colonial officer to distribute the stamps. Traditional sources suggested that the seamen aboard the *Diligence* (and its consort *Viper*) met with ... "broken remarks concerning the state of health of any one who should undertake to fetch that part of the cargo ashore." (Waddell 1910:28).

A certified New Hanover last testament dated January 1766 confirmed that Royal Navy lieutenant Thomas Whitehurst and Commander Jacob Lobb of "His Majesty's Sloop Viper" were stationed at the Port of Wilmington (Grimes 1912:512). Two volumes of abstracted wills (and other probate documents) compiled by John Bryan Grimes (1910; 1912) provide a wealth of obscure information about the Cape Fear region during the Colonial period. Anecdotal references discuss trade with other American colonies, luxury imports, regional exports, personal property (i.e. vessels), real estate conveyances, travel to exotic locales, and frequently allude to cultural and social norms.



Figure 5. Ca. 1769 plan of Wilmington (Courtesy of the Norman B. Leventhal Map & Education Center, Boston Public Library).

Less than a decade after the Stamp Act tax was levied against the American colonies, punitive laws [coercive acts] were passed by Parliament to reassert its authority over rebellious subjects. By June 1774, the fourth one (Quartering Act) allowed Royal governors to requisition unoccupied buildings. According to the Office of the Historian [U.S. Department of State] (n.d.)

In 1774, the British Parliament passed a series of laws collectively known as the Intolerable Acts, with the intent to suppress unrest in colonial Boston by closing the port and placing it under martial law. In response, colonial protestors led by a group called the Sons of Liberty issued a call for a boycott. Merchant communities were reluctant to participate in such a boycott unless there were mutually agreed upon terms and a means to enforce the boycott's provisions. Spurred by local pressure groups, colonial legislatures empowered delegates to attend a Continental Congress which would set terms for a boycott.

Commercial and Military Shipping

Eighteenth-century "Merchant Marine, Port of Roanoke" (Edenton, North Carolina) registers identified brisk coastwise trade along the North Carolina coast. Some shipping probably mirrored that of New Hanover County with respect to last port of call and/or destination ports. Select entries (custom house and naval officers' papers archived by the Clerk of Superior Court) revealed frequent voyages to/from Boston, Portsmouth [New Hampshire], Rhode Island, Nantucket, New York, and Salem. One trans-Atlantic passage originated at Whitehaven, England. Bahamian and Caribbean ports that mentioned included Jamaica, Antigua, "Anguila", Bahama Island, St. Christopher, Barbados, and the Tortugas. Only sloops, schooners, and brigs were listed in the surveyed records. The authority verified that the sloop *Betsey* was built in New Hanover County during 1772 and entered the Port of Roanoke on 24 July 1775 under the command of "John Hardy" (*North Carolina Historical and Genealogical Register* [*NCH&GR*] 1900:433-436). The compiler surmised that

From what appears in these records it is evident that at the period mentioned, it was customary for the owners of vessels to frequently take charge of them in person and make the voyages, especially after the crops on their farms had matured, was this true; during crop season some person qualified, was employed as Master. Nearly all the farmers living convenient to the water were engaged in Commercial enterprises as well as Agricultural. (*NCH&GR* 436-437)

In early autumn 1775, the Lords of Admiralty forwarded the "Disposition of H.M.'s Ships and Vessels in North America" to the Earl of Dartmouth (Secretary of State for the Colonies). Thirty Royal vessels composed of ships, sloops, brigs and one A.V. were either on station or were in route to a posting as of 17 August. The sloop *Cruizer* (under the command of Francis Parry) was on that date sailing off North Carolina. Simultaneously, Captain John Tollemache (sloop *Scorpion*) received orders to sail to North Carolina. The 6th-rate *Fowey* (George Montagu) was tasked to coast from Charlestown to Boston. On 6 October 1775, *Scorpion* was re-tasked to Boston and the

Fowey was ordered to Halifax (Nova Scotia) "to careen". In the interim, the sloop *Tamar* coasted along New Hanover County during its passage from Charleston to Boston (Colonial Office, vol. XI, 1976:75-76, 141).

An abstract of William Miller's 1777 will provides confirmation that the testator owned interest in a brigantine, which possibly was constructed in New Hanover County. Interesting eighteenth-century geo-references were identified (Figure 6). The source of Colonial wills mentioned that "Thomas Broderick" left an interesting bequest of 40 gallons of rum to a local acquaintance. Broderick survived at least one perilous 1800-plus nautical-mile voyage from his residence on the "Island of Granada" [Grenada]. Grenada was ceded to the British in 1763 from France and was universally known for high-quality nutmeg and mace. Despite the dangers of navigation on the high seas, a Scotland native sailed from Europe to St. Kitts and to the Cape Fear. Traveling aboard the 50-ton *Rebecca* in 1775 to Wilmington, she found the accommodations 'neat, clean and commodious' (Janet Shaw quoted in: Crittenden 1931:11).

MILLER, WILLIAM.

September 9, 1777. October 27, 1777. Wilmington. Brothers: Daniel and James Miller (of Luss in Dumbartonshire, North Brittain). Father: John Miller, sister: Eleanor Miller, brother: John Miller (to these three is given testator's interest in a brigantine, which he recites was "built at this place"). Brother-in-law: John Cowan ("an Island on the Sound known by the name of Bermuda, and also a piece of land on Smith's Creek"). Wife and Executrix: Anna. Executor: Alexa. Hostler. Witnesses: James Geekie, Thomas Brown, David Ross. Proven before Richard Caswell. Justice of the Peace: Jonas Dunbibin.

Figure 6. New Hanover brigantine owner (Grimes 1910:248).

American Revolutionary War Period

Naval operations were of limited importance in the Cape Fear region. In mid-1776, British warships began taking up regular station over the mouth of the river. Foraging parties in small vessels worked their way along the smaller streams and rivers in North Carolina. Forty head of cattle were seized in the vicinity of Lockwood's Folly and it was feared British sloops could cross the bars at Little River or Shallotte Inlet (Rankin 1971:72). In May of the following year, two British men-of-war entered the Cape Fear River and destroyed a number of Colonial vessels at anchor (Watson 1992:29). To counter the threat posed by British warships the General Assembly voted to purchase and arm three brigs for the defense of the Cape Fear River. However, these vessels proved inadequate for the task and suggestions were made for either selling them or sending them on trading or privateering expeditions (Watson 1992:29).

"Lieutenant Colonel Commandant of the Partisan Legion During the American War" predicted that "THE campaign projected by the British for seventy-seven, announced, in its commencement, [was] a system portentous of much evil to the United States" (Lee 1812a:5). In *Memoirs of the War in the Southern Department of the United*, "Light-Horse Harry Lee" touched on the project area as follows.

North Carolina is watered by many rivers; few of which are navigable for ships. Cape Fear is the most considerable; and that only navigable to Wilmington, situated not very distant from the sea. In a state of war, when naval superiority is conclusively in favor of the enemy, as was the case in our contest, this privation of nature was replete with advantage to us, though extremely incommodious in peace. This state is only to be assailed with effect through Virginia or South Carolina, through each of which her foreign commerce passes.... Although in this state, horses, bacon, Indian corn and beef, which constitute the most essential supplies of an army, could be found in abundance, yet, from the thinness of population, the collection of them was inconvenient. (1812a:232-234)

On Wednesday, 4 June 1777, the *Pennsylvania Journal* published a relevant article which alleged brutal treatment aboard two British vessels navigating along North Carolina's southern coast. Based on an account originating in New Bern, the Philadelphia editor commented that

The *Brune*, a frigate of 36 guns, and the *Merlin*, of 20 guns, two of his tyrannic Majesty's ships of war, are now cruising on this coast, having lately taken nine vessels between Ocracock and Cape-Fear [Figures 7], which they immediately burnt. They landed some of their prisoners at Cape Fear, where they put in to water, having on board a renegado [sic] American pilot, who served his time in Cape Fear river. The prisoners say the ships are not half manned, and that they met with great insults and savage usage from the humane and polite English officers and seamen, and were stripped of their money and cloaths [sic]. (as presented in: *Naval Documents of the American Revolution*, v. 8, 1980:942)

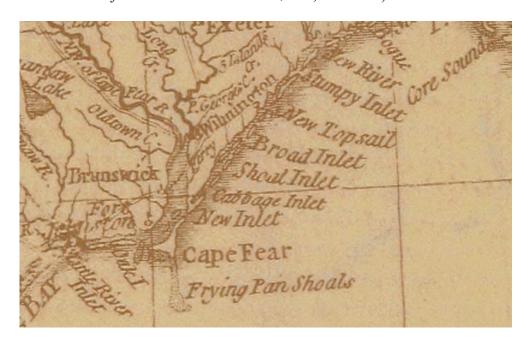


Figure 7. Detail of A General Map of the Southern British Colonies in America printed ca. 1776 by J. Bennett Map, Chart and Printsellers of London (Courtesy of NOAA).

The lower Cape Fear remained quiet until New Year 1781 when Major James Craig was dispatched by Lord Cornwallis take Wilmington. With a force of 18 vessels and 400 troops, Craig quickly captured the defenseless town (Sprunt 2005:114). Sir William Laird Clowes (1899:61) confirmed

... a small combined expedition proceeded from Charleston to Cape Fear River. Captain Andrew Barkley had under him the Blonde, 32, Otter, 14, Commander Richard Creyke (1), and Delight, 14, Commander John Inglis (1), and some smaller craft, and was the naval commander. On board were 300 soldiers under Major Craig. These, with 80 Marines were disembarked, and on the 28th [of January 1781] occupied Wilmington and captured seven American ships. The object of this expedition was to open up sea communication with Lord Cornwallis, and to secure a base for his army, then moving northward.

From Wilmington, Major Craig dispatched soldiers throughout the countryside to rally Loyalists and to procure supplies for Cornwallis's troops, then marching through North Carolina. After being checked by Colonial forces in the Battle of Guilford Courthouse the British retreated to Wilmington to recoup and replenish supplies. In the interval, Cornwallis paused at Cross Creek, where a friendly Highland settlement contributed small stock, of critical supplies. Mobilizing again, Cornwallis marched to Wilmington; to which place he was obliged to go contrary to his original plan; as the countryside offered little subsistence. Battle weary, the veteran British general reached Wilmington on 7 April 1781

...where he found major Craig with his small garrison,—perfectly serene, by his judicious defences, from injury or insult, and holding in his care abundant magazines, yielding not only every implement necessary for the further prosecution of the campaign, but affording in profusion al the comforts of food, raiment and liquor, to his worn and faithful troops.

When Cornwallis moved north to suppress Virginia, Major Craig remained in Wilmington to disrupt Colonial activity in that section of North Carolina. News of Cornwallis's surrender at Yorktown made the British position in Wilmington untenable and on 17 November 1781 Major Craig evacuated the city. After the conclusion of the war there was a shift in the maritime development of the Cape Fear region (Figure 8). Almost all the ships that left the Cape Fear now went to Charleston and few to England or the West Indies (Lee 1977:33). Inbound ships now proceeded up to Wilmington. This shift brought about the decline of the town of Brunswick as was indicated by the change in name of the "Port of Brunswick" to the "Port of Wilmington" (Lee 1977:34).

During the last decades of the eighteenth century the area that would become the town of Southport consisted of little more than the remains of Fort Johnston and the homes of local river pilots. The region's potential, however, was realized by three men from Wilmington, Joshua Potts, John Brown and John Husk, who the viewed the area, with its salubrious sea breezes, as an ideal spot for a new town. Though the men's initial petition was rejected in 1790 the group persevered and on 15 November 1792, the General Assembly issued a charter for the establishment of a town on the bluff overlooking the mouth of the river.

During the American Revolution several North Carolina brigs were equipped "as state-owned vessels or as privateers" and some were utilized "to carry on trade with France, Spain, and the West Indies" (Crittenden 1931:4). Three of these North Carolina registered brigs were the *Washington*, the *Joseph* (for Spain), and the *Buckskin* (for France). After the conflict ended, Cape Fear customs records (for just one 1789 three-month period) identified three armed brigs and their respective cargoes as follows.

The *Hannah*, of eighty tons, set sail for Penzance, England, with 606 barrels of tar, 163 casks of turpentine, and 10,164 barrel staves. The seventy-eight-ton *Mary Ann* set out for Hull, England, with 51 hogsheads of tobacco, 281 barrels of turpentine, and 6,000 white oak barrel staves; the *Sally*, of one hundred ninety-two tons, started for Kingston, Jamaica, with 70,000 feet of boards, plank, and scantling, 298,000 cypress shingles, 38 barrels of tar, and 6 tierces of rice. (Crittenden 1931:4; Figure 8)

The Quasi-War Period (1798-1801)

Viewed as a somewhat obscure and "forgotten" international conflict, The Quasi-War impacted American shipping on the coast and the high seas to a great degree. The National Museum of the U.S. Navy (n.d.) provides this succinct yet thorough synopsis of the diplomatic events which acerbated tensions between the United States and its former resolute European ally.

The years of the French Revolution and Napoleonic Wars were filled with rich opportunities and dangers for the United States. As a neutral, America's trade benefitted, but Old World powers challenged her position. France, our former ally, applied political, diplomatic, and military pressure to force the United States into a pro-French alignment. French seizure of over 300 ships led the Americans to respond with force in 1798, under the leadership of President John Adams and Secretary of the Navy Benjamin Stoddert. On July 7, 1798, Congress rescinded treaties with France, and the Quasi War began... American warships, by defeating their equals and capturing more than 80 French vessels, gave the world a convincing demonstration that the U.S. Navy was a professional fighting force... The Treaty of France, signed at Mortefontaine in September 1800, was ratified on February 3, 1801. During the conflict, the Navy grew from six vessels to about thirty commissioned ships. American Navy vessels had made prizes of approximately 85 French vessels. The experience built the Navy into a unified service protecting the American merchant fleet that previously didn't have protection besides weak armament onboard. Lessons gained from the Quasi-War with France would prove to be fruitful in the early 19th century with the first Barbary War, the War of 1812, and the second Barbary War.

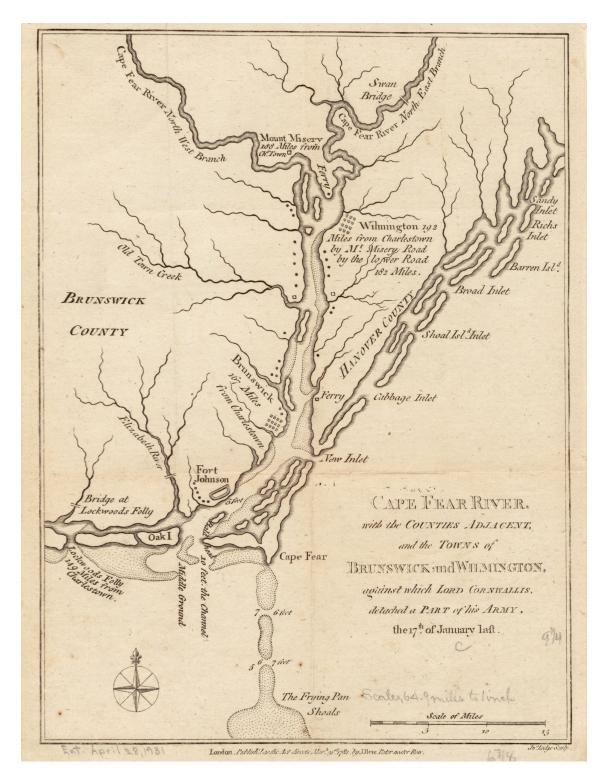


Figure 8. Cape Fear River, with the counties adjacent, and the towns of Brunswick and Wilmington, against which Lord Cornwallis, detached a part of his army, the 17th of January last [1781] (Courtesy of Norman B. Leventhal Map & Education Center, Boston Public Library).

In November 1798, the secretary of the navy informed the Georgia governor that "the Laws of Congress authorize[d] the building of Ten Gallies or other small Vessels for the defence, it was understood, of the harbours of the United States". Benjamin Stoddert added that "Georgia and the Carolinas" were "the only States for which any kind of exclusive protection in the Naval Line, has been provided" and suggested that until the French became "more powerful in the West Indies" protection afforded by the 14-gun revenue cutter *Eagle* should prevent "Piratical incursions" (Office of Naval Records and Library [ONR&L] 1935:49). Shortly thereafter, Secretary Stoddert communicated with the Wilmington collector of customs to assist a U.S. Navy vessel captain posted to the West Indies (Figure 9). In early January 1799, Stoddert reassured the port's Naval agent with respect to the destruction of government equipage (Figure 10).

To Griffith John McRea, Collector of Customs, Wilmington, N. C., from Secretary of the Navy

[Philadelphia]

Navy Dep Dec 15th 1798.

Griffith John McRea Esqt

Sir I have the Honor of enclosing to you, Instruction for Cap John Brown, of the Revenue Cutter Diligence.

It is intended that this Vessel Shall be employed this Winter in the West Indies — in Active operations it is therefore, necessery, for Cap! Brown to have his Vessel loaded with as much Provisions & Water, as she will conveniently Stow; & if you conceive that an addition of 4 or 5 men to the Number of his Crew, can be obtained without any delay & will be to his advantage, you may instruct him accordingly,

I must beg that you give every assistance in hastening the departure of Cap! Brown —

If Officers are wanted appoint them & let me know their names, They Shall be confirmed in Such appointments — Cap! Brown in addition to the usual number of Officers, allowed Revenue Cutter, must take a Surgeon's Mate, who will be allowed 30 dollars pt month & two rations pt day, you will be so obliging as to assist him in procuring an eligible charrector for this Station & Supply him with the proper medicins —

I have the honor &C.
[NDA. GLB, Vol. 1.]

Figure 9. U.S. Navy directive for Wilmington customs collector (ORN&L 1935:92).

[PHILADELPHIA]

Navy Department 4th January 1799

Mt Amaziah Jocelin

Wilmington No. Carolina

Sir I am honored with the Receipt of your letters of the 8th of November and 19th Ultimo, and regret exceedingly, the dreadful Calamity to which the Town of Wilmington has been exposed.—

I shall immediately order 50 Muskets and as many Boarding Pikes to be sent to you, and am glad that the other Articles for the Gallies which have been destroyed by the Fire can be replaced on the Spot.—

Mt Winder the Accountant of the Navy Department, will send you the forms for rendering your accounts, to which you will please to attend.— I thought he had already done it, but find it has been omitted— It may be proper to pay the Wages of the Officers & Crews of the Gallies up to the 1th Instant, and in order to enable you to do this and to provide for the other expenditures you mention, a Remittence Shall be immediately sent to you of 2800 Dollars—

I have the Honor & [NDA. GLB, Vol. 1.]

Figure 10. "Calamity" at Wilmington (ORN&L 1935:211).

In early March 1799, the French *James* "arrived as a Flag of Truce at Wilmington". Lieutenant Blouch requested that six French prisoners being held at Norfolk be released to "assist in navigating the Vessel". Navy secretary Stoddert agreed to the formal plea ordering the Norfolk navy agent to transport the detainees to North Carolina" (ONR&L 1935:460). By 14 March, two additional letters revealed that Blouch would sail onto to Charleston, pick up more French captives seamen held there, and would ultimately proceed to Guadaloupe [sic]. Interestingly, the French captain asked for a local pilot due to his anxiety in perhaps navigating the entrance to the Cape Fear (Figure 11).

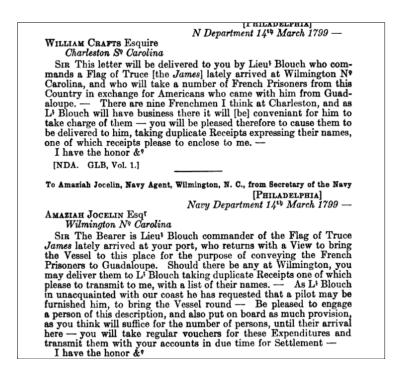


Figure 11. French Navy presence at Wilmington (ONR&L 1935:462).

Within days, the U.S. Navy secretary advised Major General Charles Pinckney (at Charleston) there were two unmanned galleys at that South Carolina port, two manned galleys at Wilmington (under Ameziah Jocelyn's supervision), and two manned galleys at Savannah (under Ebenezer Jackson's control). Stoddert related to Pinckney that "supplies pay &etc" would be needed and since he was "at so great a distance" (Philadelphia) could the general take care of that matter. Stoddert added that "The greatest part of our Vessels will shortly leave the West Indies, and will be principally employed during the Summer, on our Southern Coasts—at least, so many will be so employed, as to leave little to apprehend from the Enemy,--without an increase of their strength in the Islands" (ONR&L 1935:492-493).

On 23 March, Stoddert again wrote his Wilmington naval agent concerning fiscal matters related to equipping the North Carolina galleys. The princely sum of \$1000 was apparently being sent to Jocelin to fulfill the agent's requisition list (Figure 12). In terms of today's monetary equivalency, this would amount to over \$30,000.

Figure 12. Outfitting the Wilmington galleys (ONR&L 1935:506-508).

Nineteenth-Century Maritime Overview

In its 2 November 1803 issue, the *Cape Fear Herald (CFH)* of Wilmington published several items of particular interest. The "*Port of Wilmington*" report identified two vessels which had recently entered the subject port. These vessels were registered as the schooner *Mechanic* bound from Fairfield [Connecticut ?] and the sloop *Trial* bound from Boston. Vessels lately clearing Wilmington included the schooners *Regulator* (for Charleston) and *Experiment* (for Charleston) (*CFH* 1803a:3). The journal's recurring column entitled "*Prices Current*" for 2 November verified recently imported/exported commodities. Legible goods included; lumber, dressed staves, rough staves, shingles, rice, flour, cotton, tar, turpentine, bacon, butter, molasses, Muscovado sugar, West Indies rum, Jamaican rum, and coffee (*CFH* 1803b:3). Extracts from other contemporary maritime news follow.

The brig *Alexis*, Capt. Allison, arrived here on Monday last, in 40 days from Greenock [Scotland]. There came passengers about forty Highlanders, all in good health--The ship John Jones, Captain Allan, in 47 days from Liverpool. Capt. A. brought London papers to the 13th of September. We have only been able to procure one of the 9th—on perusing it we do not observe that it contains an article worth extracting.—By Capt.

Rice, who arrive yesterday in 22 days from St. Pierre's Martinique, we learn that a small British squadron arrived and re-commenced the blockade of that place on the 20th ult. In the preceding two week, 40 vessels had entered from St. Thomas, Guadaloupe, and the United States, laden primarily with flour, beef, and pork. (*CFH* 1803c:2)

Ming's New York Price Current kept American merchants, shippers, factors, and speculators apprised of all commodity markets trends. The Saturday, 3 January 1807 issue verifies in real time the value of the diverse cargoes (general and luxury goods) being carried aboard thousands of vessels all over the world. The circular also identifies inbound/outbound shipping at the Port of Wilmington on 16 December 1806; namely, the Nancy from Barbados, Minerva from St. Croix, Charles from Antigua, Sally from Barbados, Isabella for Guadaloupe, Recovery for Barbados, Betsey for Bordeaux [France], Julian for Kingston [Jamaica], and Phoenix for Demerara [sic] [Dutch colony until 1815] (Appendix A).

"Marine Intelligence" reported by *The Charleston Times (TCT)* on 23 March 1808 provided relevant early nineteenth-century shipping details. After recently clearing the South Carolina port, the sloops *Patty & Lydia* (Captain Sutton) and *Patty* (Captain McLean) reached Wilmington safely. The schooner *Regulator* arrived at Charleston from Wilmington in only one day; and its master (McIlhenny) offloaded a cargo of rum and bacon (*TCT* 1808a). Inbound/outbound coastwise vessels sailing from/to mid-Atlantic and New England ports [obviously navigating along North Carolina] included; brig *Homan*, schooner *Blazing Star*, brig *Eliza* (cotton), schooner *Laurel*, schooner *Kitty-Ann*, schooner *Jane* (flour), schooner *Nancy*, schooner *Connecticut* (hay), brig *South Carolina*, and sloop *Caroline* (*TCT* 1808b).

Naval War of 1812

By April 1812, an embargo against Great Britain was ordered by President James Madison [last year of his first term]. On 9 May, the Lords Commissioners of the Admiralty issued a "most secret" dispatch to "commanders in American waters to 'take special care' to avoid clashes with the United States Navy and to exercise 'all possible forbearance towards the Citizens of the United States" (Perkins 1964:11). One month later, a historic proclamation of war was approved by the United States Congress.

The rationale for "America's Second "War of Independence" which officially commenced in June 1812 was grounded in seemingly obscure circumstances that nonetheless forced President James Madison to aggressively discharge his duty. British objectives during The Naval War of 1812 were similar to those implemented in the Revolutionary War. The Southern ports dispatched 36 privateers. Referred to as commerce destroyers [Figure 13; Figure 14], they sailed from Norfolk, Wilmington, Charleston, Savannah, and New Orleans. According to Maclay (1900:320), Wilmington sent out just three privateers; the 5-gun schooner *Hawk*; 5-gun *Lovely Lass*; and the infamous and fastl 6-gun Baltimore clipper *Snap Dragon* (Maclay 1900:321). Its intrepid captain, Otway Burns, was described as audacious, reckless and fearless but clearly exhibited an uncanny sense of offensive and defensive sailing strategies. Burns was born in 1775 on Queen's Creek, Swansboro.

Vice-Admiralty judicial documents (archived at Halifax, Nova Scotia) identified countless American vessels captured by the British which verify brisk coastwise shipping despite the constant dangers of encountering the Royal Navy (Nova Scotia Vice Admiralty Court [NSCAC] 1911). Select cases that identify North Carolina ports are presented in Table 1.

Vessel	Rig	Tons	Voyage	Capture	Cargo
Apollo	Sloop	54	NC to Boston	March 1813	Corn
Maria	Schooner	131	NC to East Port ME	March 1813	
Windsor					
Rising Sun	Schooner	64	NC to Barnstable MA	March 1813	Corn, Beans & Tar
Emperor	Schooner		NC to Boston	May 1813	Indian Corn
Little Bill	Schooner		St. Bartholomew to NC	June 1813	Muscovado Sugar &
					Molasses
Carl Gustaff	Ship	306	NY to Beaufort NC	June 1813	Ballast
Caroline	Brig	195	Wilmington to MA	April 1813	Naval Stores
Caroline	Schooner	25	NC to MA	April 1813	Corn & Beans
Antelope	Schooner	73	NC to Portland ME	July 1814	Flour & Tar
Eliza	Schooner	100	Wilmington to Halifax	July 1814	Flour & Tar
Jane	Sloop	70	Wilmington & Puerto Rico	August 1814	Sugar & Hides
Rachel	Brig	120	ME to Wilmington	November 1814	Potatoes & Salt

Table 1. War of 1812 Royal Naval captures of relevant shipping (NSVAC 1911:passim).

Cargos carried on American vessels to and from Caribbean, West Indian, European (Scotland, Spain, Italy, France, etc.), South American and most U.S. ports revealed a great diversity of commodities; both practical, general, and luxurious. The 750-ton ship *Jerusalem* was transporting 2000 boxes sugar, many barrels of sugar, 200 bags of coffee, 200 quintals of copper, 150 hides, 5000 horns, and "4 boxes tapes" when captured by the Majestic on 3 September 1813. At that time, Master Panagi Corcori was bound from Havannah to Boston (NSVAC 1911:129). Other contemporary commodities carried aboard schooners, brigs, sloops, and ships engaged in coastwise and high seas commerce included; brandy, wines, silks, dry goods, currants, juniper berries, merino wool, corn, different sugars, cheese, apples, soap, candles, tea, rum, butter, and tobacco (NSVAC 1911:passim).

Nineteenth-Century Navigational Concerns

With the growing amount of vessel traffic sailing up to Wilmington there arose an urgent need for improvements in the navigability of the river. As early as 1784, measures were taken to improve the conditions of the lower Cape Fear River (Lee 1977:36). Improvements were needed at the treacherous entrances to the river, at the Bar and upstream at New Inlet. Three major shoals between Wilmington and the Atlantic Ocean also caused problems for ships trying to navigate the river. The "upper shoal," located near the foot of Clarks Island, off the southern tip of Eagles Island, had eight and one-half feet of water. The "middle shoal," also known as "the Flats," had nine feet. The "lower shoal," at the foot of Campbell Island, had nine and one-half feet. The main channel of the river was then located in a narrow passage between Campbell Island, Clarks Island, and the west bank (Lee 1978:112).



Figure 13. U.S. frigate *United States* capturing HBM frigate *Macedonian* on 25 October 1812 (Courtesy of the Library of Congress).

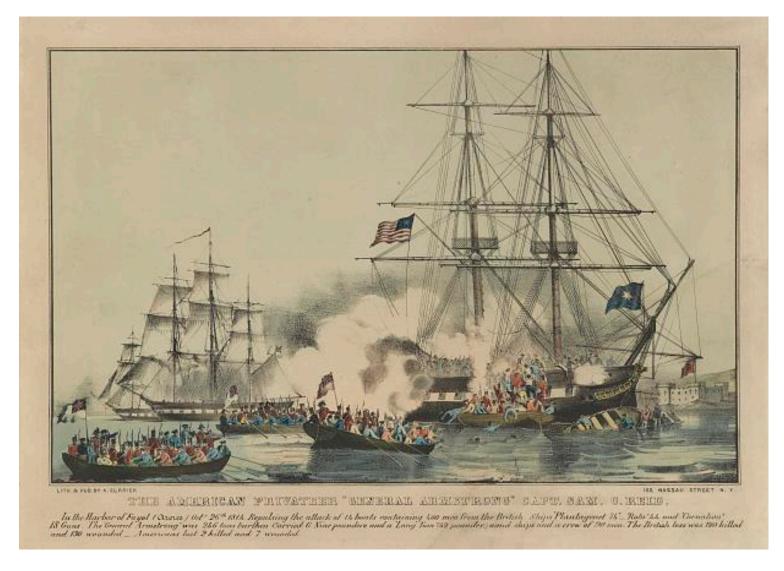


Figure 14. American privateer General Armstrong off Fayal (Azores) on 26 October 1814 (Courtesy of LOC).

In addition to the shoals, hulks deliberately sunk during the American Revolution as obstructions needed to be removed (Lee 1977:36-37). Ca. 1819, noted English engineer Hamilton Fulton was hired to make improvements on the Cape Fear River mainly between Wilmington and the ocean where a system of jetties was planned. Work continued for six years until financial limitations halted this project. Some improvements were made on the river up until the start of the American Civil War with sporadic financing by the State and local Wilmington businessmen (Lee 1977:37). Steam vessels first appeared on the Cape Fear River in 1817. The first steamboat to arrive was the side-wheel *Prometheus*, built in Beaufort for a firm in Wilmington that intended to run the vessel from Wilmington to Fayetteville and Southport.

Circa 1819, the Clarendon Steamboat Company was established at Wilmington. This company held the exclusive right to operate steamboats on the Cape Fear for a period of seven years provided that it kept one boat in service. By the 1850s, nearly 100 vessels of all types were anchored off Wilmington at the same intervals. Many of the ships were large square-rigged foreign craft, while others were side-wheel steamers. However, most were American schooners engaged in the coastal trade (Lee 1978:116).

Relevant Coastwise Shipping

In March 1822, the Congressional Committee on Commerce submitted its findings related to "the commercial intercourse of the United States with foreign nations" to the House of Representatives ... Two interesting documents; "A Statement of the Tonnage of new vessels annually built within the United States, founded on the Collectors' abstracts transmitted to the Treasury Department of the United States" and "Statement, exhibiting the quantity of Tonnage entered and cleared in and from the respective states and territories, during the year ending on the 30th September, 1821" are presented in Figure 15 and Figure 16. "A. No. 5" confirms that inbound/outbound shipping to North Carolina ports was overwhelmingly carried aboard coastwise vessels (Figure 17).

		A. No. 4.					
TATEM	ENT of the Tonnage	e of new vessels ann	ually built with				
he United	States, founded on the	he Collectors' abstra					
nc Ircusu	ry Department of the	, Onited States.					
YEARS.	REGISTERED.	ENROLLED.	TOTAL.				
	Tons. 95ths.	Tons. 95ths	Tons. 95ths.				
1803	56,671 83	31,796 52	88,448 40				
1803	73,649 39	30,104 52	103,753 91				
1805	97,373 57	30,533 41	128,507 03				
1806	93,971 61	32,121 63	126,093 29				
1807	71,175 85	28,608 07	99,783 92				
1808	11,776 45	19,978 34	31,755 34				
1809 1810	72,219 92 102,479 72	19,177 58 25,096 14	91,397 55 127,575 86				
1811	108,395 72	38,296 10	127,575 86 146,691 82				
1812	58,677 21	26,014 21	84,690 42				
1813	18,482 46	12,670 89	31,153 40				
1814	13,445 55	15,594 35	29,039 90				
	106,079 33	48.545 06	154,624 39				
1815							

Figure 15. Tonnage of American vessels as of September 1821 (Committee on Commerce 1822).

STATEMENT, ex	hibiting the	quantity o	f Tonnage	entered a	nd cleared
in and from the r ing on the 30th Se	ptember, 18	ites and te	rruories, c	iuring ine	уеит епи-
		TONNAGE.			
STATES, &c.		AMBRICAN	YESSELS.	FOREIGN	VESSELS.
		Entered.	Cleared.	Entered.	Cleared.
Maine	Tons -	71,700	111,854	883	520
New Hampshire -		9,506	8,237		1.170
Massachusetts -		158,891	129,741	1,605 80	1,170 40
Vermont		1,019	901 21,314	143	107
Rhode Island -	: :	22,808 16,464	14,749	145	101
Connecticut - New York -	: :	156,493	158,174	13,856	10,720
New Jersey -	: :	250	231		
Pennsylvania -		70,679	69,436	4,162	3,641
Delaware -		4,081	2,388		
Maryland		67,504	61,687	5,489	4,677
District of Columbia		12,546	15,035	4,598	6,483
Virginia		27,004	33,545 37,343	293	109
North Carolina -		29,904 30,524	45,343	18,745	19,525
South Carolina -	: :	24,075	41,468	11,239	14,666
Georgia -	: :	6,235	4,197	336	419
Mississippi Louisiana	: :	54,802	49,115	19,919	20,904
Louisiana East Florida -	: :	272	190	178	92
West Florida -		341			

Figure 16. Comparison of domestic and foreign shipping as of 30 September 1821 (Committee on Commerce 1822)

The chronicle of the 187-ton *Hebe* wrecked off New Hanover County in 1824 serves as an example of nineteenth-century trans-Atlantic navigation. The brig was built at Bristol, Great Britain during 1821 by Hilhouse, Sons and Company and was first advertised for sale in Jamaica. Shortly thereafter, the new owner (A. Meredith) announced that the brig was for "sale, freight or charter" (Farr 1950:234). According to documents archived by the Bristol Record Society, "In 1824, bound from Bristol for Philadelphia, she put into Falmouth in distress after being out 24 days and having to throw part of her cargo overboard. She later reached Philadelphia but, coasting down to Wilmington, was lost near Cape Fear, her crew being saved" (Farr 1950:235).

From 1828 to 1835, the 313-ton *Retrench* occasionally visited the ports of Wilmington and Charleston. Outbound from Greenock or the River Clyde, the Scottish brig generally carried both cargo and passengers (Dobson 2008:125). On 22 August 1848, a Wilmington source reported that "Sunday afternoon, during a heavy gale from South, the schr. *Caldwell*, [Captain] Hoover, from Mattamuskeet, with corn, for this port, was stranded on Barren Inlet; vessel and cargo at total loss, crew saved" (*Sailor's Magazine and Naval Journal* [*SM&NJ*] 1848:55). During the following month, the *Aurora*, [Captain Willoughby] sailed from Wilmington bound for Boston. Being caught "during the blow" on the night of 20 September, the schooner "was driven ashore on Norwalk Island, [Long Island]" (*SM&NJ* 1848:117).

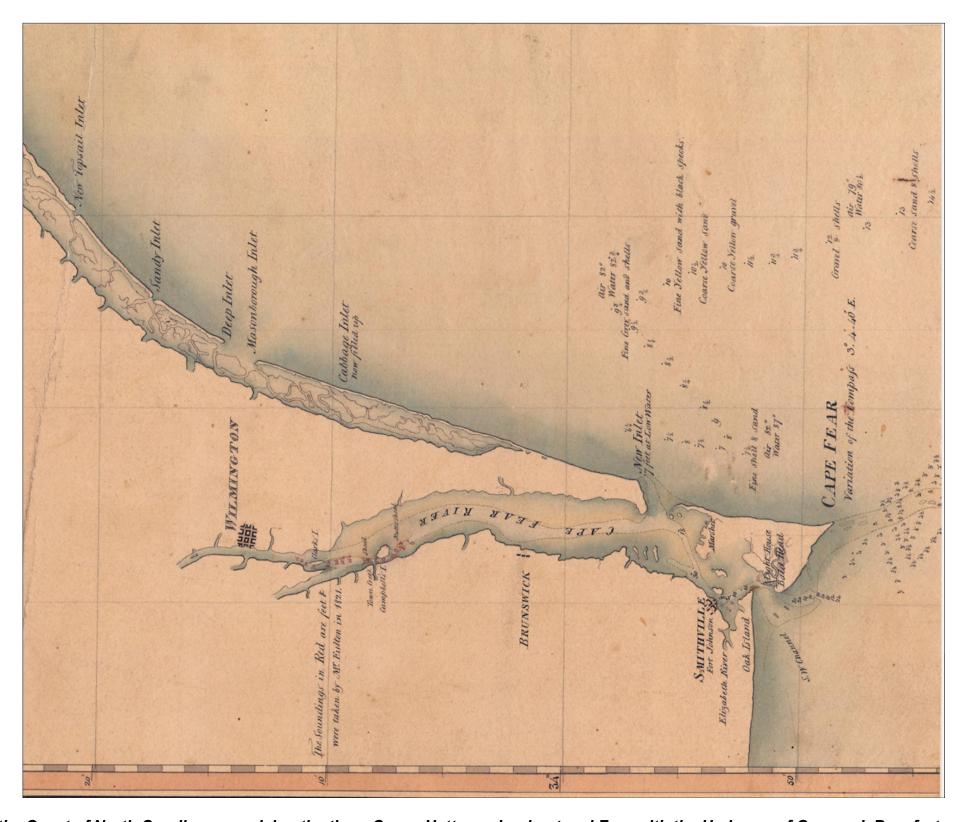


Figure 17. Detail of A Chart of the Coast of North Carolina comprising the three Capes Hatteras, Lookout and Fear with the Harbours of Ocracock Beaufort and Smithville.

This publication reported other early autumn 1848 coastwise trade which likely navigated along the coast of North Carolina; such as the Bremen brig *Eleanor Elisse* (bound from Savannah *for River Plate* but "bore away for New-York in consequence of the sickness of the crew"); barque *John Aviles* (Cienfuegos for Philadelphia); and schooner *Excel* "of and from Charleston" for New York (*SM&NJ* 1848:117). On 19 February 1849, a Boston source commented that the "Schr. *Mary Eliza*, McCumber, in endeavoring to go about, missed stays, and went ashore at Masonboro Inlet, N.C. 6th Feb., supposed to be a total loss" (*SM&NJ* 1849:246). The *Agnes Sophia*, Captain Bett, arrived safely at the entrance of Cape Fear on 10 July 1852 from a longer voyage from the Clyde [Scotland] (Dobson 2008:4; Figure 18).

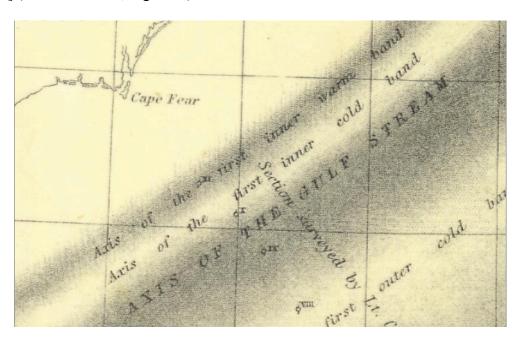


Figure 18. Detail of chart Showing the Positions and Comparison of Observations of Temperature in the Gulf Stream in 1845 through 1848 and 1853 (U.S. Coast Survey 1853).

Carolina Yacht Club Formation (1853)

According to esteemed North Carolina historians William N. Still and Richard A. Stephenson (2018:233), "Regattas were held off Wrightsville Beach in the early 1840s leading to the organization of the Carolina Yacht Club [CYC] by 1853". At the later date, CYC retained the distinction of being "the only organized racing association in the state". In *Chronicles of the Cape Fear River*, Sprunt (1916:322) alluded to the popular races when memorializing a deceased friend's love of the New Hanover shore.

[Norwood Giles] ever found solace and joy in the freedom of country life. He loved to breathe the clear air of heaven; the ocean and its wonders and the marvelous flora of our region were sources of delight to him, for he found more pleasure in the lilies of the field and in the shells of the sea than in all the arts of man's device. In all the manly sports and healthful pleasures of the sound he was an ardent and successful leader. His sprightly, generous nature, his exquisite wit and humor, made him ever

welcome in social life, and his charming pen sketches of the annual regatta, which were as fresh and breezy as the salt air, were always read with feelings of pleasure and delight.

An article [Figure 19] published a century later in a Wilmington newspaper added these antebellum facts about the private club which attracted "the whole society of Masonboro and Wrightsville"....

the club is the second oldest on the Miantic coast and the third diss yacht club in the United as members are proud of its hisary which dates back to 1854. Saling was popular at Wrightstile Beach many years prior to that, for Wrightsville Sound has alsays been a naturally fine body d water in which to operate racise sell boats. Then the Yacht club was formet in 1854. Daniel Baker was elected the first commodore and during his term of office did much to inmuse the already intense interest suling at the sea island, which is these days could hardly have un classed as a resort. Test after year races were stagwin Banks channel, "bank partis' were held in which the whole griety of Masonboro and Wrightsalle would meet on the beach to eily a day on the island and then gurn to their homes by boat in the summer moonlight, and the yacht club became a social as well as a sailing organization. The War between the States put s crimp in the activities of the this, but even that major event falled to put a stop to fae annual Jaly 4 races at which the club wing championship as decided. is fact, never until this year since te fermation of the club in 1854 use the championship races been Traffer 4

Figure 19. Extract from "Carolina Yacht Club Beach's Social Center" (WMS 16 June 1940:7).

Antebellum Shipping & Maritime Casualties

An insurance underwriter's advertisement related to a relevant marine casualty published on 18 June 1855 in the *Wilmington Daily Herald* informed readers that

ON THURSDAY next 21st inst., at 12 o'clock, I will sell by order and under inspection of Chas. D. Ellis, Underwriters' Agent, on Wrightsville Beach, the HULL, SPARS, SAILS, RIGGING, ANCHORS and FURNITURE of Schr. VIRGINIA, of and from Baltimore, bound for Savannah, as she now lies stranded on the Beach. Persons wishing to attend the sale will find boats at Bryant's and Sneaden's Sound Places, ready to carry them. (1855a:3)

Numerous notices "To Consignees" and for the general public (same newspaper issue) provided pertinent port advice. Contemporary shipping included schooners *Adele*, *A. J. De Rossett*, *R. W. Brown*, *Ben, Vapor*, and *M. E. Wells* from New York; schooner *Marine* (from ?); schooner *L. P. Smith* (from ?), and schooner *Edward Kidder* from Philadelphia. Domestic and foreign merchandise were of a diverse nature and included; exotic fruits (such as oranges, lemons, cocoanuts, and "Mountain Sicily FRUIT"), French confectionaries (such as gum drops, "real French Burnt Almonds"), fancy dry goods, Paris style bonnets, "Pineapple Cheese", India rubber toys, "Laughing Dolls", "Oriental Grape Drops", "Black and Fancy Silks", "French China", European glassware, perfumes, and linens garments (*Wilmington Daily Herald* 1855b:3).

An interesting *recurring* "Notice" first published by "Joseph Crandon" on 5 March 1855 suggested some thorny business issue with respect to vessel repairs. Republished on 18 June 1855, the item read as such; "This is to caution all persons that I hereby forbid them working on board the brig MARCELLUS, of Columbia, Maine, now lying at Railroad wharf in this town, or furnishing any material whatever, as I shall not pay any bills or contracts unless made by myself, or my agents, J. & D. McRae & Co." (*Wilmington Daily Herald* 1855c)

According to the New York Chamber of Commerce (NYCC) 1859 list of marine losses, numerous vessels were lost off North Carolina. Although extant documents do not verify casualties within the modern project area, they allude to antebellum coastwise shipping. Four events occurred off New Hanover County; i. e. barque *Exact* lost on Frying Pan Shoals; Maryland built schooner *Alabama* lost "near Wilmington"; brig *Maria* in distress off Wilmington; and schooner *John Forsyth* in distress off Wilmington. Additional marine casualties (groundings, sinkings, etc.) occurred between Currituck and Brown's Inlet. Those vessels are identified as; schooner *Liberty*, schooner *Five Boys*, British barque *Emma*, British *Roseneath*, schooner *Spy*, schooner *Rhode Island*, ship *Agamemnon*, schooner *Fanny Harms*, British schooner *E. J. Eneas*, schooner *Independence*, schooner *Mary*, schooner *Charles*, and brig *R. White* (NYCC 1860:184)

On 11 April 1860, a U.S. marshal acting for the District of Cape Fear advertised a libel associated with a significant maritime casualty (Figure 20). The official notice was published in the *Wilmington Daily Journal*, Wednesday, 11 April 1860:2.

NEW ADVERTISEMENTS.

UNITED STATES OF AMERICA.

DISTRICT OF CAPE FEAR.

WHEREAS, a libel in a cause of Salvage, civil and maritime, has been filed in the District Court of the United States for the District of Cape Fear, in the District of North Carolina, on the 10th day of April, 1860, by John Davis and others, against the cargo of the Br. Brig Alexander Wise, alleging in substance that on the 12th, 13th, 14th and 15th of January, 1860, by means of great exertions on their part, and with the Steam Tug Mariner, they salved 537 boxes Casteel Soap. 94 casks of Wine, and one box of Sponge, while the said Brig was grounded on Masonborough beach, about 16 miles Northward of the New Inlet bar, and brought the same safely to the town of Wilmington.

Now, therefore, in pursuance of the monition to me directed, I do hereby give public notice to all persons claiming said cargo, or in any way interested therein, that they be and appear before the said District Court, to be held in the town of Wilmington, in and for the District of Cape Feer aforesaid, on the first Monday after the fourth Monday in April next, then and there to interpose their claim, and to make their allegations in that behalf.

WESLEY JONES, U. S. Marshal.

JOBN J. CONOLEY, D. M.

M. LONDON, Proctor for Libellants.

April 11th, 1800. 186-20t

Figure 20. Libel against cargo of Alexander Wise (WDJ 11 April 1860:2).

American Civil War Era (April 1861-April 1865)

The Confederate war department was established by the Provisional Congress of the Confederate States of America (CSA) on 21 February 1861. "United States president" Abraham Lincoln's historic proclamation of 19 April 1861 to essentially blockade South Carolina ports (and southward) was quickly followed by one to blockade North Carolina and Virginia ports on 27 April. In *Blockade Running During the Civil War, And the Effect of Land and Water Transportation on the Confederacy,* Bradlee (1925:10) surmised that

When first announced, many well informed persons at home and nearly every one, including the highest naval authorities, abroad, considered that the blockade [Figure 21] could not possibly be rigorously enforced, and that it would result in what is known as a 'paper blockade', which that doubtful science known as 'International Law' does not consider binding. The Navy Department of the United States in this very early state of the war was, also, in a disorganized condition, due to many resignations of Southern officers and other causes ... and so for some time hardly in a condition to properly enforce Mr. Lincoln's proclamation. In 1861 the total fleet of the United States consisted of but 42 ships, carrying 555 guns and about 7600 officers and men. Out of this total several ships were what is known as tenders and storeships, quite a few were the old-fashioned sailing sloops and frigates, and so practically useless for blockading duty.

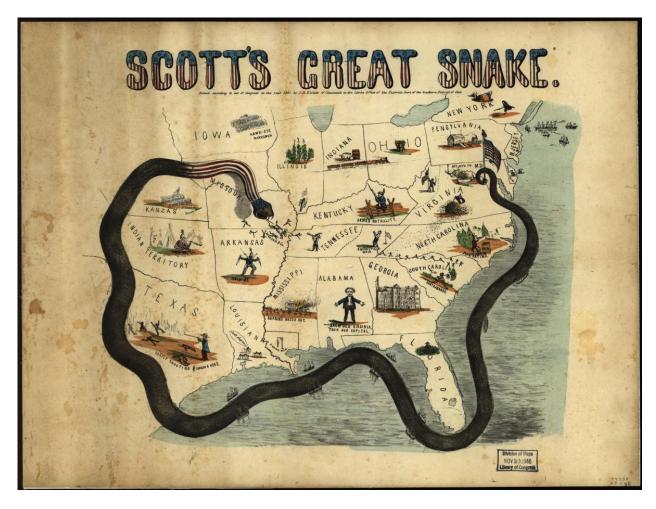


Figure 21. April 1861 cartoon map featuring U.S. Army general Winfield Scott's *Anaconda Plan* to crush the Confederacy (Courtesy of the LOC).

In concert with the State of North Carolina's withdrawal from the Union, Governor John Ellis ordered the CSA occupation of Forts Johnson and Caswell. Union naval forces were inadequate to properly enforce the blockade at the onset of the war. In 1861, U.S. navy registers listed 90 vessels, 50 of which were propelled by sail and were considered obsolete for the task at hand. The remaining 40 were steam, but several of the deep draft vessels proved unsuitable for the shallow southern waters. Eight others were laid up while 22 vessels remained at station off foreign shores and could require at least six months travel to reach the United States (Browning 1980:24).

However, within a few months of Lincoln's proclamation, Union Secretary of the Navy Gideon Welles took steps to implement an effective blockade off the southern coastline. The navy department bought or leased nearly any vessel that could be of service. In nine months, U.S. Navy agents purchased 136 ships, constructed 52 and commissioned and repaired another 76 (Engle and Lott 1975:180). The Union blockade in turn gave rise to the practice of blockade running. At the beginning of the blockade, practically any vessel was considered suitable for breaking through the Atlantic squadrons to carry cargo in or out of the isolated southern ports.

The most successful of the early runners were steamers that had belonged to the Southern Coasting Lines and were idle due to the outbreak of the war. The illicit trade carried on by these ships reaped considerable profit, but failed to compare with the great capital resources brought in during the latter part of the war. Wilmington provided North Carolina with a critical deep-water port. By 1860, Wilmington emerged as a modern shipping center with excellent internal communication. Three railroads ran through the city and daily steamboat service to Charleston and New York, as well as, up the Cape Fear River to Fayetteville.

With the capture of New Bern, Roanoke Island and Beaufort, Wilmington was the only North Carolina port left open for the importation and exportation of goods. As long as supplies were imported through the two inlets of the Cape Fear River and transported along the railroad lines, which connected with Lee's army in Virginia, the Confederacy had a lifeline. Wilmington soon became the most vital seaport in the "Southern Cause" (Pleasants 1979:15).

Wilmington became the key port for "runners" largely because of the area's topography. Located 28 miles from the mouth of the Cape Fear River, the port had access to the Atlantic through two separate entrances; eastward through New Inlet and southward through the river mouth (Figure 22). Although the two entrances were only six miles apart, Smith's Island, a strip of sand and shoal, lay in between. Continuing along Cape Fear were the dangerous Frying Pan Shoals, which extended 10 miles further into the Atlantic, making the distance by water between the two entrances a little less than 40 miles (Soley 1883:91).

This geographical configuration proved highly advantageous for blockade runners and the initial blockade of Wilmington proved ineffective. When the *Daylight*, the first and at the time the only Union vessel sent to blockade these waters, arrived, it immediately experienced the difficulties associated with guarding the dual entrances of the Cape Fear River. While pursuing a steamer out of the western bar entrance, the *Daylight* inadvertently allowed several other small vessels to pass out of the New Inlet entrance. Within three months of the *Daylight*'s arrival, 42 vessels either entered or cleared Wilmington (Browning 1980:27).

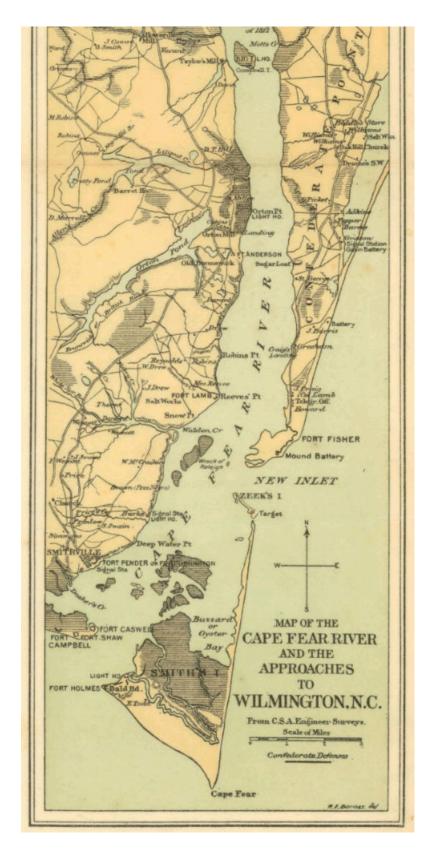


Figure 22. Map of the Cape Fear River and Approaches to Wilmington, N.C. From CSA Engineer Surveys (Courtesy of the LOC).

The constancy and frequency of this 'piracy' and the audacity of blockade-runner sailors concerned New York underwriters and most other powerful Northern insurance syndicates. Many letters originated from those powerhouses and shipping magnates reached Secretary of the Navy Gideon Welles demanding that the Federal government should intervene in an aggressive manner. As the *Wilmington Journal* reported, 'One dismal universal howl has gone up from Yankee-land for giving shelter to a nest of pirates who slide out and in "confiscating" the property of the Lincolnites in the coolest manner imaginable. (Poteat 2009:92; Figure 23) Writing from personal observation during his tenure as a Union officer stationed in North Carolina, late Brevet Major Edson Harkness commented that

Whoever held the shore north of New Inlet kept the key of this contraband mart. For more than twenty miles above its mouth, Cape Fear River flows nearly parallel with the coast, forming a peninsula twenty-three miles long, but of varying width... At the north end the peninsula is cleft by Masonboro Sound, extending sixteen miles south. (Harkness 1894:147)

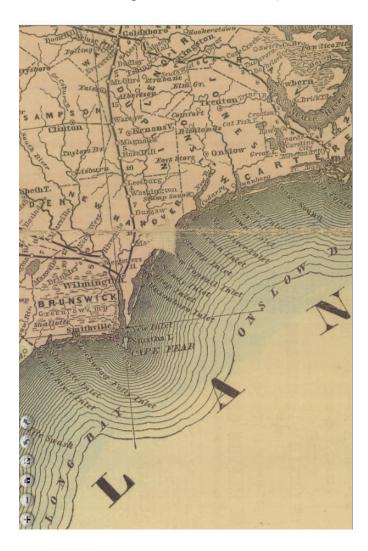


Figure 23. 1861 Lloyds Map of the Southern States Showing... Harbors Rivers and Forts (Courtesy of NOAA).

Wreck of the USS Columbia (14 January 1863)

Countless newspapers published in northeastern cities that included Providence, Rhode Island; New Bedford, Massachusetts; New London, Connecticut; New York and Boston reported on the "Masonborough Inlet" marine casualty during January 1863. Numerous letters of *explanation* were included in the comprehensive *Report of the Secretary of the Navy for 1863* detailing the shipwreck of the USS *Columbia* [Figure 24] and its subsequent destruction off Masonborough Inlet (Figure 25). A brief yet informative 17 January 1863 report from Commander William A. Parker (USS *Cambridge*) informed Rear-Admiral S. P. Lee that

Sir: I have to report the loss of the United States steamer Columbia, Lieutenant Volunteer Commanding James P. Couthouy. She ran ashore on the night of the 14th instant at this station. A boat was sent for our assistance, and only reached us after a hard pull through a rough sea of eighteen hours, distance some twenty miles. Upon our arrival I perceived the Penobscot at hand. She had just returned from Beaufort to this (her) station, having been relieved by the Columbia for the purpose of coaling. Lieutenant Commander De Haven had succeeded in rescuing some thirty of her men. We have one ensign and five men belonging to the lost vessel. We returned the fire of the shore batteries, which were opening upon the stranded ship, but the surf was so high and the breakers so heavy I did not deem it safe to send boats to her; the risk was too great. The Columbia is hard and fast, surrounded by shore batteries, and from my observation, now in possession of the rebels. At 9 a.m. this day I again stood in—the sea having gone down—in company with the Penobscot, and opened fire upon the ship and batteries, and ceased as the 11-inch gun of the Penobscot was disabled by the recoil of her gun. I shall attempt to burn the Columbia to-night [17 January]. It is my belief her battery has been thrown overboard. [U.S. Navy Department 1863:48-49]

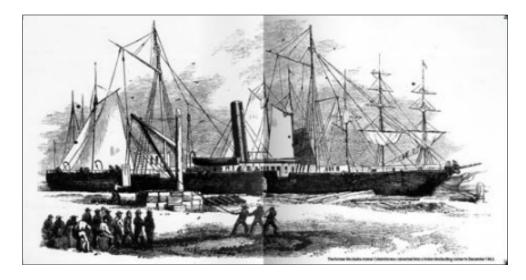


Figure 24. Ca. 1862 engraving of former blockade runner Columbia.

An authority on the subject shipwreck, Dr. Chris Fonvielle (2012), remarked that

During the afternoon of January 16 and much of the following day Confederate soldiers went on board the Columbia to salvage weapons equipment and souvenirs. The Cambridge and Penobscot harassed them with cannon fire. With a Confederate flag defiantly flying from the masthead the southerners stripped the ship of usable items and then burned what could be burned... The Wilmington Dispatch reported in May 1909 that the hulk of the Columbia was still visible in the ocean a few hundred yards from the Lumina. In the late 1970s underwater archaeologists detected a large iron anomaly deep in the sand near Masonboro Inlets jetty which they subsequently identified as the remains of the Columbia".

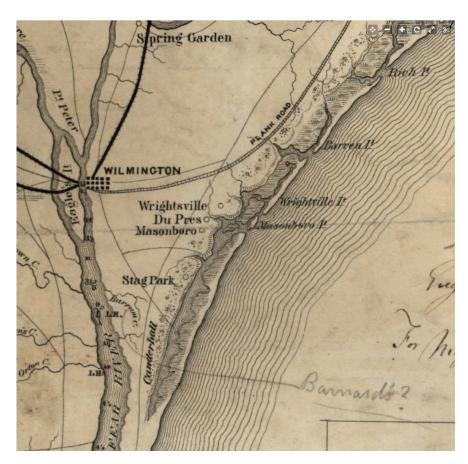


Figure 25. Detail of *Military Department of North Carolina* (Courtesy of the LOC).

Diplomatic correspondence dated 16 July 1863 which reached Lord Earl Russell [British Foreign Secretary under PM Palmerston] included a list of 102 vessels "arriving at the port of Nassau (Bahamas) from ports alleged to be blockaded in the Confederate States of America". The register (18 July 1862 to 2 June 1863) was compiled by a Confederate agent stationed at Nassau and was determined to be "an authentic document" (Mason 1864:784). Blockade runners outbound from Wilmington and their respective export cargoes are presented in Table 2.

Arrival	Туре	Cargo
18 July 1862	Sloop	Cotton
6 August 1862	Schooner	Turpentine
4 September 1862	Steamer	Cotton
25 September 1862	Schooner	Cotton & Turpentine
6 October 1862	Schooner	Cotton & Turpentine
8 October 1862	Steamer	Cotton & Turpentine
5 November 1862	Steamer	Cotton
2 December 1862	Schooner	Cotton & Resin
27 December 1862	Schooner	Cotton
26 January 1863	Steamship	Cotton
30 January 1863	Schooner	Cotton & Turpentine
5 March 1863	Steamship	Cotton
16 March 1863	Steamship	Cotton
17 March 1863	Steamship (1)	Cotton
17 March 1863	Steamship (2)	Cotton
27 March 1863	Steamship	Cotton
28 March 1863	Sloop	Cotton & Turpentine
16 April 1863	Steamship	Cotton & Turpentine
20 April 1863	Steamship	Cotton
28 April 1863	Steamship	Cotton
13 May 1863	Steamship	Cotton
22 May 1863	Steamship	Cotton
25 May 1863	Steamship	Cotton
25 May 1863	Sloop	Cotton & Turpentine
25 May 1863	Schooner	Cotton & Lumber

Table 2 Nassau, Bahamas register identifying blockade runners arriving from Wilmington (Enclosure No. 7 presented in: Mason 1864:785-786).

During a two-year period (January 1863-November 1864), Confederate naval sources listed numerous vessel stations on the Cape Fear. These vessels were identified as; the ironclad sloop *North Carolina*, floating battery *Artic*, steam gunboat *Yadkin*, steam gunboat *Equator*, torpedo boat *Squib*, the ironclad sloop *Raleigh*, and two, long one-gun cutters. In November 1864, Confederate Secretary of the Navy Stephen Mallory reported to President Jefferson Davis that two new torpedo boats were under construction at Wilmington (USDN 1921:528-532, 630, 743-745).

The capture of Wilmington proved difficult because both entrances to the Cape Fear were guarded by powerful fortifications and lesser works. Collectively, those fortifications became known as the Lower Cape Fear Defense System. The central point of that system was Fort Fisher, located on Confederate Point. That fortification was originally a small earthwork constructed to protect New Inlet. By 1864, Fort Fisher evolved to become the largest seacoast fortification in the Confederacy. Shaped like an inverted "L," Fort Fisher's land face ran 628 yards and was guarded by 20 of the heaviest seacoast guns. The sea face included a 130-pound Armstrong rifle and 170-pound Blakely, both from England (Browning 1980:35).

Extending from the land face was a string of torpedoes, which could be exploded from inside of the fort (Pleasants 1979:22). Mound Battery, towering to a height of 60 feet with two mounted heavy guns, stood near the end of Confederate Point. Augusta Battery, which stood behind Mound Battery, was located near the river (Pleasants 1979:24).

Fort Holmes, on the other side of New Inlet on Smith's Island, shared the protection of Smith's Inlet in the Cape Fear River with the batteries at Oak Island. Oak Island, located opposite Fort Holmes, held another series of forts and batteries, such as Fort Campbell, Fort Caswell and Battery Shaw (Pleasants 1979:24). Fort Caswell guarded the western bar entrance. Captured by Confederate militia on 14 April 1861, Caswell was renovated into a strong casemated work with new armament consisting of seven 10-inch, four 8-inch Columbiads and a 9-inch Dahlgren gun (Browning 1980:35; Pleasants 1979:24).

In addition to this impressive array of forts, a naval construction program was initiated in Wilmington to contribute to the defenses of the harbor. The success of the ironclad ram CSS *Virginia* in the March 1862 battles at Hampton Roads demonstrated the superiority of armored warships to naval officers of both the North and South. In late March 1862, Confederate Secretary of the Navy Stephen R. Mallory, sent "instructions relative to gunboats" to Commander William T. Muse, the ranking naval officer at Wilmington. Shortly thereafter, the navy began building two ironclads in the city, the *Raleigh* at James Cassidy's shipyard at the foot of Church Street, and the *North Carolina* at the Beery shipyard on Eagle Island (Still 1985:5-17, 79-92).

Both vessels utilized a design based on plans conceived by naval constructor John L. Porter. The plans called for a tightly framed hull, with a slight deadrise and a hard chine. The vessels were to be 174 feet long (150 feet between perpendiculars) with a draft of 13 feet. Amidships, a 105-foot long casemate, angled at thirty-five degrees and covered with 4 inches of iron plate, protected the gun deck. Two boilers provided steam for the vessel's two horizontal engines, which were geared to a single 10-foot screw. The first ironclad built on this design, the CSS *Richmond*, was completed in Richmond in 1862. Known as the *Richmond* class, this group, consisting of five vessels, was numerically the largest standardized class of ironclads constructed by the Confederacy (Holcombe 1993:63-64).

The two Cape Fear ironclads entered into active service by late 1863/early 1864 (*North Carolina* in December 1863 and the *Raleigh* in April 1864) after numerous delays resulting from material shortages, strikes and epidemics. However, the usefulness of these two vessels to the Confederacy's war effort was limited. *Raleigh* grounded on a shoal near the mouth of New Inlet and was destroyed after a sortie against the blockading squadron on 7 May 1864, less than a month after entering service. *North Carolina*, on the other hand, was reduced to serving as a floating battery; its deep draft and lack of motive power rendered the vessel ineffective as a ram. The ironclad was further hampered by the use of unseasoned timber in its construction. Warping and splitting timbers caused the ship to leak incessantly and a *Teredo navalis* infestation further weakened the hull. For most of its career, the ironclad remained at anchor near Smithville, positioned to support the nearby forts in the defense of Wilmington. The *North Carolina* finally sank at its moorings in September 1864. Though useless as an offensive weapon, the *North Carolina* served as a deterrent, preventing the U.S. Navy from entering and seizing the lower Cape Fear until the fall of Fort Fisher in the closing days of the war.

Union vessels including the USS *Tuscarora*, army transport *Delaware*, and USS *Nansemond* reconnoitered the entrances of the Cape Fear during mid-November 1863 (Civil War Centennial Commission 1966:102). Normal cruising grounds for these vessels and other Federal watercraft would have extended along the modern project area (Figure 26; Figure 27). Just before dawn on 9 November 1863, the blockade-runner *Ella & Anna* was seized off Masonborough Inlet. The ensuing prize litigation reached the U.S. District Court of Massachusetts and the ruling is presented in Appendix B.



Figure 26. Preliminary Chart of Frying Pan Shoals and Entranced to Cape Fear River North Carolina (Courtesy of NOAA Historical Charts).



Figure 27. Detail of 1863 U.S. Coast Survey chart emphasizing Masonboro Inlet and Wrightsville (Courtesy of NOAA Historical Charts).

In January 1864 correspondence about "British neutrality" with Ambassador Charles Adams (1864:79), Secretary of State William H. Seward mentioned that a Royal Navy officer delivered "contraband mail to Bermuda, to be delivered to insurgent agents there". The American secretary of state also enclosed this relevant St. John, New Brunswick newspaper article.

The Bermuda packet, arrived to-day [Halifax] brings absolutely nothing of interest from the Confederate States. There are two passengers through from Wilmington, 12th instant [December 1863]. I have one solitary paper of that date. The Flora is the only blockade steamer out since the last moon, a month ago. One schooner came through from Wilmington successfully, and another schooner had got in. The Don and Hansa had been captured by the federals off Charleston, and the Beauregard and Ceres run ashore near Wilmington and destroyed. The Ceres is the only steamer of all blockade runners that has not paid for herself; it was her trip. The Beauregard had a very valuable cargo. Steamers continue to arrive at Nassau and Bermuda, to take the places of those destroyed. The number is increased rather than diminished. This business is reduced to a mathematical nicety, and the chances of profit and loss are fully computed. No vessel is expected to have nine lives, although a half dozen or so are reckoned upon. (*Morning Telegraph* 31 December 1863)

Four weeks later, Secretary Seward forwarded *a Richmond Examiner* article to Adams which described a recent New Hanover County shipwreck. Correspondence followed [6 February 1864] with contemporary news about another blockade runner headed for Wilmington. Due to their detail, Executive Documents *No. 833* and *834* are presented in Figure 28.

128 DIPLOMATIC CORRESPONDENCE.

unhappy conflict shall bear unquestionable evidence that it was a war which was maintained on the part of the United States in necessary defence of the nation and of the cause of humanity.

The efforts of every citizen, of either state, to avert such an unreasonable conflict is of inestimable importance. I give you, therefore, the President's sincere thanks for the tribute you have paid in your address to the interest of international peace and friendship between the two principal branches of a race that ought to devote itself wholly to the advancement of the world's civilization.

Mr. Seward to Mr. Adams.

No. 833.]

DEPARTMENT OF STATE,
Washington, February 5, 1864.

Sir: I enclose copies of the Morning Chronicle, of this city, of yesterday, which contain an article from the Richmond Examiner, of the 25th ultimo, relative to the stranding and destruction of the blockade-runner Vesta, near Wilmington. The article confesses that at least a part of the eargo of the steamer was the property of the insurgent government, so called. You may consequently find it useful as cumulative proof of the fact that their resistance is prolonged by the introduction of such supplies in that way. It is not unlikely that the vessel itself was also really owned by the same party.

I am, sir, your obedient servant,

WILLIAM H. SEWARD.

CHARLES F. ADAMS, Esq., &c., &c., &c.

The blockade .- Wreck of the steamer Vesta.

[From the Richmond Examiner, January 20.]

We have the particulars of another disaster off the Carolina coast—the wreck of the Vesta, one of the finest steamers in the blockade-running line. The incidents are obtained from a confederate officer, who was a passenger from Bermuda.

The following is a list of the Vesta's passengers: Mrs. John Mitchell, Miss Minnie Mitchell, Miss Isabel Mitchell, Mr. T. J. Leed, England; Mr. Perrin, Confederate States navy; Lieut. J. H. Gardner, Confederate States navy; Dr. William Shepherdson, Confederate States navy; Paymaster Moses, Confederate States navy; Mr. Kirlebane, Bermuda.

This was the first trip of the Vesta from England. She was a double-screw steamer, perfect in all appointments, and commanded by Captain R. H. Eustace, an Englishman.

The Vesta left Bermuda on the 3d instant. For seven days she was chased over the seas by a number of Yankee cruisers, but succeded in cluding them, and on the 10th instant made the coast in the vicinity of Wilmington. Being compelled to lay to, she was descried by a Yankee cruiser, which gave chase, and in half an hour more eleven Yankee vessels were pouncing down upon the suddenly discovered prey. The Vesta, although apparently surrounded, ran the gauntlet in splendid style, through one of the most stirring scenes which the war has yet witnessed on the water. Some of the cruisers attempted to cross her bows and cut her off, but she was too rapid for this manœuvre, and at half a mile's distance some of the cruisers opened their broadsides upon her, while five others in chase were constantly using their bow guns, exploding shells right over the decks of the devoted vessel. Fortunately no one was hurt, and the vessel ran the gauntlet, raising her flag in defiance, suffering only from a single shot, which, though it passed amidships, above the water-line, happily escaped the machinery.

DIPLOMATIC CORRESPONDENCE.

129

But the trouble seems to have commenced with what the passengers anticipated to be the triumphant escape from their captors; for the captain and the first officer, Tickler, are reported to have become outrageously drunk after the affair was over and the night had fallen. It is said that the captain was asleep on the quarter-deck, stupefied with drink, when he should have put the ship on land; and that at 2 o'clock in the morning he directed the pilot to take the ship ashore, telling him that the ship was ten miles above Fort Fisher, when the fact was that she was about forty miles to the southward of Fryingpan shoals.

Fifteen minutes afterwards the Vesta made land, the pilot having run her so far ashore that it was impossible to get her off. She was run aground at Little River inlet; the passengers landed in boats minus their baggage; and, although there were no cruisers in sight, and not the least occasion for precipitation, the vessel, with all her valuable cargo, was fired before daylight, by order of Captain Eustace, and burned to the water's edge. The cruisers did not get up to the wreck until two o'clock on the afternoon of the next day, and then they were attracted to it by the smoke from the conflagration.

The cargo of the Vesta was of the most valuable description; three-fourths of it on government account, consisting of army supplies, and including a very extensive lot of English shoes. There was also lost by the wreck a splendid uniform, intended as a present to General Lee, from some of his admirers in London. Nothing of any account was saved.

Mr. Seward to Mr. Adams.

No. 834.

DEPARTMENT OF STATE, Washington, February 6, 1864.

Sir: I have to inform you that it has become known to this government that the British steamer Will-o'-the-Wisp will soon, if she has not already, leave Halifax, in ballast for Bermuda, on account of the insurgents of the United States, and under direction of their agents, now having harbor at Halifax; that on arriving at Bermuda she will take in ordnance and stores for the use of the insurgents, and attempt to make her way into Wilmington; and that this proceeding will be under the direction of insurgent agents at Bermuda. I consequently have to suggest to you the expediency of requesting of Earl Russell that the colonial authorities at Bermuda may be apprised of this hostile proceeding, in order that, if deemed advisable, it may be arrested.

I am, sir, your obedient servant,

WILLIAM H. SEWARD.

CHARLES F. ADAMS, Esq., &c., &c., &c.

Mr. Seward to Mr. Adams.

No. 835.

DEPARTMENT OF STATE, Washington, February 6, 1864.

SIR: I transmit the copy of a despatch of the 5th of December last, from Mr. W. R. G. Mellen, the consul of the United States at Port Louis, Mauritius, relative to the capture of the American ship Sea Bride, by the piratical steamer Alabama. When you have sufficient information you will represent it to the British government.

I am, sir, your obedient servant,

Charles Francis Adams, &c., &c., &c.

WILLIAM H. SEWARD.

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Figure 28. Germane diplomatic correspondence (Seward 1864a; Seward 1864b).

By the end of February, a frustrated Seward (1864:201) wrote Ambassador Adams commenting on the celebrated *Alexandria* case with this anecdotal remark.

The blockade amounts practically to a closing of all insurgent ports, except Wilmington, and the contraband trade there is now so exceedingly abridged that it seems unaccountable to us that Great Britain should not be ready to suppress it altogether, and accept in lien the restoration of a free and prosperous commerce under the treaties and laws of the United States.

In Blockade Running During the Civil War, And the Effect of Land and Water Transportation on the Confederacy, Bradlee (1925) commented that

In 1864 nearly all the supplies from Europe entered the Confederacy through Wilmington. Governor Vance claimed, as he had in the matter of manufacturing, the precedence of state blockade runners over those of the general government, at times denouncing President [Jefferson] Davis and his administration in unmeasured terms. He practically demanded that North Carolina's interests should be first satisfied; then, if anything remained, the Confederacy might have it.

Destruction of Salt-Works at Masonborough Inlet (21 April 1864)

In Salt as a Factor in the Confederacy, Ella Lonn (1965:13) commented that

It is only when a prime necessity thrusts itself upon public attention by its absence that a person ceases to take it for granted. Only when he no longer has it, does he realize what an important ingredient for his palate and digestion is plain, ordinary salt, necessary alike for man and beast. He then recalls that the salt licks and salt springs have from the earliest times been centers of interest and development.

Early on in the armed conflict, there existed ... "a virtual monopoly of such articles ... as flour, corn, bacon, and salt. There were being in part withheld from the market, and in part exported out of the state" (Lonn 1965:84). "In North Carolina, where [Confederate] officials computed the salt requirement at 18,000 bushels a month", Lonn (1965:211) found contemporary evidence of "definite and comprehensive figures". As early as the middle of August, 1862, the salt commissioner of that state [North Carolina], operating state works on the coast near Wilmington, was reported as manufacturing an average of 200 bushels a day"... (Lonn 1965:211). Two years later, a vital salt-work located at Masonborough Inlet was destroyed by Union forces. The letter from Confederate Major-General Whiting to his superior, General Pierre Gustave Toutant-Beauregard sheds light on this critical loss and is presented as Figure 29.

APRIL 21, 1864.—Destruction of Salt-Works at Masonborough Inlet, N. C. Report of Maj. Gen. William H. C. Whiting, C. S. Army. Headquarters Department of Cape Fear, Wilmington, N. C., April 22, 1864. General: Nine barges of the enemy, piloted by a renegade, landed last night at Masonborough, at the State salt-works, which they destroyed. They carried off a number of conscripts or employés. I do not much regret the matter, as the State salt-works have always been a nest of traitors, and more than suspected of holding intercourse with the enemy, but I have no doubt at all that the attempt was made in consequence of information transmitted to the enemy of the withdrawal of my movable force. On the 12th instant I had directed General Martin to occupy the belt of sounds opposite Masonborough Inlet, but the recent movement of troops prevented it. It has always been my custom to guard these points strongly, as of very great importance to the security of the command. The enemy carried off a number of willing prisoners. They are capable of giving much information. You will see by the inclored copy of a letter* to the Governor my opinion of the works and the people engaged on them. The whole affair strongly illustrates the necessity of keeping here at least a brigade at all times. The men carried off were in the habit of daily visiting the city to haul and dispose of salt, are fully aware of the late movements and of every exposed condition, and will no doubt give all the information they have to the enemy. If your operations will not permit you to leave a brigade with me, I beg you will present this to the Department, which has been fully advised of the circumstances of this command. I have not at present sufficient force to perform the heavy garrison duties of the city. Very respectfully, W. H. C. WHITING, Major-General.

Figure 29. Destruction of Masonborough Inlet salt-work (USWD 1891:307)

In late April 1864, the *Niphon* drew fire on two occasions from Confederate artillery while anchored near Masonboro Inlet. After the second attack, the Union steamer's crew threw shells which destroyed a steam saw-mill. The interesting account of Commander J. B. Breck is presented in Figure 30.

```
DISPERSION OF REBEL ARTILLERY NEAR MASONBORO' INLET.
                                    UNITED STATES STEAMER NIPHON,
                             Off New Inlet, North Carolina, April 29, 1864.
 SIR: I have the honor to report, that on the morning of April 27, while close in
shore near Masonboro' inlet, discovered a boat; stood for her; found eight negro
refagees in her, one of whom shipped on board this vessel for three years; the other seven were transferred on board the United States steamer Fahkee, at
the request of Acting Master Webb, who shipped them for three years. While
taking on board these refugees, six pieces of field artillery opened on us, but the
shell fell short. We immediately went to quarters, threw shell among them and
drove them away; two of our shells exploding in the steam saw-mill on shore,
set it on fire. On the morning of the 29th the enemy opened fire on us with
two Whitworth guns, the shot passing over us; stood in shore and shelled them,
and also a company of cavalry, who were driven away into the woods. There
appears to be a large body of the enemy located at Masonboro'. The refugees state that there is great excitement at Wilmington, and on Sunday last, when
they left that place, all the citizens were under arms, expecting an attack.
    Very respectfully, your obedient servant,
                                                           J. B. BRECK.
                                Commanding United States Steamer Niphon.
  Commander WM. A. PARKER. Senior Officer present.
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Figure 30. Destruction of sawmill near Masonborough Inlet (*Report of the Secretary of the Navy* in: USND 1864:117)

On 22 October 1864, USN Rear-Admiral David D. Porter issued "Orders For Blockaders Off The Eastern & Western Bars" (Figure 31). The meticulous instructions were issued to Union blockading vessels tasked to monitor a particularly challenging coastline of North Carolina. A relevant excerpt follows.

One or two fast vessels will be kept forty miles to the eastward and westward of the bar, and cruise along shore in the daytime to see if any vessels are anchored ready to run in at night. The vessels to the eastward and westward of the bar will sometimes, at night, burn false lights, corresponding as nearly as possible to the lights shown by the light-houses at the entrances to Cape Fear; this may lead the runners astray.... When blockade-runners are run on shore at the bar, or beached, they must be destroyed at all hazards, unless they are in a position where they can *certainly* be got off. Every officer must keep a close account of the tides, as the runners will often be governed in their movements by high water, especially at night; but the tides must not be relied on to govern their movements as the class of vessels now employed in illicit trade do not draw much water and can run in and out at any time.

Writing from Wilmington on 25 October 1864, Confederate Major-General W. H. C. Whiting advised President Jefferson Davis that

The following secret information has been received—orders from the enemy's headquarters: Wilmington to be attacked within sixty days from September 10. Will not attack Fort Fisher. Will land a large force at Masonborough; another below Caswell. Cavalry from Morehead City will cut railroad at Magnolia—this to be done at night. Our own troops to spike heavy guns, cut telegraph wires, and pilot the enemy to the city. State saltworks in constant communication with the enemy; ought to be broken up at once. Two large monitors with eighty others, large and small, to cooperate. Information plausible; hardly believe it about our troops; General [Braxton] Bragg directs me to communicate it. (USWD 1893:1173)

In late November 1864, American Ambassador to Great Britain Charles Francis Adams wrote American Secretary of State William H. Seward commenting that

I transmit copies of two letters from Mr. Sprague, the [American] consul at Gibraltar, respecting the suspected [Confederate] steamer seen off Cape Spartel on the 19th instant. Since then nothing more definite has been heard from her. It may be that this is the vessel that the bark Agrippina was sent out from here last week to meet and supply with ammunition, agreeably to the information furnished from the source already made known to you. My own impression, however, is from the color which she is said to be painted, that she is sooner or later likely to turn up as a blockade runner at Wilmington or elsewhere.

Not to go out of the immediate hopeficer of the County Office NORTH ATLANTIC SQUADRON, FLAGSHIP "MALVERS Flag-Ship "Malvern,"
October 22d, 1864. ORDERS FOR BLOCKADERS OFF THE EASTERN & WESTERN BARS. for the future the following order will be carried out as meany as possinor:

wells must be made at the east and west bars, and there must be established an inner and outside line. The slower
as the bars, ready to fire on the blockade-runners as they attempt to pass in or out, and one or two fast resuels,
with steam up to chane. The slow wessels stationed at the bar are not to chane of shore, but the fast claners are
ataching the blockade-runner. The moment a chase commences the chancers must, at night, carry a red light over
our vessels firing into each other. These lights must be pretected on the sides that they may not show abeam.

a blockade-runner and chases her at night must indicate by signal the course the blockade-runner is steering, ac-1 Rocket Morthward.
2 Rockets and White Coston—North-Westward.
1 Rocket and White Coston—Southward.
2 Rockets and White Coston—Southward.
2 Rockets and Red Coston—Southward.
2 Rockets and Green Coston—Eastward.
2 Rockets and Green Coston—South-Eastward. And rockets will be thrown horizontally in the direction of the chase from time to time. COURSE SIGNALS BY STEAM WHISTLE. 1 Short Whistle—North-Ward.
1 Long Whistle—North-Eastward.
2 Short Whistles—North-Westward.
2 Long Whistles—Eastward. 3 Short Whistles—Westward
3 Long Whistles—Southward.
1 Long and 1 Short Whistle—South-Eastward.
1 Short and 1 Long Whistle—South-Westward. I A Drong transmer—massward.

It be reased blockeding the bars must not go in until twilight, and must then lie in as clove as they can. The picket-boats will cruise inside of them over at. No lights will be shown by bar-blockeders nor will any neire be allowed on beard.

Each bar-ressel will keep out a good swift boat, in fair weather, well arread, and provided with a bright red lantern, enclosed in a box, and the light is to ward only towards the bar-blockeders, when anything is seen coming out. The picket steam laumeness will be provided in the same way.

Vessels lying at the bar will be careful to ascertain the position of each and every blockeder, so that there will be no danger of collision or firing into other. each other.

Those ressels that are not to chase will (when signal is made that a blockade-runner has passed the bar) hold a red light over the side opposite the batteries these lights always to be kept lit; on deels. It is to be remembered that the inshore line is not to chase, but to fire on blockade-runners as they go in or out. The moment a blockade-runner is signalled the bar vessels will endeavor to get in between her and the brar at vessel, supposed to be blockade-runner, does not show a red light at once and attempts to run, she must be fired into inmediately, and any vessel making doubtful movements must be supposed to be the state of the red of itself and to work pursued and fired at. The chase must lie with her breaded bearing on the blocks became in the blocks of the state are of itself and to see pursued and fired at. The chase must be supposed to the signals to be made when a vessel is sighted, and every commander will study them and strictly observe them: In Fog, Vessel Making Signal First. In Fog. Answer. | Plashe white, | S Flashes red, | 1 Short whistles, | 4 Long whistles, | Costor's No. 1 Costor's No. 1 Flash red, | 2 Flashes white, | 2 Flashes white, | 2 Flashes white, | 2 Flashes white, | 2 Flashes red, | 3 Short whistles, | 2 Long whistles, | Costor's No. 2 Costor's No. 1 Flash red, | 4 Flashes white, | 4 Flashes white, | 4 Flashes white, | 4 Flashes red, | 5 Flashes red, | 5 Flashes red, | 1 Flash white, red burning, | 5 Flashes white, red burning, | 6 Flashes red, white burning, | 6 Flashes white, red burning, | 7 Flashes white, red burning, | 7 Flashes white, red burning, | 8 Flashes white, red burning, | 9 Flashes white, are with the tricks of these brokende-tunners.

Every officer will keep a small chart or diagram, including Cape Lockout and Cape Fear and forty miles each side of both these places. The position of a seen and the line on which they are chasted will be marked down and sent to me'nt such times as may be most derivenient. This will best enable me to was general relief of the capture of vessels.

When blockade-runners are run on shore at the bar, or beached, they must be destroyed at all hazards, unless they are in a position where they can due to the cape of the capture o any time.

When calcium lights are supplied they will be kept at right in readiness on the forecastle, and when classing he kept turned to the runner. Certain vessels on the bar will be supplied with calcium lights, and they will turn them on the bir when a runner is trying to get out or in. As these lights require nice management, they will only be entriused to competent persons.

The pipes, bulls, and all parts of blockaders should be painted one uniform color. As the fog signils and course signals will be used at different times, the latter only in clear weather, the foreign only in fogs, there can be no confusion. DAVID D. PORTER Comd'g North Atlantic Squadron

Figure 31. General Order No. 18; issued 22 October 1864.

Writing from Kinston on 9 November 1864, Brigadier General C. Leventhorpe transmitted this historic message to General Braxton Bragg; "A good scout from New Berne reports that an attack is certain on Wilmington. General Weitzel is to command. They will land on the sound and attack Fort Fisher in the rear" (USWD 1893:1207).

At this time, Bragg was slated to assume complete command of North Carolina armed forces based on recommendations from General Robert E. Lee and Secretary of War James A. Seddon. President Jefferson Davis approved those referrals on 10 November. Concurrently, Confederate Major-General W. H. C. Whiting advised Colonel Tansill (assistant adjutant and inspector general) to assume command of Masonborough due to "the importance of the present emergency". Pickets at Wrightsville were mentioned with respect to those units moving to the Sugar Loaf to support Fort Fisher. Tansill was tasked with also making sure his officers and soldiers "familiar with the coast and the locality" and ultimately to resist the Union forces on their way to Masonborough Sound to mobilize the attack on Fort Fisher (USWD 1893:1207).

On 18 December 1864, Confederate Major-General W. H. C. Whiting [Wilmington] informed the North Carolina governor in Raleigh that "A very large fleet, very formidable, under [David] Porter, with very large land force, 20,000, under [Benjamin] Butler, left Fortress Monroe on Friday to attack Wilmington. The advance squadron is already at Beaufort (USWD 1893:1279). A state-of-the-art glass negative created by Timothy H. O'Sullivan in early December 1864 shows the celebrated Union fleet after leaving Fort Monroe in preparation to reach its final destination of Fort Fisher (Figure 32).



Figure 32. "Hampton Roads, Virginia. Fleet of Fort Fisher expedition" (Courtesy of the Library of Congress).

By 20 December 1864, Major-General Whiting dispatched two urgent messages to; Colonel Connally stationed at Masonboro and Colonel Lamb at Fort Fisher. The brief yet meaningful letters are presented as Figure 33.

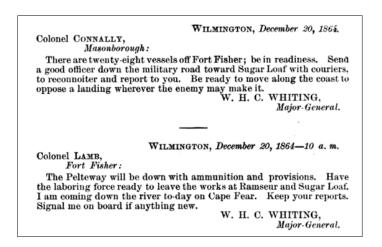


Figure 33. Confederate army messages before the Fall of Fort Fisher (USWD 1893:1284).

On the same day, from the State Capitol, the North Carolina chief executive published a historic proclamation urging all able citizens to

Hurry to Wilmington... Whereas the long expected attack upon our only remaining sea-port is now about to be made, and our State is also likely to be invaded at other points by an enemy to whom mercy and civilization are alike unknown and unregarded; and Whereas all the organized force of the State already ordered to the front may still be insufficient to roll back the tide which threatens us with worse than death, and to drive from our doors a fate horrible to contemplate: Now, therefore, I, Zebulon B. Vance, Governor of North Carolina., relying upon the loyalty and devotion of her citizens, do issue this my proclamation, commanding and adjuring all good people, whether by law subject to military duty or not, who may be able to stand behind breastworks and fire a musket, of all ages and condition, to rally at once to the defense of their country and hurry to Wilmington... Let every man physically able then hurry with his blanket to Wilmington, where arms and rations will be furnished, and let those left behind mount themselves and patrol their counties, looking after the women and children and preserving order. Your Governor will meet you at the front and will share with you the worst. Given under my hand and the great seal of the State. Done at our city of Raleigh on December 20, 1864. (Vance quoted in: USWD 1893:12841285)

Ironically, as the Port City was preparing to be sieged, numerous American-flagged vessels (as of December 1864) with a possible alliance to Wilmington were listed by a prestigious *British* mercantile publication (Table 3).

Name	Rigging	Tons
Anna Smith	Schooner	199
Alice Lee	Schooner	281
Colonel John McRae	Bark	240
Edward Wood	Schooner	59
Ella Simmons	Schooner	85
Ellen Bush	Schooner	286
Joseph Albion	Brig	211
James Logan	Schooner	265
Lamont Dupont	Schooner	194
L and R Smith	Schooner	259
Margaret Plater	Schooner	66
Maria Fleming	Schooner	126
Martha J. Gaus	Schooner	120
O. G. Parslee	Schooner	268
Robert Gilfillan	Schooner	240
Sarah J Bright	Schooner	205
Sarah Fisher	Schooner	97
Sidney Price	Schooner	199
Southern Star	Steamer	544
Two Marys	Schooner	64
Vermont	Barge	171
David Faust	Schooner	199

Table 3. "American" vessels listed in *The Mercantile Navy List* (Board of Trade 1864:passim)

On 27 December 1864, intelligence was received by the Confederate Command commenting that "The officer in charge of pickets at Masonborough reports twenty vessels off Masonborough. They are six miles farther east that they were yesterday" (USWD 1893:1332). Per Harkness (1894:165)

At daybreak, January 13, preparations were begun for landing at a branch of Masonboro Inlet, i.e., Myrtle Sound, five miles north of Fort Fisher. Before a single boat left the transports, at 8 A. M., sixteen gunboats anchored inside, one hundred yards from the beach. The Confederate General Hoke had intended to resist the disembarkment, but the naval fire strewed the woods with shell till it seemed a deserted wilderness. By 3 P.M., all the infantry had disembarked, treating the affair as a mere picnic; they had forty rounds of ammunition, six days' supply of hardtack, and three hundred thousand rounds of ammunition for small-arms. The first object to be attained after landing was to throw a strong defensive line across the peninsula from the sea to the Cape Fear River. General Terry finally selected a position where the maps showed a large pond occupying about one-third of the width of the peninsula, and about three miles north of the fort. The pond was found to be a sand-flat, partly covered with shallow water.

In spite of the Federal fleet's menacing presence along the Carolina coast, a Virginia newspaper reported that three blockade runners successfully reached Bermuda on or about 23 December 1864. The vessels were identified as the steamer *Charlotte* (1024 bales of cotton); the *Owl* (700 bales); and the *Lamb* (1800 bales) (*Alexandria Gazette and Virginia Advertiser* [*AG&VA*] 1865a:2). Two more rousing maritime events to cheer depressed Confederates follow.

The new Confederate steamer Sea King, now the Shenandoah, according to the report of Captain Hanson, of the brig Susan, at New York, has captured and destroyed the brig Susan a schooner, the barks Elena and E. G. Godfrey, and has also captured and bonded the ships Kate and Prince. The officers and crews of the captured vessels were taken by the Shenandoah into the port of Bahia, Brazil. Since the departure the fleet and the resumption of regular blockade, three blockade runners have reached Wilmington, loaded with supplies for the Confederate government and with miscellaneous stores. (*AG&VA* 1865b:2)

The *Daily Chattanooga Rebel* (1865:2) confirmed this story and remarked that "On the 29th ult., [December] several blockade runners ran into Wilmington [and that] the Agnes Fry ran ashore of Piney Point". A Fortress Monroe dispatch dated 30 December 1864 related that most Union steamers (under the command of Major General Butler) that composed the expeditionary force tasked to attack Fort Fisher

... which sailed from this port several weeks since, have returned in safety, notwithstanding the severe storms experienced along the coast and while anchored off Wilmington... The Norfolk Regime of to-day contains the following: The shore is strewn with broken boats which have been wrecked in one way or another, and they lie scattered along the beach to Masonboro. The North Carolina state works at Masonboro were destroyed by fire last Saturday. Many of the vessels had withdrawn from these waters and the bombardment by the fleet may be said to have come to an end. (Wheeling Daily Register [WDR] 1865a).

Another dispatch published by the same journal foreshadowed the future fierce debate regarding Butler's actions off Fort Fisher with this audacious remark; "The [Richmond] Examiner in an ironical article says if [Admiral David] Porter had thrown Butler overboard, perhaps no storm would have blown the fleet to sea and deranged the physique and morale of the invincible armada". This jaded observation was perhaps associated with credible reports that the Federals "threw overboard many horses in the gale" off the North Carolina coast (*WDR* 1865b).

On Tuesday, 3 January 1865, the *North Carolina Standard* (*NCS*) of Raleigh reported on the recent dramatic Union offense against Fort Fisher and cited a competing paper's reference to the waters off Masonboro Island. *NCS* editor William Holden remarked that

The defence of Wilmington is of vital importance to the Confederate States. We need not say why this is so, as our readers can see the reasons as clearly as we do. It is more than probable that this fleet will return, and

that a desperate battle will be fought, the city of Wilmington, the Cape Fear river above Wilmington and the line of Railroad being the objects at stake. We trust that our authorities will not be caught off their guard, but will be constantly on the alert, so as to be ready for any new and sudden demonstration the enemy may make. The *Carolinian* of the 29th [December 1864] says: 'We are informed that twenty-one of the enemy's fleet were seen off Masonborough Sound on Wednesday last. Another account represents forty-four to have been lying around the point. We give these reports for what they are worth. Last night there could only be seen the usual blockading squadron. Wilmington is again safe for the present, and things will go on in their usual way'. (p. 2)

For the average Evansville, Indiana citizen reading their newspaper on 20 February 1865, the headline "Gen. Schofield at Masonboro—Wilmington Closely Besieged" perhaps appeared innocuous. For the Confederacy and residents of New Hanover County, the narrative signaled the beginning of catastrophic military and societal events (Figure 34).

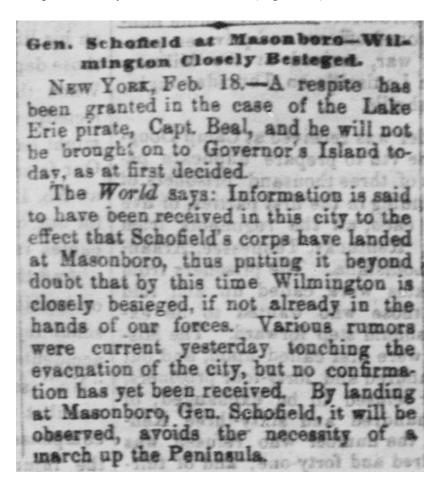


Figure 34. Article published by Evansville Daily Journal (Courtesy of CA, LOC).

Reconstruction Era (April 1865-1877)

When armed hostilities officially ended in April 1865 so did some of the regular river trade. The prewar steamer service between Wilmington, Charleston and Savannah was not resumed, since rail service had been established. Steamship service did, however, resume to the northern cities of Baltimore, Philadelphia and New York (Lee 1977:91). Coastal trade also revived and was conducted mainly by schooners ranging between 150 and 600 tons. Because of the decimation of American shipping during the ACW international commerce was carried in foreign bottoms, usually of British, German or Scandinavian origins (Sprunt 2005:501).

Industry was severely interrupted during the war, but was beginning to make a comeback. Naval stores and lumber continued to be the principal exports with the addition of some cotton. Exports recorded for the year 1871 amounted to some 95,000 bales of cotton, 100,000 bushels of peanuts, 112,024 barrels of spirits of turpentine, 568,441 barrels of rosin, 37,867 barrels of tar and 17,963 barrels of turpentine (Sprunt 2005:513-514). Without the use of slave labor, the rice industry declined dramatically (Lee 1977:86-87).

On 13 September 1866, the *Wilmington Journal* (p. 2) reported that the steamer *C. W. Lord* had recently cleared the port city. Southern cotton markets were "rather firmer than otherwise" along with flour and pork while lard was reported as "dull". Despite "meagre" supplies of turpentine, the trade of naval stores appeared to be fairly steady as evidenced by the prominent Wallace & Southerland advertisement placed on the front page. This particular ad commenced in early February 1866 (Figure 35). Exports registered at the Port of Wilmington for the week ending 13 September 1866 are presented in Figure 36.

Gold and U.S. currency continued to be required by the local auctioneer for downtown real estate. Out of 19 rental offerings (comprised of dwellings, stores, vacant lots, a waterfront lot, and the "Marble Yard and buildings") eight would only be leased for gold. On the civic front, the reporter covering "The County Meeting" of 12 September 1866 commented that "Last night was one of the most harmonious meetings of a political nature we have ever witnessed. It was composed of the masses, the farmers and the professional men. There was no jarring or wrangling, everybody seemed determined to do the best they could for the county and State, and no petty jealousies were exhibited." (Wilmington Journal 1866:2)

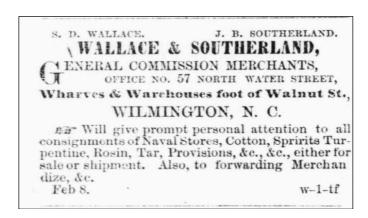


Figure 35. Prominent postwar Water Street factor (Wilmington Journal 1866:1).

From the Port of Wilmington, N. C., for the week ending Sept. 13th, 1866. COASTWISE. To New York—2,084 bbls. spirits turpentine; 650 do. crude turpentine; 7,361 do. rosin; 61 bales cotton; 3 do. sheeting; 12 empty bbls.; 4,000 juniper staves; 5 bbls. wax: 26 tons old iron; 7 pkgs. mdze. To Philadelphia—141 bbls. rosin; 38,000 feet lumber; 105,000 shingles; 116 tons old iron. To Baltimore—304 bbls. spirits turpentine; 60 do. crude turpentine; 1,244 do. rosin; 25 do. pitch; 1 bale cotton; 1 bbl. copper ore; 500 hides; 4 bdls. sheep skins; 5 pkgs. mdze.

Figure 36. Coastwise shipping September 1866 (Wilmington Journal 1866:3).

North Carolina was readmitted to the Union on 4 July 1868 in conjunction with the state's ratification of the auspicious yet controversial *14th Amendment*. Per its discussion of the early years of Reconstruction in the state, the North Carolina Historic Sites (n.d.) remarked that

In 1867, Congress temporarily placed most of the South under military rule. North Carolina was in the Second Military District (out of five) under Maj. Gen. Daniel Sickles (March-August 1867) and Brig. Gen. Edward R. S. Canby (September 1867-August 1868). After 1868, the Federal military presence in North Carolina dwindled. The capital city of Raleigh, however, remained a military outpost. During this period, the force was reduced to around 500 troops statewide, and included the 8th U.S. Infantry.

A review of *The Mercantile Navy List and Maritime Directory for 1867* reported that the British steamer *Star* was owned by Herman Decker of Wilmington, North Carolina. The 109-ton steamer was registered at New Providence, Nassau (Board of Trade 1867:362). Registered at St. John, New Brunswick, the 339-ton British *Southern Belle* was owned by "R. H. Robinson, Wilmington, U.S." (Board of Trade 1867:358, 362).

As of 1 July 1873, *The United States Treasury Register* (*USTR*) identified 14 customs' service agents in the "District of Wilmington". Of that number, nine were native North Carolinians and all were appointed during the Reconstruction Era. Names, designations, stations, etc. are presented in Table 4. The Federal authority also reported that the "Sixth Light-House District" [New River Inlet to Cape Canaveral] employed four individuals locally (Table 5). Maine native George Z. French was assigned by the treasury department as a "Special Agent" in Wilmington and was appointed to that position on 4 October 1870 (USTR 1873:144). [The U.S. Mint became a part of the subject department in 1873 and its agents became better trained to detect counterfeit currency, etc. under the leadership of George S. Boutwell (U.S. Treasury Department n.d.]

Name	Designation	Station	Born	Appointment	Salary
Denard Rumley	Collector	Wilmington	NC	1867	\$1000 & fees
R. W. Chadwick	Deputy Collector	Wilmington	NC	1871	\$2000
C. S. Servoss	Clerk	Wilmington	NY	1870	\$1500
E. M. Shoemaker	"Weigher, gauger,	Wilmington	NJ	1871	\$1500
	& measurer"				
C. E. Taylor	Chief Inspector	Wilmington	Maine	1866	\$4 per day
E. J. Pennypacker	Inspector	Wilmington	PA	1871	\$4 per day
E. M. Rosafy	Inspector	Smithville	Hungary	1870	\$4 per day
Owen Burney	Inspector	Masonborough	NC	1873	\$4 per day
James Lowery	Inspector	Little River	NC	1873	\$4 per day
Fred Miller	Store-keeper	Little River	NC	1866	\$1.40 per day
Ezekiel Hooper	Boatman	Little River	NC	1870	\$30 per month
Calvin Benton	Boatman	Little River	NC	1870	\$30 per month
John D. Davis	Boatman	Smithville	NC	1869	\$30 per month
Frank Dosher	Boatman	Smithville	NC	1869	\$30 per month

Table 4. Wilmington District customs' personnel as of July 1873 (USTR 1873:129).

Lighthouse or Vessel	Customs District	State	Superintendent	Keeper	Compensation
Federal Point	Wilmington	NC	D. Rumley	J. Taylor	\$560
Frying-pan Shoals	Wilmington	NC	D. Rumley	John Walker	\$1000
Oak Island	Wilmington	NC	D. Rumley	J. Melasky	\$600

Table 5. Relevant sixth lighthouse district personnel as of July 1873 (USTR 1873:163).

In the same calendar year, Wilmington's U.S. Army signal officer reported 1-vessels heeded a series of cautionary flags in March [storm]; 2-a violent collision occurred between a foreign brig and coastal schooner; and 3-serious regional damage was caused by the Gale of September 1873. An extract from the *Annual Report of the Chief Signal-Officer to the Secretary of War for the Year 1873* (p. 294) is presented as Figure 37.

March 19-21, 1873.—No vessel left port during the display of signal, and no damage is reported.

March 23-27, 1873.—No damage done to the shipping in port, and no vessel left the harbor during the display of the signal.

March 28-30, 1873.—Three large foreign vessels were about to sail on Friday night, but remained in port on account of the cautionary signal. No damage done in port.

April 9-10, 1873.—A Norwegian brig and the schooner John went to sea before the signal was hoisted; both vessels, becoming unmanagable before they were out of the channel, collided heavily and were badly damaged.

September 19-20, 1873.—The signal was heeded by mariners, merchants, and the public. One of the most violent storms known for a number of years prevailed here from 1.30 a. m. to 5 a. m. of the 20th, the wind attaining a velocity of forty-eight miles per hour. Trees were torn up by the roots, chimneys and fences blown down, and large trees that heretofore had battled successfully with rude Boreas were compelled to bow in obedience to his mighty power. North of the city the storm was even more severe, destroying barns and out-houses, killing and crippling numbers of cattle, the rain coming down in torrents all the while.

Figure 37. Wilmington signal officer log for mid-March through September 1873.

Reconstruction Era Shipping

Local newspapers provided insight into Reconstruction Era shipping and commodity markets. In early August 1875, the *Wilmington Daily Journal (WDJ)* remarked that trading of "Spirits Turpentine" had fallen to "348 casks at 28 cents" and the market was "dull". Likewise, sales of local rosin were "quiet". However, the market for "Crude Turpentine" and "Tar" were "steady". Exports loaded on the steamship *Lucille* bound for Baltimore included; "334 bbls rosin; 14 bales yarn; 3 bales waste; 63 casks Spirits Turpentine; 80 bbls Tar; 16 beer kegs;75 bushels peanuts; 2 tons iron; 2 packages merchandize; [and] 4,259 feet lumber". Captain "Bennet" commanded this steamer and its cargo was ultimately consigned to "A. D. Cazaux" of New York City (*WDJ* 5 August 1875:4).

On the same date, 4 August 1875, the steamer *Dixie* cleared the Port of Wilmington and cruised to Smithville under the supervision of Master Jacobs. Arrivals for 4 August included schooners *Henrietta Hill* and *Florence* from Elizabeth City with 3200 bushels and 2000 bushels of corn, respectively, for B. F. Mitchell & Son. The schooner *Lequathwaite* (Captain Jackson) arrived from Elizabeth City with 1000 bushels of corn for Henderson & Co. The schooner *Anna G. Midyette* arrived with 1400 bushels of corn for B. F. Mitchell bound from Wysocking. The steamship *William P. Clyde* also entered the port on 4 August from New York with Captain Doane at its helm (*WDJ* 5 August 1875:4).

On a more ominous note, all vessels arriving from "Ports South of Cape Fear" were still subject to the *Quarantine Notice* implemented in May due to a deadly yellow fever outbreak (*WDJ* 5 August 1875:4). An unusual marine casualty story was printed by *WDJ* on 5 August that remarked:

Recovered. The yacht Empire and Marion which was stolen on Monday night from Dr. A. E. Wright's residence on Wrightsville sound was found yesterday on the beach at Moore's inlet about two mile and half north of Wrightsville beach. It is very evident from the position in which the yacht was lying on the beach that the parties who stole her had no other intention than her destruction. The mast, sails, rigging and rudder were missing and the yacht was placed on the beach in a position where every sea broke over her. [p. 4]

The October 1876 Report of the Chief of Engineers submitted to the U.S. Congress touched on several relevant maritime issues. With respect to Fort Caswell, the authority commented that modifications to the fortification are ... "still under consideration" and that "There is neither armament nor garrison, nor quarters for a garrison, at the place" (USWD 1876:22). Furthermore, the report stressed that "Its location is advantageous for the protection of one of the entrances to Cape Fear River, and therefore one of the approaches to the city of Wilmington" (USWD 1876:22). No appropriations were requested by Congress for the military work then under charge to Lieutenant Colonel Quincy A. Gillmore. However, significant improvements and surveys [previous Federal funding] of the Cape Fear River were reported for the period (Figure 38). Data about the status of Masonboro Sound and inlet were also reported (Figure 39).

13. Improvement of the Cape Fear River, North Carolina.—The width of the new channel behind the Horseshoe Shoal has been increased from 100 to about 200 feet, and its depth from 9 to 12 feet at low-water. This work has been carried on simultaneously with laying an apron of timber, brush, and stone on the bottom in the opening between Federal Point and Zeke's Island, and has the same object, the diversion of water from New Inlet to the old mouth of the river, near Baldhead Point. Both operations have been successful. This apron has been made as high and the channel has been made as wide as the available funds permitted.

The suction-dredge Woodbury was worked on the Baldhead Bar until late in January, 1876, when the condition of her machinery became such that she was necessarily withdrawn. Funds could not be spared for her repair. She has, consequently, been idle nearly half the year.

Some obstructions have been removed which were placed in the river near Wilmington, during the late war, by the confederate authorities, and a few days' dredging was done at a shoal near Campbell's Island.

The depth aimed at in the year's operations has been about 12 feet at low-water, and very nearly this depth can be carried at ordinary low-water from Wilmington to the ocean, a marked improvement in the condition of the river.

Figure 38. Improvement of Cape Fear River as of June 1876 (USWD 1876:65).

Middle Sound.—From Queen to Barren Inlet, 14 miles, the depth averages 9 feet. Four years ago the banks to the south of Barren Inlet were broken through, and a new inlet made. This later opening has been called Sandy Inlet. It has 1 foot of water on the bar, but is said to be fast tilling up. The depth over the bar at the old opening is 4 feet; the rise of tide is 3 feet. From Barren Inlet to Masonborough Inlet is 3\xi\$ miles. The average depth for the first 2\xi\$ miles is 5\xi\$ feet, and for the remainder of the distance, from 8\xi\$ to 13 feet. The bottoms in all the Bank Channels are hard sand.

Masonborough Sound.—The depth, $8\frac{1}{2}$ to 13 feet, continues for $1\frac{1}{4}$ miles beyond Masonborough Inlet, and then gradually decreases to 1 foot at the mouth of Hewlet's Creek, distant $3\frac{3}{2}$ miles from the inlet, the point selected as the commencement of the land-line across to Cape Fear River. The depth of water over Masonborough Bar is $4\frac{1}{2}$ feet; the rise of tide is $3\frac{1}{2}$ feet. The shoals within are continually shifting. It is said by old residents that the ocean beach has washed back one-eighth of a mile during the last twenty years.

Figure 39. Contemporary navigational data about Masonborough Bar and inlet (USWD 1876:400).

Late-Nineteenth-Century Maritime Advice

A tragic local drowning occurred on Monday, 13 February 1882, when a small vessel foundered after its occupants had been tonging for shellfish. The *Wilmington Morning Star* brief item follows.

Lewis Spencer and Betsy Hines, both colored, were crossing the main channel at Masonboro Sound with a boat loaded with oysters, on Monday, about 1 o'clock P.M., when a sudden storm came up, which struck the boat and caused it to fill and sink in deep water. Lewis Spencer, being a good swimmer, struck out for the shore and succeeded in reaching it all right, but the woman was drowned. She was a widow, aged about 35 or 40 years, and lived near what is known as the Harper's place. The body had not been discovered at last accounts. Coroner Hewlett will probably examine the remains when found, and see if an inquest be necessary. [WMS, 15 February 1882:1]

The 20 May 1882 edition of *The Daily Review* (p. 4) of Wilmington, North Carolina confirmed very brisk international shipping to the named port. Six select foreign barques are identified in the "Marine Directory" for that date. Details are presented in Table 6.

Vessel	Tons	Association
Agder	340	C.P. Mebane
Erwin	360	E. Peschau & Westerman
Norwegian Atlantic	423	C. P. Mebane
Glacier		E.G. Barker & Co.
Norwegian Leo	516	Granton, Heide & Co.
German August	387	E. Peschau & Westerman

Table 6. Sample of foreign barques at the Port of Wilmington.

As of 1883, the Maritime Association of the Port of New York (MAPNY 1883:24, 63) subscribed to countless American and foreign newspapers (e.g. *Wilmington Star*), and employed hundreds of correspondents (e.g. Wilmington, North Carolina) to provide daily marine reports. In his annual report submitted to the association, Superintendent John C. Smith remarked that

A valuable addition to these slates [bulletins], and one of great interest to masters of vessels bound to sea by way of Sandy Hook, and in fact to all concerned in our Southern Coasting trade, is the suspension from them, tri-daily of reports of the direction and the velocity of the wind, state of the weather, sea swell, etc., etc., from Block Island to Smithville, North Carolina. I would add that we are now arranging to have a similar record from our Eastern Coast from the benefit of those engaged in the trade of that quarter. (MAPNY 1883:150)

The inclusion of the "List of American Vessels, and Foreign Vessels in the American Trade, Abandoned at Sea, Reported Missing, or Wrecked during the year 1882" published by MAPNY (1883:152-165) documents relevant coastwise navigation in addition to casualty advice. In mid-January 1882, the *Lilly* was abandoned in "leaky" condition off Cape Fear. The 413-ton American schooner (Master Cole) was bound for New York from Charleston (MAPNY 1883:159). On 12 April, the 299-ton American schooner *Minnie* wrecked off Frying Pan Shoals as it navigated from New York to Charleston. Twelve days later, the *Mercy T. Trundy* also wrecked at Frying Pan Shoals during its voyage from Philadelphia to Wilmington. At that date, the 326-ton American schooner was commanded by Captain Crowley (MAPNY 1883:160).

During its voyage from Philadelphia to Wilmington, the *L. Sturdevant* "Wrecked at Masonboro" on 6 July 1882. At the time of the shipwreck, the 123-ton American schooner was commanded by Master Tolson (MAPNY 1883:159). In early November 1882, the 326-ton *Mattie B. Rulon* was "Abandoned, waterlogged" while the schooner sailed from Charleston to New York. The American coaster may have shipwrecked off the Carolina coast (MAPNY 1883:160; Figure 40).

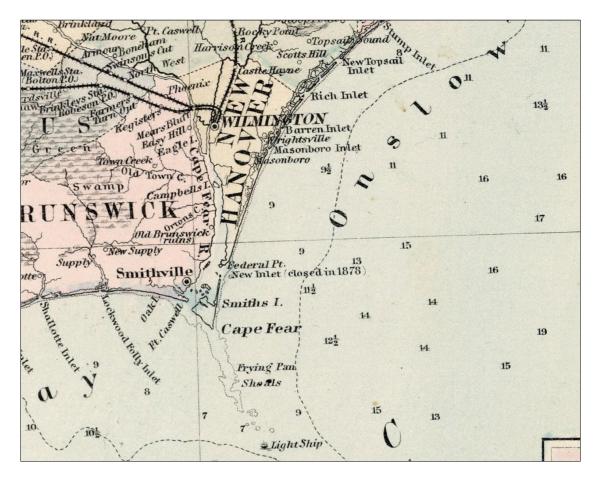


Figure 40. Detail of 1881 Gray & Gray atlas map (Courtesy of the David Rumsey Map Collection).

The early June 1893 item "Surf bathing is now in full blast on Wrightsville beach" published by *The Roanoke News* of Weldon, North Carolina attested to wide-spread popularity of the county's tranquil shore. In July 1899, the *Semi-Weekly Messenger* of Wilmington published a prominent advertisement for one favorite local accommodation. Proprietor George Campbell and Manager R. Crawford advised Wrightsville Beach enthusiasts that

The Sea shore Hotel opens Jne 1st, season of 1899. The hotel is handsomely furnished and fitted with all the conveniences and improvements of modern times. only half hours' ride from Wilmington, N.C. Wrightsville beach is not only noted for its cooling summer breezes and matchless view of the grand old Atlantic Ocean, but it is the most famous summer resort on the continent. Nothing will be left undone by the management of the Sea Shore to promote the comfort of its guests. the cuisine is up to the highest standard of excellence. drinking water furnished by artesian well. special railroad rates from charlotte, Greensboro, Raleigh, Goldsboro and other points. surf bathing---still water bathing. [p. 4; Figure 41]

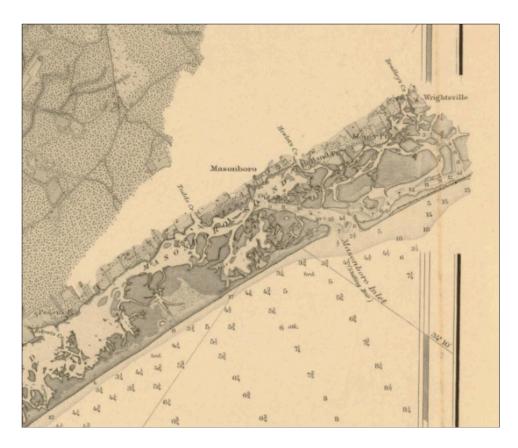


Figure 41. Detail of 1897 USCS chart entitled *Masonboro Inlet to Shallotte Inlet Including Cape Fear, North Carolina* (Courtesy of Office of Coast Survey, NOAA).

The powerful hurricane of September 1893 which devastated the sea islands along Georgia and South Carolina also impacted the coast of North Carolina. Eyewitness accounts published by the *Savannah Morning News* commented on 12 September that

The hull of a schooner, bottom up, ashore on Caswell Beach, is said to emit such a fearful stench that no can go near her. Wrightsville Beach is covered with pine lumber from inlet to inlet, supposed to have come from one of the numerous wrecks of lumber-laden vessels along the coast. The beach at Masonboro is also covered with wreckage of the same description. [p. 7]

The Wilmington *Harbor Master's Annual Report* for "Arrivals of Vessels of Ninety Tons and Over at the Port During 1899" confirmed the following inbound shipping. Two hundred and twenty-nine vessels entered the port with aggregate tonnage of 182,938. Captain Edgar D. Williams confirmed shipping as follows; "American-58 steamships, 77,885 tons; 1 barque, 348 tons; 2 brigs, 639 tons; 28 barges, 19,984 tons; 74 schooners, 21,636. Total, vessels 163; total tonnage 120,492. Foreign-27 steamships, 46,052 tons; 25 barques, 14,101 tons; 1 brig, 293 tons; 10 schooners, 2,030 tons. Total vessels, 63; total tonnage 62, 476. Grand total-229 vessel, 182,938 tons". For comparison, Captain Williams reported 259 inbound vessels [90 tons plus] entering the port during calendar year 1898 (*Wilmington Morning Star*, 2 January 1900a:4)

Twentieth-Century Maritime Overview

On 2 January 1900, the *Wilmington Morning Star* reported that the *Seabright*, which regularly navigated between the North Carolina port and Little River, South Carolina encountered strong "Northern" gales, heavy fog, and frequent rain squalls on the previous day. The steamer was forced to seek shelter near Southport and then nearly foundered at the Shallotte bar before finally reaching Wilmington. On this passage, the steamer conveyed cargo confirmed as; "cotton, naval stores, peanuts, poultry and general produce" in addition to five passengers. Captain W. A. Sanders later reported that "An awful big sea was running and in going over the bar she was constantly swept by huge waves that carried off a part of her cargo, including a coop of turkeys, two hogs and other produce on the deck". (*WMS* 1900a)

WMS (22 February 1900b:1) also verified that "The British schooner, *Blomidon*, 271 tons, Capt. Baxter, has been chartered to load lumber here [Wilmington] for the Kidder Lumber Company". Table 7 details the newspaper's marine directory published on the same date.

Vessel	Type	Tons	Status	Consignment	
Charles H Wolston	Schooner	287	Inbound from NYC	George Harriss Son, & Co.	
CC Wehrum	Schooner	484	Cleared for NYC	Lumber cargo by Hilton	
				Lumber Co.; vessel by George	
				Harriss Son, & Co.	
Melissa Trask	Schooner	225	At anchor	George Harriss Son, & Co.	
Oliver Schofield	Schooner	337	At anchor	George Harriss Son, & Co.	
Maria Dolores	Barge	610	At anchor	Virginia-Carolina Chemical Co.	

Table 7. 22 February 1900 marine directory (WMS 1900e:2).

A comparison of southern pine receipts [feet] shipped from key North Carolina ports to New York City for the same intervals in 1901/1902 is presented in Table 8. The reports compiled for Wilmington were significantly higher than its sister ports.

Outbound	March 25 to April 23		ound March 25 to April 23 16		16 Weeks En	ding April 23
	1901	1902	1901	1902		
Bogue	160,000		160,000			
New Bern		744,536		1,629,535		
Wilmington	527,919	1,500,507	3,268,426	5,991,391		

Table 8. Early twentieth-century lumber shipments originating in North Carolina ports (U.S. Bureau of Statistics 1902:3742).

In early January 1902, the *WMS* reported this local shipping news, which represents contemporary vessels and cargoes for the early twentieth century, as follows;

The barque *Albatross* passed out at 10 A.M. yesterday [2 January 1902] at Southport... Four hundred thousand shingles were loaded into the steamer *Snyg* by the Wilmington Stevedore Company in nine hours—Schooner *Annie P. McFadden* and *Wm. P. Hood* cleared yesterday with timber and lumber cargoes for New York and Boston, respectively.—The Norwegian barque *Hutitu* was cleared yesterday by Messrs. Heide & Co., for London, Eng., with a cargo of 6290 barrels rosin, consigned by Murchison & Co. [p.1]

Barkentine Glad Tidings Maritime Event (1902)

Dramatic headlines, "Perils of the Sea" and "The Awful Experience of the Barkentine Glad Tidings", introduced this relevant maritime story published by the *Wilmington Messenger* on Thursday, 27 February 1902.

Yesterday [26 February] morning with a heavy fog prevailing at Wrightsville Beach, the outlines of a ship in distress were seen from the shore. She was about a mile and a half off and was anchored opposite the coal chute of the Wilmington Seacoast railroad, not far from Masonboro Inlet. The ship proved to be the American barkentine Glad Tidings, 626 tons, Captain Collier, bound from Turks Island for Baltimore with a cargo of salt. She anchored there Tuesday afternoon at 5 o'clock in about six fathoms of water. Yesterday morning Captain Collier came ashore and was brought to the city by Mr. J. M. Hewlett. He reported to Messrs. George Harriss, Son & Co., ship brokers who made arrangement to have the vessel towed from her perilous position. The tug Alexander Jones has been chartered to tow her to Baltimore and will probably leave with her today. The captain returned to the ship yesterday with supplies and Mr. Hewlett accompanied him and furnished a boat to take them out to the vessel. Captain Collier reports that he sailed from Turks Island February 4th, for Baltimore, with a cargo of 30,000 bushels of salt. He says he encountered one storm after another, and when he would run out of one gale it appeared that he had run right into the teeth of another. Sails were blown away, the rigging damaged, and the vessel sprung aleak [sic]. The gales were so fierce that the crew was kept up day and night, and it was with great difficulty that they saved the ship. The men were kept constantly at the pumps night and day and all on board were exhausted and bruised by being buffeted about. Captain Collier says he encountered the most severe storm Monday night between Point Lookout and Cape Fear. Great mountains of water broke over the ship and the captain says that in an experience of fifty-three years as a sailor he has never seen a more awful sea. (p. 4)

Lumina Pavilion Grand Opening

On 26 July 1905, North Carolina's largest subscriber newspaper rhetorically asked readers; "WHAT IS LUMINA? THE GREAT ATTRACTION AT WRIGHTSVILLE BEACH CREATES INTEREST." Responding to its own question, *The News and Observer* (1905) of Raleigh commented that

Wrightsville Beach is constantly offering pleasant surprises to visitors. This year the visiting public has found a marvelous electric railway service that is the equal of anything in the country. Much of the distance is double tracked and the twelve mile ride to the popular beach is made by thousands each day. Nine thousand were handled the Fourth of July. The latest, greatest, and pleasantest surprise is LUMINA, the most conveniently arrange pavilion in the South. Every imaginable convenience has been arranged for the comfort and pleasure of excursionists and other visitors to Wrightsville Beach. Dressing room even are free and the charge for an elegant dinner such as is served by some hotels of reputation, is only 25 cents. LUMINA is beautiful by day, but most beautiful at night when tis appearance with thousands of electric bulbs of varied colors make it rival in grandeur some of the most attractively constructed resort buildings at St. Louis and the Buffalo expositions. LUMINA is the poor man's friend and the rich man's joy. It has made Wrightsville Beach more famous.

Previously, the *Semi-Weekly Messenger* of Wilmington devoted several columns regarding the auspicious *Fourth of July* 1905 celebrations at Wrightsville Beach. Select headlines published on 7 July included: "A RECORD BREAKER; 7,000 People Visited the Beach Yesterday; NO ACCIDENTS REPORTED; Lumina Center of Attraction for Those Visiting the Beach" (*Wilmington Messenger* 1905:8). An excerpt from "Thousands at Lumina" commented that

Lumina was the mecca for those on the beach. There was an enormous crowd here during the day and at night nearly every one [sic] on the beach gathered there for the purpose of seeing the fireworks. Fully 5,000 people gathered around Lumina about 8:30 and the crowd remained about the same until 9:30 when they began returning to the city. The people of Wilmington have reason to be proud that Wrightsville Beach affords such an up-to-date pavilion as Lumina and it is a place free to the public and where any one who visits the beach can go and spend the afternoon. There was music at the pavilion during part of the day and at night unless there dancing. (Semi-Weekly Messenger 1905:8)

With respect to maritime events, "The event of interest during the morning hours and about noon was the yacht race and although the sun beat down relentlessness the large crowd lined the board walk and watched the trim yachts as they glided over the course on Banks channel" (*Wilmington Messenger* 1905:8; Figure 42).

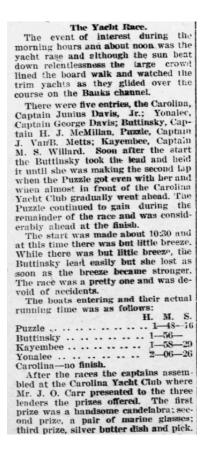


Figure 42. Fourth of July yachting off Wrightsville Beach (Wilmington Messenger 1905:8).

The regularly published "Wilmington Markets" column of the same newspaper identified potential regional exports as presented in Figure 43.

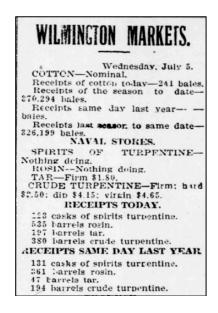


Figure 43. Early July 1905 market report (Semi-Weekly Messenger 1905:8)

During July 1906, Roland M. Harper toured the coastlines of Georgia, South Carolina, and North Carolina which included rail stops at Wilmington and Wrightsville Beach. In his overview of the Atlantic coastal plain, Roland Harper (1907:356) remarked that

One or two slight exceptions to the general monotony of the topography toward the coast may be worth noting. In the immediate vicinity of Yemassee, S.C., the country seems just a little more broken than it is for some distance farther inland; and the city of Wilmington is remarkably hilly for a southern seaport, perhaps more so than any other place so near the coast between New York and Florida. The topography between Wilmington and Wrightsville Beach, a distance of ten or eleven miles, seems as undulating as in many places in the Altamaha Grit region of Georgia, and looking inland from the beach the land is seen to have a decided elevation, quite different from the extreme flatness which characterizes the coasts of South Carolina and Georgia.

Within a few years of Lumina Pavilion's auspicious opening, articles and advertisements were commonplace in many North Carolina newspapers regaling the popular and very trendy Wrightsville Beach venue (Figure 44; Figure 45).



Figure 44. Summer 1909 ad presented in *The Robesonian of Lumberton* (Courtesy of the LOC).

MERRY AND GAY LIFE AT WRIGHTSVILLE BEACH

Season's Outlook Promises Unusually Large Gathering at This Famous Resort.

The formal opening of the Seashore Hotel on June 1, of Lumina, the handsomely equipped pavilion of the Tide Water Power Company, of the Tarrymoore Hotel, which will occur on Thursday, and of the many delightful boarding houses indicate the fact that possibly the largest season in the history of Wrightsville Beach is now upon us. The hotels have enjoyed a large patronage in the past, and it has frequently been the case that every available cot on Wrightsville Beach has been put in service for the accommodation of the enormous number of annual visitors at this popular lar beach, and in view of this, many additional rooms have been thrown open to the use o fthe large number of guests anticipated.

Already the merry whirl of pleasure has begun. The Banks Channel has been the scene of a number of close and exciting yacht races, in addition to which one may find hundreds of bathers in the surf each afternoon. "Lumina" now has a ball room 150 feet in length, with a veranda containing 25,000 square feet of available space. The ten-piece orchestra has fulfilled the fondest expectations of the most sanguine, and the enormous sounding board in which this orchestra is placed, magnifies and re-echoes the sweet strains of delightful music to such an extent that each note may be heard in the furthest part of this enormous pavilion. Numbers of special dances have already been given, and the Tide Water Power Company has many more on tapis for the approaching season. The Dance of All Nations on June 15 will be particularly attractive. The spacious ball room will be decorated with the flags of many nations. The national air of each country will be played. As the first note is struck, a huge flag will automatically unfurl itself from the ceiling, when will follow a waltz and two-step of each respective country. The plans for this particular dance are exceedingly elaborate and beautiful in their conception. MEARES HARRISS.

Figure 45. June 1909 Goldsboro Semi-Weekly Argus article (Courtesy of CA, LOC).

The Great War Period

In February 1918, the Taya Line steamer *Guadalquivir* was docked at Wilmington and loaded with a valuable consignment of cotton. Soon thereafter, "the vessel was sunk on the high seas by an enemy submarine and the 500 bales of cotton were wholly lost" (*Nauticus* 28 January 1922:23).

A review of German Submarine Activities on the Atlantic Coast of the United States and Canada confirmed the presence of German "Unterseeboten" off the coast of North Carolina during The Great War (WWI) (ONR&L 1920:11, 138; Figure 46). During early June 1918, the U.S. Navy monograph related that enemy submarines were hunting Allied shipping off Cape Hatteras. Subsequently, *U-140* shadowed and attacked three vessels commencing on 6 August that included the 590-ton Diamond Shoals Lightship, the British steamer Bencleuch, and the 2431-ton American steamer Mariners Harbor. Of those three, the USCG lightship was sunk by German gunfire (ONR&L 1920: 77-79, 140)

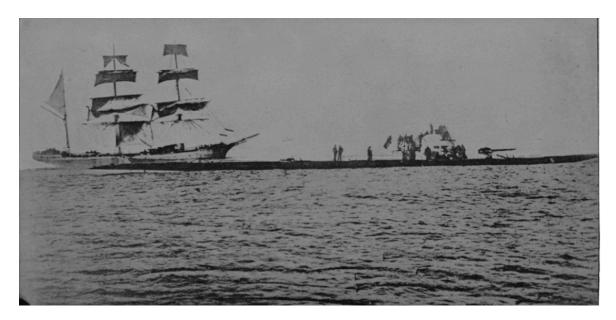


Figure 46. Historic 1918 image of U-Boat lying near 19th-schooner as submariners board their latest Western Atlantic target (Presented in: ONR&L 1920:48).

The loss of the 6978-ton British steamer *Mirlo* ½ mile off Wimble Shoals on 15/16 August was attributed to a German mine (ONR&L 1920:138, 207). An official chart entitled "German Submarine Activities in the Western Atlantic Ocean, 1918" suggested that no *documented* U-Boat mine laying occurred off the modern project area (ONR&L 1920:207). American minesweepers tasked to reconnoiter the fifth naval district [Assateague VA to New River Inlet NC] were identified as the *Spartan, S. T. No. 2, Bellows, Kajeruna, Struven, Messick, McNeal*, and *Margaret*. Sixth naval district [New River Inlet to St. Johns River FL] minesweepers during the global conflict were identified as the *Alaska, Adams, Ranger,* and *Montauk* (ONR&L 1920:135).

The Armistice of 11 November 1918 was the cease-fire agreement signed at Le Francport near Compiègne that ended fighting on land, sea, and air in WWI between the Allies and their last remaining opponent, Germany. Previously, armistices were negotiated with Bulgaria, the Ottoman Empire, and Austria-Hungary. In the postwar period, maritime industries in the port city slowly commenced again despite the economic hardships brought about by the global conflict. By December 1921, *Nauticus* reported that several vessels were being constructed in Wilmington including some government contracts. In early January 1922, the *Messenger of Peace* was towed to Wilmington in a "leaking" condition. Prior to the British schooner's distress call, the vessel was routed from the West Indies to Ocracoke Island. Its ultimate destination was Nova Scotia (*Nauticus* 14 January 1922:20).

Idyllic Atmosphere of Wrightsville Beach

The quaint community of Wrightsville Beach thrived during the war and postwar period. "Lumina Dancing Pavilion" [Figure 47; Figure 48] offered young and older folk pleasant opportunities to escape the worries of the conflict and the devastating effects of The Spanish Flu. Block (1998:35) commented that "Assuming an array of postures and dress, bathing beauties competed at Wrightsville Beach in the 1920s. Lumina was the venue for varied competitions, including boxing and wrestling matches and greased pole climbs".



Figure 47. Ca. 1917 postcard entitled "Lumina, Best Dancing Pavilion on South Atlantic Coast, Wrightsville Beach, near Wilmington, N.C." (Courtesy of Durwood Barbour Collection, NC Collection Photographic Archives, Wilson Library, UNC-Chapel Hill).



Figure 48. Ca. 1918 Interior view (Courtesy of the ECU Digital Collection).

In the warmer months, the John Edmund Barry family of Wilmington [pop. 32,000] and others lived in "the many very small cottages/fishing shacks just several yards west of the Lumina Pavilion on Banks Channel"... According to the author of *Why Can't I*

The shacks or fishing cottages they rented went for \$60.00 a year. They had no running water, just a spigot on the board walk for the building, a fish cleaning station, a few interior lights provided by Tidewater Power and the usual out-houses. Wrightsville Beach Town in this era was a secluded island where gentlepeople vacationed and lived summer after summer. Without a doubt, it was different from any other resort anywhere in that era. Wrightsville Beach was isolated from the noise and frustration of Wilmington with a mile-wide expanse of tidal marsh grass and winding channels stretching away to the North and South as far as the eye could see. Bordered on the east by the roaring surf of the Atlantic Ocean, its only connection with the busy world was the long trolley trestle over Banks Channel. (Barry 2020:1-2)

Fortunately, due to the widespread use of cameras both professionally and personally, many early twentieth-century photographs exist and have been published. Per Block (1998:30) "Eric Norden snapped many pictures of life on Wrightsville Sound in the 1920s... Some record a quaint element of daily life. Many capture local fashions and mores. A few are amusingly contrived"... An especially charming image [copyrighted] of one Wrightsville Beach hotel was described by Block (1998:67) as such

The natural beauty of Wilmington and its surrounding area has often made innkeeping [Figure 49] a thriving business and has continually converted a percentage of tourists into residents. The Oceanic, which seemed as much a work of art as hotel, graced Wrightsville Beach from 1905 until 1934, when it was destroyed by fire".



Figure 49. Birmingham Age Herald published 2 July 1922 (Courtesy of the LOC).

Initial Beach Erosion Study and Infrastructure Development

According *To Great and Useful Purpose, A History of the U.S. Army Corps of Engineers*, "Residents of Wrightsville Beach, just north of Fort Fisher, also began expressing their concerns over beach erosion in the 1920s." Repairs to the Wrightsville Beach groin were completed during 1923 utilizing horses "to provide power to move pilings in the surf zone" (Hartzer 1984:84; Figure 50).



Figure 50. Groin repair at Wrightsville Beach (Presented in: Hartzer 1984:84).

In 1930, North Carolina Division of Water Resources and Engineering director J. W. Harrelson remarked that

Four years ago... we began to conduct observations on the changes going on along our coasts, the measurement of beach erosion, and the migration or closing of inlets... South of Beaufort Inlet there were in 1783, 13 inlets; in 1875–12; at present, ten. Inlets which have remained open, such as Hatteras, Ocracoke, and Masonboro [Figure 51] have migrated from one to three miles south within the past 30 years [1900 to 1930]. The forces which have produced these changes are still active and by erosion of resort beaches, or by shoaling, closing or migration of inlets have caused marked injury to the resort developments along the beaches, to navigation of inlets by fishing and other boats, and to the fishing industry by decreasing the salinity of the sound waters. Our investigations of winds, tides, currents, coastal movement, inlet closure, rainfall, and stream flow in the coastal area of the State are designed to enable us to evaluate properly the complex forces producing these conditions, and to apply intelligent remedial measures. (Harrellson quoted in: *Conservation and Industry* 1930:10)

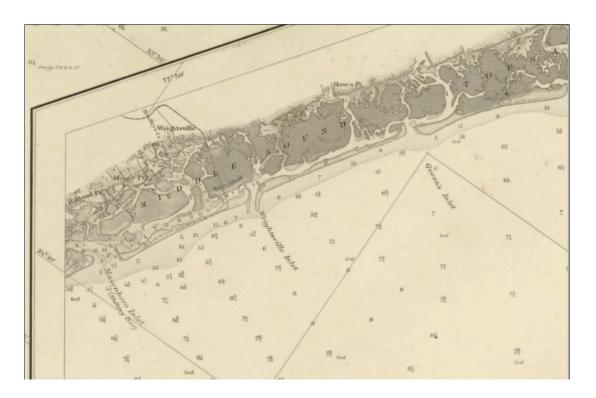


Figure 51. Detail of 1923 USCS chart identifying navigable inlets in the project vicinity.

A collaborative approach headed by Thorndyke Saville, the N.C. Department of Conservation and Development, and the Beach Erosion Board culminated in a 1934 study that suggested Wrightsville Beach "had eroded a net distance of 80 feet over a period of 75 years" (Hartzer 1984:83). To remedy the ongoing damage, a groundbreaking "renourishment" project commenced in 1935 as follows

To halt the beach's erosion, which was influenced by the presence of Moore Inlet at the northern end of Wrightsville Beach and Masonboro Inlet at the southern end, the [Erosion Board] recommended a series of 16 steel sheet-pile groins, spaced 650 to 750 feet apart and connected at their shore ends to a steel sheet-pile bulkhead 9,855 feet long. To restore the beach to its former condition, sand from the rear of the island should be supplied to portions of the beach, according to the board's recommendations. In 1939, financed in part by the Public Works Administration, the town of Wrightsville Beach built a groin system generally in conformance with the proposals of the Beach Erosion Board, except that the bulkhead was omitted for lack of funds. The work comprised 16 creosoted pile-and-timber groins, each 325 feet long with an average spacing of 800 feet, and placement of nearly 700,000 cubic yards of fill (Hartzer 1984:84)

Based on Corps of Engineers 1934/1935 surveys, USC&GS *Chart No. 832* detailed the coastline from New River Inlet to Southport. A cautionary note remarked that "The channels at the entrances to the inlets on this chart are subject to changes. Strangers should not enter before obtaining local information as to conditions. The buoys in Masonboro Inlet are not charted because they are frequently shifted in position" (USC&GS 1936). The relevant sector is presented in Figure 52.

In addition to local interest in preserving the beach to attract development and keep tourists coming to Wrightsville, forward-thinking officials recognized the need for a proper road system to replace the primitive shell hash version which had existed for decades. In her interesting column called "Through Capital Keyholes, Behind the News in North Carolina" (under the topic "RESORT"), Bess Hinton Silver advised *Roanoke Rapids Herald* readers in June 1935 that

Citizens of New Hanover county are hoping to get the State to construct a road along the sound side of Wrightsville Beach reaching up beyond Lumina pavilion. The county has some road money coming to it under the future road program and there are many leading citizens who would prefer to see it all spent to get a road up the Southern end of Wrightsville. Later they hope to connect Wrightsville and Carolina Beaches with an ocean open road that would be a real attraction to tourists.

At this date, Wrightsville Beach and environs had developed into a statewide and national venue for prestigious social gatherings, government meetings, and industrial conventions. The Ocean Terrace Hotel of Wrightsville Beach hosted the August 1939 convention for the North Carolina League of Municipalities (The American City 1939:115).

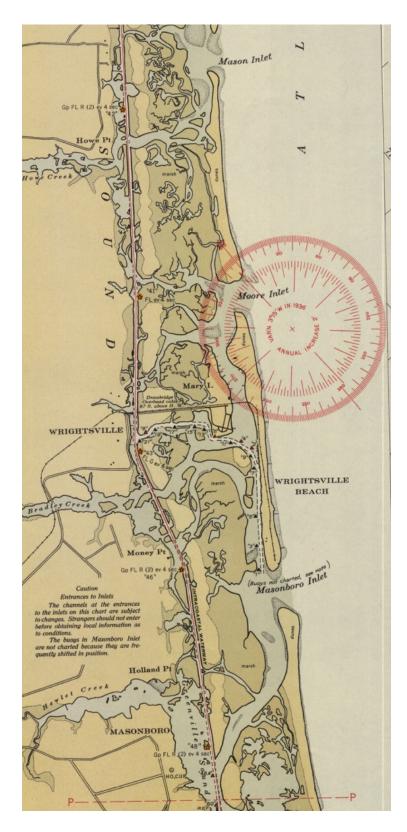


Figure 52. Detail of chart entitled New River Inlet To Southport (USC&GS 1936).

A very significant letter dated 8 July 1939 revealed that at least "18 marine casualties (principally motorboats and yachts), involving the loss of 3 lives" had "occurred in the vicinity of Masonboro Inlet" from 1933 to 1938. The official correspondence was forwarded to the Committee on Merchant Marine and Fisheries from Acting Secretary of the Treasury Stephen B. Gibbons. Owing to its importance with respect to the rationale for constructing a USCG station at Wrightsville Beach, the entire letter is presented as Figure 53.

> COAST GUARD STATION, WRIGHTSVILLE BEACH, N. C. 2

> > TREASURY DEPARTMENT, Washington, July 8, 1939.

Hon. S. O. Bland, Chairman, Committee on Merchant Marine and Fisheries House of Representatives, Washington, D. C.

Dear Mr. Chairman: Reference is made to your letter of April 20, 1939. enclosing copy of bill H. R. 5845, Seventy-sixth Congress, first session, "To provide for the establishment of a Coast Guard station on the shore of North Carolina at or near Wrightsville Beach, New Hanover County," and requesting to be furnished the views and recommendations of this Department on the proposed legislation.

This proposal has been made the subject of a most careful study by the Com-

mandant of the Coast Guard, the pertinent facts and conditions bearing upon the need of such station being as hereunder indicated:

Wrightsville Beach, the locality mentioned in the bill, is located on the Atlantic Ocean coast of North Carolina, approximately 24 miles north of Cape Fear (mouth of Cape Fear River), and is about 9 miles by land east of the port of Wilmington, N. C. The nearest Coast Guard station to the northward of this locality is that at Bogue Inlet, approximately 53 miles distant, and to the southward that at Oak Island, about 25 miles distant. This represents an intervening coastal area of approximately 78 miles between the existing Coast Guard stations along this section of the coast, and in which area there is at present no Coast Guard station. The coast in this particular area has no shore hazards for coastwise shipping not common to other coastlines; however, due to the fact that there are 11 small inlets, 6 of which are within 14 miles of the proposed station and used by commercial and sport fishermen, marine commerce of such a character is subject to the hazards incident to navigating through these inlets.

The principal marine activities which would come within the protection of the Coast Guard station as proposed are those of commercial and sport fishing which are carried on generally in the region off Wrightsville Beach, and using Masonboro Inlet (at Wrightsville Beach) in going to and from the sea. Normally, approximately 25 commercial boats and 100 private boats operate out of Masonboro Inlet, and this marine commerce is considerably augmented by the influx of seasonal visitors to this region who resort to boating and fishing. It was represented at the hearings held locally on the proposal that the extensive fishing grounds in the vicinity, if afforded adequate Coast Guard protection, would be commercialized to an increasing extent and to the public benefit. It was considered that such a station, in addition to giving protection to the above-mentioned commerce, would be in position to render assistance to stranded or disabled marine traffic using the Intercoastal Waterway passing close by. The coastwise steamship track passes 45 miles offshore.

During the 5-year period, 1933-38, there occurred in the vicinity of Masonboro Inlet alone 18 marine casualties (principally motorboats and yachts), involving the loss of 3 lives. Undoubtedly there were other marine casualties of which no records were available.

Briefly, a Coast Guard station established in the general region of Wrightsville Beach would provide protection which is considered essential for marine commerce operating along this section of the coast, and would afford the Coast Guard a most useful link, in its distribution of stations, in a lengthy coastal area (78 miles) now without such an establishment.

For the above reasons the Department recommends enactment of bill H. R.

This Department has been advised by the Bureau of the Budget that there is no objection to the submission of the report to your committee, with the understanding that no commitment is thereby made with respect to any early expenditures of funds for the establishment of this station.

Very truly yours,

STEPHEN B. GIBBONS, Acting Secretary of the Treasury.

 \bigcirc

Figure 53. 1939 political lobbying for Wrightsville Beach USCG station.

World War II Period

On 3 September 1939, the SS *Esso Bayway* "arrived from Ingleside, Texas, at Wilmington, N.C., with her first wartime cargo—104,470 barrels of Essolene". Significantly, the tanker "was an essential unit in the coastwise transportation of oil for the nation's domestic economy and transshipment overseas... The pre-Pearl Harbor wartime voyages of the Esso Bayway were uneventful but vital. Summed up, they signified the transportation of more than 5,000,000 barrels of petroleum products" (Figure 54)



Figure 54. Esso Bayway "came through the war unscathed" (Standard Oil Company 1946:380).

Prior to the United States' official entrance into World War II (WWII) undertakings, Wrightsville Beach continued to flourish as a summer destination. An advertisement placed by Mrs. E. T. Pullen boasted that 16 years of experience assured her guests good food and pleasant service (Figure 55).



Figure 55. June 1940 ad in Wilmington Morning Star (Courtesy of the LOC).

On 16 June 1940, the *Wilmington Morning Star* published articles and numerous photographs headlined by "Wrightsville Beach Anticipates Best Season". Excerpts follow with respect to local navigational improvements and maritime activities clearly demonstrating the mid-twenty-century shift from nearshore activities to offshore recreational pursuits.

The July event, to be staged July 13 and 14, will be the annual Water Carnival. August's event will be a motorboat week-end and the September event will consist of a fishing rodeo to be staged sometime after the middle of the month.... [Vacationists] enjoy the spine-tingling thrills of riding aquaplanes behind zig-zagging motorboats flying over the water at high speeds and bathers find the new bathing areas, improved last year by dredging operations carried out as a means of erosion control, finer than ever before... Sailing, which always plays a big part in a vacation at Wrightsville Beach, will be more in the spotlight this year than ever before [Figure 56]. Additions to the sailing fleet and the fact a gala invitational regatta is to be held have served to focus the attention of vacationists at the resort on this ever-popular sport.... Deep sea fishing is proving unusually popular this season and anglers are finding the beach this year has better boat facilities than ever before. Inlet channels have been marked by the lighthouse service and make navigation much easier and completely safe for those who venture out to the deep waters to seek the game, fighting fish which abound there [Figure 57]. (Wilmington Morning Star 1940b:27)



Figure 56. June 1940 image of numerous sail boats off Wrightsville Beach (Wilmington Morning Star 1940b:27).



Figure 57. Female anglers headed out Masonboro Inlet during June 1940 (Wilmington Morning Star 1940b:27).

Per remarks published by *The Congressional Record*, "During World War II, Wilmington was the country's unique wartime boomtown, aptly and officially named 'The Defense Capital of the State.' The once-quiet seaside city, geographically isolated for decades, suddenly found itself an exploding center for military life and defense production" (McIntyre 2008:11747-11748). From 1939 to April 1943, the SS *Esso Baltimore* conducted "an uninterrupted series of coastwise and Caribbean voyages" delivering cargoes of gasoline, heating oil, fuel oil, crudes, distillates, and Diesel oil" for Halifax, Nova Scotia, Aruba, and several U.S. ports including Wilmington (Standard Oil Company 1946:324)

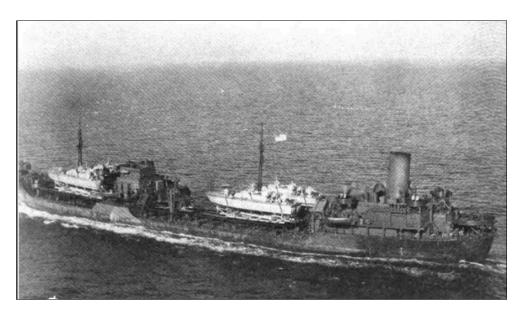


Figure 58. SS *Esso Baltimore* ca. 1944 bound for Oran, North Africa (Courtesy of the U.S. Navy).

The USS *Zebulon B. Vance* was launched on 6 December 1941 by the North Carolina Shipbuilding Company (organized just one year before) located in Wilmington (Figure 59). This 10,000-ton Virginia Dare-type "Liberty Ship" was the first of 90 sister ships to be built for the Maritime Commission. According to the Cape Fear Museum website,

Although the Wilmington shipyard was a small part of the nation's bigger war effort, it had an enormous influence on the town and the state of North Carolina. Before the war, there were a few thousand manufacturing workers in Wilmington. During the war, Wilmington's shipyard became the largest employer in the state with more than 20,000 workers. The yard employed blacks and whites, men and some women. It ran three shifts, 24 hours a day. By May 25, 1943, less than 2 years after the S.S. Zebulon Vance was launched, Wilmington's shipyard finished its 100th freighter. And by war's end, the yard had produced 243 ships to support the Allied war effort.



Figure 59. Launch of the USS Zebulon B. Vance (Courtesy of the LOC).

A seminal work entitled *The Battle of the Atlantic and Signals Intelligence: U-Boat Situations and Trends, 1941-1945* was reviewed for germane information. According to the editor's preface

This volume contains the U-boat situations and U-boat trends which were written during World War II by Rear Admiral J. W. Clayton, RN, the head of the Admiralty's Operational Intelligence Centre, and by Commander Rodger Winn, RNR, the head of the Submarine Tracking Room. Based

largely on the latest, at the time, available information, mainly communications intelligence, the U-boat situations and U-boat trends were designed to inform a small number of senior commanders and high-ranking officials of the latest events and developments in the Allied war against the U-boats. These documents are important because they relate on a weekly and, in some cases, daily basis, exactly what the British knew concerning the activities of the German U-boats during the Battle of the Atlantic. (Syrett 1988:ix)

For the week ending 2 February 1942, the Admiralty related that

In a strategic sense the week has been uneventful, for no development or change of plan in the heading of U-boats has emerged. But the brunt of attack has continued to be borne by shipping off the Atlantic seaboard of USA between North Carolina and New York; losses have been particularly severe in the former region. It is apparent that U-boats are refraining from attacks on convoys and are selecting their targets from among the individual ships encountered with some particularity. A large proportion of the ships sunk have been laden tankers of substantial displacement. The tonnage lost in January will be found to amount to an ugly figure, in the neighborhood of 200,000. [*] No effective countermeasures have been employed. (Syrett 19889:9)

Soon thereafter, the Operational Intelligence Centre was forced to revise the estimate* and reported that "Sixty-two ships amounting to 327,357 tons were lost to U-boat action"... for the month of January 1942 (Syrett 1988:9). For the week ending 16 March 1942, the Submarine Tracking Room confirmed that at least five U-Boats were operating in the Atlantic between Wilmington, North Carolina and Cape Cod (Syrett 1988:18). The same authority elaborated on details as follows.

A number of attacks have also been made close in off the American coast between Wilmington and New York, and it appears unlikely that the Germans will abandon this fruitful area until it is possible to introduce coastal convoys. Several incidents have occurred between Bermuda and the Antilles for which boats on passage to and from the Caribbean are thought to have been responsible. (Syrett 1988:19)

In mid-March 1942, the unarmed (and unescorted) *Esso Nashville* left Port Arthur, Texas bound for Connecticut with 78,000 barrels of fuel oil. On March 20, the tanker passed the Frying Pan Shoal lighted buoy before midnight without incident. At 12:20 a.m., a German torpedo struck the starboard side followed by another within minutes. Lifeboats were launched and the tanker was abandoned quickly. At this time, the *Esso Nashville* was located "about 16 miles northeast of Frying Pan Shoals" (Standard Oil Company [SOC] 1946:157). Before dawn, the U.S. destroyer *McKean* and USCG cutters *Agassiz* and *Tallapoosa* were on the scene methodically involved in search and rescue tasks. Many survivors were transported to Southport and Wilmington for medical treatment

By 23 March 1942, the U.S. Navy tug *Umpqua* towed the "after section" of the tanker to Morehead City. According to eyewitnesses, "The hull was completely broken transversely in way of No. 5 cargo tanks and a large section of deck plating and fittings was hanging down vertically over the forward end of No. 6 tanks" (SOC 1946:159).

The relevant "U-Boat Situation" for the week ending 11 May 1942 according to Royal Navy documents commented that

Losses in American coastal waters from Cape Canaveral northwards to New York have been much lighter, though U-boats have undoubtedly been operating there. On 9th April a U-boat [U-352] was sunk by the USCGC Icarus east of Wilmington and a number of other attacks and sightings have also been reported. (Syrett 1988:39)

By mid-August 1942,

The American zone continues to be quieter, though at least one U-boat is operating off the [mouth] of the Mississippi, two or three in the Key West area and one in the Central Caribbean. It is obvious that they are now experiencing difficulties in finding unescorted target (ZA), Not more than four U-boats appear to have been operating off the Atlantic seaboard (ZA), and the Americans claim to have seriously damaged one to the eastward of Wilmington on 7th August. (Syrett 1988:68)

A U.S. congressional source related that a German submarine fired at the Ethel [sic]-Dow chemical plant in Wilmington in July 1943, "perhaps the only German attack on America" (McIntyre 2008:11748). Of note, for the period commencing 23 August 1943 through 1 September 1943, British intelligence confirmed that "One U-boat has been fixed off [the] US coast east of Wilmington" (Syrett 19889:236).

On 1 August 1944, the first tropical storm of the year to reach the U.S. coast struck Southport at approximately 7 P.M. Although "the diameter of the storm was small" officials reported the associated "winds were of hurricane force" (Sumner 1944:237. Before tracking northwest to Richmond and then to Washington, D.C, the cyclone's affected the current project area. An excerpt from a respected National scientific journal is presented in Figure 60. A contemporary rendering of the referenced Wrightsville Beach hotel is presented in Figure 61.

Damage to property and crops in the Wilmington area has been estimated at about \$2,000,000. On the beaches, particularly at Carolina and Wrightsville, many houses and cottages were destroyed or had their foundations undermined by high tides and extremely high seas. Substantially built structures not subject to undermining by water action went through the storm without damage. A guest at the Ocean Terrace Hotel, Wrightsville Beach, who had retired early, awoke the morning after the storm and found, after a sound night's sleep, that she was the sole occupant of a hotel from which everyone else had been evacuated. Property losses in the city of Wilmington have been reported as totaling about \$60,000, and in Southport the damage figure has been placed at \$10,000. Slight storm damage was reported from the beaches north of Wilmington.

Crop damage was heaviest in the counties of New Hanover, Brunswick, Onslow, and Pender. The county agent of New Hanover County has estimated crop losses for the entire area at \$1,269,000.

More than 10,000 persons were evacuated from beaches and exposed locations in advance of the storm, and as a result no lives were lost and few serious injuries were reported.

Figure 60. Local impact of August 1944 Hurricane (Sumner quoted in: *Monthly Weather Review* 1944:238).



Figure 61. Pre-WWII Tichnor Brothers postcard of popular Ocean Terrace Hotel (Courtesy of Digital Commonwealth, Massachusetts Collections Online).

Post-World War II Period

During the annual *CYC Invitational Regatta* staged off Wrightsville Beach from 22 to 24 August 1946, South Carolinian entries "monopolized the win column in [the] first heat of the three day sailing conflict". However, a list of the "Yacht Race Box Score" identified numerous local vessels which certainly regularly navigated along the subject beach and Masonboro Inlet (Figure 62).

	Yack	ht Race Box	Score	,	
		CLASS "C"			
Boat	No.	Skipper	Home Port	St	TO TO
Wing-it	38	Billy Lockwood	Charleston	1	TP 8
Mercury	55	L. G. Sprunt	Wrightsville	2	7
Wind-rider	36	Billy Collins	Mt. Pleasant	3	6
Dixie	11	Donald Parsley	Wrightsville	4	5
Fairwind	51	E. M. Seabrook	Mt. Pleasant	5	4
Duchess	. 57	Jack Preston	Wrightsville	6	3
Thistle Dauntless	100	Vic Taylor	Wrightsville	7	2
Dauntiess	111	E. L. Matthews	Wrightsville	8	1
•		CLASS "D"			
Siren	101	John Houghton	Charleston	- 1	4
Airborne	122	Billy Leonard	Charleston	2	3
Calypso	. 19	Johnny Murchison	Wrightsville	3	2
Ripple	43	Bill Quinlivan	Wrightsville	4	1
		CLASS "E"			
War Bis	10	Stewart Walker	Charleston	1	
Curlew II	66	Henry Von Oesen	Wrightsville	2	5 4
Phantom	187	Warren Sanders	Wrightsville	3	3
Storm I	4	Ray Buck	Wrightsville	4	2
Pokey	8	John Nuckton	Wrightsville	5	1
		SNIPE CLASS			
No Name II	2676	Jack Lesemann	Charleston		
Sarah Ann	4442	Richardson Hanckel	Charleston	1 2	8
Annette II .	3710	Billy Dosher	Charleston	3	
Ho Hum III		Tanky Meier	Wrightsville	4	9 8 7 6 5 4
B. S. and T.	20	Weddell Harriss	Wrighstville	5	
Peggy	1	Lizzie Metts	Wrightsville	6	4
Red Wing	24	Gilchrist Hill	Wrightsville	7	3
Blister	-	Tolliver Hughes	Wrightsville	8	
Toss Pot	18	Johnny Metts	Wrightsville	9	1
		COMET CLASS			
N:	1198	Sammy Pou	Morehead City	1	. (
Nipper	1577	Donald Fisher	Wrightsville	2	
	1547	Edwin Pate	Morehead City	3	
	1735	Sandy McClamroch	Morehead City	4	:
	1757	"Pop-eye" Booker Cunningham	Wrightsville	5.	
	1101		Morehead City	0	1
		HAMPTON CLASS	7,		
Rebel	1 70	Henry Peschau, Jr.	Wrightsville	1	
Arrow	73	Dalziel Sprunt, Jr.	Wrightsville	2	
Bluebird	2	Dinks Preston	Wrightsville	3	- :
*		NATIONAL ONE DESIGN OLA	ASS		
Miss Conduct	33	Keating Simons	Charleston	1	
Surprize	23	Louis Dawson, III	Charleston	2	
Me Too	26	Bruce Prentiss	Charleston	3	(
		MOTH CLASS	₩.		
Blue Goose	77	Stark Patterson	Wrightsville	1	
Caledonia	8	Joe Morrison	Wrightsville	2	
Hi Ho	435	Percy Smith	Wrightsville	3	
Cartoon	60	Brad Cantwell	Wrightsville	4	
Joy	541	Eleanor Hanckel	Charleston	5	
Perch	22	H. L. Keith	Wrightsville	6	
Sea Flea	21	Norman George	Wrightsville	6	

Figure 62. CYC regatta entries (WMS 23 August 1946:9).

Postwar Shoreline Oversight

In early October 1948, shoreline conservation and navigational issues were addressed by a multidepartment team of out-of-state USACE personnel joining their Wilmington District colleagues in North Carolina. *The State* (p. 15) reported that

ENGINEERS from Washington, accompanied by like personnel from Atlanta and Wilmington made an aerial survey last week [September 1948] of the coastline from Masonboro Inlet to Oregon Inlet in connection with the current program of coast and inlets developments. The group checked on erosion conditions and additional matters pertaining to petitions presented some time ago proposing that Masonboro Inlet be deepened and established to provide year-round passage for ocean craft.

By early August 1949, North Carolina governor Kerr Scott approved USACE plans for improving the ICW near Wrightsville Beach. The sweeping \$2.5 million project also included a component for ... "deepening and stabilizing Masonboro Inlet" (*The State* 1949:15). According to the 1950 U.S. Census, at this time Wrightsville Beach reported a population of 711.

In the late 1940s, scientists touched on the "physical, chemical, and hydrobiological conditions of coastal waters, the several fishery resources of the State, the current status of the commercial and sport fisheries, and the potentialities in development", which culminated in a groundbreaking study entitled *Survey of Marine Fisheries of North Carolina* (Taylor 1951:vii). A contributor remarked on fishing activities in the postwar period as such.

Wrightsville Beach is particularly well equipped as a vacation spot for anglers. It has five 40 to 50-foot, and nine 30 to 40-foot part boats. The majority of these are twin screw and equipped for Gulf Stream fishing. Most of them have radio. There are good local facilities for repair... This whole section has a long fishing season, both marine and fresh water, and, in addition some hunting. It is additionally attractive to anglers because of its annual fishing rodeo, and to tourists because of beautiful Orton Plantation between Wilmington and Southport. (Francesca La Monte quoted in: Taylor 1951:261)

In September 1952, the North Carolina Coastal Marine Council was established at Belhaven (Beaufort County). The express purpose of the new agency was to develop the coastline of the State primarily through "the development of the waterways and small ports" (North Carolina Department of Conservation and Development [NCDCD] 1954:55). At this date, statewide beach erosion presented "a real problem in protection" and this issue was compounded by the fact that "Practically all the beaches [were then] private property and as such [were] not eligible for financial aid from State or Federal Government" sources (NCDCD 1954:56). With respect to relevant New Hanover County sites, the NCDCD commented that

The town of Wrightsville Beach has built a rock jetty at the south end of the island. This jetty was originally of wood, then of asphalt, and now of rock. Masonboro Inlet has always caused trouble due to shifting. One year the sand will be 100 or more feet in the inlet and the next year very little sand will be found around the jetty. This very type of shifting has taken place during the biennium. On September 3, 1952, the citizens of the Carolina Beach area dredged an inlet from the sound to the ocean about three miles north of Carolina Beach. This inlet has given Carolina Beach an outlet from Myrtle Sound to the ocean without traveling miles to Masonboro Inlet. There is a possibility that this inlet might have some effect on the erosion at Carolina Beach, but to date no ill effects have been noted. (p. 57)

Hurricane *Hazel* Event (15 October 1954)

Per Hartzer (1974:84), Hurricane *Hazel* struck the North Coast on 15 October 1954. Storm surges (levels 12 to 13 feet above MLW) resulted in "large waves that broke directly on waterfront structures" (Figure 63). At least 89 homes at Wrightsville Beach were totally destroyed by the epic storm system. Three strong hurricanes (*Connie, Diane, and Ione*) that followed in 1955 "dramatized the need for protection of beach areas", which resulted in Congressional approval of Public Law 71 in 1955 (Figure 64). This legislation required that surveys conducted by the USACE "consider the economics of breakwaters, seawalls, dikes, dams, and other structures that might be required". Essentially this act made protection from beach erosion and the effects of hurricanes" fall under the oversight of U.S. Army engineers (Hartzer 1984:84). Based on USACE documents, the four named hurricanes plus two others (*Helene* 1958) and (*Donna* 1960) "caused property damage totaling \$12,362,200 in the Wrightsville Beach-Carolina Beach area alone" (Hartzer 1984:84). In terms of the inflation rate, the 2022 value would be \$136,173,080.000.



Figure 63. 1954 damage to Carolina Yacht Club compliments of Hurricane *Hazel* (As presented in: Hartzer 1984:85).

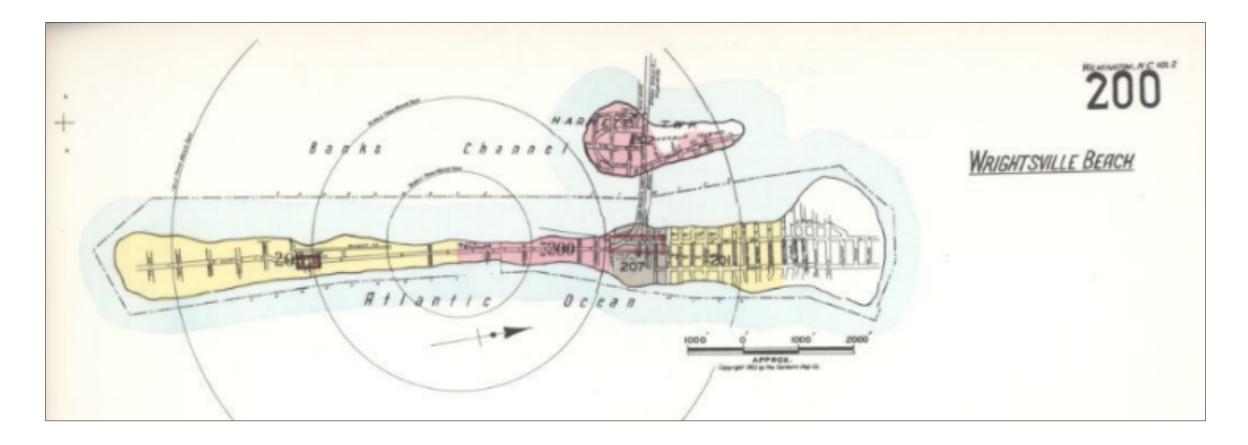


Figure 64. Detail of 1955 [revision of 1915] Sanborn Fire Insurance map featuring Wrightsville Beach (Courtesy of the Geography and Map Division, Library of Congress).

By 1954, Assistant Fisheries Commissioner C. G. Holland reported that the State's "Commercial Fisheries Produce Shell and Fin Fish Valued at Nearly \$20,000,000" (NCDCD 1954:29). During that year, four additional patrol boats were added to the existing State fleet which included the *Cape Fear* and *Croatan*. Two new vessels were "capable of operating 30 to 35 miles per hour"; and all eight were equipped with state-of-the-art "radio telephones" (NCDCD 1954:32; Figure 65). That total did not include "four smaller boats for shallow water work and short patrols" (NCDCD 1954:32).



Figure 65. Flagship *Q-91* shown anchored at MHC (NCDCD 1954:29).

U.S. Coast Guard Station Wrightsville Beach

Although Federal funds were earmarked for the construction of a USCG facility at Wrightsville Beach prior to WWII, priorities to support critical military spending placed the project on hold. In 1957, at the urging of local officials and townsfolk the station was finally constructed on Masonboro Sound in the vicinity of the CYC. Obvious far-reaching maritime responsibilities overwhelmed the original 18-man unit and the continuous increase of boaters along New Hanover County resulted in a new station being built during 1969. By 2010, the Wrightsville Beach station billeted over 30 crew who maintained four watercraft; two 25-foot response boats and two 41-foot utility vessels (Maloney 2010).

With respect to the principal duties of the modern USCG, the dynamic shift from primarily search and rescue missions to the addition of law enforcement duties commenced in the early twenty-first century. Wrightsville Beach guardsmen patrol areas that overlap those of its sister stations, Oak Island and Emerald Isle to foil waterborne criminals. Former executive Petty Officer Mike Hall (subject station tenure, 2006-2009) remarked that

The events of September 11 changed the Coast Guard forever... With the development and implementation of the Homeland Security Department we were immediately transferred to that department and became its lead agency. With that came funding that we had never seen before... The first noticeable change was the focus on the ports around the United States... Ask someone before 9-11 what the Coast Guard did and the answer would have been: save lives... After 9-11 the answer became: We protect the shores of the United States and we save lives. (Quoted in: Maloney 2010)

Early Hurricane and Shore Protection Projects

Four significant storm systems impacted the project area between September 1956 to September 1960. Details are provided in Table 9. Information from the Coastal Services Center division of NOAA for systems passing "Masonboro Island" which includes data from 1956 to 2005 is presented in Appendix C.

Date	Name	Wind	Classification	
		[Knots]		
September 1956	Flossy	35	Extratropical	
September 1958	Helene	115	Category 4 Hurricane	
July 1960	Brenda	50	Tropical Storm	
September 1960	Donna	95	Category 2 Hurricane	

Table 9. Storms passing Masonboro Inlet (As presented in Fear 2008:89)

The Coastland Times of Manteo reported a significant story on 7 February 1958 (p. 4), in which USACE colonel Henry Rowland addressed the North Carolina Fisheries Association. Colonel Rowland ... "gave the gathering a frank discussion of the waterways projects of North Carolina and the effect of the current national fiscal policy upon them". Emphasizing that the Federal government needed "to get along on a minimum of funds... due to the slowing of civil works to the military 'crash' programs [then] getting priority in federal spending". In a positive note,

The district engineer held out hope to the commercial fishing industry for relief in the unstable inlets of the State in the construction of a small overboard discharge suction dredge which [was] expected to be in operation in [NC] waters in 1959. Col. Rowland said the results expected from the new dredge might well be a scientific and economic breakthrough in the dredging industry. He cited Oregon Inlet and Masonboro Inlet as two for which the special dredge [was] needed for their completionOn 17 February 1961, *The Coastland Times* published an in-depth article entitled "Ocean Relentlessly Eats Away N.C. Barrier Reef, For Over 100 Years, Despoiled Coastland Has Been Victim of Winds and Tides; Man's Depredations Have Been Costly to Posterity Also." Steve Wall of Wilmington provided contemporary statistics verifying the alarming rate of erosion on beaches commencing near Oregon Inlet and terminating near the modern project area. In his treatment of Onslow, New Hanover, and Brunswick beaches, the author surmised that

From Beaufort Inlet to New River Inlet recession reached 100 feet in only one instance (at New River), but it rose to over 600 feet between the latter point and Queen (Mason) Inlet during the 70-year period ending in 1930. Strangely enough but typical of natural forces, erosion amounted to 669 feet at New Topsail Inlet but only 110 feet tow miles southward at old [sic] Topsail Inlet. Then it shot upward to 409 feet at Rich Inlet and continued to 630 feet at Queen Inlet just north of Wrightsville Beach. Recession of the shore line from the Wrightsville Beach area, including Masonboro Inlet, to Cape Fear shows a landward movement of 100 to 200 feet for the period of 1860-1935 [p.1]... While inlets, notably Oregon, Ocracoke, Masonboro, and Lockwoods Folly bear utmost importance to the fishing industry, they present two conflicting characteristics where navigation is concerned. The littoral drift tends to feed sand into the mouths of inlets and close them. On the contrary, inlet currents appear to scour the sand oceanward to aid in building up shoals in what is called the bar channel...Movements of sand and in such large volumes shed more light on the characteristics of unstabilized inlets. That inlets shift positions, subjected as they are to the whims of nature, has long been established... Masonboro Inlet migrated southwestward only 1,000 feet and increased in width from 1,900 feet to 2,100 feet...[Wall 1961:p. 6]

In late November 1962, "an off-shore storm which lashed the Carolina coast with high winds and rain" destroyed a small pier located at Banks Channel, Wrightsville Beach. "Several small boats motor boats were reported swamped in the Wilmington area" due to the recorded 72-mph gales (*Washington Daily News* 1962:1). During 1965, Wrightsville Beach's shoreline was modified ... "by the construction of a hurricane and shore protection project" (Winton 1981:12 [includes poorquality aerial images of Masonboro Inlet/Wrightsville Beach]). Specifically,

2,288,000 cubic meters of fill material was placed along 5,100 meters of beach north of Masonboro Inlet with artificial dune heights constructed to an approximate elevation of +2.5 meters (MSL) for storm protection purposes. The northern transition section included the closure of Moore Inlet, which had previously separated Wrightsville Beach from Shell Island [Figure 66]. In spring 1966, an additional 244,000 cubic meters of fill material from the Masonboro Inlet was placed between Johnnie Mercer's Pier and Crystal Pier. In October 1966, a final deposition of 32,100 cubic meters of material from the estuarial area behind Shell Island was placed along the northernmost 610 meters within the town limits of the Wrightsville Beach project shoreline [Figure 67]. In 1970, a renourishment of the central shoreline of Wrightsville Beach was required. A total of 1,053,600 cubic meters of fill material obtained from a shoal in the Banks Channel and the sound area behind Shell Island was placed on the beach, beginning at a point approximately 1.83 kilometers north of Masonboro Inlet and extending to the northern city limits of Wrightsville Beach. [Winton 1981:12] [See Appendix D: renourishment chronology]



Figure 66. Wrightsville Beach berm and dune before February 1965 (As presented in Hartzer 1984:84).

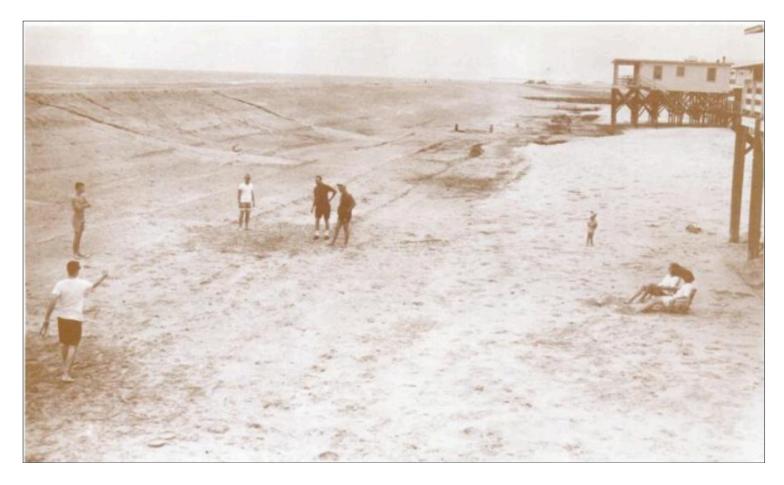


Figure 67. Post dune and berm construction at Wrightsville Beach (As presented in: Hartzer 1984).

Local Cutting-Edge Desalination Project

As a consequence of two landmark Congressional laws, the *Saline Water Act of 1952* and the *Anderson-Aspinwall Act of 1961*, the U.S. Department of the Interior authorized the construction of several test facilities. According to Bradford (2018)

The fifth a pilot plant for research development and demonstration was completed on Wrightsville Beach between U.S. highways 74 and 76 Salisbury Street and Causeway Drive in July 1964 by the Carrier Corp. at a cost of \$948 000. Municipal and state officials induced the federal government to pick Harbor Island by offering 25 acres of sandy marshland without charge. In the early years at the facility contractors conducted experimental work under standardized conditions on seawater fresh water steam electricity compressed air fuel storage waste disposal and reinforced concrete foundations for erection of pilot equipment or plants. Stewart Udall Secretary of the Interior is quoted in a report from 1961 in the Congressional Record—Senate: 'This new approach to the economic conversion of saline water to fresh has only recently reached the pilot plant stage of development. A 15 000-gallon-per-day pilot plant using one type of freezing process is now [1961] operating on sea water at Wrightsville Beach N.C.

Unfortunately, findings from a 1965 U.S. Senate investigation remarked that 'Mechanical difficulties and some design problems are listed a having prevented successful operation and fresh water production [at the Wrightsville Beach site]'. Bradford (2018) went on to report that the land acquired by the Department of Interior was later deeded [1980s] back to the city with restrictions. In July 1972, the *Times Standard* of Eureka, California published a report concerning forward-thinking experiments being conducted at Holt Reservoir [Imperial Valley CA] to convert hot underground brackish water into potable water. According to correspondent Kenneth Dalecki (1972:5), "The pilot plant developed by Envirogenics [was then operational] at the OSW testing facility at Wrightsville Beach, N.C., where it successfully desalted an artificially formulated thermal solution which scientists [believed approximated] what is under the Imperial Valley"...

During 1974, the U.S. Naval Ship Research and Development Center (Bethesda MD) conducted (then classified) experiments at Wrightsville Beach with respect to seawater reverse osmosis (RO) modules. The cutting-edge technology confirmed that RO was ... "emerging as a viable process for desalting brackish water, waste water, and sea water", and could be implemented for shipboard applications (Pizzino and Adamson 1974:1). Ultimately, future testing could ensure that the "product water" was "medically safe to drink" (Pizzino and Adamson 1974:9).

Historic Shipwreck Legislation and Judicial Rulings

As a consequence of controversial salvage operations in 1965 related to the *Modern Greece* shipwreck site located off the New Hanover County shore, the NCDAH [now NCDCR] filed charges against the company recovering historic artifacts from the Civil War period blockade runner. Ensuing litigation reached the North Carolina Supreme Court which ultimately ruled in favor of the State [*State of North Carolina v. Flying W Enterprises Inc*; 10 April 1968]. In its ruling, the high court quoted passages from *Chronicles of the Cape Fear River*, 1660-1916 (Sprunt 1914) and *Derelicts: An Account of Ships Lost at Sea in General Commercial Traffic and a Brief History of Blockade Runners Stranded Along the North Carolina Coast, 1861-1865 (Sprunt 1920), which specifically mention historic shipwrecks off both Masonboro and Wrightsville Beach (See Appendix E).*

In her thesis entitled "Reanimating the Graveyard: Heritage Tourism Development of North Carolina Shipwrecks", Grussing (2009:56) related that

... in 1967, New Hanover County representatives successfully introduced a bill in the state legislature that claimed title to 'all shipwrecks, vessels, cargoes, tackle, and underwater archaeological artifacts which have remained unclaimed for more than 10 years lying on said bottoms, or on the bottoms of any other navigable waters of the State' (NCGS 121 Article 3).

Masonboro Inlet Hydraulic Studies

In the late 1960s and early 1970s, considerable attention to the complex "Geologic, Hydraulic, and Engineering Aspects of Tidal Inlets" prompted private sector and Government scientists to reexamine subject waterways. Ultimately, the U.S. Army Coastal Engineering Research Center (Fort Belvoir VA) and U.S. Army Engineer Waterways Experiment Station (Vicksburg MS) compiled a comprehensive bibliography of related literature in January 1976. With respect to the "Evaluation of state-of-the art modeling techniques", the USACE compiler-editor commented

The objectives of this portion of the inlet hydraulics study are to determine the usefulness and reliability of existing physical and numerical modeling techniques in predicting the hydraulic characteristics of inlet/by systems, and to determine whether simple tests, performed rapidly and economically, are useful in the evaluation of proposed inlet improvements. Masonboro Inlet, N.C., was selected as the prototype inlet which would be used along with hydraulic and numerical models in the evaluation of existing techniques. In September 1969 a complete set of hydraulic and bathymetric data was collected at Masonboro Inlet. Construction of the fixed-bed physical model was initiated in 1969, and extensive tests have been performed since then. In addition, three existing numerical models were applied to predict the inlet's hydraulics. Extensive field data were collected at Masonboro Inlet in August 1974 for use in

evaluating the capabilities of the physical and numerical models. (Barwis 1976:iv-v)

Germane reports abstracted by Barwis (1976) included; *Tidal Navigation Inlet* (Lee 1968); *Coastal Regime, Recent U.S. Experience* (Saville and Watts 1969); *Masonboro Inlet South Jetty, Restudy Report* (USACE-Wilmington District 1970); *Sea Grant Publication No. 73-15, Computation of Flow Through Masonboro Inlet* (Amein 1973); *A Mathematical Model of Masonboro Inlet* (Chen and Hembree 1973); *Simulation of Hydrodynamics in a Tidal Flat* (Masch, Brandes, and Reagan 1973); *An ERTS-1 Study of Coastal Features on the North Carolina Coast* (Miller and Berg 1973); *Simulation of Sediment Movement for Masonboro Inlet, North Carolina* (Seabergh 1973); and *A Recent History of Masonboro Inlet, North Carolina* (Vallianos 1973);

In June 1976, Congress approved "general construction" funds (USACE oversight) amounting to \$250,000 for improvements at the subject waterway. Although the initial Federal estimate *exceeded* 4.5 million dollars; Masonboro Inlet's importance to regional navigation was confirmed. Of the eight North Carolina projects under consideration [specific category], it was the only "inlet" contemplated (U.S. Congress 1976:50). Senate *Report No. 94-960* stated that

Through the U.S. Army Corps of Engineers Civil Works program the Federal government has invested almost \$36 billion in the planning, design, construction, operation and maintenance of water resources projects... Though relatively small in the context of total Federal expenditures, investments in Corps water resources projects have beneficial effects that touch almost every facet of modern American society—navigation projects that provide the Nation with its lowest-cost mode of transportation for bulk commodities; flood control projects that protect the lives, homes and businesses of thousands of Americans; and recreation facilities that enable millions of visitors to relax and enjoy the beauty of our country's waters. These Corps water resources developments form an integral part of the physical web needed to provide both the necessities and the luxuries Americans enjoy today. (U.S. Congress 1976:29)

A 1982 study authorized by the U.S. Army Coastal Engineering Research Center and U.S. Army Engineer Waterways Experiment Station specifically focused on Masonboro Inlet (Figure 68). In his treatment of the inlet's then current modeling, McTamany (1982:11) referred to aerial photographs of the subject waterway produced from 1945 to 1966.



Figure 68. Construction of Masonboro Inlet south jetty completed 1980 (As presented in: Hartzer 1984:89).

Wrightsville Beach Shipbuilding Industry

Prior to the completion of the aforementioned Masonboro south jetty, countless unknown vessels were navigating the waterway and cruising along the Wrightsville Beach shoreline. From 1971 to 1975, Wrightsville Beach shipyards constructed a significant number of small oil screws and some catamarans. With the exception of *Starship* and *Tri World*, all USCG registered vessels [as of 1 January 1976] were fashioned of fiberglass. Most were utilized as pleasure craft, specifically, for yachting. A few were apparently purchased for commercial passenger service. The subject vessels are identified and described in Table 10.

Name	Rig	Tons	Dimensions	Built	Homeport
Aerie	Oil Screw	15/13	32x11x8	1974	New Bedford MA
Amehl	Oil Screw	15/13	32x11x8	1975	Wilmington NC
Capricorn	Sail Catamaran	12/10	30x18x7	1972	Wilmington DE
Childe Harold	Gas Screw	15/13	32x11x8	1975	New York NY
Defiance	Oil Screw	15/13	32x11x8	1975	New Bedford MA
Felicite	Oil Screw	15/13	32x11x8	1975	Pensacola FL
Fine Feather	Oil Screw	15/13	32x11x8	1975	Sandusky OH
Galindor	Oil Screw	15/13	32x11x8	1974	Portsmouth NH
Gena	Oil Screw	15/13	32x11x8	1974	Evansville IN
Genesis	Oil Screw	15/13	32x11x8	1975	Nashville TN
Ginny B	Oil Catamaran	38/29	49x27x7	1971	Memphis TN
Horizon	Oil Screw	15/13	32x11x8	1975	Philadelphia PA
Isabel	Oil Screw	15/13	32x11x8	1975	Boston MA
Judith	Oil Screw	8/7	32x11x5	1975	Miami FL
Kasha	Oil Screw	12/10	32x11x6	1974	Wilmington NC
Kristine	Oil Screw	15/13	32x11x8	1975	Philadelphia PA
Kylie	Oil Screw	12/11	32x11x6	1975	Wilmington NC
MacFinn	Oil Screw	15/13	32x11x8	1975	Wilmington NC
Mahimahi	Oil Screw	15/13	32x11x8	1975	Norfolk VA
Mistral	Oil Screw	14/13	32x11x8	1975	Washington DC
Nordfjord	Oil Screw	15/13	32x11x8	1975	Washington DC
Ollie Sharp	Oil Screw	15/13	32x11x8	1975	Beaufort-MHC NC
Phoenix Riddle	Oil Screw	15/13	32x11x8	1975	Miami FL
Rachel	Oil Screw	20/16	32x11x8	1975	Miami FL
Rocknantie	Oil Screw	15/13	32x11x8	1975	Wilmington NC
Satori	Oil Screw	15/13	32x11x8	1974	Portsmouth NH
Sea Trove	Oil Catamaran	12/11	33x17x4	1973	Norfolk VA
Simcar	Oil Screw	15/13	32x11x8	1975	Wilmington NC
Snapper	Oil Screw	15/13	32x11x8	1975	Wilmington NC
Starship	Oil Screw	20/19	40x23x6	1972	New Bedford MA
Tri World	Oil Catamaran	35/27	51x27x7	1974	West Palm Beach FL
Unlikely V	Oil Screw	15/13	32x11x8	1974	Wilmington NC

Table 10. Local built watercraft details (USCG 1976:passim).

Artificial Reef-Building Program

According to the North Carolina Department of Environmental Quality (NCDEQ), the state's impressive artificial reef program evolved from the 1940s when intrepid sportsmen sought viable fishing grounds that were readily accessible by small watercraft. A contemporary NCDEQ (n.d.) publication comments that

During the 1920s and 1930s the fledgling sport fishing industry continued to develop, and by the close of World War II, sunken vessels were sparking interest... Unfortunately, for most recreational fishermen at the time, many WWII vessels were too far offshore and out of range for their small fishing boats. Only on the calmest days, and at considerable risk, could smaller, private fishing craft enjoy the sport offered by the wrecks. Accordingly, during the 1950s and 1960s, a number of fishing clubs attempted to build their own reefs closer to some of North Carolina's navigable inlets. Early attempts at reef construction were haphazard affairs. Automobile bodies, washing machines, old automobile tires, scrap concrete and numerous types of other materials were dumped at selected locations offshore in an effort to provide areas where recreational fishermen in small boats could fish.

By 1964, the USACE granted the "Fabulous Fishing Club" a Federal permit ... "to construct an artificial reef about 2 miles off Atlantic Beach". The initial site largely composed of rubble [remnants of old bridge] and tire units morphed into modern AR-315. During the same period, "fishermen established two ad hoc fishing reefs off New Hanover County. Founders of these reefs marked locations off Wrightsville Beach and Carolina Beach, and constructed habitat using their personal boats to transport small items such as weighted automobile tires, old stoves, and washing machines" (NCDEQ n.d.).

An April 1973 article published in *Wildlife In North Carolina* (under the authority of the North Carolina Wildlife Resources Commission) provides an overview of early to then contemporary strategies to build artificial reefs in the state. Per the contributor,

Dick Stone, chief of the Artificial Reef program at the National Oceanic and Atmospheric Administration's Atlantic Estuarine Fisheries Center at Beaufort has been involved in reef construction since 1966. In that time, he has used junked cars, old boats, building rubble, precast concrete 'fish apartment houses', concrete culvert and discarded automobile tires as reef material. Junked automobiles, Mr. Stone found, last only about five years in salt water and are very expensive to handle (about \$80 per unit). In addition they disintegrate readily in rough weather and tend to litter beaches with rusty debris. Concrete materials make an excellent base for a reef, but they too are very heavy and expensive to handle. Old boats are fine when they are available but they require towing, usually by a fairly large vessel. The greatest success, after taking into account cost,

manageability and ease of transportation, was achieved with the old tires. They are free, can be handled easily without heavy equipment, and according to Mr. Stone can be arranged in a variety of ways to suit different purposes... The most convenient arrangements of tires are those shown in the accompanying sketch. [Figure 69] The single tire unit is just a tire casing weighted at the bottom with an air escape hole drilled or punched at the top... The three tire unit is three of the single units tied or bolted together. It lies on its side and creates a small underwater cave... The third unit is a stack of up to eight tires with the bottom one poured full of concrete and the pile held together with lengths of rough reinforcing rod. The unit weighs about 250 pounds, but can be turned on its side and rolled easily by one man. When sunk it stands upright and gives profile (height above the bottom) to the reef... North Carolina's present [1973] saltwater artificial reefs are located at Atlantic Beach, Wrightsville Beach, Carolina Beach and Lockwood's Folly Inlet... Two of the reefs contain sunken vessels; an old tugboat lies 1.5 miles off Carolina Beach in about 40 feet of water, and another boat was sunk about three miles off Wrightsville Beach [Figure 70] ... The Wrightsville reef lies on a compass bearing of about 100° from Masonboro Inlet, about half-way between Mason Inlet and the first watertower to the south... In addition to the old hulk it contains some 200 old tires [Figure 71] and a washing machine, all dropped by local fishermen and divers. The reef has about a 15-foot profile and is sitting on an old coral bed in 50 feet of water. (Reedy 1973:20-21)

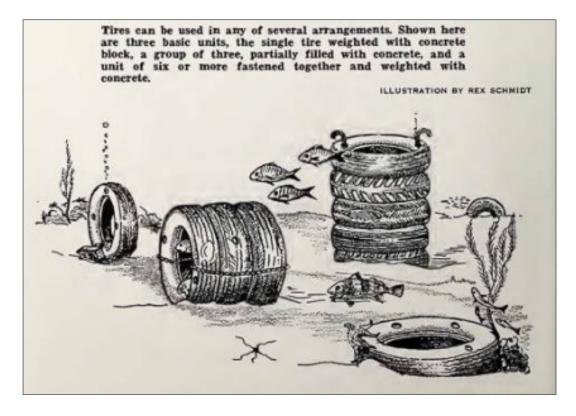


Figure 69. Basic methods to utilize old tires (As presented in: Reedy 1973:20).



Figure 70. Research vessel *Dan Moore* [background] on standby as *Firefighter* sinks to become part of Wrightsville Beach reef (As presented in: Reedy 1973:22).



Figure 71. "This jumble of old tires is off Wrightsville Beach" (Presented in: Reedy 1973:21).

During late summer 1974, the "North Carolina Department of Natural and Economic Resources" managed the calculated sinking of a World War II "Liberty Ship" off Wrightsville Beach. With respect to the Monday, 26 August maritime event, the *Statesville Record and Landmark* (1974:4-A) related that

Two sets of demolition charges were required to send the ship, the Alexander Ramsey, to the bottom. After one set of charges failed to sink the stout vessel, a Marine demolition team set off another set of charges. That sent the ship down in 17 minutes. The ship was the second to be sunk off the coast in a multi-million dollar project to improve coastal fishing. One ship was sunk off Morehead City several months ago and another is scheduled to be sunk off Oregon Inlet soon. In addition to the ships, discarded auto tires are being used to build the artificial reefs which are expected to attract more fish to the reef areas.

Per the *Greensboro Daily News* issue dated 30 July 1978 (p. 8), the North Department of Natural and Cultural Resources and Community Development stated that "Since 1974, the state has placed more than 500,000 tires, three surplus military ships and four scrapped boats on nine ocean reefs and two located in estuarine waters. Officials said an estimated 100 tons of fish were caught off the largest reefs at Atlantic Beach and Wrightsville Beach between 1975 and 1977".

Currently, the State of North Carolina manages "one of the most active reef enhancement programs" in the United States. According to the North Carolina Division of Marine Fisheries, nearshore reefs are located zero to five miles off the subject beach and offshore reefs are located five-plus miles from the nearest shoreline (NCDEQ n.d.). The "Interactive Reef Guide" (administered by NCDEQ) identifies two artificial sites in close proximity to Wrightsville Beach and Masonboro Inlet. Available data is presented in Table 11. Photographs of select vessels prior to sinking and vessels utilized to facilitate the process are shown in Figure 72 to Figure 76.

Billy Murrell Reef				
Reef Number	AR-364			
Latitude	34° 14.833' N			
Longitude	77° 42.833' W			
Region	Southern Onslow Bay			
General	33.1° magnetic - 6.1 nm from Masonboro Inlet Sea Buoy or 204.1° magnetic - 6.5 nm			
Location	from New Topsail Inlet Sea Buoy			
Vessels	52-foot tug Captain Tom; deployed May 1992			
	65-foot tug Captain Jerry; deployed 1994			
	297-foot barge <i>HT-290</i> ; deployed 1997			
	55-foot land craft <i>LCM6</i> ; deployed January 1989			
Meares Harris Reef				
Reef Number	AR-370			
Latitude	34° 10.467' N			
Longitude	77° 45.067' W			

Region	Southern Onslow Bay		
General	78.4° magnetic - 2.3 nm from Masonboro Inlet Sea Buoy		
Location			
Vessels	90-foot barge; deployed August 1973		
	440-foot Liberty Ship <i>Alexander Ramsey</i> ; deployed August 1974		
	120-foot tug <i>Sicany</i> ; deployed December 1982		
	110-foot tug Firefighter; deployed June 1970		
	105-foot tug Stone Brothers; deployed January 1983		
	135-foot barge; deployed September 1980		

Table 11. Artificial reefs in the vicinity of current 2022 survey project area (NCDEQ n.d.).



Figure 72. Sinking 90-foot barge.



Figure 73. Tug Sicany sinking.

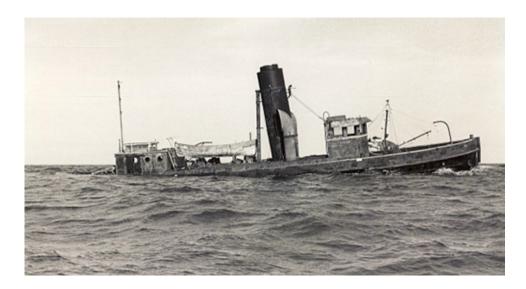


Figure 74. Scene before sinking Firefighter.



Figure 75. "The tug FIREFIGHTER goes down to become part of a reef at Wrightsville Beach" (Presented in: Reedy 1973:22

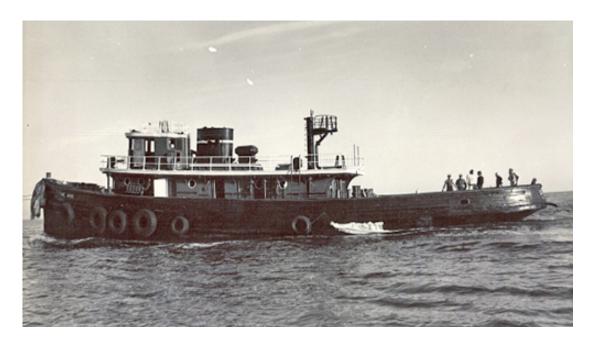


Figure 76. Tug Stone Brothers before sinking.

Contemporary Beach Renourishment

In mid-February 2018, the USACE-Wilmington District commenced pumping renourishment sand [approximately "700,000 cubic yards"] onto Wrightsville Beach to "combat erosion". According to town manager Tim Owens, the project began "just north of the Blockade Runner" and terminated "just north of the Holiday Inn". *StarNews* reporter Cammie Bellamy (2018) commented that "The \$13.2 million contract [\$9.4 million for WB/\$3.8 mil for Ocean Isle] went to New Jersey-based Weeks Marine, according [to] USACE Project Manager Jim Medlock. Weeks also handled nourishment projects at [Wrightsville Beach] in 2014. Sand for the project [was] dredged from Masonboro Inlet."

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Shipwreck Inventory of Vessels Lost in the Vicinity of Masonboro Inlet and Wrightsville Beach

NAME	TYPE	DATE	CASUALTY	LOCATION	NOTES	REFERENCE
Ashley	Brig	1 JUN 1842		1 mile south of Deep Inlet		TAR 1994; UAB
Mary Eliza	Schooner	6 FEB 1849	Navigational	Masonboro Inlet	On 19 February 1849, a Boston source commented that the "Schr. Mary Eliza, McCumber, in endeavoring	Sailor's Magazine and
			error		to go about, missed stays, and went ashore at Masonboro Inlet, N.C. 6th Feb., supposed to be a total loss"	Naval Journal 1849
Virginia	Schooner				Notice of salvage advertised	
Alexander	Brig	JAN 1860	Grounded	"on Masonborough beach"		Wilmington Daily Journal
Wise	(British)					1860
Unknown	Schooner	6 JUL 1862	Burned	Shore of Masonboro Inlet		TAR 1994; UAB
Columbia	Iron Screw-4th rate; side-wheel steamer	14 JAN 1863	Grounded in 8 feet of water	Off Masonboro Inlet	"During the afternoon of January 16 and much of the following day Confederate soldiers went on board the Columbia to salvage weapons equipment and souvenirs. The Cambridge and Penobscot harassed them with cannon fire. With a Confederate flag defiantly flying from the masthead the southerners stripped the ship of usable items and then burned what could be burned The Wilmington Dispatch reported in May 1909 that the hulk of the Columbia was still visible in the ocean a few hundred yards from the Lumina. In the late 1970s underwater archaeologists detected a large iron anomaly deep in the sand near Masonboro Inlets jetty which they subsequently identified as the remains of the Columbia".	Bauer and Roberts 1991:91; Fonvielle 2012
Emily of London	Steamer	10 FEB 1864	Grounded	North of Masonboro Inlet	which they subsequently rachemed as the remains of the Columbia.	TAR 1994; UAB
Fanny and Jenny	Steamer	10 FEB 1864	Grounded	North of Masonboro Inlet		TAR 1994; UAB
Unknown (Multiple)		27 DEC 1864	War event/storm	Masonboro	"The Norfolk Register to-day contains the following correspondence from Fort Fisher on the 27 th inst.: The shore is strewn with broken boats, which have been wrecked in one or another way. They lie scattered along the beach from Fort Fisher to Masonboro."	
Unknown	Wooden	1860s	Burned		Vicinity of Masonboro Inlet; may be Civil War era vessels	TAR 1994; UAB
Toy	Schooner	6 MAY 1873	Ashore	Inside Inlet		TAR1994; UAB
L. Sturdevant	Schooner (American)	6 JUL 1882	"Wrecked"	"Masonboro"	During its voyage from Philadelphia to Wilmington, the L. Sturdevant "Wrecked at Masonboro" on 6 July 1882. At the time of the shipwreck, the 123-ton American schooner was commanded by Master Tolson.	Maritime Association of the Port of New York 1883
Naomi	Schooner	OCT 1887		Middle of Wrightsville Beach		TAR 1994; UAB
Frances	Schooner	24 MAR 1888	Ashore	On Wrightsville Beach		TAR 1994; UAB
Najaidin	Barge	SEP/OCT 1894		Wrightsville Beach		TAR 1994; UAB
Unknown		1896		Near Masonboro Inlet		TAR 1994; UAB
Katie	Schooner	FEB 1906		Unknown		TAR 1994; UAB
Unknown	Yacht	29 OCT 1929		On Masonboro Beach, in inlet		TAR 1994; UAB
Unknown (Multiple)	Yachts and motor boats [18+]	1933-1938		Masonboro Inlet	U.S. Treasury letter forwarded to U.S. House of Representatives to stress need for USCG station at Wrightsville Beach	Gibbons 1939
Unknown	USCG vessel (50-foot)	1943	Lost	In inlet		TAR 1994; UAB
Unknown (Multiple)	Wooden boats (two)	1949 [?]	Sank	Masonboro Inlet		TAR 1994; UAB
Unknown	Shrimper	1951		Just north of inlet		TAR 1994; UAB

Appendices

NEW-YORK PRICE-CURRENT

3 Dollas per Ann.] SAT	TURDAY, JANUARY 3, 1807.	DURO
A D. C.D. C. Duries in Raman	ARES.) D. C.D. C. DUTEES. REI	M A R K S z
American Vessels 3	Fish, Cod, dry —— Quin 4 25 5 55c.p. quin bbl. 15 5 110 c.p. bbl.	
Affirm — Cwt. 6 7 Free Scarce	Salmon —	
Almonds, soft shell'dib. 21 232 cents per lb.	Herrings — 5 6 6 A 44 do.	
Anchors 8 10 14 do.	5 Shad	
BACON b.	Furs, Otter, north, Skin 4	
Beef, Cargo — bbl. 7 7 50	Mink, north, 3 50	
Prime 8 50 9 N. York inspect.	south, 37	
Mess	Martin — 6 68 Free	
Brandy, Fr. 2d proof Gal. 90 25 cents per gal.	Red Fox	
3d proof 96 28 do. 4th proof 96 100 32 do.	Bear, North 4 6	
Cette, 85	Beaver, North lb. 3 3 25	
Spanish, 4th proof 82 92 32 do.	West, 1 75 2	
Brandy (of Cyder) 46 48 Plenty Brazilletto Ton 50 55 Free None.		
Bread, Pilot Cwt. 6 50 Free None.	Country, do. 68 Grain, Wheat, N. Riv bush 1 62 1 66	•
Middling 4 50	Southern 1 44 1 50	
Middling 4 50	Rye	
Britantone, Roll—Cwt 4 4 50 Scarce Butter, for export—ib. 15 16 Dull.		
Butter, for export—ib. 15 16 Dull. CANDLES, dipt—18	Corp. North. 75	
mould 15 20 Plenty		carce.
Sperm. 48 50	Gunpowder, Engl. 251b. 10 75 11 4 cents per lb. P.	enty.
Chesse, Dutch————————————————————————————————————	Ginger, Race, (Jam. Cwt. 11 12)	-
Cheese, Dutch————————————————————————————————————	Ginger, Race, (Jam. Cwt. 11 12 13 17 p. ct. ad val. Scan	rtc.
Chovolate, (N. York) 28	6 Glass, 8 by 10———100 (14 59) X 160 ets. per 100)	
Albany, 28	7 by 9———————————————————————————————————	
Cinvamon 1 75 2 20 cents per lb.	Ginseng ————————————————————————————————————	ry dull.
Cloves 88 20 do. Dull.		denty
Clover-sped 13	6 Hams 17	lenty
Coal, Foreign—— Chai 9 14 5 cents per bush.	Hogs-lard 14 15	
Virginia 8 50 9 Cocoa, Island Cwt 20 22	Handk'fs. Bandanna Piec 4 75 5 15 p. cent. ad val. INDIGO, Flotant—lb. 2 37 2 50 25 cents per lb.	`
Cocoa, Island Cwt. 20 22 2 cents per lb.	Nam Orland 1 col	• • • • • • •
Cochineal lb 5 Free Scarce	ce. Carolina 1 18	carce.
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Coffee, W. India — B. 31 33 5 cents per 1b. Batavia — 31 32 do.	1 1	•
Bourbon _ 32 do. Scarce	Russia 100 105 15 p. ct. ad val	· · · · .
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Mississippi 26 27	N. River Pine - 17 50	
St. Domingo 28 30 7 Scarce		
Surinam 42 44 3 cents per lb.	Albany Boards—Piec 20 Oak Timber—sd.ft. 18 20	leasy.
DUCK, American—Bolt 12 50	Scantling, Pine Mft. 13	•
Russia — 18 22	Shingles, M.	****
Ravens — 14 50 15 Dull.	Cypress, 22 In. 4 50	
Russia Sheetings Pce. 20 20 50 15 per ct. ad val.	Staves, who Oak pip. 65	
flaxseed, (clean) = cask 12 50	hhd. 40 47 56 hhd. heading 47 50	• '
Flour, Superfine bbl. 8 25	red Oak, hhd. 27 50	
Common 7 73 8	bbl. 30	
Middling (fine) 6 50	Hoops, hhd. (new) 30	Plenty.
Rye Scarce	Mahogany, Buy su.ft. 10 16 16 St. Domingo 18 20	. 2 .
Virg. superfine 3 25 8 50 New.	A COCKEGOD Day less less	Putter
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MACE, 7 8 125 cents per lb.		Sugar, Muscovada-		8	1	3	21	do.	Plenty
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Havannah- 38 40 5 cents per gal.	Plenty.	Martinique, clayed,		12	1		3	do.	
St. Vincents 41 43	I was a second	India Sugar,		12			21	do.	e tall establish
Sugarhouse 60 62	Call Control	Lump, (N. Y.)	lb.		21		12	with a deduction	中华兴度总统
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Nicaragua Wood— Ton 100 110 Free Nails, 10 to 20d— lb. 11 12	Dull.	English-	100		12	1:	3	100 cts. per cwt.	
	Spirit Colors	Country blister'd	-		$6\frac{1}{2}$		1	roo cts. per cwt.	
sheathing — 11 12 2 cents per lb.	Plenty.	Crowley's-	fagg		1	7	1	The Books	2000
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Pimento 24 do.	STANDARD BOOK OF	East India	15.55 15.55	- 5	10		1)	15 p. ct. ad val.	Duni
Pitch bbl. 3 50	Scarces	Bohea -			5			cents per lb.	Scarce.
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Ameri. Brown Stont dez. 9	Lyn Satatala al	do. (new)	-	7	1 2	8 1	45		
Rum, Jamaica 4 prf. Gall 87 90 32 cents per gall.		Petersburg .	-	7		8			
Antigua, 2d proof 75 77 25 do.	THE PROPERTY OF	North Carolina	3.5		I	6			None.
3d proof 80 28 do 80 28 do.		South, do. Georgia		6	1	7	1		Scarce.
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Box - Box. 4 25 4 50 5 2 cents per 10.	Dec Harris .	Wines, Madeira I	Pipe 2	50	30	00	50	to 58 cents	Plenty.
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St. Martins - none Weighing more	(attiga)	Sicily, —	-			33		do.	A TA PRINT
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St. Ubes 622 weighing 56lb or less, pays 20	6	Fayal—		non		13	28	do.	4.5
French 62½ or less, pays 20 cts. per bush.	3	Port	Park The	1 4	11	50	1	do.	Trails, pringing
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ground 50		Claret	loz.	5	6		35	do.	Thursday, and the
Shot of all Sizes — Ton 250	residence (A	do. (new)e	ask 2	8	30		23	do	Scars
Spirits of Turpent.—Gall 25 28	Dull. 6	Catalonia,	gail.		5		23	do.	Scaree,
		The same of the same of the same	-	DELTA:	www	de la company	TORNEO AN	MANAGED CAN HARDERS TO SHOW HE	THE STATES

An addition of 10 per cent, upon the Duty is exacted on all Goods, Wares and Merchandize, when imported in Foreign Vessels; and all articles subject to duty, imported into the United States, not having been landed more than one year, are allowed a Drawback of the Duties, subject to a Deduction of three and one half per Cent. except Spirits, which is half cent. per gallon, and two and one half per cent. on the amount of the Duties.

** TARES allowed at the Custom-House:—on Sugar, in boxes, 15 per cent.—do. in casks, 12 per cent.—do. in bags or mats, 5 per cent. Coffee in casks 12.—in bags 2—and in bales, 3 per cent. Cotton, in bales, 2—and in seroons, 6 per cent. Cocoa. in casks, 10—and in bags, 1 per cent. Cheese, in boxes, 20 per cent. Pepper, in casks, 12—in bales, 5—and in bags 2 per cent. Leakage on Spirits, 2 per cent.

Average Price of	Stocks this week.								
U. S. Bank Stock, - (Div. off) - 132 New-York Bank Stock, 121	6 per Cent (Interest off) - 98' 3 per Cent (Interest off) - 61 United Insurance Shares, - 93								
Manhatean Bank Stock, 118 Merchant's Bank, 114 1 Jersey Bank Stock, 102 1	New-York Insurance Shares, - 102 Columbian Insurance Shares, - 97								
8 per Cent (Interest off) 408	Marine InsuranceShares,								

Sept-Idag 1 y Baninest w

Course of Exchange.

SATURDAY, January 3. BILLS

On London, 60 days sight, - 92

— Amsterdam, - 30 Cents per Guilder.

— Hamburg, - 33½ Cents per Mark Banco.

Dollars, - - 1 per Cents

Lottery Tickets, 'til 6th Jan. S8, thence \$9

PREMIUMS OF INSURANCE IN AMERICAN VESSELS:

PORT OF NEW-YORK.

December 27.—ENTERED FROM
Paul Sherman, Starry.

Paul Sherman, Starry,
Trinidad 21
Charlotte, Jones, St. Barts. 33
Nancy, Muren,
Delight, Jenkins,
Minerva, Baker,
Crooked Island 15

Crooked Island 15
Eliza, Halsey, Guadaloupe —
29.—Huron, Duplex, Teneriffe 35
Exchange, Stoddard,
Trinidad 26

Trinidad 26 Friendship, Stanton, Bord'x 65

Phæbe, Bouton, St. Thomas — Den Good Sally, Glander, do 18 Experiment, Kirkpatrick,

Hope, Ramblett, Martinique 18 Linnet, Patterson, Windsor — 30.-Moultrie, McClenachan,

Isle of France 65 Maria-Theresa, Lambert,

Havana 16
31.—Sarah, Gill, Liverpool 77
Neptune, Bell, Curacoa —
Jan. 2.—Fox, Hillard, Havana —

December 27 .---CLEARED FOR 1 William, Betts, St. Thomas Argus, Thayer, Havana Actress, Puntine, Guadaloupe Eliza, Johnson, Bahamas Mercury, Simpson, St. John Argo, Woodworth, St. Andrew St. John Atlantic, Haley, St. Barts. Eliza, Seymour, Guadaloupe 29.-Franklin, Quersberg, Jamaica Soloma, Lee, St. Croix Jenny, Norris, Halifax 30.-Huron, Sydleman, Jamaica Concord, Hitch, Trinidad

Sperry Baker, West, St. Thos.
Argus, Tiffany, Curacos
31.—Collector, Mayo, Vera Crus
Cornelia, Bartlett, St. Thomas
Mary, Norton,
Jan. 2.—Speedwell, Collins,
Liverpool

New-York, Landon, Mercator, Perry, Aordeaux
Dryad, Grant, Liverpool
Alonzo, Alr
PORTSM Bordeaux
Sally, OUTH, Dec. 28.-from

rinided Chilips Liverpool, via

Washington, Kennard, Guadal. George Washington, Blunt,	Phænix, Smith, N Resolution, Thom
- Sardinia	Laura, Ward,
Dolphin, Tripe, Guadaloupe Sailed	Gustavus, Ganfiel NEW-LONDON
Joseph, Stoodley, Amsterdam	Gustavus, Canfield
SALEM, Dec. 26	Ariel, Kimbal, Fanny, Wolf,
Cleared for	For
Hero, Upton, Lagura	Fox, —, NEW-HAVEN,
MARBLEHEAD, Dec. 28from, Salkins, Martinique	Laura, Ward, Julius Cæsar, Line
NEWBURYPORT, Dec. 26, from	Henry, Denison,
Susannah, Babbidge, Cadiz Eliza, Brown, Guadaloupe	Resolution, Thom Sally, Hoadley,
Alice, Parcher, do	
Ruby, Wilcomb, do Bee, Tyler, Surinam	Triumph, Brintnal Mercury, Smith,
Regulus, Stewart, Trinidad	PHILADELPHIA
Hazard, Remick, West-Indies	Abigail, Bangs, Alexander, cartwe
BOSTON, Dec. 29from	Hebe, Bainbridge,
Levant, Merrit, St. Ubes Blanche, Pritchard, Martinique	General Green, Fa
Eunice, Davis, Guadaloupo	Pilgrim, Drewis,
Alexander, Wescott, Newfoundi'd Hannah, May, St. Ubes	Rebecca, M'Keeve Fabius, Norris,
Saba, Anderson, Demarara,	Hercules, Turkey, Lopenzo, Dill,
via Vineyard Edward & Charles, Pettingal, do	Susannah, Thurst
Emmeline, Allen, Isle of May Financier, Atkins, Cadiz	Louisiana, M'Farl Friendship, Este,
John & William, Hedge, Malaga	Chance, Martin,
John, Salter, Guadaloupe Hannah, Hopkins, St. Ubes	Ariadne, Smith, William & Samuel
Ann, Folger, Smyrna	i General de la companya
Rover, Paine, Havana Swift, Gardner, do	Favorite, Lancaste Minerva, Baker,
Rebecca, Nash, Guadaloupe	Mary, Foster,
Adventure, Treadwell, Mart'que Caroline, Tuck, Guadaloupe	Mercury, Dolby, Clio, Zenegan, St
Jenny, Turner, Cumberland	Lively, Racker,
Laura, Prince, Cape Good Hope Leopard, Rogers, Demarara &	Fortune, Lister, Ci- Experiment, Paul,
St. Thomas	
Joseph, Whipple, Honduras Martha, M'Farlane, St. John	Halcyon, Read, Brutus, Craig,
Lucy, Huxford, Halifax Cheared for	Cordelia, Middin,
A	Ariadne, Hodgson Adonis, Norris, St
Abeona, Williams, Jamaica Sally, Godfrey, Havana William & Martha, Hastings,	Fame, Jones, Tryphena, Patterso
Berbice & a market	Globe, Williams,
Lilly, Parker, Liverpool (N. F.) Minerva, Wheelright, Berbice	Amity, Bouttelier, Ann-Eliza, Bartles
Rachel, Thomas, Mediterranean	•
Adams, Coffin, Surinam Littilar, Balch, Buenos Ayres	Ocean, Girdon, Union, Stevenson,
President, Cartwright,	Pindus, Allen,
Cape of Good Hope Argo, Gowen, Yai mouth	Active Trader, He Argus, Crapo,
Alfred, Brouse, Poole Triton, Rich, St. Martin	
Diana, Small, Mediterranean	Pennsylvania Pack
Favorite, Pratt, Marseilles &	Romulus, Hoyt,
Huntress, Allyn, Kingston (Jam.)	Diamond, Manson, Wm. & Mary, Tu
PROVIDENCE, Dec. 29,-/rom	Olive Branch, Brei
Eliza, Hallowell, Amsterdam Cleared for	Active, Taggard, City of
Union, Remington, Rotterdam	Dispatch, Boush,
NE WPORT, Dec. 28.——from Parmer, Potter, Jamaica	Lydia, Sanderson,

1 Phonix, Smith, New-Providence	Gov. M'Kean, Yardsley,
Phonix, Smith, New-Providence Resolution, Thompson, Tortola	- La V
Laura, Ward, St. Kitts. Gustavus, Ganfield, St. Lucie	Betsey & Peggy, Stansbi
NEW-LONDON, Dec. 27from	i.
Gustavus, Canfield, St Lucie	Argus, Wood, St.
Ariel, Kimbal, Demarara	
Ariel, Kimbal, Demarara Fanny, Wolf, Demarara, via	John & Joseph, Manning,
New-York	Henry, Graves, st.
Fox, Havana	Mary, Almeda,
NEW-HAVEN, Dec. 28 from	Paragon, Evelith,
Laura, Ward, St. Kitts	Good Intent, I hompson,
Julius Casar, Lines, St. Croix	Fox, Mills, La Ve
Henry, Denison, do	Fox, Mills, La Ve Betsey, Reeves, Gua
Resolution, Thompson, Tortola	Father & Son, Hipkins,
Sally, Hoadley, Dominique	St. Thomas, via
Sally, Hoadley, Dominique Cleared for	Sall, Chase, L
Triumph, Brintnal, Pacific Ocean	Robert, Dunkin,
Mercury, Smith, St Lucie	Susannah, Barnes, Sr
PHILADELPHIA, Dec. 30. form	C
Abigail, Bangs, Bremen	Little Mary, Waters, L
Alexander, hartwell, Point-Petre	Somerset, Nowell, Gua
Hebe, Bainbridge, Havana	Hunter, Rider, St
General Green, Fairfield,	Cle
Liverpool	Thomas Wilson, Gardne
LPilgrim, Drewis, Borneaux	Ma
Rebecca, M'Keever, Sardinia	largaret, Clark,
Fabius, Norris, Bordeaux	United States, Moore,
Hercules, Turkey, Havana	Işle of
Lorenzo, Dill, St. Pierre	Tammany, Ames, Ba
Susannah, Thurston, Havana	Neptunus, Sagelkin,
Susannah, Thurston, Havana Louisiana, M'Farland, Laguira	Ann, Vinson, Ba
Friendship. Este, Point Petre	Merchant, Higby,
Chance, Martin, Curacoa	Volona, Wheeler,
Chance, Martin, Curacoa Ariadne, Smith, Havana	Enterprize, Geoghegan.
William & Samuel, Lucet,	Ma
Porto-Rico	NORFOLK, Dec. 23
Favorite, Lancaster, Isle of May	Julia Ann, Stowe, B
Minerva, Baker, Point-Petre	Sampson, Worth, S
Mary, Foster, Jamaica,	
Mercury, Dolby, Madeira	Fame, Stone, G
Clio, Zenegan, St. Jago de Cuba	William, Brown,
Lively, Racker, St. Pierre	Indian, Skinner,
Fortune, Lister, City St. Domingo	Betsey, Whitbie,
Experiment, Paul, St. Thomas	Ann, Forsyth,
Cleared for	Henry Morris, Dill,
Halcyon, Read, Liverpool	Rose, Johnston, M
Brutus, Craig, Londonderry	Live Oak, Yarreil,
Cordelia, Middin, Isle of France	India Packet, Ringe,
	Clermont, Dale, G
Adonie Norrie, St. Rartholomate	
Adonis, Norris, St. Bartholomew	Peace, Swaine,
Fame, Jones, Canton.	Peace, Swaine, Retrieve, Newman, St.
Fume, Jones, Canton. Tryphena, Patterson, Cayenne	Peace, Swaine, Retrieve, Newman, St. Experiment, Nash,
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La Vera Cruz ALTIMORE, Dec. 29.--from isey & Peggy, Stansbury, Trinidad gus, Wood, St. Thomas, bound to Pinladelphia ın & Joseph, Manning, Figuira nry, Graves, St. Thomas ry, Almeda, Havana ragon, Evelith, Trieste od latent, I hompson. x, Mills, La Vera Cruz sey. Reeves. Guadaloupe her & Son, Hipkins, St. Thomas, via Norfolk l. Chase, Liverpool bert, Dunkin, Batavia annah, Barnes, Smyrna & Gibralta: tle Mary, Waters, Liverpool nerset, Nowell, Guadaloupe nter, Rider, St. Pierre Cleared for omas Wilson, Gardner, Martinique rgaret, Clark, Havana ited States, Moore, Isle of France mmany, Ames, Barbadoes ptunus, Sagelkin, Bremen n, Vinson, Barbadoes rchant, Bigby, Havana lona, Wheeler, Laguira erprize, Geoghegan. Martinique RFOLK, Dec. 23. - fiom Bermuda a Ann, Stowe, npson, Worth, Surinam , Randall, C. of S. Domingo ne, Stone, Gibraltar lliam, Brown, Grenada ian, Skinner, Mariel sey, Whitbie, Tobago Malaga n, Forsyth, nry Morris, Dill, Antigua se, Johnston. Marennes e Oak, Yarreil, Jamaica Dundalk ia Packet, Ringe, rmont, Dale, Guernsey ice, Swaine, Kingston St. Vincent rieve, Newman, periment, Nash, Tobago nbow, Hathaway, St. Lucie Hamburg lman, Wood, rer, Tinckham, Amigua In Hampton Roads, Nortz, for ty, Mathew, City Point omas & Henry, Fletcher. Antigua, for Folly Landing hmond, Butler, Leghorn, for Philadephia Cleared for ustry, Wilson, Liverpoo! St. Thomas ft, Leonard, za Henry, -Barbadoes LMINGTON, (n. c.) Dec. 16. -from Barbadocs Nancy, Windsor, St. Kitts | Mine va. St. Clair, St Croix Lishon Charles, Rowson, Antigua Barbadoos St. Martin | Sally, M. Lean,

Cleared for Isabella, Bernard, Guadaloupe & a market Recovery, Braid, Barbadoes Betssy, Chipman, Julian, Wardwell, Bordeaux Kingston Phænix, Smith, Demarara ALEXANDRIA, Dec. 19 .- from Ann-Eliza, Davidson, Curaçoa Paisey, Skinner, Jamaica CHARLESTON, Dec. 18 .- /rom Apollo, Waiters, Hamburg Emily, Welch, Havanna Fox. Whitney. Campeachey rranklin, Lauve, New-Orleans, in distress, bound to Nantz Vigilant, Bosworth, Liverpeol Two Friends, Livingston, London Union, ! ucker. Congo Wheeler, Grinnels, Liverpool Commerce, Sebastiani, Madeira Washington, Paterson, Rio Pongus Mary, M'Millan, Amsterdam Famous Voltaire, Yaldes, Havana Mary, Fuller, Bremen Baitic, Messroon. Bordeaux Dispatch, Churnsides, Havana Independence, Chandler, Jamaica Argo, Keildo, Manzinello (Cuba) Johanna Adriana, Port, Kingston Caledonia, Dickson, Liverpool Boyne, Mood, Venus, Vincent, Havana liercules, Grefe, Bremen Rose, Gardner, Cork Tom, Seward, Hamburg Yorick, Lambert, Liverpool Connecticut, M'Cluve. do Charleston, White, do Isabelia, Nutter, do Adam Berkeley, Dean, St. Thos, Antelope, Gray, Maria, Ames, St. Bartholomew Mary, Campbell, Monteviedo Louisa, Weaver, Isle de Los Joseph, Elsworth, Hamburghi Milton, Chamberlain, Malagat St. Thomas Alfred, Shillaber, Resolution, Pearson, Tobasco Cong . Nicholson, Tarmod, Eliza, Taylor, Kingston' Sally, Lark, Havana Plouglboy, Rich, do Jupiter, Bayton, Martinique Peter, Donald, Nassau Molus, Wells, Rotterdam

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Diyad, 4	·ŧ
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Kover, Dublin,	d

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APPENDIX B

DECISIONS

OF

HON. PELEG SPRAGUE

LN

MARITIME, ADMIRALTY, AND PRIZE CAUSES

IN THE

DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

1854-1864.

VOL. II.

84761

BOSTON: LITTLE, BROWN, AND COMPANY, 110 WASHINGTON STREET.

1868.

The Aries, — that the orders respecting guns and rockets in force in the squadron off Charleston do not amount to such a system; and to add that, in this case, the Flag was not near enough to hear such guns as the Stettin had, in the then state of the wind and weather.

The claim of the Flag to participate in proceeds must be disallowed. The claims of the other vessels of the squadron fall with it, as they were still farther off than the Flag. The decree will divide the net proceeds between the United States and the steamer Stettin.

R. H. Dana, Jr., United States Attorney, for all the vessels.

April, 1864.

THE ELLA & ANNA.

Where a prize is made by one vessel alone, other vessels who claim to participate in the proceeds solely on the ground that they were within signal distance, have the burden of proof upon them to establish all the facts necessary to sustain their claim. To give such vessels a right to participate in the proceeds, it must appear that they were within a distance at which signals could have been seen in the state of atmosphere and other circumstances existing at the time; and it is not enough to place them within a distance at which signals might have been seen under other circumstances. Where signals were not actually seen from the mast-head and answered, and the answers seen, it is not enough to show that they might have been seen from the mast-head, but not from the deck. At the time of this capture, November, 1863, there was no system established by which guns or rockets can be held to be the kind of signals referred to by the statute for distributing prize money, supposing that such a system can be carried into effect. Within signal distance means within a distance at which signals can be so made out that communications to and from can be intelligently exchanged. Up n the evidence in this cause, it is not established that Co-ton's Night Signals can, under the most favorable circumstances, be intelligently read at a distance of eight miles.

Sprague, J. — This vessel and cargo have been condemned as lawful prize, and I am now called upon to determine to what vessels of the navy the proceeds shall be decreed.

The capture was made by the steamer Niphon, commanded by Lieutenant Breck. Four other vessels, the Shenandoah, Houqua, Daylight, and Tuscarora, have severally presented applications to be admitted to share in the proceeds. The petitioners rest their

claims solely on the allegation that they were respectively "within signal distance of the vessel making the prize."

Prizes belong primarily to the government. The policy and propriety of giving the proceeds wholly or in part to the captor are manifest; but why should others, who did not even aid in making the capture, share equally with those who actually made it? A glance at the history of the law on this subject may be of use in discovering the reason. In England, from an early period, prizes have been granted by statute to "the takers." This language, in its natural import, embraces only those who actually make the capture. But the judicial tribunals introduced what they denominated constructive captors, and of these there were two classes. One of these was admitted to share by reason of being in sight at the time of the capture, and the other because of being intimately associated in a common enterprise. The doctrine that vessels in sight should be admitted as constructive joint captors was established prior to the year 1799. At that time this doctrine was adopted by an act of Congress, which remained in force one year. Act 1799, chap. 24, sec. 6, 1 U.S. Stats. at Large, 715. But this provision was re-enacted by Statute of 1800, chap. 33, by which one-half of the proceeds of prizes, when of inferior force, were, in the first place, by sec. 5, given to the captors, and then, by sec. 6, vessels of the navy in sight at the time were entitled to share equally with the captors. Act of 1800, chap. 33, 2 U.S. Stats. at Large, 52, 53. This continued to be the law of the United States until the year 1862, when, by Act 1862, chap. 204, sec. 3, 12 U. S. Stats. at Large, 606, "signal distance" was substituted for the being in sight. Thus our enactments respecting being in sight and within signal distance seem to have had their origin in the doctrine of the English courts. Upon what reason was that doctrine founded? The statute, as we have seen, gave the prize to "the takers." But who were to be deemed the takers? If there was a battle, all those who took part in the conflict were clearly actual captors. But then there was another class of vessels, perhaps of superior force, who were in such immediate proximity, and took such positions to prevent the escape of the enemy, as actually and materially to contribute to the result. Then came another class, whose mere presence constituted such an over-

whelming force at hand, that it might be presumed to have contributed to the capture, by intimidating the enemy and encouraging the friend; but what should be deemed such presence, and under what circumstances would such a presumption arise? The line must be drawn somewhere, and the courts prescribed the rule as follows: In the first place, that none but king's ships could share by reason of being in sight. Privateers were excluded, because, not being bound to render assistance, there was no sufficient presumption that they would do so. And, in the next place, to entitle king's ships to share, it was necessary that they should be actually in sight both of the capturing and captured vessels, under such circumstances as would give encouragement to the captors, and cause intimidation to the enemy. If the king's ship was utterly disabled, or prevented by other duties from rendering aid, as, for example, if she was engaged as convoy, or if she continued on a course which was carrying her away from the scene of the capture, making it manifest that she did not intend to co-operate, she was not admitted as a constructive joint captor. Thus the doctrine of the courts, by which vessels in sight were permitted to share, was founded on the presumption that their presence contributed to the result, at least by encouragement to the one party and intimidation to the other. This doctrine was modified or guarded by stringent rules respecting the kind and degree of evidence that should be required. In the first place, as already stated, direct evidence of being in sight was indispensable. In the second place, testimony coming only from the asserted joint captors, however strong, was not sufficient; and Sir William Scott, in The Robert, 3 Rob. Adm. 201, speaking of the asserted joint captors, says: "On this proof it is impossible to say that they have performed the task which the law imposes on them of bringing unequivocal, direct, and unsuspicious evidence of their claim." Again, in the same case, p. 195, he says, "Where no actual assistance is alleged, the presumption of law leans in favor of the actual captor."

The doctrine of constructive capture, limited and guarded as it was by these rules, still appears not to have found favor with the legal profession; and the courts themselves sometimes admit that it had not been sufficiently restricted and guarded. The Vryheid,

2 Rob. Adm. 16; The Financier, 1 Dods. 67; The Odin, 4 Rob. Adm. 325; La Furieuse, Stewart, Nova Scotia, 179; Le Niemen, 1 Dods. 16; The Arthur, 1 Dods. 425; L'Etoile, 2 Dods. 107.

The change made by substituting signal distance for being in sight, by our Statute of 1862, is far from being immaterial; and English decisions are not authorities to be implicitly followed. But when the reasons upon which they are founded are applicable, and commend themselves to our understanding, they are entitled to consideration, not only for their intrinsic force, but as having been adopted and acted upon by judicial tribunals of very great experience and intelligence.

Without going as far as the English courts, we may at least say that those who claim to share equally with the actual captors should be required to produce evidence of such character and weight as to satisfy the mind of the court, and render it reasonably certain that they were within signal distance. Reason and policy dictate that no part of the prize should be taken from those whose vigilance, energy, skill, or courage achieved the capture, to be given to others who contributed no assistance, and were so remote as to render it very doubtful whether a request for aid could have reached them, if aid had been desired.

Questions have heretofore arisen in this court upon the provisions of the statute respecting signal distance, but none in which the evidence was so multifarious and conflicting, or which required so close a scrutiny into the principles by which the court should be guided in analyzing, weighing and applying the evidence, and giving a true construction and proper effect to this new provision of the law.

The first question that presents itself is, What signals are sufficient? It has been contended in this case, and in prior cases, that signals by guns or rockets answer the requirement of the statute. Without undertaking to decide that a code or system of such signals may not be invented and adopted, so as to answer the purposes of the law, it is sufficient to say that the evidence does not show that any such system has been established. This capture was made by one of the blockading squadron off Wilmington, N.C. It appears that the commanding officer on that station had given instruction to the vessels of the squadron, that, upon

discovering a blockade-runner, a rocket should be thrown up in the direction in which she was going, and a gun fired to attract attention. This is the extent to which any particular meaning was attached to those acts. The direction of a rocket indicated the course of a blockade-runner. A gun was to be fired, but without any special significance, and having only its natural effect of arresting attention. The most that can be said is, that by these means notice was given that there was a blockade-runner going in a certain direction, but they were not signals by which there could be any intercommunication. There was no recognized mode by which a vessel, seeing a rocket and hearing a gun, could return any answer, even to the extent of making known the fact that they were observed. If a vessel should throw up a rocket or fire a gun under these instructions, it could not be construed into an acknowledgment of the notice; but the meaning would be that such vessel had discovered a blockade-runner taking a certain course, and wished to attract attention.

In the case of *The Aries*, (a) it appeared that the commander of the blockading squadron off Charleston, S.C., had given orders that a rocket should be thrown to indicate the direction in which a blockade-runner was going, and that, if two guns were heard in quick succession, it was the duty of the vessel hearing them to go immediately and ascertain the cause of the firing. This went somewhat farther than the instructions to the squadron off Wilmington. Yet, in that case, I held that no such system of signals by guns or rockets had been established as would meet the requirements of the statute.

Lanterns have been spoken of by several of the witnesses as being frequently used. But it is admitted that they cannot be seen as far as the Coston lights. It is unnecessary, therefore, to make any remarks respecting them. This capture was made at night, and the result is that the only signals which can be regarded in the present case are those denominated Naval Night Signals, that is, the Coston lights.

The next inquiry is, From what part of the vessel must the signals be visible? Is it sufficient if they might be seen from the

mast-head, and not from the deck? It is a great privilege to any vessel to be allowed to share in a prize which she has not actually aided in capturing. Such indulgence is not to be granted without good reason. It ought not to be enjoyed by any vessel, unless she is within such distance as gives assurance that she would render actual assistance if called upon, and could afford encouragement to the captors, by their knowing that such assistance was at hand.

On board of a vessel at sea, there is at all times kept a watch on deck, composed of some of the officers and a considerable part of the crew, some of whom are specially designated as the lookout, and all are required to be vigilant. In a well-ordered ship, a light exhibited in any part of the horizon would be immediately discovered and attended to. A man may indeed be sent aloft, and stationed there as a look-out, but this at night is exceptional; and if by such means a signal should be discovered, which could not be seen from the deck, still it would not avail unless there should also happen to be a man at the mast-head of the capturing vessel, who should see the signals made in response. The possibility that signals might be interchanged in such manner does not answer the purpose of the statute. It does not give adequate assurance that, if the capturing vessel had shown the usual Coston lights, they would have been seen and read, or, if seen, that the answering signals, made in the usual manner, would have been discovered and understood by the capturing vessel so as to give her that encouragement and confidence which the knowledge that assistance was at hand might inspire.

I am not speaking of a case in which signals are actually interchanged, and seen and understood by means of persons at the mast-head of both vessels. I have no occasion to consider and express an opinion upon such a state of facts. In the present case, no signals were made. In England, a vessel being visible from the mast-head only, although actually seen from that position, is not deemed to be in sight so as to be entitled to share in the prize.

Another question has been presented. Some of the witnesses from the petitioning ships say that, under the most favorable circumstances, the Coston lights may be seen nine miles, and thence infer that signal distance always means that number of miles.

This is founded on the assumption that signal distance is a certain number of miles, and is applicable to all cases, without regard to the state of the atmosphere or other obstructions in the particular instance. This is an error. The statute confers the right of sharing in the proceeds upon any vessel of the navy which "shall be within signal distance of another making a prize;" that is, if she be within signal distance of that vessel at that time. If the state of the atmosphere, from fog or haze, for example, is such as to prevent signals being seen, neither the language nor the reason of the statute is satisfied. Of what benefit would it be to a capturing vessel that another should, without her knowledge, be within a certain number of miles, but to which she could make no communication, and from which she could receive no encouragement, by promise of assistance or otherwise?

The question, then, is reduced to this: If, at the time of making this capture, the Niphon had made signals by the Coston lights in the usual manner, were these petitioning vessels, or was either of them, within such distance that such signals could then have been seen and read from her deck or top-gallant-fore-castle?

The Niphon was one of the blockading squadron off Wilmington. The line of the coast there lies nearly north and south, the sea being to the eastward.

On the morning of the 9th of November last, the Niphon was a short distance from the shore; and at about twenty-five minutes past five o'clock, when it was so dark that a ship could be seen but a short distance, she discovered a vessel running down the coast, that is, from north to south, very near to the beach. The Niphon immediately steered toward the shore, in a direction that would cut her off, and fired at her from the bow, and, when quite near, from the broadside also. Very soon after the Niphon had taken a direction to cut off the strange vessel, it was discovered that the latter had altered her course to the eastward, and was aiming to run the Niphon down, by striking her amidships. Both vessels were at full speed. The commander of the Niphon immediately ordered her helm hard to starboard, by which her course was changed so as to be nearly in the same direction as that of the other vessel. They struck each other at the bows. A

portion of the Niphon's crew immediately jumped on board the other vessel, and carried her by boarding. This was from ten to fifteen minutes only from the time she had been first discovered. She proved to be the Ella & Anna, an iron steamer of about a thousand tons burden, with a full cargo. She had forty pounds of steam on, and several hundred pounds weight on her safety valve, and must have been going at her utmost speed. The Niphon was a steamer of five hundred tons burden, with an iron frame and wood planking. If she had been struck on her side, nearly at right angles, as the enemy had intended, she must have been so seriously injured that she would probably have gone down in a few minutes, and there was but little chance for any of her crew to have survived.

As before stated, this capture was made at night. No signals were made; and it is not contended that either of the petitioning ships was in sight, or that there is any direct evidence in support of their claims. They rely wholly upon circumstantial evidence. They undertake to establish certain facts, and from them to deduce the conclusion that their vessel was in the requisite proximity.

They have attempted to do this in two modes. First, by ascertaining the position of each vessel at the time of the capture in relation to certain monuments or landmarks on the coast, and then the distance between such monuments, and thence to infer the distance of the vessels from each other. The other mode is by first ascertaining the time of the capture, and then the time when the capturing vessel was afterwards first seen, and at what distance, and how far and in what direction each vessel had moved in the interval between the capture and their first coming in sight, and, from these premises, to infer the distance between the vessels at the time of the capture.

[The learned judge then proceeded to a minute and careful analysis of the evidence of forty witnesses and of the charts. He pronounced the testimony very conflicting in many respects, especially in respect to the exact time when the chief events occurred, and the estimated distances at which objects were seen. The result to which he arrived on the chief points of fact may be stated thus: The capture was made before daylight, on the 9th

November, at 5.35 A.M. The place of the capture was off Masonborough Inlet, or, perhaps, a little to the north of it. The distance from Masonborough Inlet to New Inlet is at least fifteen and one-quarter miles. The wrecks of the Venus and Hebe were seven and one-quarter miles south of Masonborough Inlet, and, of course, eight miles north of New Inlet. Fort Fisher is on the site of the old light-house, at the north entrance of New Inlet. The day rendezvous of the fleet was at a buoy which was five miles S. E. by E. & E. from Fort Fisher, and fifteen miles south of Masonborough Inlet. As to the Shenandoah, the result of all the testimony is, that she was five miles from the shore, and, on the most favorable view to her, at least eight miles south from Masonborough Inlet, at the time of the capture. None of the petitioning vessels were as near as the Shenandoah. None of the petitioning vessels knew of the capture until they saw the Niphon and her prize at daylight. The Niphon fired seven guns at the chase, before the capture. These were thirty-two-pounders and a rifled twenty-pounder. There was a fresh breeze from the north; yet the reports of none of these guns were heard by any of the petitioning vessels, nor were their flashes seen. The steamer Daylight seems to have been as far south as New Inlet bar, and the Tuscarora at least two miles south of the buoy, and the Houqua a considerable distance south of the Shenandoah, at day-If, therefore, the Shenandoah was not within signal distance, none of them were.

The remaining question was, how far the Coston signals can be seen at a time like this. On that point, each party selected three officers of the navy, as experts, and the testimony of the six was before the court, and fully considered. The important question put was, "Suppose the signals given to consist of two or three colors, and to report several numbers in succession: please to state how far, under the most favorable circumstances, such signals can be read and understood with satisfactory exactness." The learned judge said the experts differed as much as the parties. Three of them limited the distance to between four and five miles. One put it at six miles, and two at between eight and ten miles. The three who had had the most experience of the Coston signals, put the distance at four and one-half, five, and six miles,

as the extreme. On the whole, the judge was of opinion that it was not satisfactorily established that the Coston signals could be read and understood, under the most favorable circumstances, at a distance of eight miles, and that was the least distance at which any of the petitioning vessels was proved to have been. He gave no opinion at what less distance they could be read.]

The result of the testimony is that the Shenandoah, the nearest of the petitioning vessels, was at least eight miles distant. No signals were in fact made. It is not established that the Coston signals can be intelligently read at that distance under the most favorable circumstances. Moreover, the circumstances were not favorable. The witnesses from the Shenandoah, as well as the Niphon, show that there was a haze along the horizon, which the experts say contracts the distance for intelligent vision of colored lights.

The petitions of the Shenandoah, Daylight, Tuscarora, and Houqua to share in the prize are rejected; and the net proceeds are adjudged one-half to the Niphon, and one-half to the United States.

- R. H. Dana, Jr., United States Attorney, for the Niphon.
- W. A. Field, for the Shenandoah.
- C. C. Dame, for the Tuscarora.

See The Steamer Anglia, Blatchf. Prize Cases, 566; The Cherokee, ante, p. 235; The Aries, ante, p. 262; The St. John, ante, p. 266.

The construction put upon the Act of 1862 by the decision in this case has been adopted by the Act of 1864, c. 174, § 10, 18 U. S. Stats. at Large, 309. This provides as follows: "All vessels of the navy within signal distance of the vessel or vessels making the capture, under such circumstances and in such condition as to be able to render effective aid if required, shall share in the prize; and, in case of vessels not of the navy, none shall be entitled to share except the vessel or vessels making the capture, in which term shall be included vessels present at the capture and rendering actual assistance in the capture."

APPENDIX C

A Comprehensive Site Profile for the North Carolina National Estuarine Research Reserve

August 2008

Respectfully compiled and submitted by the staff of the North Carolina National Estuarine Research Reserve

Corresponding author: John Fear John.Fear@ncmail.net 101 Pivers Island Rd. Beaufort, N.C. 28516 252-838-0884 Table 4.2 shows the named tropical systems that have passed within 65 nm of Masonboro Island of the past 50 years. Notable storms include Bertha and Fran in 1996 which caused extensive damage to the Wilmington area. In 1999 Hurricane Floyd passed directly over Masonboro Island before moving North. The rainfall associated with Floyd led to extensive flood damage in the coastal plain region of North Carolina. More recently, Hurricane Ophelia passed just offshore in September of 2005 bringing large amounts of beach front erosion and large amounts of rainfall. Nor'Easters do not get named like tropical systems, but are usually denoted by the month or significant calendar event and year in which they occur (*i.e.* the Halloween storm of 1991). Several Nor'Easters have also impacted the region since 1956.

Table 4.2: Tropical storms passing within 65nm of Masonboro Island since 1956

Storm	Date	Name	Wind (kts)	Minimum Pressure (mb)	Classification
1	September 1956	Flossy	35	, , ,	Extratropical
2	September 1958	Helene	115	938	Category 4 hurricane
3	July 1960	Brenda	50		Tropical storm
4	September 1960	Donna	95	958	Category 2 hurricane
5	September 1961	Not Named	35		Tropical depression
6	August 1962	Alma	45	1002	Tropical storm
7	September 1964	Dora	45		Tropical storm
8	June 1966	Alma	40	997	Tropical storm
9	June 1968	Abby	25		Tropical depression
10	October 1968	Gladys	75		Category 1 hurricane
11	August 1970	Not Named	30	1013	Tropical depression
12	August 1971	Doria	50	998	Tropical storm
13	October 1971	Ginger	65	984	Category 1 hurricane
14	June 1972	Agnes	40	988	Tropical storm
15	June 1975	Amy	30	1006	Tropical depression
16	October 1975	Hallie	45	1002	Tropical storm
17	September 1977	Clara	25	1011	Tropical depression
18	August 1981	Dennis	55	998	Tropical storm
19	June 1982	Subtropical 1	60	992	Subtropical storm
20	September 1984	Diana	115	949	Category 4 hurricane
21	November 1985	Kate	45	996	Tropical storm
22	August 1987	Arlene	10	1016	Tropical low
23	June 1995	Allison	40	995	Extratropical
24	June 1996	Arthur	40	1005	Tropical storm
25	July 1996	Bertha	90	974	Category 2 hurricane
26	September 1996	Fran	100	954	Category 3 hurricane
27	October 1996	Josephine	45	988	Extratropical
28	August 1998	Bonnie	100	962	Category 3 hurricane
29	September 1998	Earl	50	995	Extratropical
30	September 1999	Floyd	90	950	Category 2 hurricane
31	October 1999	Irene	80	976	Category 1 hurricane
32	June 2001	Allison	25	1006	Subtropical depression
33	October 2002	Kyle	35	1011	Tropical storm
34	August 2004	Bonnie	25	1008	Tropical depression
35	August 2004	Charley	65	988	Category 1 hurricane
36	September 2005	Ophelia	75	979	Category 1 hurricane
Data from	the NOAA - Coastal Ser	vices Center	_		

APPENDIX D

iscal Year County	Where Dredged	Where Placed	Dredge Name	Dredge Type	Length (ft)) Miles	Volume (cy) Cost	Funding Source	Funding Type	Project Type	Data Sou
			REGION 2a									
E BEACH												
1997 New Hanover	Offshore	Kure Beach (sta 0 to 180)					3,384,854	\$9,293,200			Initial Construction	Tom2
1998 New Hanover 2001 New Hanover Wil	ilminaton Harbar Entranas Channel (Harasahas Chael thru Cta 12:00 Chaus Marah)	Kure Beach	Texas/Illinois	Dineline	18,005	3.4	1.024.450	\$14,550,000 \$5,356,654	Federal	Storm and Erosion	Renourishment	psds USACE2/To
2001 New Hanover Will 2004 New Hanover	ilmington Harbor Entrance Channel (Horseshoe Shoal thru Sta 12+00 Snows Marsh)	Kure Beach (sta 0 to 180) Kure Beach	i exas/illinois	Pipeline	6,000	1.1	1,034,458 190,000	\$2,380,000	Federal	Storm and Erosion	Renourishment	psds/dredge da
2004 New Hanover		Kure Beach			0,000		270,000				Renourishment	Tom2/dredge d
2007 New Hanover	Offshore	Kure Beach			4,224	0.8	262,790	\$3,100,000	Federal	Storm and Erosion	Renourishment	psds/Tom
OLINA BEACH												
1955 New Hanover		Carolina Beach			-		252,000	\$50,000	Federal	Storm and Erosion		psds
1956 New Hanover		Carolina Beach			-		200,000	-	State/Local	-		psds
1965 New Hanover 1965 New Hanover	Carolina Beach Yacht Basin	Carolina Beach Carolina Beach (sta 0 to 140)			13,992	2.7		\$1,025,000 \$925,506	Federal	Storm and Erosion	Initial Construction	psds Tom1/Sper
1965 New Hanover	East End of Snows Cut	Carolina Beach (sta 0 to 140) Carolina Beach (sta 100 to 140)			4,224	0.8		\$186,308	Federal	Emergency	Renourishment	psds/Tom1/Sper
1968 New Hanover	East Eliu di Silows Cut	Carolina Beach			- 4,224	0.0	97,000	-	Federal	Emergency Navigation	Renounstiment	psds/Toll17/S
970 New Hanover		Carolina Beach			4,224	0.8	346,000	\$291,159	Federal	Emergency		psds
970 New Hanover	Carolina Beach Inlet	Carolina Beach (sta 60 to 120)			6,000	1.1	282,423	\$291,159			Emergency	Tom1/Spe
New Hanover	Cape Fear River	Carolina Beach (sta 0 to 140)			11,600	2.2	734,140	\$517,897	Federal	Storm and Erosion	Renourishment	psds/Tom1/S
972 New Hanover 973 New Hanover	Carolina Beach Waterways	Carolina Beach Carolina Beach			182	0.0	18,816 30,547	-	Federal Federal	Navigation Navigation	USACE Navigation Dredging USACE Navigation Dredging	psds/Spe psds/Spe
974 New Hanover	Carolina Beach Waterways	Carolina Beach			-		66,687	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
New Hanover	Carolina Beach Waterways	Carolina Beach			-		40,804	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
76 New Hanover	Carolina Beach Waterways	Carolina Beach	-		-		119,971	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
77 New Hanover	Carolina Beach Waterways	Carolina Beach Carolina Beach			-	1	62,066	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
79 New Hanover 80 New Hanover	Carolina Beach Waterways Carolina Beach Waterways	Carolina Beach Carolina Beach			-	+ +	230,866 38,075	-	Federal	Navigation	USACE Navigation Dredging USACE Navigation Dredging	psds/Spe Spenc
81 New Hanover	Carolina Beach Waterways Carolina Beach Waterways	Carolina Beach			-		109,176	\$174,002	Federal	Navigation	USACE Navigation Dredging	psds/Spe
81 New Hanover	Carolina Beach Materways	Carolina Beach (sta 60 to 120)			6,000	1	406,352	\$1,051,774	Federal	Emergency	Emergency	psds/Tom1/S
82 New Hanover	Upland Along Cape Fear River	Carolina Beach (sta 0 to 140)			14,256	2.7	3,662,181	\$8,384,406	Federal	Storm and Erosion	Renourishment	psds/Tom1/s
83 New Hanover	Carolina Beach Waterways	Carolina Beach			-		119,244	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
85 New Hanover 85 New Hanover	Carolina Beach Waterways	Carolina Beach			6.000	1.1	28,267	\$1,650,004	Federal	Navigation Storm and Erosion	USACE Navigation Dredging	psds/Spe
85 New Hanover 88 New Hanover	Carolina Beach Inlet Carolina Beach Inlet	Carolina Beach (sta 80 to 140) Carolina Beach (sta 85 to 142)			5,700	1.1	764,162 950,913	\$1,652,004 \$1,890,535	Federal Federal	Storm and Erosion Storm and Erosion	Renourishment Renourishment	psds/Tom1/s psds/Tom1/s
89 New Hanover	Carolina Deach mict	Carolina Beach			-	1.1	98,843	-	Federal	Navigation	Renounsiment	psds/Tohri/c
91 New Hanover	Carolina Beach Inlet	Carolina Beach (sta 0 to 140)			11,600	2.2	1,008,736	\$2,450,286	Federal	Storm and Erosion	Renourishment	psds/Tom1/S
95 New Hanover	Carolina Beach Inlet	Carolina Beach (sta 0 to 140)			11,600	2.2	1,157,742	\$3,185,642	Federal	Storm and Erosion	Renourishment	psds/Tom1/s
96 New Hanover		Carolina & Kure Beach South			18,000	3.4	3,500,000	40.001.000			Nourishment	Spence
98 New Hanover	Carolina Beach Inlet	Carolina Beach (sta 0 to 140) Carolina Beach (sta 0 to 140)					1,204,646				Renourishment	Tom1
001 New Hanover 004 New Hanover	Carolina Beach Inlet Carolina Beach Inlet	Carolina Beach (sta 0 to 140) Carolina Beach (sta 0 to 140)						\$2,096,174 \$2,909,500	Federal	Storm and Erosion	Renourishment	Tom1/dredge psds/dredge
007 New Hanover	Carolina Beach Inlet	Carolina Beach (sta 0 to 140)			5,280	1.0		\$3,000,000	Federal	Storm and Erosion		psds
986 New Hanover 994 New Hanover	Masonboro Inlet Masonboro Inlet	Masonboro Island Masonboro Island	American Alaska	Pipeline Pipeline	2,400	0.5		\$1,629,013 \$892,995	Federal	Navigation		USACE psds/USACE4/
998 New Hanover	Masonboro Inlet	Masonboro Island (sta 95 to 150)	R.S. Weeks	Pipeline				\$1,328,131				USACE4/U
02 New Hanover 06 New Hanover	Masonboro Inlet Masonboro Inlet	Masonboro Island (sta 90 to 150) Masonboro Island (sta 151 to 191)	R.S. Weeks Alaska	Pipeline Pipeline				\$1,473,802 \$2,258,189				USACE4/USAC USACE4/U
ITCVII I E BEACH												
39 New Hanover		Wrightsville Beach			13,728	2.6	700,000	\$98,000	_			psds
55 New Hanover		Wrightsville Beach			-	2.0	38,000	-	-	-		psds
56 New Hanover		Wrightsville Beach			-		35,000	-	State/Local	-		psds
57 New Hanover		Wrightsville Beach			-		304,000	-	-	-		psds
59 New Hanover	Dealer Observed	Wrightsville Beach			7,920	1.5	100,000	-	Fortered	-	In Wal Construction	psds
New Hanover New Hanover	Banks Channel Masonboro Inlet & Behind Shell Island	Wrightsville Beach (sta 0 to 140) Wrightsville Beach (sta 30 to 140)			14,000 12,000	2.7		\$739,339 \$255,941	Federal Federal	Storm and Erosion Storm and Erosion	Initial Construction Deposotion Basin/Nourishment	psds/Tom3/ psds/Tom3/
70 New Hanover	South End of Banks Channel	Wrightsville Beach (sta 50 to 140) Wrightsville Beach (sta 60 to 140)			8,000	1.5		\$578,545	Federal	Storm and Erosion	PL99,O&M,CG	psds/Tom3/s
80 New Hanover		Wrightsville Beach			-		36,108	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
80 New Hanover	South End of Banks Channel	Wrightsville Beach (sta 60 to 140)			8,000	1.5	540,715	\$1,030,736	Federal	Emergency	PL99	psds/Tom3/
81 New Hanover	Masonboro Inlet	Wrightsville Beach (sta 60 to 140)	Essex	Pipeline	8,000	1.5		\$4,427,792	Federal	Storm and Erosion	PL99,O&M,CG,Sec 111	psds/USACE4/To
32 New Hanover 33 New Hanover		Wrightsville Beach Wrightsville Beach			-	+ +	124,533 93,755	-	Federal Federal	Navigation Navigation	USACE Navigation Dredging USACE Navigation Dredging	psds/Spe psds/Spe
35 New Hanover		Wrightsville Beach			-		19,399	-	Federal	Navigation	USACE Navigation Dredging USACE Navigation Dredging	psds/Spi
86 New Hanover	Masonboro Inlet	Wrightsville Beach (sta 60 to 140)	American	Pipeline	6,864	1.3	898,593	\$1,331,715	Federal	Navigation	Sand Bypassing	psds/USACE4/To
New Hanover		Wrightsville Beach	-		-		76,556	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
89 New Hanover	Managhaya lalat	Wrightsville Beach	According	Planetta	- 004	10	96,771		Federal	Navigation	Cabild Namioharant 9 Processin	psds
91 New Hanover 94 New Hanover	Masonboro Inlet Masonboro Inlet	Wrightsville Beach (sta 60 to 140) Wrightsville Beach (sta 82 to 146)	American Alaska	Pipeline Pipeline	6,864 6,400	1.3	1,016,684 619,031	\$2,682,412 \$1,973,591	Federal Federal	Storm and Erosion Storm and Erosion	Sch'ld Nourishment & Bypassing Sch'ld Nourishment & Bypassing	psds/USACE4/To
98 New Hanover	INICOLIDATO ILITOT	Wrightsville Beach Wrightsville Beach	Alaska	Fipeline	-	1.2	-	\$1,740,000	Federal	Storm and Erosion	,, ,	psds
98 New Hanover	Masonboro Inlet	Wrightsville Beach (sta 60 to 160)	R.S. Weeks	Pipeline			1,116,573	\$2,890,256			Sch'ld Nourishment & Bypassing (CG,O&M)	USACE4/USA
02 New Hanover	Masonboro Inlet	Wrightsville Beach (sta 70 to 161)	R.S. Weeks	Pipeline			783,690	\$2,382,924 \$100,000			-	USACE4/US
05 New Hanover 06 New Hanover	Masonboro Inlet	Wrightsville Beach Wrightsville Beach (sta 75 to 160)	Alaska	Pipeline			10,000 560,000	\$100,000 \$5,004,977	Federal	Emergency		psds USACE4/U
E EIGHT ISLAND				<u> </u>								
79 New Hanover		Figure Eight Island			-	1 1	181,949	-	Federal	Navigation	USACE Navigation Dredging	psds/Spe
83 New Hanover		Figure Eight Island			2,000	0.4	90,000				Beach Nourishment	Spend
985 New Hanover	Banks Channel	Figure Eight Island			2,000			-	Local/Private	-	Beach Nourishment	psds/Spence
985 New Hanover		Figure Eight Island			2,000		120,000		Legal/Drivet		Beach Nourishment	Spence
986 New Hanover 992 New Hanover	Ranks Channel	Figure Eight Island					250,000 550,000	-	Local/Private	-	Beach Nourishment	psds Spencer/I
192 New Hanover 192 New Hanover	Banks Channel	Figure Eight Island Figure Eight Island					153,000				Beach Nourishment Beach Nourishment	Spencer/I Spenc
93 New Hanover	Middle Sound-Rich Inlert	Figure Eight Island					275,000	-	Local/Private	-	2000ouronnent	psds/D0
99 New Hanover		Figure Eight Island			9,000	1.7	400,000	-	Local/Private	-		psds
002 New Hanover		Figure Eight Island			-	1 7	500,572	\$2,753,146	Local/Private	-		psds
							00 000					
003 New Hanover 005 New Hanover		Figure Eight Island Figure Eight Island			-		90,000 180,000	\$495,000	Local/Private Local/Private	Navigation		psds psds

STATE of North Carolina, ex rel. T. Wade BRUTON, Attorney General of the State of North Carolina

FLYING "W" ENTERPRISES, INC., a corporation; W. L. Wilde, Robert T. Squyres, Jerry Adams, and John Doe, Richard Roe, and All Other Persons Threatening to Trespass Upon the S.S. MODERN GREECE, Her Engines, tackle, apparel, furniture or cargo, and all other vessels lying within a marine league off the coast of the State of North Carolina.

No. 199.

Supreme Court of North Carolina.

April 10, 1968.

486 *486 Poisson & Barnhill by L. J. Poisson, Jr., Wilmington, for defendant appellants.

Atty. Gen. T. W. Bruton, Asst. Atty. Gen. Parks H. Icenhour, and Rountree & Clark by George Rountree, III, Wilmington, for plaintiff appellee.

PARKER, Chief Justice.

Defendants have not excepted to any findings of fact except the finding of fact that a continuation of the diving and salvage *487 operation of the defendants will result in irreparable loss and damage to the State of North Carolina. A number of facts were stipulated by the parties. The parties stipulated in substance that all the hulks or wrecks of the vessels herein involved, together with all the property in and upon them, "lie in the Atlantic Ocean, below the surface of the water at low tide, within a marine league seawardly from the Coast of North Carolina, offshore from the waters of Pender, New Hanover and Brunswick Counties, North Carolina." Under this stipulation of fact, all the hulks or wrecks herein involved, together with all the property in and upon them, lie within the territorial boundaries of the State of North Carolina and have substantially so lain since they were sunk, except the Spanish sailing vessel Fortune which, with its cargo therein, was sunk in the early 1700's and has substantially lain in the same position since it was sunk.

G.S. § 141-6(a) and (b) read:

- "(a) The Constitution of the State of North Carolina, adopted in 1868, having provided in article I, § 34, that the `limits and boundaries of the State shall be and remain as they now are,' and the eastern limit and boundary of the State of North Carolina on the Atlantic seaboard having always been, since the Treaty of Peace with Great Britain in 1783 and the Declaration of Independence of July 4th, 1776, one marine league eastward from the Atlantic seashore, measured from the extreme low water mark, the eastern boundary of the State of North Carolina is hereby declared to be fixed as it has always been at one marine league eastward from the seashore of the Atlantic Ocean bordering the State of North Carolina, measured from the extreme low water mark of the Atlantic Ocean seashore aforesaid.
- "(b) The State of North Carolina shall continue as it always has to exercise jurisdiction over the territory within the littoral waters and ownership of the lands under the same within the boundaries of the State, subject only to the jurisdiction of the federal government over navigation within such territorial waters."

See North Carolina Constitution of 1776, Declaration of Rights § 25.

By statute the United States has in effect quitclaimed and confirmed the ownership of the State of North Carolina in the lands beneath the Atlantic Ocean within a marine league seaward from the eastern boundary of the State. 43 U.S.C.A. § 1312 reads:

"The seaward boundary of each original coastal State is approved and confirmed as a line three geographical miles distant from its coast line or, in the case of the Great Lakes, to the international boundary. Any State admitted subsequent to the formation of the Union which has not already done so may extend its seaward boundaries to a line three geographical miles distant from its coast line, or to the international boundaries of the United States in the Great Lakes or any other body of water traversed by such boundaries. Any claim heretofore or hereafter asserted either by constitutional provision, statute, or otherwise, indicating the intent of a State so to extend its boundaries is approved and confirmed, without prejudice to its claim, if any it has, that its boundaries extend beyond that line. Nothing in this section is to be construed as questioning or in any manner prejudicing the existence of any State's seaward boundary beyond three geographical miles if

it was so provided by its constitution or laws prior to or at the time such State became a member of the Union, or if it has been heretofore approved by Congress. May 22, 1953, c. 65, Title II, § 4, 67 Stat. 31."

A marine league is a distance which is the equivalent of three geographical miles. Ballentine's Law Dictionary (2nd Ed. 1948).

Defendants assign as error that Judge Mintz in answering the issue set forth above "yes" held in effect that the plaintiff is the *488 owner and entitled to the immediate possession of the sunken hulks and all property thereon or therein, including those hulks and artifacts specifically described in the complaint, lying in the Atlantic Ocean seaward within one marine league of the North Carolina coast, as alleged in the complaint. Defendants also assign as error the court's conclusion of law that the State of North Carolina has never abandoned the wrecks of the S/S *Modern Greece*, the S/S *Phantom*, the S/S *Ranger* and the Spanish privateer *Fortune*, and the articles contained therein, nor the wrecks of any other ships, lying in the Atlantic Ocean within the territorial waters of the State of North Carolina and within a marine league seaward from the Coast of North Carolina.

It is well-settled law that the owners of sunken or derelict vessels or their contents may abandon them so effectively as to divest title and ownership. Thompson v. United States, 62 Ct.Cl. 516; Eads v. Brazelton, 22 Ark. 499, 79 Am.Dec. 88; Howard v. Sharlin (Fla.), 61 So.2d 181; State by and through Ervin v. Massachusetts Company (Fla.), 95 So.2d 902, 63 A.L.R.2d 1360; Creevy v. Breedlove, 12 La.Ann. 745; Steinbraker v. Crouse, 169 Md. 453, 182 A. 448; Deklyn v. Davis, 1 Hopk.Ch. 135, 2 N.Y.Ch. 369; Williamson v. Mennella, 248 App.Div. 911, 290 N.Y.S. 645; Annot., 63 A.L.R.2d 1369, 1372.

"A vessel, cargo, or other property is derelict in the maritime sense of the word when it is abandoned without hope of recovery or without intention of returning." 48 Am.Jur., Shipping § 647 at p. 451. It is manifest from the stipulations and the findings of fact made by the judge, which findings of fact relevant here are unchallenged, that the vessels herein involved were derelicts, and that the one-time owners of these submerged vessels and their contents have abandoned them so effectively that they, and each one of them, have divested themselves of any title and ownership.

Defendants contend the State of North Carolina has no property rights in these sunken vessels or their cargoes either under the early English common law or under the subsequent law of the State of North Carolina prior to the enactment of Chapter 533, Session Laws of 1967 (now codified as G.S. § 121-22 through G.S. § 121-28). Defendants in their brief contend in essence that these vessels and their cargoes were abandoned by their former owners, and that ownership has vested in defendants because they have lawfully appropriated them to their own use and reduced them to possession with the requisite intent to become the owners.

We will first consider the question of the right of the sovereign at common law to goods found wrecked or derelict at sea, regardless of whether they were "cast upon the land or shore."

The Supreme Court of Florida, *en banc*, dealt with this precise question in State by and through <u>Ervin v. Massachusetts Company (Fla.)</u>, <u>95 So.2d 902</u>, 63 A.L.R.2d 1360. In a very scholarly opinion, Justice Roberts said for the Court:

"The rule is stated in Carver's Carriage of Goods by Sea, 9th Ed., p. 580, as follows:

"So where a ship is derelict, or where goods have been thrown out of a vessel to lighten her (jetsam), or have been sunk but tied to some floating mark to show the place (lagan) or have been washed out of the ship and remain afloat (flotsam), in those cases, also, the property belongs to the Crown in its office of Admiralty, unless the owner establishes his claim to it.'

"This statement is supported by the English cases on the subject. `* * the common law gave as well wreck, *jetsam*, *flotsam*, and *lagan* upon the sea, as estray * * *, treasure-trove, and the like to the King, because by the rule of the common law, when no man can claim property in any goods, the King shall have them by his prerogative.' Sir Henry Constable's Case, 5 Coke's Report 108b, *489 77 Eng.Repr. 218, 223. `By the general law, all goods found afloat and derelict on the high seas belong, as droits, to the Crown, in its office of Admiralty.' <u>The King v. Forty-Nine Casks of Brandy (1836) 3 Hagg.Adm. 292, 166 Eng.Repr. 414.</u> A wrecked vessel and its cargo, lying at the bottom of the sea, is a `derelict' which, if not claimed by the owner, at the end of a year, becomes a *droit* of the Crown in its office of Admiralty. H.M.S. Thetis (1835) 3 Hagg. 228, 166 Eng.Repr. 390, 391. See also the Tubantia (1924) P. 78, 91; <u>The King v. Two Casks of Tallow (1837) 3 Hagg.Adm. 292, 166 Eng.Repr. 414</u>; and The Aquila (1798) 1 C.Rob. 37, 165 Eng.Repr. 87, 91.

"The difficulty which the Chancellor—and apparently the parties, also—has had with this question stems from a misunderstanding of the meaning and effect of the two English statutes cited above. The statute of 3 Edward I, Ch. 4, (enacted in 1275) provides that:

"Concerning Wrecks of the Sea, it is agreed, that where a Man, a Dog, or a Cat escape quick out of the Ship, that such Ship nor Barge, nor any Thing within them, shall be adjudged Wreck; (2) but the goods shall be saved and kept by View of the Sheriff, Coroner or the King's Bailiff, and delivered into the Hands of such as are of the Crown, where the Goods were found; (3) so that if any sue for those Goods, and after prove that they were his, or perished in his keeping, within a Year and a Day, they shall be restored to him without Delay; and if not, they shall remain to the King, and be seized by the

489

490

Sheriffs, Coroners, and Bailiffs, and shall be delivered to them of the Town, which shall answer before the Justices of the Wreck belonging to the King.'

"The statute of 17 Edward II, Ch. 11 (enacted in 1324) provides that:

"`Also the King shall have Wreck of the Sea throughout the Realm; (2) Whales and great Sturgeons taken in the Sea or elsewhere within the Realm, (3) except in certain Places privileged by the King.'

"These two statutes did not confer any new right upon the Crown. By the ancient Roman law and the early common law of England, the right of the sovereign to wrecked and derelict property on the seas was absolute, to the exclusion of the owner. See the note to The Aquila, supra, 165 Eng.Repr. 87, 91. But by the time of Edward I, this harsh rule had been softened and the owner could reclaim his property within a year and a day. The statute of 3 Edward I, Ch. 4, 'was but a declaration of the common law against the opinion in Dr. and Stud. lib. 2 fo. 118, and if the owner dies, his executors or administrators may make their proofs.' Constable's Case, supra, 77 Eng.Repr. 218, 222. Similarly, the declaration of the statute of 17 Edward II, supra, that 'wreck of the sea' belonged to the King 'except in certain places Privileged by the King' was 'but a declaration and an affirmation of the common law. For notwithstanding that stat. being made within time of memory, a man may prescribe to have wreck, * * *' Constable's Case, supra. And, of course, the King could grant the right to 'wreck of the sea' to a subject, generally to the lord of a manor bordering on the sea. In fact, most of the cases in which 'wreck of the sea' or *wreccum maris*, has been defined were concerned with the question of ownership of shipwrecked goods, as between the Crown and the lord of the manor, where the lord is claiming ownership of the goods either under a grant of wreck or by prescription.

"In short, the statute of 3 Edward I, supra, was simply a declaration of the right of an owner to assert his ownership to shipwrecked goods within a year and a day—a right which already existed under the common law, not only as to technical 'wreck of the sea' but also to goods of the character of *flotsam*, *jetsam*, and *lagan*. *490 And the statute of 17 Edward II, supra, was merely a declaration of the privilege of acquiring a right to 'wreck of the sea', in its technical sense, by prescription or usage, already existing under the common law. Constable's Case, supra."

A rehearing was granted by the Supreme Court of Florida in this case on 12 June 1957 and, upon further consideration, it adhered to its former opinion and judgment. <u>95 So.2d 908, 63 A.L.R.2d 1369</u>. Thereupon, defendant Massachusetts Co. petitioned the United States Supreme Court for *certiorari*, which was denied 25 November 1957, 355 U.S. 881, 78 S.Ct. 147, 2 L.Ed.2d 112.

This is said in 1 Blackstone's Commentaries on the Laws of England, Ch. 8, p. 280 (Reprint of the First Edition, Dawsons of Pall Mall, London, 1966):

"Another maritime revenue, and founded partly upon the same reason [that is, grounded on the consideration of the King's guarding and protecting the seas from pirates and robbers], is that of shipwrecks; which are also declared to be the king's property by the same prerogative statute 17 Edw. II, c. 11. and were so, long before, at the common law."

In <u>Hetfield v. Baum, 35 N.C. 394</u>, Justice Pearson said for the Court:

"The sovereign has a right to wrecks and all property stranded on the sea beach, and in many countries this right is exercised so as to be a source of considerable revenue.

"North Carolina has a sea-coast great in extent and very dangerous, and there are probably more wrecks upon her coast during the year than upon that of any five of the other states. * * *"

In 80 C.J.S. Shipping § 258, it is said:

"'Wreck' has been defined to be such goods as after a shipwreck are cast on land by the sea and left there, and as the ruins of a ship which has been stranded or dashed on a shelf, rock, or lee shore by tempestuous weather, * * *."

"In England, by the early common law, all wreck or wrecks (in the technical sense) became the property of the Crown or its grantee after a year and a day, if no owner appeared within that time to claim it." 48 Am.Jur. Shipping § 648. To the same effect, 80 C.J.S. Shipping § 259.

The General Assembly in 1778, Ch. 133, P.R., enacted this statute:

"Be it enacted, &c. That all such statutes, and such parts of the common law, as were heretofore in force and use within this territory, (b) and all the acts of the late general assemblies thereof, or so much of the said statutes, common law, and acts of assembly, as are not destructive of, repugnant to, or inconsistent with the freedom and independence of this State, and the form of government therein established, and which have not been otherwise provided for, in the whole or in part, not abrogated, repealed, expired, or become obsolete, are hereby declared to be in full force within this state."

This statute in its present form is codified in G.S. § 4-1 as follows:

"Common law declared to be in force.—All such parts of the common law as were heretofore in force and use within this State, or so much of the common law as is not destructive of, or repugnant to, or inconsistent with, the freedom and independence of this State and the form of government therein established, and which has not been otherwise provided for in whole or in part, not abrogated, repealed, or become obsolete, are hereby declared to be in full force within this State."

This Court said in Resort Development Co. v. Parmele, 235 N.C. 689, 71 S.E.2d 474:

"Previously the General Assembly of North Carolina, beginning in 1711, had enacted statutes declaring that 'the common law is, and shall be in force in this government.' See Laws of N.C. 1711, *491 Chap. 1, Sec. III (Published in Vol. 25 The State Records of North Carolina by Clark), Laws of N.C. 1715, Chap. 31, Sec. VI, Laws of N.C. 1715, Chap. 66, Sec. VIII, Laws of N.C. 1749, Chap. 1, Sec. VI, Laws of 1777 (First Session) Chap. 25, Laws of 1777 (Second Session) Chap. XIV, Sec. II, Laws of N.C. 1778 (First Session) Chap. V, Sec. II."

The term "Common Law" refers to the common law of England and not of any particular state. <u>Eidman v. Martinez, 184 U.S. 578, 22 S.Ct.</u> 515, 46 L.Ed. 697.

Defendants rely strongly upon the case of Murphy v. Dunham (1889, D.C.Mich.), 38 F. 503. The concept of the sovereign's prerogative as to a derelict ship or cargo apparently has been rejected expressly in this case. The Federal District Court in Michigan held, in the absence of statute, that the ownership of a cargo of coal in a vessel sunk in Lake Michigan did not pass to the State of Illinois as sovereign. The Court reasoned as follows: The Statute of Westminister (3 Edw. I. c. 4), which it held to be expressive of the common law upon the subject, applied only to "wreck of the sea" consisting of goods cast upon the shore, and goods known as *flotsam, jetsam,* and *lagan; flotsam* being goods cast upon the water, *jetsam* being goods cast overboard to save a laboring ship, and *lagan* being goods cast overboard attached to a line and buoy to mark their presence. The Court held that under these definitions coal lying at the bottom of the lake could not be considered "wreck of the sea" such as would be a prerogative of the sovereign. In the annotation in <u>63 A.L.R.2d 1377,</u> it is said:

"It should be noted, however, that the decision in this case can be rested on the ground that the cargo of coal had never been abandoned by its purchaser. The court also disposed of the contention that ownership of the coal had passed to the United States by noting that the sovereignty of the State of Illinois extended to the waters in which the ship had sunk, the United States at that time having only rights of control over commerce and navigation."

Defendants contend as follows:

491

"At the dates of the sinking and abandonment, the Merchant Shipping Act of 1854 (17 & 18 Vict. c 104) was in effect in England, and it was not until the enactment of the Merchant Shipping Act of 1894 (57 & 58 Vict. c 60) that the term `wreck' at common law was extended to apply to any vessel or its cargo not thrown upon the shore."

In the case of H.M.S. "Thetis" (1835), 3 Hagg. 228, 166 Eng.Repr. 390, 393, the Court said:

"Now derelicts are *prima facie* droits; they are so till a claim is allowed; they do not become actual droits until a year has expired without such a claim, and until then they are only derelicts. This treasure, though it never became a droit, was a derelict; it was out of the possession of any person in right of the owner—*it was at the bottom of the sea and fished up from it*; and there was no doubt in the mind of anyone who sat in the Court of Appeal that it was a derelict; but within the time prescribed by law, the owners or their representatives appeared and claimed the property, and upon proof of ownership it was restored to them,—but subject to salvage, and the salvage is in respect of monies arising out of derelict." (Emphasis supplied.)

As long ago as the year 1798, in The "Aquila," 1 C.Rob. 37, 165 Eng.Repr. 87, we find the salvor attempting to claim title by right of occupancy to the cargo carried in a ship found derelict at sea, where the ship was reclaimed and restored by the owner and the cargo remained unchanged. The learned and distinguished Admiralty Judge,

Sir W. Scott, in this case said:

492

"It is certainly very true that property may be so acquired: but the question is, to whom is it acquired? By the law of nature, to the individual finder or occupant: *492 But in a state of civil society, although property may be acquired by occupancy, it is not necessarily acquired to the occupant himself; for the positive regulations of the State may have made alterations on the subject; and may, for reasons of public peace and policy, have appropriated it to other persons, as, for instance, to the State itself, or to its grantees.

"It will depend, therefore, on the law of each country to determine, whether property so acquired by occupancy, shall accrue to the individual finder, or to the Sovereign and his representatives? And I consider it to be the general rule of

civilized countries, that what is found derelict on the seas, is acquired beneficially for the Sovereign, if no owner shall appear. Selden (De Dom. Maris, lib. i, c. 24) lays it down as a right annexed to sovereignty, and acknowledged amongst all nations ancient and modern. Loccenius (Lib. i, c. 7, 10) mentions it as an incontestable right of sovereignty in the north of Europe. Valin (Lib. iv, tit. 9, art. 26) ascribes the same right to the crown of France; and speaking of the rule in France, that a third shall be given to salvors, in cases of shipwreck, expressly applies the same rule to derelicts, as standing on the same footing. In England this right is as firmly established as any one prerogative of the crown. * * *"

We do not accept the statement in Murphy v. Dunham, supra, as a correct statement of applicable common law, nor do we agree with the contention of defendants that "it was not until the enactment of the Merchant Shipping Act of 1894 (57 & 58 Vict. c. 60) that the term 'wreck' at common law was extended to apply to any vessel or its cargo not thrown upon the shore." State by and through Ervin v. Massachusetts Company, supra.

We conclude that the hulks or vessels and the cargoes therein involved in the instant case were "derelicts" which, at common law, would belong to the Crown in its office of Admiralty at the end of a year and a day under the authority of the English cases we have quoted above from the Supreme Court of Florida, and of The "Aquila," supra. The North Carolina statutes which we have quoted above declaring the common law to be in force in this State since 1776 show the intention of the State to pre-empt for itself those fiscal perquisites which, at common law, had been the prerogative right of the Crown. Consequently, since these hulks or vessels and the cargoes therein were resting in territorial waters of the State of North Carolina and within the boundaries of the State of North Carolina, they are within the purview of the common law and belong to the State in its sovereign capacity.

The parties stipulated as follows:

"That during March, 1962, the plaintiff State of North Carolina, through its Department of Archives and History, supervised diving upon the hulks of the *Modern Greece*, the *Phantom*, and the *Ranger*, and further, undertook and conducted recovery and restoration of portions of the cargo, furniture, tackle and apparel from the *Modern Greece*, as appears by an inventory of relics recovered from sunken Confederate blockade runners, a copy of which is attached. (Labeled Appendix One, pages one through seven.) (Appendix One listed various items removed from the *Modern Greece*, *Ranger*, *Venus*, *Ella Beauregard*, *Phamto*, *and Condor*.) And that the State undertook and conducted recovery and restoration of certain articles from the *Phantom* and from the *Ranger*, which articles are also described in the appendix attached to these stipulations; and that the plaintiff has opened and is presently maintaining a restoration center and laboratory at Fort Fisher, New Hanover County, North Carolina, in which the plaintiff has gathered, preserved, identified, studied and maintained parts and parcels of these hulks, their cargoes, furniture, apparel, fixtures and appliances."

*493 According to the stipulation of facts and the facts found by the judge, which are unchallenged in respect to this point, it is our opinion, and we so hold, that the sovereign State of North Carolina has never abandoned the hulks or sunken vessels herein involved, nor the property in or upon them.

The two assignments of error above mentioned are overruled.

Defendants assign as error the court's finding that the diving and salvaging operations conducted and performed by defendants on the wrecks of the S/S *Modern Greece*, the Spanish privateer *Fortune*, the S/S *Ranger*, and the S/S *Phantom* constitute unlawful trespasses by them, jointly and severally. This assignment of error is overruled. For the reason stated above, we hold that the State of North Carolina, in its sovereign capacity, has a possessory right or title to these hulks or vessels and their cargoes; and, consequently, the defendants, in going upon them and removing objects therefrom, were trespassers. It is hornbook law that to trespass is a wrongful invasion of the possession of another. 4 Strong, N.C. Index, Trespass, § 1.

Defendants assign as error that the court erred in its finding of fact that a continuation of defendants' activities in and upon the hulks of these sunken vessels will result in irreparable loss and damage to the State of North Carolina. Defendants also assign as error the granting of the State's request for injunctive relief.

According to the stipulated facts, these old derelict vessels, with the exception of the Spanish privateer *Fortune*, were once Confederate blockade runners, sunk over a century ago during the War Between the States; and, since that time, they have lain at the bottom of the sea within the territorial waters of the sovereign State of North Carolina abandoned by their onetime owners. These sunken vessels contain articles of unique historical significance and value which cannot be replaced. No reasonable redress at law can be afforded for defendants' taking of these artifacts, and the sovereign State of North Carolina, in equity and good conscience, should not be required to submit to the defendants' unlawfully going upon its property and removing therefrom such articles. Under the facts stipulated and found, defendants are not engaged in any legitimate enterprise with respect to these old derelicts.

The Honorable James Sprunt, a distinguished citizen of this State, one of its more prominent businessmen and a longtime resident of New Hanover County, at the age of 17 1/2 years, sailed on the blockade runners *Advance, Eugenie, Northheath, Lillian, Susan, Beirne,* and the *Alonzo* in the capacity of purser. The historical value and rare interest which these old derelict vessels may have for future generations who are interested in days long past have been expressed by Mr. Sprunt in his accurate and most interesting volumes Chronicles of the

Cape Fear River, 1660-1916, and Derelicts, 1920. We quote from page 396 of the Second Edition of Chronicles of the Cape Fear River, speaking of these blockade runners:

"Some of the steamers which were run ashore by the blockaders may still be seen: the *Ella* on Baldhead, the *Spunky* and the *Georgiana McCall* on Caswell Beach, the *Hebe* and the *Dee* between Wrightsville and Masonboro. The *Beauregard* and the *Venus* lie stranded on Carolina Beach; the *Modern Greece*, near New Inlet; the *Antonica*, on Frying Pan Shoals. Two others lie near Lockwood's Folly Bar; and others whose names are forgotten, lie half-buried in sands, where they may remain for centuries to come."

And at page 461 of the same book, Mr. Sprunt goes on to say:

"After a heavy storm on the coast, the summer residents at Carolina Beach and Masonboro Sound have occasionally picked up along the shore some interesting relics of blockade times which the heaving *494 oceans has broken from the buried cargoes of the *Beauregard, Venus, Hebe,* and *Dee.* Tallow candles, Nassau bacon, soldiers' shoes, and other wreckage comprise in part this flotsam yielded up by Neptune after nearly fifty years' soaking in the sea."

Mr. Sprunt, in his book Derelicts, 1920, in speaking of blockade runners, has this to say on page 51:

"For many years the summer visitors on Wrightsville Beach have looked out upon the hurrying swell of the broad Atlantic and have felt the fascination of the long lines of crested breakers like Neptune's racers charging and reforming for the never-ending fray; and, when the unresting tide receded, they have seen the battered hulks of some of the most beautiful ships that ever shaped a course for Wilmington in the days of the Southern Confederacy. They represented an epoch that is unique in our country's history, for, in the modern art of war the conditions which then prevailed can never occur again."

The "wrecks" statutes of North Carolina, G.S. §§ 82-1 through 82-18, both inclusive, do not refer in any way to the ownership of the hulks or sunken vessels here and the cargoes therein contained. These statutes are concerned with the protection and sale of stranded vessels or a vessel's cargo or material or any property cast ashore, and the application of the proceeds. According to all the facts stipulated and found, these hulks or sunken vessels and their cargoes have lain unattended and abandoned for more than one hundred years beneath the surface of the Atlantic Ocean within the territorial limits of the State of North Carolina, except for the Spanish privateer *Fortune* which has lain for more than two hundred fifty years beneath the surface of the Atlantic Ocean in the territorial limits of the State of North Carolina. In this case we are not concerned with property which Blackstone says is distinguished "by the barbarous and uncouth appellations of *jetsam*, *flotsam*, and *ligan*." It is manifest that no attempt has been made or will be made to salvage these sunken vessels, and it is equally manifest that the sunken vessels here have little, if any, value for salvage. In recent years since the advent of skin divers and oxygen tanks which may be strapped to the backs of skin divers, it is possible to explore such sunken vessels with no great difficulty and carry to shore articles of unique historical value found therein. It is manifest that the activities of the defendants here were solely for their own personal gain. Upon the facts stipulated and found, we do not think that our "wrecks" statutes divested this State of a prerogative right of the Crown to which it succeeded when it became a sovereign State and adopted the common law of England as it existed in 1776. In our opinion, and we so hold, our "wrecks" statutes have no application to the facts in the present case.

Upon the stipulated facts and facts found, which are not challenged except in one respect heretofore stated, the trial court correctly entered an order permanently enjoining defendants from diving upon, going on, molesting, or in anywise interfering with the hulks or sunken vessels here and their cargoes, and the court also was correct in issuing a mandatory injunction that defendants shall forthwith return to the sovereign State of North Carolina the articles specified above which were taken from these hulks or sunken vessels. All defendants' assignments of error are overruled.

The judgment below is

Affirmed.

494

HUSKINS, J., took no part in the consideration or decision of this case.

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