

A Publication of the North Carolina Maritime History Council www.ncmaritimehistory.com

Fall 2022 Number 20

# Tributaries

**Letter from the Board** 

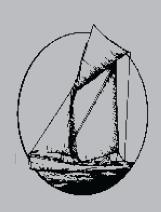
**Letter from the Editor** 

"The Bridge that Was a Whale": The History of North Carolina's Old Bone Foot Log
By: Dominic Bush

"A Commanding Position for Communication": Competition for Wireless Stations on the North Carolina Coast, 1901-1919
By: Thomas C. Jepsen

Lost and Found at Rodanthe: Insights from Stranding Events in Pamlico Sound (1886-1910)

By: Nathan Richards & Adam Parker



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## Contents

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Do	mir	nic	Rn	ch

Thomas C. Jepsen

Nathan Richards and Adam Parker

Members of the Executive Board	3
Letter from the Board	4
Letter from the Editor	5
"The Bridge that Was a Whale"	6
The History of North Carolina's Old Bone Foot Log	
"A Commanding Position for Communication"	15
Competition for Wireless Stations on the North Carolina 1901-1919	Coast,
Lost and Found at Rodanthe	24
Insights from Stranding Events in Pamlico Sound (1886-1	910)
Call for Submissions	42
Style Appendix	43
Student Paper Prize	44

Tributaries Fall 2022

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Tributaries Fall 2022

## Letter from the Board

What is North Carolina's maritime history?

The maritime landscape of North Carolina is truly remarkable. Throughout prehistory, native inhabitants utilized dugout canoes to maintain lines of communication, trade, and relied on the marine environment for subsistence. Ships of exploration and colonial craft of every description plied coastal, sound, and riverine waters. Vessels of piracy, warfare, and commerce led to legendary shipwrecks, heroic rescues, and enduring maritime mysteries. Maritime industries flourished adjacent to and within the resource-rich waters of the Tar Heel State. All this combines to form an incredibly profound maritime heritage, one which only now is beginning to be understood in its broadest context.

The North Carolina Maritime History Council came together in 1988 when a group of individuals involved in the maritime history field began meeting informally to share information and to discuss issues of mutual concern. In 1990 the North Carolina Maritime History Council was incorporated with the mission to identify and encourage historical and educational projects that have as their purpose the enhancement and preservation of the state's maritime history and culture, and that create public awareness of that heritage.

Council membership is open to any individuals and institutions interested in the maritime history of our region. We encourage this membership to seek ways to pool resources, share information, and discuss issues to benefit the dissemination of our mutual maritime heritage. It is our hope that you will continue to support the Council as we encourage and learn from more diverse scholarship in our field. No story is too small, no voice left unheard. Please consider renewing your membership or otherwise contributing to our mission.

Sincerely,

The Executive Board of the North Carolina Maritime History Council

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## Letter from the Editor

*Tributaries* is a product of the North Carolina Maritime History Council since its incorporation in 1990. It is the only history journal published in the state fully dedicated to North Carolina maritime historical and archaeological topics. As stated in the Council's mission, we seek to enhance understanding and promote our state's maritime history, and *Tributaries* is a major component towards that purpose.

North Carolina's maritime history is not limited to the well-known stories and sites that attract the attention of the public and researchers. It is my hope to utilize *Tributaries* as a repository for a wide range of histories related to specific ships, shipwrecks, maritime sites, people, events, and industries that might help inform broader research themes in our state. All members of the maritime history community, including independent researchers, local history groups, genealogical societies, oral historians, students, academics, and federal, state, or municipal governments are encouraged to submit articles to the journal.

This issue of *Tributaries* highlights some of these unique histories within our state. The first article discusses early geological characterization of a whale skeleton, used as a bridge by locals, and located far from the modern coastline. Intersecting with geology, paleontology, and the history of scientific study, this article broadens the scope of traditional "maritime" history. The next article discusses the use of wireless stations on the NC coast, extending the range (pun-intended) of maritime focus beyond the ship and shipwreck to how people communicated from land to sea. Last, the final paper examines incidents that are overlooked when discussing maritime losses: those where the ship is recovered. As the authors state, these patterns further illuminate the past maritime activity of everyday people and vessels that might resonate with anyone boating in the Outer Banks today.

Yours in continual learning, Jeremy Borrelli

Editor, Tributaries borrellij16@ecu.edu

## "The Bridge that Was a Whale:"

### The History of North Carolina's Old Bone Foot Log

#### by Dominic Bush

#### **Abstract**

Known as the "Old Bone Foot Log," a fossilized whale skeleton once spanned Fishing Creek, north of Whitakers, North Carolina. Though the ancient cetacean remains are only partially documented in 19th century newspaper articles and geological reports, sources are consistent in the fossil's use as a bridge. Allegedly the subject of superstitions amongst local slave communities and believed to have been located on the former property of Confederate Major J. M. Mayo, the Old Bone Foot Log lays at the nexus of history and geology. In fact, paleontological interest in the specimen resulted in a tangible link between the founding of the North Carolina State Museum, the Smithsonian, and the controversial paleontologist, Edward Drinker Cope. Deposited on the seafloor over two million years ago and discovered 180 kilometers from the Atlantic Ocean, the skeleton presents an interesting challenge to conventional concepts of maritime history.

#### Introduction

Surpassing dinosaurs in size, whales constitute the largest creatures to ever live, and have occupied a prominent part in humanity's maritime past. From inspiring Herman Melville's legendary epic,<sup>1</sup> to cultural expressions as evidenced by traditional Micronesian tattoo practices,<sup>2</sup> the special connection between these giant sea mammals and humans is extensive. This paper, however, attempts to tell the story of a specific whale, who despite being millions of years older than the humans who interacted with it, managed to once play a significant role in the area's history. Special attention will be paid to the transformative process, in which the story of this whale morphed from a local curiosity to

the subject of serious paleontological intrigue, before becoming a regional legend, and finally, a largely-forgotten footnote.

In his correspondence piece published on 14 February 1845, an editor for the Weekly Raleigh Register described his travels from Tarboro, N.C. to Washington, N.C.<sup>3</sup> Along this sojourn, the editor mentioned being in the company of several other patrons seated around a tavern fireplace. This group was joined by a "tall down-easter," who quickly became the center of attention. The man regaled the group with knowledge regarding the "old fashioned Prints,"4 that hung over the barroom's mantle. As the night waned, the down-easter's audience retired one-by-one, until it was only himself and the newspaper editor. At this point, the editor asked the man if he had travelled far that day, to which he responded, "only fifteen miles or there abouts."5 The gregarious stranger added that the highlight of this journey was encountering a "huge skeleton of some fish, probably a whale,"6 that was used to cross Fishing Creek, near the modern-day town of Whitakers. Both men expressed amazement at the situation and speculated on how the whale skeleton came to be. Unaware of North Carolina's paleoenvironmental past, the downeaster posited that a predator may have forced the whale upstream.

The real answer was that the ancient cetacean likely arrived at its final resting place around three to four million years earlier, at a time when North Carolina's shoreline was nearly 200 kilometers more inland than its present location. Geologically known as the Pliocene Epoch, this period was largely defined by a global climate that averaged 2-3 degrees Celsius warmer than today. The increased



#### Tributaries

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Figure 1. Suspected location of the Old Bone Foot Log (University of North Carolina Gilmer Civil War Maps Collection [left] and Google Earth [right]). The names Taylor, Parker, and Hunter can be seen within the red circle on historical map. The Wilmington and Weldon Railroad can be seen on both maps. Fishing Creek has been highlighted in blue on the Google Earth imagery.



temperatures correlated in a decreased global ice volume, resulting in an influx of seawater and a much higher sea-level (i.e. glacial eustasy) than currently observed.9 Some have argued, however, that the change in the positioning of North Carolina's shoreline cannot be attributed to glacial eustasy alone.10 Instead, it is believed that glaciation starting at the end of the Pliocene and increasing during the subsequent Pleistocene created a situation where heightened ice loading in the northern latitudes caused the elevation of lands (including North Carolina) on the peripheries of this ice complex as the Earth's crust reached an equilibrium (i.e. glacial isostasy and dynamic topography). 11 As a result, North Carolina's shoreline regressed significantly during the late-Pliocene (3.0-2.4 million years ago), which has been confirmed paleontologically through the analysis of fossilized planktonic foraminifers from the coastal plain.<sup>12</sup>

#### **Nineteenth Century Documentation**

In 1852, the assistant state geologist of North Carolina, Spence McLenahan was the first to formally investigate the whale skeleton. In a letter to his superior, Ebenezer Emmons, North Carolina's first state geologist, McLenahan described the whale's vertebra as lying diagonally across Fishing Creek, with the skull partially embedded in a bed of marl (marine shell, limestone, and green sand) on the northern bank.<sup>13</sup> The property owner, W. H. Knight, informed McLenahan that this section of the creek was frequented by fossil collectors who succeeded in removing much of the skeleton.<sup>14</sup> McLenahan also wrote that the whale's final resting position was on its back though its ribs had long been broken off and washed away. He reported collecting a piece of the exposed jawbone from the marl deposit and returning to Raleigh with the fragment.15

The skeleton's location has generally been described as around three miles south of Enfield,16 two miles north of Whitakers,17 and one mile west of the Wilmington & Wheldon (W&W) Railroad.<sup>18</sup> A more exact position can be inferred from the area's property records. A search of the Nash County deed records revealed that in 1859, W. H. Knight sold an 887.5-acre tract of land in Nash County to Jesse W. Parker of Edgecombe County for \$9,000.19 The plot was bounded to the north by Fishing Creek, to west by the property of K. A. Taylor and a tributary of Fishing Creek, and to the east by a Dr. Hunter's property. While Parker is listed as the land proprietor by a paleontologist who went to see the skeleton in 1869,<sup>20</sup> by 1875 the whale is reported as being on the farm of J. M. Mayo.<sup>21</sup> Again looking to the Nash County records, the same tract of land sold from Knight to Parker, was granted from Parker to J. M. Mayo in 1870 for one-dollar.<sup>22</sup> To confirm the location of this plot, one can look at the "Map of the Area between Roanoke River and Tar River" from the University of North Carolina's (UNC) Gilmer Civil War Maps Collection (Figure 1). The property listed as belonging to Parker is bordered by land belonging to Taylor and Dr. Hunter, which accords with the 1859 deed record. The suspected location of the skeleton also falls in line with the previously described landmarks of Enfield, Whitakers, and the W&W Railroad.

In 1860, a second fossilized whale was discovered near Quanky Creek, just 14 miles from Fishing Creek. Reverend Robert S. Moran headed the investigation of this new skeleton, having it partially excavated and drawn for analysis.<sup>23</sup> Moran sent the sketch to Yale, where a geology professor confirmed its identity as a fossilized whale. This skeleton, referred to as the Quanky specimen, was revisited after the Civil War, when Washington Caruthers

Kerr, Emmons' successor as state geologist, began directing a statewide geological survey.<sup>24</sup> Though Emmons had completed a survey in 1860, Governor Jonathon Worth requested that Kerr conduct a second survey with more of a focus on economically-valuable geological resources.25 Kerr consented to the request in 1866, and soon after succeeded in removing several large sections of the Quanky specimen's skull and jawbones with the aid of the infamous paleontologist, Edward Drinker Cope.<sup>26</sup> Cope would thrust himself into the international spotlight through his participation in the "Bone Wars" saga, which took place from around 1877 to 1892. During this span, Cope and rival paleontologist Othniel Charles Marsh engaged in an ethically-dubious race to discover and name as many dinosaur species as possible. The contest captivated audiences at a time when interest in paleontology reached a fever pitch, however, the hostilities between Cope and Marsh ultimately soured public opinion on both men and paleontology in the United States. While several species identified during this period are still recognized as valid, some feel that the episode had a net negative impact as hastily curated collections, unsupported conclusions, and the use of explosives and sabotage eliminated opportunities for sound paleontological research.<sup>27</sup>

Before incurring the wrath of the academic world, Cope travelled to North Carolina in 1869, where he assisted Kerr with excavating, cleaning, and analyzing the Quankey fossils.28 He eventually concluded that the whale was a novel species, likely an extinct member of the Balaenidae family, comparing favorably to modern right whales (Eubalaena spp.) and bowhead whales (Balaena spp.).29 Kerr also brought Cope to the Fishing Creek skeleton, which would later be dubbed the "Old Bone Foot Log." The two men investigated what was left of the local landmark, describing it as being fully submerged and consisting of only three to four vertebrae segments left in situ.<sup>30</sup> Cope wrote that the skeleton's inundation meant that the vertebra could only be used as a crossing during the late summer months when water levels were at their lowest. At the time of his visit, Cope distinguished the vertebra with the use of a feeling rod.31 He posited that the entire whale, which once spanned a section of the creek around 50-feet wide, would have between 70-80feet long.32 Just as McLenahan had done, Kerr retrieved a piece of the skeleton (a lumbosacral vertebra) with the intention of bringing it back to Raleigh.33 Though Cope and Kerr did not attempt to excavate the skull, they estimated its length, 18-feet, based on the dimensions obtained from the Quanky specimen (Figure 2).34 Cope also made mention of an additional

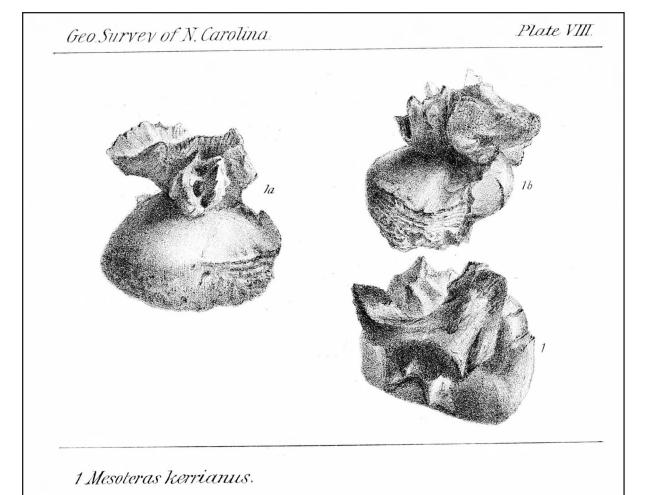


Figure 2. Edward D. Cope's sketches of Mesoteras kerrianus skeletal elements. (Image from Report of the Geological Survey of North Carolina, 1875, 465).

North Carolina Maritime History Council "vertebra of similar character," being recovered from Wayne County, N.C., and speculated that *M. kerrianus* "did not appear to be rare." <sup>35</sup>

According to a letter to his father detailing his travels through North Carolina, Cope completed the analysis of this new whale species in August 1869.<sup>36</sup> In typical Cope fashion, he presented his findings several months later to the American Philosophical Society.<sup>37</sup> He named the whale Mesoteras kerrianus in honor of Kerr and, in 1870, announced the discovery of this novel whale species in the American Naturalist.<sup>38</sup> In the same year, Kerr completed the statewide survey,<sup>39</sup> but was unable to secure the funding necessary for the publication of the survey results.40 Between 1870 to 1875, Kerr went on what appears to be a media tour of sorts, divulging certain aspects of the survey to various newspaper outlets<sup>41</sup> and issuing short survey reports, "on matters of special and immediate interest."42 Finally, in 1875 after striking a deal with the State Printer, the full 470-page report was published. Under a section describing the "Blue Marls of Wayne, Wilson and Nash," Kerr mentioned "the famous locality where the skeleton of a whale has long been known," and lamented the fact that "[m]ost of the skeleton had been carried off by curiosity hunters."43

## The 'Old Bone Foot Log' and the North Carolina State Museum

The lumbosacral vertebra taken from the Old Bone Foot Log, along with the skeletal elements from the Quankey Creek skeleton, were likely incorporated into Kerr's mineral cabinet, which featured other geological resources obtained during the survey. This collection was put on display at the North Carolina State Capital until 1879, when it was combined with an agricultural collection, by way of decree from the North Carolina General Assembly, thus creating the North Carolina State Museum. 44 As the collection grew, so did interest in providing a more formal museum setting. In 1881, the Department of Agriculture, which had been given authority over the museum, secured the title to the Eagle Hotel at the northwest corner of Edenton St. and Halifax St. in downtown Raleigh. Now serving as the Department of Agriculture's headquarters, the repurposed hotel doubled as the formal location of the State Museum. 43 According to a newspaper article from the 1897, the vertebra segment Kerr retrieved from Fishing Creek could be seen on display at the museum.45

Nearing the turn of the century, the museum's leadership, including curator Thomas C. Harris, recognized a need to streamline collections in hopes of dealing with issues of overcrowding. As a part of these efforts, Harris penned a letter

in March 1894 to the United States National Museum (Smithsonian) in Washington D.C., which he addressed to the museum's curatorin-charge, F. W. True. Harris offered True the opportunity to receive two boxes of whale fossils contingent upon the National Museum paying for the freight shipping.46 Harris explicitly stated that the fossils were "parts of the head and jaw," of a whale species known as M. kerrianus, which he believed was recovered from Quankey Creek.<sup>47</sup> Harris, however, expressed some uncertainty about whether the skull and jaw remains were from the same individual. The National Museum accepted Harris's proposed transfer,48 and the two boxes of whale fossils were delivered to Washington D.C. in April 1894 via the Seaboard Air-Line Railway System. 49 Twenty-four years later, then-director of the North Carolina State Museum, H. H. Brimley, wrote a letter of his own to True, again offering the National Museum the opportunity to further increase its fossilized whale collection.<sup>50</sup> Brimley acknowledge the 1894 transfer and announced that his museum was in possession of "a basal piece of one mandible and two or three vertebrae," that he believed belonged to M. kerrianus.<sup>51</sup> Brimley concluded his letter by stating that prior to his association with the State Museum, a "lack of care and cataloging," led to the identities of these and other fossils being lost. He felt that the "absence of any locality labels," resulted in the fossils being of little use to the State Museum.<sup>52</sup> It is unclear if True ever responded to this message, and if he had, it is equally ambiguous whether or not the National Museum accepted the transfer of these fossils.

#### Mythicizing of the 'Old Bone Foot Log'

Throughout the 1890s, the Fishing Creek skeleton continued to appear in multiple local interest articles that nostalgically described the fossilized whale.53 The newspaper journalists were consistent in their description of the bones as a "crossing" used by locals prior to the Civil War. At least one account<sup>54</sup> includes an interview with a "Mr. Hunter," who is believed to be a part of the same Hunter family described in the 1859 deed delineating the property boundaries of the skeleton's suspected location. These stories were often accompanied by descriptions of the work conducted by Cope and Kerr, as well as references to the Quanky Creek specimen. The Fishing Creek skeleton was even cited in the Department of Agriculture's North Carolina and its Resources (1896).55 Interestingly, in a 1900 article featured in The Asheville Daily Citizen, one can begin to see the mythicizing of the skeleton.56 The author inaccurately described the fossils as belonging to a "mammoth" and that, "years ago Indians used it in the summer to cross." The source of the latter is credited

to "tradition" and marks the first time anyone attempted to establish a connection between the skeleton and Native American history. The article also makes mention of a botched excavation by J. M. Mayo, who had become known as a war hero for his service as a major in the North Carolina Calvary during the Civil War. Prior to 1900, there are no primary sources indicating that Mayo ever attempted to dig up the whale's buried skull. Those that have excavated in the Fishing Creek basin, have found that removing whale fossils is often a precarious endeavor, "as the wet bones tend to fall to pieces on exposure to the air." <sup>57</sup>

With the onset of the 20th century, interest in North Carolina's paleoenvironment increased, as evidenced by multiple excavations of other, inland fossilized whales.58 Related to these efforts, Collier Cobb, former head of the UNC Geology Department, "exhibited a whale bone found on the north bank of Fishing Creek" during the 1922 Elisha Mitchell Scientific Society (EMSS) Meeting.<sup>59</sup> While it is doubtful that this bone originated from the Old Bone Foot Log, Cobb wrote in the meeting's proceedings that the vertebra of a fossilized whale, "was for many years used as a footlog for crossing the creek from near the home of Mr. Applewhite, in Halifax, to the Edgecombe side." 60 There is some uncertainty about whether Cobb is referring to the Old Bone Foot Log, given that the skeleton has always been referred to as lying between Halifax and Nash counties. The inclusion of Edgecombe County, however, is likely the result of Cobb misremembering the details of a local legend, as opposed to evidence of a second whale skeleton foot log. Similar to the 1900 article that misidentifies the skeleton as a mammoth,61 Cobb's error symbolizes the erosion of society's memory regarding the famed skeleton. At the 1934 EMSS Meeting, William F. Prouty, a colleague of Cobb at UNC, synthesized the current knowledge pertaining to North Carolina's fossilized whales. 62 Like Cobb who had highlighted the "many whales known in the Miocene deposits along Fishing Creek,"63 Prouty concluded that, "[t]he valley of Fishing Creek... is also known to be a good whale collecting grounds."64 Unfortunately, only the abstract from this presentation has been published, thus, it is unclear if Prouty included any information on the Old Bone Foot Log.

Within the broader scientific community at that time, numerous fossilized mammal catalogs<sup>65</sup> featured the *M. kerrianus* taxonomy, despite the sole basis for its identification coming from a man with a dubious reputation. Some, including F. W. True<sup>66</sup> of the Smithsonian, and Herluf Winge<sup>67</sup> of the University of Copenhagen, however, expressed doubts about the validity of the *Mesoteras* genus. Suspicions

notwithstanding, the acceptance of Cope's findings, combined with statewide intrigue in the phenomenon of finding whale remains far from the modern shoreline only further cemented the legendary status of the Fishing Creek skeleton. Nowhere is this more apparent than in comments made by Harry T. Davis, Brimley's successor at the State Museum. In a 1934 newspaper article, Davis is credited with being the first to describe the skeleton as the "Old Bone Foot Log" and dubbed it the, "most famous fossil whale in the state."68 In a subsequent article,69 Davis was portrayed as "rueful" when discussing the museum's inability to obtain and retain the famous whale remains. Based on this information, it is likely that the State Museum had either given away or discarded the fossils mentioned by Brimley in his 1908 letter to the National Museum.<sup>70</sup> The use of the Old Bone Foot Log moniker continued, including in a 1938 bulletin published by the North Carolina Department of Public Instruction.71 In a section titled "Fossil Whales in North Carolina," the publication confirmed that the museum was no longer in possession of any fossils associated with the Old Bone Foot Log, nor was the skeleton still embedded across the creek.<sup>72</sup> Instead, Davis was quoted as saying that, "in time the 'foot log' gave way and the vertebrae were dispersed down the creek."73 This line was reprinted by the Rocky Mount Telegram in 1954, alongside another Davis quote, in which he estimated the whale to be around 25 million years-old.74 More recent geological work suggests the deposit (Yorktown Formation) from which the whale likely came from dates to 3.0-4.0 million years-old<sup>75</sup>.

On 30 August 1942, as the United States involvement in World War II intensified, Ruth Smith Williams, a reporter for the Raleigh News and Observer, authored a fantastic account of, "The Whale of Nash and Halifax." Though details about the Old Bone Foot Log have been misconstrued before, as Cobb likely did in 1923,77 Williams' tale included far more than a slight geographical error. The newswoman began her narrative with stories about how hunting dogs, as well as plantation workers (a euphemism for enslaved laborers) and their descendants refused to cross the skeleton. The author also referenced the supposed sounds and strange occurrences in the waters near the Old Bone Foot Log prior to storms, "as if some gigantic creature [was] engaged in immortal combat."78 Williams based most of her narrative off an interview with T. T. Thorne Jr., a state senator from Nash County, whose father had served as a lieutenant under J. M. Mayo during the Civil War. After the war, the elder Thorne became Mayo's business partner, jointly owning various parcels of land in the Nash County area.79

Beyond the unverified myths, Williams' full spread article included recognizable inconsistencies, such as a colorful description of boys fishing from and diving off the Old Bone Foot Log in the late 19th century, at a time when the skeleton would have been largely inundated.80 Additionally, Williams cites Thorne Jr.'s account of his father and Mayo supposedly excavating the Old Bone Foot Log with the aid of the State Museum's director during the 1880s (there are no museum records indicating this occurred). Thorne Jr. had assured the newspaper columnist that he could have collected, "a cart full" of vertebra during that period, despite multiple sources that attest to the fact that only a few vertebrae were left in situ by 1875. Perhaps even more telling, Thorne Jr. believed that over 20 feet of the vertebra and various cranial elements were transported to Raleigh and then transferred to the Smithsonian following the supposed excavation. Of course, any whale fossils in the National Museum's collections from the Nash-Halifax area were likely attributable to the Quankey specimen. Furthermore, Thorne Jr. is quoted as describing the burial matrix as "red clay," although it has been consistently labeled as "blue marl" in earlier publications. When considering Thorne Jr.'s age (75; born in 1867) at the time of printing, it is probable that the state senator either conflated the stories of the Quankey specimen and Old Bone Foot Log, or simply, exaggerated the details of a boyhood memory. From the writer's perspective, the local interest piece may have been crafted in hopes of alleviating anxieties related to the on-going war, including the beginning of the infamous Guadalcanal Campaign. Williams concluded the piece by stating that, "[i]n many farm homes joints of the vertebrae, sepulchral white with age, are still being used as doorstops, or footstools, or seats."81 Regardless of the author's motive or Thorne's embellishments, it is clear that the Old Bone Foot Log had reached legend status at this

#### The Old Bone Foot Log Today

Despite issues with its historical authenticity, the *Rocky Mount Telegram* republished Williams' article nearly verbatim in 1966.<sup>82</sup> A year later, a contributor for *The State Magazine*, who claimed to be the stepdaughter of T. T. Thorne Jr.'s childhood friend, mentioned the Old Bone Foot Log by name in a piece titled, "The Bridge that Was a Whale."<sup>83</sup> These appear to be the last publications regarding the once famed skeleton, which brings this story to the current day. Dr. Christian Kammerer, Research Curator of Paleontology at the North Carolina Museum of Natural Sciences, revealed that none of the museum's fossilized whale specimens

are associated with either Kerr or Fishing Creek.84 In fact, the earliest whale fossil in the museum's collections dates to 1932, well after the investigations of the Old Bone Foot Log. Dave Bohaska, a collections specialist within the Smithsonian's vertebrate paleontology department, confirmed the existence of several large blocks of whale fossil ascribed to the holotype M. kerrianus.85 According to the Smithsonian accession record, 86 these remains were transferred from Raleigh to Washington D.C., and list W. C. Kerr as the collector and Halifax County as the place of origin. Mr. Bohaska stated that the bones were severely degraded and questioned how anyone, including Cope, could have made any meaningful identification based on these fossils alone. While it is faintly possible that the fossils represent the Old Bone Foot Log, it is more probable that they are from the Quankey specimen, as described in Harris' letter to True. Finally, Dr. Mark Uhen, an associate professor of geology at George Mason University, was unable to locate any M. kerrianus outside of those within the Smithsonian's collection.87 Dr. Uhen was conducting research on the genus Mesoteras, as a part of his contribution to the Evolution of Tertiary Mammals of North America.88 Like True and Winge, he concluded that the species is likely "nomen dubium," a title given to taxonomic identifications that are doubtful or impossible to corroborate. This is often the case when speciation is based off only a single specimen, or in the case of M. kerrianus, two specimens. On a more local level, calls to both the Rural Nash Historical Society and Friends of Historic Halifax failed in uncovering additional information about the Old Bone Foot Log. It appears that the local memory of the skeleton's history has all but deteriorated, resulting in this truly unique story fading from the public consciousness.

The author recently discovered that one can drive up U.S. Route 301 from Rocky Mount to the town of Whitakers. North of the town center, Fishing Creek still serves as the border between Nash and Halifax counties. Near a distinctive bend in this Tar River tributary stands a sign reading, "Whitakers BBQ Club: Members & Guest Only. Est. 1919." Entering the creek from this location on a day where the water level has receded, one only needs to walk fifteen minutes or so westward before arriving at an unmistakable bed of blue marl (Figure 3). Laced with millions of ancient shells, the area's paleoenvironment past is immediately apparent. Thus far, it is impossible to definitively say if this is the exact location described by Kerr, Cope, and others in accounts of the Old Bone Foot Log. It is, however, tempting to imagine the backbone of a colossal sea mammal spanning this section of the creek. While the search for

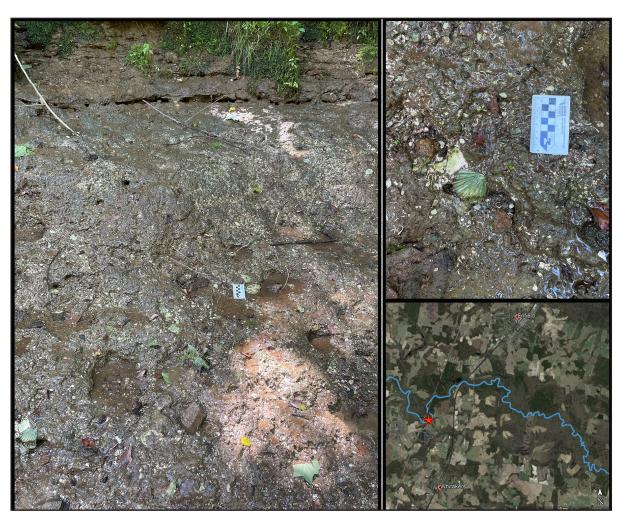


Figure 3. Blue marl bed found along Fishing Creek near Whitakers, N.C., with Google Earth imagery indicating location (Image by the author).

physical proof of its existence continues, the story of the Old Bone Foot Log remains at the nexus of history and geology, connecting, among other things, the Pliocene Epoch, Civil War, and modern day in one of North Carolina's most unusual maritime histories.

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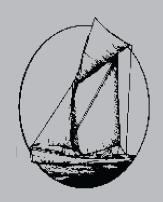
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## "A Commanding Position for Communication":

Competition for Wireless Stations on the North Carolina Coast, 1901-1919

by Thomas C. Jepsen

#### **Abstract**

One of the most transformative technical innovations to appear at the end of the nineteenth century was "wireless telegraphy" – the ability to use radio waves to send Morse code messages through the air without the use of wires. This technology not only eliminated the need for telegraph poles and wires and their costly maintenance, but also enabled near-instantaneous ship-to-shore communication for the first time. Adoption of this new communications medium resulted in competition among government departments and private companies for domination of this emerging field—much of which played out in North Carolina.

#### Introduction

At the beginning of the twentieth century, North Carolina's coast became the scene of intense competition for dominance in the newly emerging field of wireless telegraphy. As with many of today's leading-edge technologies, this competition involved multiple actors with differing motivations, and took place at the intersection of multiple forces, including technology, economics, national security, and geopolitics.

The intent of this article is to trace the evolution of this quest for dominance through distinct stages and create context for the various wireless deployments on the North Carolina coastline. In the early experimental phase, entrepreneurs, having demonstrated success in ship-to-shore communication, attempted to use wireless telegraphy for weather reporting in the harsh

and unforgiving environment of coastal North Carolina. While the attempt to use wireless telegraphy for weather reporting failed, the ability of wireless telegraphy to provide shipto-shore communication and emergency aid to ships in distress led to a second phase of competition among private companies on the North Carolina coast for dominance of the emerging commercial wireless market.

However, at the same time, interference resulting from multiple unregulated transmitters led to intervention by the United States government to create a regulatory environment and sort out priorities among governmental actors. The U.S. Navy, which was in the process of expanding its global reach and dominance of the open seas in the aftermath of the Spanish-American War, understood the significance of wireless telegraphy in the command and control of its fleet, and was given a predominant role in wireless development and deployment. This included the construction of several stations on the North Carolina coast.

With the entry of the United States in the first World War in 1917, national security concerns led to a third phase of government takeover and control of the commercial wireless industry, and expansion of naval wireless operations on the North Carolina coast. While the Navy's success in managing wireless operations during the war led some to call for a government monopoly on wireless communication, changes in the economic and political landscape at the end of the war led instead to a fourth phase – development of commercial radio broadcasting by private industry.

Beginning of Wireless Telegraphy, 1897-1900

The British-Italian experimenter Guglielmo Marconi successfully demonstrated ship-toshore wireless telegraphy for the British Royal Navy in the summer of 1899 and used the technology to cover the America's Cup yacht races for the New York Herald in October of the same year. This gained Marconi the attention of the U.S. Navy, which was in the process of modernizing its fleet in the aftermath of its victory in the Spanish-American War. The Navy's Bureau of Equipment asked Marconi to install his wireless equipment on two warships, and a land station to determine the distance at which signals could be exchanged. While it was established that signals could be exchanged between the ships and the land station at the Navesink Light Station in New Jersey, over a distance of at least thirty-six miles, the Bureau of Equipment rejected Marconi's offer to lease twenty sets to the Navy at \$20,000 per set. Nevertheless, Marconi, encouraged by the results of the testing, formed the Marconi Wireless Telegraph Company of America (commonly referred to as "American Marconi") in November 1899 to begin marketing wireless equipment in the United States.1

Weather Bureau Interest: Interest in Fessenden's System, 1901-1902

The Weather Bureau, a component of the U.S. Department of Agriculture, also developed an interest in adopting wireless telegraphy around 1900. The Weather Bureau maintained an extensive network of telegraph lines and stations around the U.S., including a line that ran along the Outer Banks of North Carolina, connecting weather stations at Kitty Hawk and Hatteras. These lines, located in remote parts of the country were difficult and costly to maintain; in his 1899-1900 report, Weather Bureau Chief Willis Moore noted that he had been authorized to investigate the use of wireless telegraphy to replace the landline telegraph system.<sup>2</sup>

Moore enlisted the aid of a Canadian-American inventor, Reginald Aubrey Fessenden, a competitor of Marconi's, to develop a system of wireless telegraphy to replace the Bureau's land lines, and, potentially, to receive weather reports from ships at sea. Fessenden set up an experimental station in Manteo, N.C., in January 1901, and attempted to establish reliable communications with a second station in Hatteras (Figure 2), a distance of approximately 50 miles. After a year of unsuccessful trials, and a falling-out with Moore over patent rights, Fessenden abandoned the project in 1902 and left North Carolina.<sup>3</sup>

Competition Within Government for Control of Wireless, 1904

The Navy continued evaluating wireless equipment for use on its ships after rejecting Marconi's lease offer. Almost from its beginning, the Marconi Wireless Telegraph Company of America tried to take control of the emerging market for wireless equipment in the U.S. by demanding that customers lease rather than buy its equipment, and ordering stations using its equipment to refuse to receive messages sent by stations using non-Marconi equipment. Many in the U.S. government began to suspect that the tactics of the American Marconi Company, which was largely financed by the British Marconi Company, were part of a scheme by the British to monopolize the worldwide wireless market. In order to avoid doing business with American Marconi, the U.S. Navy purchased 45 Slaby-Arco wireless sets from Germany and installed them on Navy ships in 1903.4

Competition began to arise among several departments of the federal government for authority over the development of wireless telegraphy. In addition to the Navy's efforts to develop ship-to shore communication, and the Weather Bureau's attempts to use wireless for weather reporting, the Army Signal Corps was experimenting with the use

## Marconi Wireless Telegraph Company of America



## World Wide Wireless Spanning the Atlantic and Pacific

Public message service is now in successful operation

AT GREATLY REDUCED RATES BETWEEN

AMERICA, GREAT BRITAIN

AMERICA, GREAT BRITAIN JAPAN, HAWAII, ALASKA

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Builders of every type of Wireless Apparatus Works at Aldene, New Jersey

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John W. Griggs, President
Edward J. Nally, Vice-President & General Manager
George S. DeSousa, Traffic Manager

WOOLWORTH BUILDING, NEW YORK

Figure 1. Advertisement for the Marconi Wireless Telegraph Company of America (Image from The Year-book of Wireless Telegraphy & Telephony, 1917, vi.).

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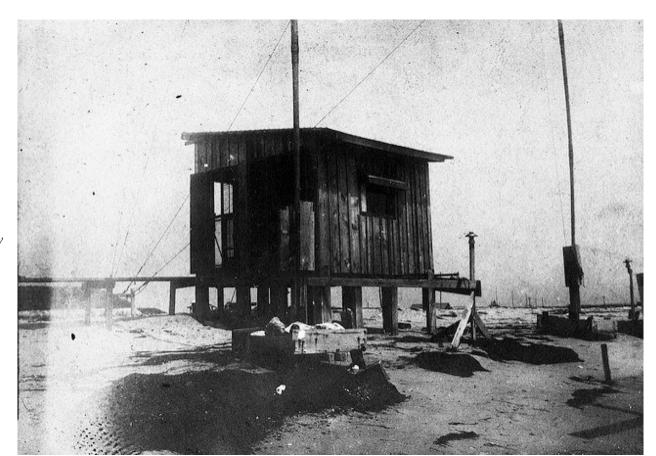


Figure 2. Fessenden Experimental Wireless Station, Hatteras, 1901-2 (Courtesy of the State Archives of North Carolina).

of wireless to communicate among remote army bases. The result was that many of these unregulated experimental stations interfered with each other's transmissions, making accurate reception impossible. In spring 1904, Admiral George Dewey, hero of the Battle of Manila in the Spanish-American War, wrote a memorandum to the Secretary of the Navy stating that interference was the, "principal defect of wireless telegraphy," and requesting President Theodore Roosevelt to issue an executive order controlling the use of wireless by government departments. Roosevelt responded by creating the "Interdepartmental Board of Wireless Telegraphy" on June 24, 1904, to settle disputes and assign responsibility for wireless deployment, and appointing representatives of all the affected parties.<sup>5</sup>

The President approved the board's findings on July 29, 1904. The Navy emerged as the dominant player in the wireless field; the board found that, "wireless telegraphy is of paramount interest through the Navy Department," and authorized the Navy to, "equip and install a complete coastwise wireless telegraph system covering the entire coasts of the United States." The board also found that, "coastwise wireless telegraphy is not a necessity for the work of the Weather Bureau," thus ending the Bureau's attempt to enter the field.<sup>6</sup>

The government's interest in giving control of wireless development to the Navy was strategic;

if the range of the technology could be extended over thousands of miles, movements of the entire U.S. fleet could be commanded and controlled from a central location. Already other nations, including Great Britain and Germany, had begun to develop shipboard wireless systems for their fleets.

North Carolina played a prominent role in the Navy's plans for wireless deployment, due to the amount of ship traffic off its coast and its proximity to the Norfolk Navy Yard in Norfolk, Virginia. Navy wireless station NAN began operation on Piver's Island, near Beaufort, North Carolina, in 1904. The Navy also deployed wireless equipment on the Diamond Shoals lightship (Figure 8) off the North Carolina coast; wireless station NLB on the lightship would receive storm warnings from the Norfolk Navy Yard and transmit weather reports back to the Navy yard.<sup>7</sup>

The Navy wireless station at Beaufort attracted some media attention from the Plymouth, North Carolina *Roanoke Beacon* newspaper when the station received an "SOS" message on August 11, 1909, from the SS *Arapahoe*, which had become disabled near Diamond Shoals (Figure 3). This was the first recorded reception in the U.S. of "SOS" as an international distress signal (previously, ships in distress used the call "CQD").8 The station again made the pages of the *Roanoke Beacon* on September 24 of the same year when it received a distress message

Tributaries Fall 2022



Figure 3. SS Arapahoe
– First use of SOS,
1909 (Courtesy of the
Library of Congress).

from the steamer *Carib*, bound from New York to Wilmington with cargo and passengers on board, which had become disabled near Cape Hatteras. The station's role in aiding ships at sea emphasized the value of the wireless technology in not only directing naval operations, but also directing rescue on the high seas.<sup>9</sup>

## United Wireless Telegraph Company, 1906 -1912

The American Marconi company began to acquire competition in the commercial wireless business, including Reginald Fessenden's National Electric Signaling Company and Lee De Forest's American De Forest Wireless Telegraph Company, in the first decade of the twentieth century. Most early wireless telegraph companies operated at a loss, as they were unable to match the prices of the landlinebased telegraph companies like Western Union for point-to-point message delivery. However, providing ship-to-shore communications for commercial freight and passenger ships promised to be a lucrative business, and this caused intense competition to equip ships with wireless equipment.

In 1906, a stock promoter named Abraham White acquired the assets of the American De

Forest Company and renamed it the United Wireless Telegraph Company. The company embarked on a program of rapid expansion, building stations along the Gulf and Atlantic coasts, and along the shores of the Great Lakes. To compete with the Marconi company and its expensive and proprietary shipboard equipment leases, United Wireless rented wireless sets to seagoing vessels at little or no cost. By 1910, the company boasted 88 land-based stations in the U.S. plus 9 in Alaska, and 262 shipboard wireless installations.<sup>10</sup>

The first commercial wireless station in North Carolina was set up by the American De Forest Company at or near Reginald Fessenden's abandoned experimental wireless station at Hatteras, sometime before 1906; it was acquired by United Wireless when that company acquired the assets of the De Forest Company (Figure 5). At first the station used the Weather Bureau's telegraph wires to communicate with the station at Norfolk; later a second wireless station was set up in Elizabeth City, N.C., to relay messages to Norfolk.<sup>11</sup>

In 1909, however, the United Wireless company embarked on a dubious plan to inflate stock sales by building vast numbers of inland stations, most of which operated at a loss. Some were not

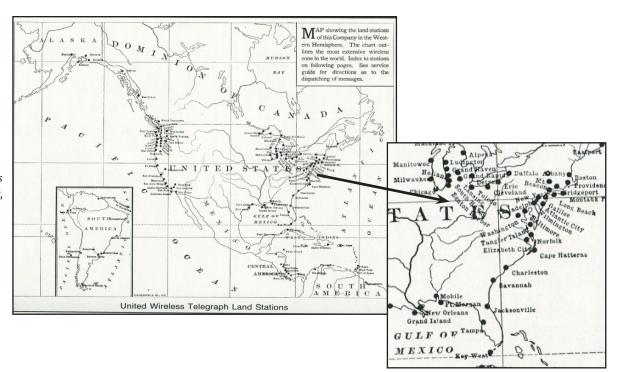


Figure 4. United Wireless Telegraph Stations, ca. 1909 (Image from Mayes, Wireless Communications in the United States, 1989. 64).

even intended to be functional; a station built in Atlanta was not in the range of communication with any other station. The Roanoke Beacon for June 18, 1909, reported that, "The eastern operating department of that company... has announced the placing of an order for 250 complete sets of wireless instruments all of which it is said will be installed at stations to be established during 1909 in cities east of the Mississippi River..."12

The grandiose plans of the United Wireless Telegraph Company for North Carolina included stations at Wilmington, New Bern,

Figure 5. De Forest Wireless Station, Hatteras, ca. 1905. (Image from *Impressions of Hatteras,* Wireless Age, 1914, 621).

**Tributaries** 

Fall 2022

Raleigh, Greensboro, Charlotte, Asheville, Henderson, and Winston-Salem. However, none of the proposed inland stations were ever built. The New York headquarters of the company were raided by U.S. Postal inspectors in June 1910, and the company's president and other officials were arrested for stock fraud.13

#### Marconi Takes Over Assets of United Wireless, 1912

The officers of the United Wireless Company were convicted of use of the mails to defraud stockholders in May 1911, and later that year the company was declared bankrupt. The final blow came in March 1912, when the Marconi Company filed suit against United Wireless for patent infringement. As part of the settlement in July 1912, American Marconi acquired the assets of United Wireless, comprising approximately 500 shipboard wireless sets and 70 land stations, including station HA in Hatteras, N.C. (Figure 6).14

After the Interdepartmental Board on Wireless Telegraphy gave control of coastwise wireless telegraphy to the Navy Department in 1904, the Weather Bureau had begun negotiations with American Marconi to use their wireless stations to receive weather reports from commercial vessels at sea and send storm warnings to them. This led to close cooperation between Weather Bureau stations on the coast and nearby Marconi wireless stations. The Weather Bureau station in Hatteras worked closely with the Hatteras Marconi station (located in Buxton, N.C.), receiving weather reports from seagoing vessels and sending storm warnings to them.<sup>15</sup>

19

The May 1914 issue of Wireless Age contained an





The first wireless station was constructed under great difficulties; it was often necessary to wait two weeks for material and tests had to be made piecemeal

Figure 6. Marconi Wireless Station HA, Hatteras, 1914 (Image from Impressions of Hatteras, Wireless Age, 620, 622).

article titled, "Impressions of Hatteras," which vividly described not only the operation of the Marconi wireless station, but also the lifestyle of the Outer Banks residents and the windswept terrain. Regarding the operation of the wireless station, the article noted that,

The Marconi station at Hatteras is of immense value to shipping as it occupies a commanding position for communication with coastwise vessels and can immediately report distress calls to all vessels in the vicinity as well as to the various life-saving stations on the island. In touch with practically every vessel making southern ports, Hatteras handles a considerable amount of wireless traffic each month. The station also sends press to passing vessels and keeps commanders posted on weather conditions. Comfortable living quarters are provided for the operating staff in a separate house containing three bedrooms and a generously proportioned living room.16

Marconi wireless telegrams found in the walls of the Hatteras Weather Station during its restoration in 2001-2007 provide a sampling of the messages sent and received by the wireless station (Figure 7). They included notices of ship arrivals and freight shipments, reports of fishing activities, and personal messages, as well as weather reports. A news item in the December 30, 1915, issue of the *Washington*, *N.C. Daily News* described what may be the first use of wireless for "Telemedicine," when a shipboard doctor on a vessel several hundred miles at sea

sent an urgent message to the Hatteras Marconi station requesting medical assistance in the case of a sick infant onboard the ship. A Dr. Sutton, then resident at Hatteras, was able to provide the necessary medical information via return message, and the infant's life was saved.<sup>17</sup>

World War I and Government seizure of wireless stations, 1917

Following declarations of war in Europe, President Wilson, on August 5, 1914, ordered all wireless stations to maintain strict neutrality and forbade transmission of messages of a "non-neutral" nature. The Navy was given responsibility for enforcing censorship. While most wireless companies voluntarily complied with the neutrality order, the Marconi Company resisted the order and unsuccessfully sought to have an injunction issued against the Secretary of the Navy. As part of war preparedness planning, the Navy created the Naval Communications Service and established a system of naval districts on July 28, 1916. The Beaufort station and the Diamond Shoals lightship became part of the 5th District of the Atlantic Division. 18

On April 7, 1917, after the U.S. declaration of war, fifty-three privately-owned wireless stations were taken over by the government and placed under control of the Navy. Twenty-eight of the stations were closed, including the Marconi station at Hatteras, having been deemed unnecessary for wartime radio operations. <sup>19</sup> The Navy continued to build new stations during the war, constructing "radio compass" stations (i.e. stations equipped with a receiver and directional antenna used to determine the direction of a radio signal) at Cape Hatteras and Cape Lookout, and an additional wireless station at Wilmington. <sup>20</sup>

Figure 7. Marconi Telegrams found in the walls of the Hatteras Weather Station. (Courtesy of the National Park Service, Cape Hatteras National Seashore).

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The Diamond Shoals lightship suffered an attack by a German U-boat on August 6, 1918. The U-boat *U-140* had spotted and torpedoed the merchant ship Merak within sight of the lightship, whereupon the lightship used its wireless to broadcast a warning message to all ships in the vicinity: "Enemy submarine shelling unknown ship E.N.E. ¼ mile off lightship." However, the U-boat, being also equipped with wireless equipment, heard the message as well and turned its guns toward the lightship. After the first shot destroyed the lightship's wireless antenna, the crew abandoned ship, and made it to shore safely. As they watched, the U-boat proceeded to demolish the lightship with gunfire. It would be six months before a replacement lightship could be put in place at Diamond Shoals.21

Post War Competition for Control of Commercial Wireless

With the signing of the armistice on November 11, 1918, debates arose within the U.S. government and the private wireless companies about the disposition of the wireless stations that had been taken over by the Navy Department. Under the leadership of Secretary of the Navy Josephus Daniels, the Navy argued that its efficient management of the wireless stations taken over during the war pointed to the need for a government monopoly over the commercial wireless business: "The Navy occupies a strong position in the commercial

radio field on account of efficient service rendered, and I think presages the way for making this service entirely governmental."<sup>22</sup>

Having paid the American Marconi Company \$798,500 for the stations taken over during the war on November 1, 1918, the Navy was reluctant to return the stations to private ownership, reviving its earlier allegations that the Marconi company was controlled by British interests as part of their strategy to maintain a monopoly on international wireless communication. 23 The Navy's position was vigorously opposed by the Marconi company, which, together with members of the National Wireless Association, lobbied Congress to reject the Navy's proposal. The case for a return to private ownership was strengthened when the 1918 midterm elections gave the Republicans a majority in both the House and Senate. A compromise was proposed, in which commercial wireless stations would be returned to private ownership once the assets of the American Marconi Company were transferred to an exclusively American-owned and operated company under government regulation. This resulted in the purchase of American Marconi's assets by the General Electric Company on November 20, 1919, and the re-naming of the company to the "Radio Corporation of America," or RCA, reflecting not only its American ownership, but also replacing "wireless" with "radio," new terminology that had come into widespread usage during the war.24

The Marconi wireless station HA at Hatteras was never returned to private ownership as a commercial station after World War I but continued to operate as a low-powered transmitter/receiver station and direction finder for the U.S. Navy until the mid-1920s.<sup>25</sup> Navy station NAN at Piver's Island came to a dramatic ending on Friday, April 16, 1920, when the station was destroyed by a fire of unknown origin. Residents of nearby Beaufort, N.C., witnessed the conflagration from the waterfront. According to a report which appeared in The *Beaufort News* for Thursday, April 22, 1920,

A number of cases of revolver and rifle cartridges were stored in the building and when these caught on fire they made a racket almost equal to the battle of Chateau Thierry. A large crowd of citizens had collected at the foot of Front Street to witness the conflagration but when the cartridges began to explode their anxiety to get over to the island was considerably cooled. Thousands of the bullets

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Figure 8. Diamond Shoals Lightship attacked by German U-boat, August 6, 1918 (Public domain).

whistled through the air but by good luck none of them found a human target.<sup>26</sup>

The station was relocated to the Naval air station at Camp Glenn near Morehead City, and remained in operation until the mid-1920s, when the Navy returned Camp Glenn to the state of North Carolina.<sup>27</sup>

#### Conclusions

As noted by Wireless Age in 1914, the North Carolina coast held a "commanding position" for the development of wireless telegraphy in the early years of the twentieth century, as the Weather Bureau, the U.S. Navy, and several private companies competed for a presence on the coast. For the Weather Bureau, establishing a wireless station would offer faster reports of weather conditions and the ability to send storm warnings to ships at sea; for the Navy, better command and control capabilities for its rapidly expanding fleet in the south Atlantic and Caribbean; and for private companies, an opportunity to provide communications for commercial vessels at sea.

This competition for presence on the coast played out in the larger context of the federal government's attempts to regulate and control the emerging new technology. In the absence of licensing regulations and frequency allocations, stations interfered with one another and disrupted communications. Giving the Navy a dominant position in control of wireless in 1904

eliminated some of the interference problems, but also led to attempts by the Navy to create a government monopoly in the emerging field of radio at the end of World War I.<sup>28</sup>

The Navy's desire to dominate the wireless business and its reluctance to return control to private companies, especially American Marconi, played out in the larger geopolitical context of attempting to limit British influence in global communications. While the Navy was eventually forced to relinquish the development of the commercial radio business to private industry, it was able to use its influence to require the transfer of American Marconi's assets to American ownership.

However, the competition for stations on the coast was short-lived, due to improvements in radio technology. The high-powered radio stations built by the Navy in Arlington, Virginia, and RCA on Long Island in the 1920s could broadcast to a larger area, eliminating the need for the low-powered regional stations at Beaufort and Cape Hatteras. With the acquisition of American Marconi by RCA in 1919, the company's focus turned from wireless telegraphy to commercial broadcast of voice and music, and the manufacture of radio sets for home use. North Carolinians who purchased radio sets from RCA could tune in to broadcasts from WBT in Charlotte, the state's first commercial radio station, in April 1922.

During the brief period of their existence, the coastal North Carolina wireless stations played

a significant role in the development of wireless communications, enabling the rescue of ships at sea, participating in the wartime effort in World War I, and providing ship-to-shore communications for seagoing vessels for the first time. Today, thanks to the rapid development of telecommunications technology, "wireless" has taken on a totally different meaning, and a larger role, in our everyday lives.

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- 10. Mayes, Wireless Communications in the United States, 1, 64-5.
- 11. "Impressions of Hatteras," Wireless Age (May 1914),

- 623; History San Jose photo, <a href="https://historysanjose.pastperfectonline.com/photo/CE58DFC8-BFC8-4881-A83B-581558482465">https://historysanjose.pastperfectonline.com/photo/CE58DFC8-BFC8-4881-A83B-581558482465</a>. The wireless station at Elizabeth City was closed down sometime between 1909 and 1912 when more powerful equipment at Hatteras made direct communication with Norfolk possible.

  12. "Wilmington Wireless Station," *Roanoke Beacon*,
- June 18, 1909. 13. Mayes, Wireless Communications in the United States, 66-7.
- 14. Ibid., 66-69.
- 15. Moore, *Report of the Chief of the Weather Bureau* 1904-1905 (Washington, D.C.: Weather Bureau 1904), xix. Many Marconi Wireless Company telegrams were found in the walls of the Hatteras Weather Station when it was restored beginning in 2001. Along with these a log entry was found which purported to be a record of the distress message sent by the RMS *Titanic* when it sank on April 15, 1912.
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- 24. Ibid., 313-318.
- 25. Ibid., Appendix L, U.S. Naval Radio Stations, 1921-1925, 587.
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- 28. While outside the scope of this paper, the desire for effective regulation of radio led to the Wireless Ship Act of 1910 and the Radio Act of1912, which mandated the use of shipboard wireless, and in turn led to the establishment of the Federal Radio Commission in 1927 to regulate broadcast radio, and the creation of the Federal Communications Commission in 1934 to regulate all forms of electronic communication.

## Lost and Found at Rodanthe:

Insights from Stranding Events in Pamlico Sound (1886-1910)

by Nathan Richards and Adam Parker

#### Abstract

In 2014, the authors collated a maritime historical and archaeological inventory pertaining to a section of Pamlico Sound near Rodanthe (Dare County, North Carolina). The authors collected a broad range of historical and archival material to document a broad scale of pertinent sociocultural variables and human activities. Following preliminary investigations, a multistage archaeological survey documented a part of Pamlico Sound near Rodanthe. Over the course of the survey, extant cultural material was scarce; however, the historical record highlighted the region's numerous wrecking and stranding events between 1821 and 1968. Globally, maritime archaeology has focused on using total losses (shipwrecks) as points of analysis. This paper instead focuses on the biographies of stranded and recovered watercraft from between 1886 and 1910 (a concentrated period of well-documented maritime incidents in the area) and explores the relationship between maritime incidents (the loss and recovery of watercraft) and the maritime histories of secondary maritime centers along the North Carolina coast.

#### Introduction

In 2014, the authors were engaged in a multidisciplinary project focused on the potential use of dredged sediment in Pamlico Sound, North Carolina. The project included mapping the "ecological, geological, physical and maritime heritage attributes of the area inland of the Rodanthe Channel." As a component of the report, researchers would assess the area for potential cultural resources and marine debris lying in an area adjacent to the Rodanthe Emergency Channel (Figure 1) and create a submerged cultural resources inventory.<sup>2</sup> The 2014 study area sits in a section of Pamlico Sound at the northern extent of Hatteras Island, next to the village of Rodanthe, Dare County, N.C. It is the northernmost village of several settlements in the area including Waves, Salvo, Avon, and Buxton. Rodanthe, Salvo, and Avon were historically known by other names – Chicamacomico, Little Kinnakeet, and Big Kinnakeet, respectively, and were all associated with U.S. Life-Saving Stations.<sup>3</sup>

Rather than focus on shipwrecks as the sole potential underwater cultural classification in the project area, the authors chose to undertake a broad consideration of the many ways that humans may have left signatures of their activities in the landscape. Following initial historical research, the authors focused on four primary categories of landscape impact: the effects of dredging, commerce, conflict, and maritime accidents. This approach allowed the researchers to understand the broad range of activities as reported in local history before archaeological research occurred and allowed more ephemeral archaeological sites and isolated finds to be placed in their proper context.

By the conclusion of the study, the authors observed the history of marine incidents were particularly useful for fleshing out the pattern of trade and waterborne activities in the area between 1886 and 1910 (Figure 2). *Maritime incidents* are defined here as events where a vessel grounded or became stranded and later refloated or otherwise recovered. The biographies of watercraft wrecked and stranded in an area may tell the story of the maritime histories of minor coastal locations and highlight behavioral patterns not otherwise communicated in traditional narrative histories,



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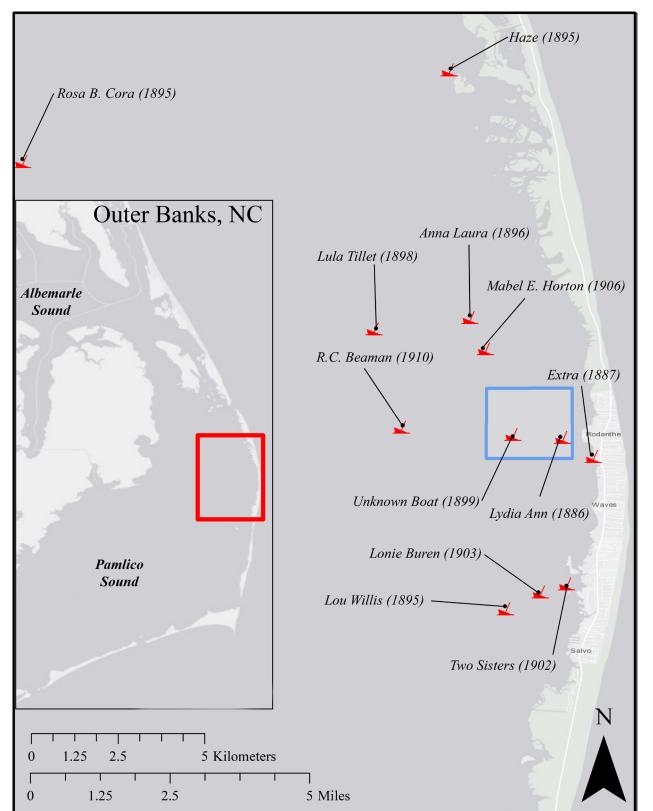


Figure 1. Overview of 2014 survey area (blue box) showing the estimated location of the twelve "maritime incidents" (1886-1910) adjacent to it. Noted locations represent the "epicenters" of circular buffer zones of a radius of 1-2 miles (Image by Nathan Richards).

or shipwreck-focused publications. These incident accounts tend to illuminate the lives of "everyday" maritime activities, focusing the stories on robust, long-lived watercraft involved in low-volume commercial activities or supply services, such as mail delivery, to an area. In this study period, 100 percent of the vessels lost and recovered represented the activities of local trade networks with vessel departing North Carolina locales for destinations in the state. Focusing attention on marine incidents through

time may be useful for conveying the details of maritime trade for minor coastal ports in North Carolina and elsewhere. As an example, the maritime history of the area around present-day Rodanthe, while connected with the earliest days of European exploration and settlement, is not feature prominently in written histories of the state.<sup>4</sup> Northern Hatteras Island does not feature in published histories of the state until the nineteenth century, and from a state-wide perspective is not an economically important

place until the twentieth century following the development of tourism in the region.<sup>5</sup>

However, this section of Hatteras Island did have a robust maritime trade within an ever-changing landscape of opening and closing inlets, and constant coastal reconfiguration stretching back to the mid-seventeenth century. Each opening or closing would have dramatically transformed the lives of the people in the area by having effects on local transportation, altered the nature of local and regional trade, and influenced the rate of development. Adverse weather has played a role as well, as hurricanes and nor easters have had a long history of significant social and economic impacts on the people of northern Hatteras Island, some of which is potentially decipherable within the archaeological record.

Other researchers have examined the marine incident event patterns of this region, but with slightly different temporal limits and geospatial boundaries. In 2012, Joshua Marano studied patterns of marine incidents within a ten mile buffer zone around the US Lifesaving Station at Nags Head and documented 133 wrecking events between 1876 and 1915, ultimately listing ten incidents occurring on the sound-side of Rodanthe.<sup>8</sup> In 2021, Allyson Ropp examined ship wrecking trends east of Rodanthe focused on the areas adjacent to ocean-side Wimble Shoals and including 204 reported losses over the period 1730-1979 (suspected total losses only, not including stranding events).<sup>9</sup>

The work done by Marano, Ropp, and this article differ only in the degree to which they emphasize certain human behaviors (i.e., risk-taking behavior) or historical trends (i.e., wrecking trends) or the role of environmental factors in causing wrecking and stranding incidents. While most of Hatteras Island today may appear to be a natural landscape, this is far from the case. The island represents a landscape significantly altered by human agency.<sup>10</sup> Moreover, comparing data from this sound-focused study and Ropp's ocean-oriented research highlights how maritime trade in Pamlico Sound was radically different than that passing by in the Atlantic Ocean, particularly because portions of the sound that border Hatteras Island are notoriously shallow. In some ways we may see the previous research of Marano and Ropp as demonstrating North Carolina's role as an important portion of the maritime trade along the eastern seaboard of the United States, whereas the current sound-side dataset illuminates temporally, and geographically distinct local and soundside trade dominated by the challenges of navigating tides within famously shallow waters. Emblematic of the importance of the area's shallowness is the following reminiscence by

Henry Plummer dated to 2 December 1912:

Gunners returning to Stumpy Point from Hatteras told us that the gale of Thanksgiving day blew all the water out of the sound and left a big 60 ft. motor yacht high and dry off the beach. Then when wind hauled N.W. all the water blew back with such a rush that she was afloat in 40 minutes but lost her nice bower launch, anchor and 15 fathoms chain, but was able to get shelter under power herself.<sup>11</sup>

This quote stands for what is a repeating historical pattern. Ships continuously run aground in the waters along Hatteras Island's sound-side shoreline. While they may lose parts of their hull, cargo, or equipment, they tend to refloat - sometimes with and sometimes without human help. Vessel groundings within this area capture the nature of "everyday trade," and are perhaps more representative of maritime activities in the area than catastrophic wrecks. Maritime historians and archaeologists tend to focus on the histories of the "lost," and wrecks which may hold clues to various technological, economic, and social change in a region, and serve as a historical snapshot. This paper seeks to tell the story of the "lost and found" vessels within this portion of Pamlico Sound in consideration of whether researchers may gain a greater appreciation of maritime activities within coastal regions by expanding inquiries into events leaving fewer tangible clues regarding their groundings.

Marine Casualties near Rodanthe: An Inventory

Of the list of potential shipwrecks lost in Pamlico Sound, extant historical records over the period 1886 to 1910 mention twelve as having been involved in *incidents* within proximity to the study area. None represent *bona fide* shipwrecks where locations are definitive (i.e., where the hulls of the ship lie *in situ* in the present day); nevertheless, the incident locations can be estimated (Figures 1 and 2).

One caveat when examining Figures 1 and 2, is that the spatial locations depicted are approximations interpreted by the authors from reading reports written during a time before technology that provided precise position fixing was available. Due to this, the authors have shown caution in selecting candidates within 15 miles of the study area. Given the proximity of the Chicamacomico Life-Saving Station to the study area, this likely represents the potential wrecking events occurring next to the present-

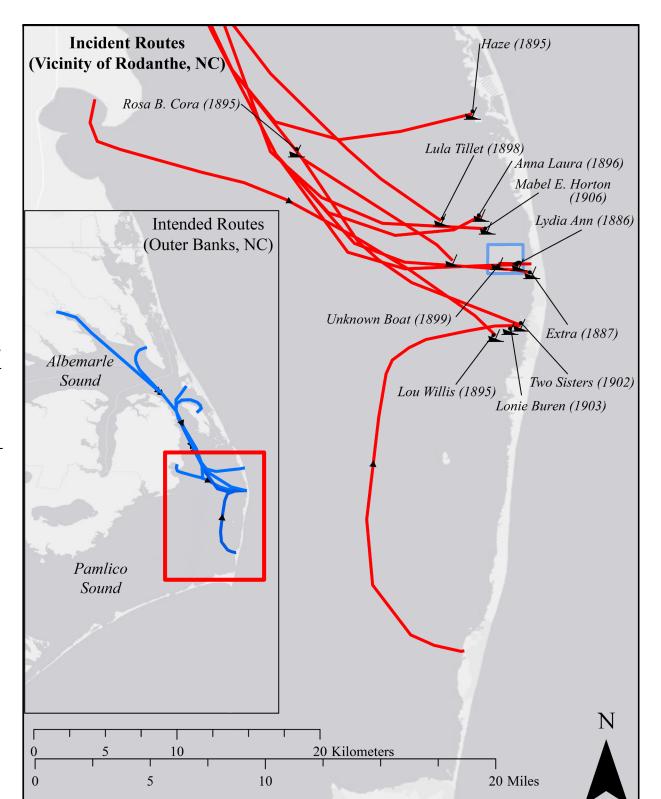


Figure 2. Incident routes (red lines) versus intended routes (blue lines) of vessels stranded within the vicinity of Rodanthe, 1886-1910, demonstrating hypothesized concentration of traffic during the period (Image by Nathan Richards).

day ferry channel over the period of the Life-Saving Station's operations (1874-1915) and as a Coast Guard station from 1915 to 1954. Additionally, oral histories tell of accidents and incidents in the post-1954 era (specifically the early 1960s), where four additional vessels grounded in the vicinity, one of which represents the only confirmed shipwreck within the project area, PAS0001 (the "Pappy's Lane Wreck" ex. suspected *Hunt Bros. No. 10*; see Figure 3).

The text below outlines the maritime incidents currently known to have occurred within the vicinity of the study area. Incident circumstances regarding historically documented *named vessels* over the period 1886 to 1910 are communicated. Of the twelve incidents, historical records supply definitive statements of their loss or their recovery. Regardless of the vessel's reported fate, the authors did more historical research to examine the potential historical significance of the ships interacting with the study area and



Figure 3. "View of Rodanthe, c. 1970s" showing the study location and the location of the one confirmed shipwreck in the area – a modern ship PAS0001 (the Pappy Lane Shipwreck) (Image 6MAP025, Robert Dolan Collection, Outer Banks History Center).

to decide if this fate changed. However, despite refloating and salvage operations, portions of the damaged hulls or material lost from cargos may still be present at the incident location and become part of the archaeological record.

An interesting corollary related to collating these wrecking events adjacent to the Chicamacomico Life-Saving Station is independent verification of an observation noted by Wright and Zoby regarding the proximal Pea Island station that,

Vigilant service and good fortune had helped keep ships off the shoals at Pea Island for the better part of the 1880s. With the new decade, Richard Etheridge and his crew suddenly found themselves confronted with disaster after disaster. The ten months between Christmas, 1895, and November 1896 were particularly nasty at Pea Island. Ships came ashore like never before, their hapless crews leaving their fate in the hands of lifesayers. 12

Four out of the twelve ships mentioned below are involved in incidents within this time. The biographies of these watercraft are listed below, chronologically by date of incident.

Lydia Ann (c.1875-unknown): 9 January 1886 incident

Archival sources outline the loss of the sloop *Lydia Ann* three-quarters of a mile west of the Chicamacomico Life-Saving Station on 31 December 1895. However, this appears to be an error, as life-saving station wreck reports show this incident happened off Bodie Island in the vicinity of Roanoke Island and that the vessel was saved, according to J. S. Etheridge's wreck report.<sup>13</sup> A full telling of *Lydia Ann*'s life, however, does illuminate trade in the area, as it had previously stranded near Rodanthe.

On 9 January 1896, the sloop *Lydia Ann*, under master and owner John Coumbs, rode high on shore due to a parted painter. It was en route from Currituck to Roanoke Island without cargo and foundered three and one-half miles northwest of the Bodie Island Station roughly half a mile from shore. Etheridge's report notes the vessel wrecked at Cow Island Flats during the night due to weather. S. L. Midgett discovered the vessel by 11:00 AM as a southwest gale was blowing. However, Captain Coumbs did not at once request for help by the station crew, thinking he would wait for high tide to refloat the sloop. Therefore, the station crew did not give aid instantly. After a few days of the tides not refloating the vessel, Captain Coumbs

left to retrieve lumber, and hoped in doing so to effect getting the sloop off the shore. On 13 January 1896, he requested help from the station crew, and they spent two days refloating *Lydia Ann*. Presumably, the sloop proceeded on its way, as it was reported to have been saved and undamaged.<sup>14</sup>

The 1897 edition of the *Annual Report of the U.S. Life-Saving Service* (USLSS) duplicates this information, noting that the vessel "parted line and stranded" three and a half miles northwest of the Bodie Island Station on 31 December 1895, that the vessel was worth \$100, and that it, along with its two passengers, were saved.<sup>15</sup>

The error is that the wrong station and date have been combined in certain archival sources, and the incident at Chicamacomico is an earlier event that occurred on 9 January 1886 (which was not discovered at the time this report was written). The entry in the USLSS Annual Report for 1887 reads, "1886. Jan 9. Pamlico Sound, three-fourths of a mile W of station. Chicamicomico. Sl. Lydia Ann, Elizabeth City, NC." The master and tonnage of the vessel is unlisted. The report outlines that the vessel was bound for Rodanthe from Colington Island, N.C. without cargo (and a single crew member) at the time of the incident. At this time the vessel was worth \$200 and sustained fifty dollars of damage.16

Research has not yet discovered any other instances of *Lydia Ann* being involved in other incidences in the region after 1895; no other reference to this vessel has been found in government reports or ship registers from this time, and no vessel by this name is listed as "totally lost" in other publications.<sup>17</sup> The activities and fate of *Lydia Ann* after 1897 are currently unknown.

Extra (1853?-unknown): 22 March 1887 incident

The 1887 Annual Report of the USLSS outlines the loss of a schooner named Extra on 22 March 1887 approximately one-half mile southwest of Chicamacomico station. The report lists the vessel's home port as Elizabeth City, N.C. and that it was on a voyage from Colington, N.C. bound for Chicamacomico, N.C. The estimated value of the vessel was \$2,500 and the owners recovered \$2,470. Two people were on board - both were saved. Cargo, master, and tonnage are unspecified in the file.<sup>18</sup> The listing of a thirty-dollar loss indicates that the vessel was almost certainly refloated. The full details of the wrecking incident, as outlined in the Chicamacomico station wreck report (22 March 1887), have not been relocated.

The Record of American and Foreign Shipping (RAFS) lists a vessel named Extra (Official Number 8054) over the years 1861-1870, 1872, and 1882-1886. The single-decked, 58 ton (listed as 78 tons between 1861 and 1865) wooden schooner (variously described as constructed of oak or oak and pine with iron fasteners), built in Dorcester County, Maryland (no specified builder) in 1853, was 73.2 feet long, 21.3 feet wide, and 6.1 feet deep. From 1861 to 1872, Extra was classed grade 2½ (a 3rd class rating, falling under the description implying a lack of "confidence for the conveyance of cargoes in their nature subject to sea damage") and owned by "Ridgeway" of Baltimore, M.D. (inspected at Baltimore in October 1860 and at Philadelphia in March 1864 and March 1866). Between 1861 and 1870 the records name "Wilson" as the captain, and a Captain "Taylor" in that role in 1872. A column of remarks notes the vessel had a centerboard and a half poop deck.<sup>19</sup> Over the years 1881-1886 Extra's hailing port was Crisfield, M.D. (owned by R. P. Darby, Thomas H. Murphy, master).<sup>20</sup> Nothing else is known about this vessel.

Insurance registers do not list *Extra* after 1886, creating the slim potential that its owners may have transferred it to Elizabeth City in 1886 or early 1887. However, there is currently no definitive connection between *Extra* reported in the RAFS and *Extra* reported as having been partially damaged at Chicamacomico in 1887. None of the seminal published texts regarding North Carolina shipwrecks include a shipwreck named *Extra*, suggesting it was not permanently lost in the state.<sup>21</sup>

Lou Willis (1876-c.1912): 27 January 1895 incident

Historical records note *Lou Willis* as stranded three and a half miles south by west of Chicamacomico Life-Saving Station on 27 January 1895, and then recovered. *Lou Willis* (official number 140160) was a schooner built in Smyrna, N.C. in 1876. It had a length of 42.9 feet and a beam measuring 13.8 feet while its hold was 4.2 feet deep. It had a gross and net tonnage of 15.33 and 14.57 tons respectively.<sup>22</sup> Beginning in 1902, the required number of crew needed to sail it was two sailors.<sup>23</sup>

Before the schooner's first encounter off the Chicamicomico Station, it had already befallen misfortune multiple times in its service life. On 21 July 1886, *The News and Observer* reported that the schooner was found capsized by the revenue cutter, *Stevens*.<sup>24</sup> It had foundered in Roanoke Sound, between Nags Head and Manteo, N.C. Several of the fourteen passengers aboard were already being rescued in a canoe that *Lou Willis* had in tow by the time the cutter's

boat reached the scene. It was ascertained that a young woman from Hertford had already drowned while a child and elderly woman were still trapped in the cabin. With *Lou Willis* lying on its beams in heavy seas, Lieutenant Hand of *Stevens* ordered his crew to begin smashing through the hull and the cabin walls. After four hours of work, they succeeded, and Lieutenant Hand delivered the survivors to Manteo. The capsizing event occurred due to the crew's drunkenness during a storm.<sup>25</sup> Sometime after the incident, *Lou Willis* was refloated and repaired to continue trading on the sounds.

On 6 August 1888, a similar event occurred. *Lou Willis*, under the command of Captain Daniels, and underway with four passengers, freight, and mail was off Roanoke Island, having left Nags Head for Elizabeth City when a sudden gale ripped the vessels topmast away and caused the schooner to careen and almost capsize. After the deployment of a distress signal, canoes arrived from Roanoke Island to rescue the crew and passengers (all were saved). Although the vessel was in danger of total submergence, the cargo was believed to be recoverable.<sup>26</sup>

Lou Willis would survive, as on 27 December 1895, the schooner had its first encounter with the Life-Saving Station at Chicamicomico. Under Master L. R. O'Neal, Lou Willis' anchor fouled and allowed the schooner to drag in heavy seas around 2:00 AM. It was only ferrying passengers -- a woman from Stumpy Point, N.C. and three children from Elizabeth City. It was enroute from Stumpy Point to docks at Chicamicomico.<sup>27</sup>

At sunrise, roughly 8:45 AM, Keeper L. B. Midgett Jr. spotted the vessel a mile from shore and three and a half miles south by west from the station. The station lookout then informed him that a distress signal had been made from the schooner, and the crew set out for the stranded vessel. Midgett Jr. made note that by the time the life-saving crew had reached the wreck, the water was calm but that the tide was very high. Despite this, the schooner had become stranded. Thus, the life-saving crew could do nothing until Master O'Neal had retrieved skids to re-launch the schooner.<sup>28</sup>

On 23 January 1895, these skids were retrieved, and the life-saving station crew succeeded in getting the schooner afloat again. From this point, Master O'Neal and owners A. S. and A. W. Hoopers took charge of the schooner and continued on the way.<sup>29</sup> The report lists *Lou Willis* as being seventeen years old and having Elizabeth City as its homeport. In the *Annual List of Merchant Vessels of the United States* (ALMVUS) for 1895, the schooner is registered in Edenton, N.C.<sup>30</sup> As the wrecking event is so

early in the year 1895, it may be that the vessel was registered in Elizabeth City in the year 1894 before being re-registered in 1895 in Edenton. This may also imply that the schooner was sold to different owners soon after the wrecking event. However, the actual age of the vessel at the time of the wrecking event was 19 years old.<sup>31</sup>

Over the next several years, *Lou Willis* was registered in several different ports. As noted above, in 1895, it was registered in Edenton.<sup>32</sup> The following year, it was registered in New Bern, N.C.<sup>33</sup> Here it remained registered until 1898. The records show that it was registered in Edenton once again in 1899.<sup>34</sup> For three years, it remained registered in that port. In 1903, the schooner was registered once more in Elizabeth City.<sup>35</sup> It remained registered in Elizabeth City until the end of its service career in 1912.<sup>36</sup>

In the year 1902, Lou Willis provided passage for Wilbur and Orville Wright, inventors of the first successful self-propelled, crewed aircraft. On 26 August 1902, the Wright Brothers arrived in Elizabeth City with intentions to travel once again to Kitty Hawk in the Outer Banks to test their new glider design. They arrived at 5:45 PM, with the intention of finding suitable transportation to the barrier islands the next day. Instead, they immediately spotted Lou Willis tied up to the city docks. They quickly discovered that the schooner was departing for Kitty Hawk in the morning and hurried to retrieve their baggage and freight before the train depot closed.<sup>37</sup>

At this time, the schooner was being captained by Franklin Midgett, who had recently left the life-saving service to start a boat line. On this trip, the schooner was carrying a cargo of lumber as well as another passenger.<sup>38</sup> Early on August 27, Captain Midgett cast off and proceeded down the Pasquotank River. There was little wind - so little in fact that the schooner had to be poled out from the wharves. The passage was particularly slow, and in twelve hours, the schooner had only gone fifteen miles. At this point, Captain Midgett decided to cast anchor and wait until the next day for better winds.39 The next morning, Lou Willis weighed anchor and reached Kitty Hawk without further interruptions at 4:00 PM the same day.40 A few weeks later, the schooner brought their 1902 glider to Kitty Hawk from Elizabeth City after they had established their camp and did the same in 1903.41

Lou Willis again met the Life-Saving Service on 10 March 1906. The schooner was sailing in ballast from Martin's Point, N.C., to Kitty Hawk, N.C. under Master J. E. Midgett and another crew member. They were near the Paul Gamiels Hill Station. A missing staysail caused the schooner to become stranded on a sand shoal, 300 yards from shore and two miles southwest of the station. Two days later, with help from the keeper and surfmen from the Kitty Hawk Station, station keeper Harris and five of his crew rowed out to the schooner at 9:00 AM. At 2:00 PM, they returned to duty as they had saved the schooner and moved it once more into deeper water. Per newspaper accounts, the Kitty Hawk Station was called for help because the Paul Gamiels Station did not have an experienced diver.

Following legal disputes, *Lou Willis* again ferried the Wright Brothers to Kitty Hawk in 1908. At this point, it was being captained by Franklin Midgett's son, Spencer. Upon learning that their old camp was in ruins, Wilbur Wright traveled to Kitty Hawk a gasoline launch while *Lou Willis* followed carrying as much lumber as possible.<sup>44</sup> Difficulties with the schooner such as sails being lost on return trips for more lumber, and winds leaving it stranded on sand bars resulted in 1908 being the last year *Lou Willis* provided service for the Wright Brothers.<sup>45</sup>

While it no longer serviced the Wright Brothers, Lou Willis appears to have done similar duties throughout the rest of its career until 1912. It seems to have been well-known in Outer Banks communities, probably due to its association with the Midgett family and their connections. In 1906, it is not listed for services among the packet service vessels or in the canal trade in the Daily Economist. Instead, its arrival in Elizabeth City is mentioned on the same page in the personal mentions.<sup>46</sup> This suggests that it served the rest of its career making private runs out to the Outer Banks for the Life-Saving Service stations and private residents receiving supplies from Elizabeth City. Lou Willis does not appear in any of the seminal historical sources concerning shipwrecks in North Carolina waters.47 Its fate after 1912 remains unknown.

Haze (1890-c.1907): 10 March 1895 incident

The schooner (also described as a "schooner yacht") *Haze* (official number 96071) was built in 1890 at East River, Connecticut. Its length is recorded as 44.4 feet, its breadth at 12.5 feet, and its depth of hold was 2.7 feet. Its gross tonnage was noted to be 10.53 tons, and its net tonnage was 10.01 tons. In the year 1895, it was registered in Edenton. By 1902, it was reported to only require one crew member.

Haze only had a single encounter with a lifesaving station, the New Inlet Station. On 10 March 1895, the schooner was sailing from Elizabeth City to New Inlet, N.C. under Master G. Heath. *Haze* was providing passage for two passengers. Master Heath was assisted on the voyage by a cook, A. Fearing. Both crewmembers resided in Elizabeth City. The passengers, J. Derby and E. Richards, were both traveling from Sandy Hill, New York. <sup>50</sup>

During the early morning hours of 10 March, the schooner became stranded one mile from shore and two miles northwest of the station on Jack Shoal. The cause of the stranding was determined to be miscalculation by Master Heath. At 7:00 AM, lookout A. Etheridge spotted the wreck flying a distress signal. Keeper Wescott gathered his crew in a sailing fishing boat and sailed out to the schooner. They reached the wreck at 8:00 AM and were soon joined by the keeper and crew from the Pea Island Life-Saving Station.<sup>51</sup>

Wescott discovered the schooner to be high on the shoal. The crew agreed to run out *Haze*'s anchors and wait until high tide before trying to float it once more. The first attempt to refloat it failed and the crews agreed to meet in the morning to try again. The next morning at high tide, the crews positioned the schooner where it would be easiest to refloat, and this second attempt proved successful. *Haze* then continued its voyage.<sup>52</sup>

Little more is known of the schooner *Haze*. A bill of sale in the Edenton newspaper Fisherman and Farmer on 10 April 1896, lists a "Schooner Yacht" of the same name amongst the property of J. B. Brockett of Elizabeth City, noting, "the Yacht is completely furnished and has accommodations for about ten persons."53 It appears to have continued working from its homeport of Edenton until 1903. In this year, a possible change in ownership saw it registered in Elizabeth City.54 It only continued service from Elizabeth City until 1905. In 1906 it was recorded as registered in New Bern.55 It continued working from New Bern until the next year or until early 1908, as it is not recorded in the ALMVUS past the 1907 registry year.<sup>56</sup> No other anecdotal evidence of the schooner can be found, and no sources list a wreck named Haze as occurring in North Carolina waters.<sup>57</sup>

Rosa B. Cora (1892-c.1914): 7 August 1895 incident

Rosa B. Cora (Official Number 111006) was a schooner measuring 41 feet in length, 13 feet in width, 4 feet in depth (17.06 gross tons/16.18 net tons burden), built at Elizabeth City in 1892. The vessel operated with a single crewmember out of three North Carolina ports during its life – Edenton (1892-1895, 1899-1901), New Bern (1896-1898, 1904-1914), and Elizabeth City (1902-1903). 58 On 7 August 1895, an

incident occurring 10 miles northwest by west of Chicamacomico culminated in the partial recovery of the schooner while running out of Elizabeth City.<sup>59</sup> The incident concerning *Rosa B. Cora* is found in an entry in Sarah Downing's *On This Day in Outer Banks History*, titled, August 7, 1895—Hatteras Crews Right Edenton Vessel:

The two-masted schooner *Rosa B*. Cora, of Edenton, North Carolina, capsized in the Pamlico Sound during an early morning squall. The ship, en route to Rodanthe from Elizabeth City, carried a load of ice, flour, corn and salt. The captain of the vessel, William R. Balance, requested assistance from the Chicamacomico Life-Saving Station and he was taken to Rodanthe in a shad boat that the Rosa B. Cora had in tow. The Chicamacomico crew, assisted by crew from the New Inlet and Pea Island Stations, was unable to raise the schooner for two days due to rough conditions in the sound but was successful on the third day when the water calmed. The ship was righted, bailed out and towed to a safe harbor, when the owner thanked the crew for its assistance.60

Likewise, Wright and Zoby discuss the event in Fire on the Beach: Recovering the Lost Story of Richard Etheridge and the Pea Island Lifesaver:

In August 1895, Richard Etheridge and his men were summoned to the wreck of the *Rosa Cora*, which had capsized in the Pamlico Sound. The combined Chicamacomico, New Inlet, and Pea Island crews raised and righted her and sent her on her way.<sup>61</sup>

The information used by both Downing and Wright and Zoby comes from L. B. Midgett's 12 August 1895 wreck report which outlines additional details of the capsizing event, rescue, and eventual recovery of *Rosa B. Cora*. <sup>62</sup> The wreck report is presented as a synopsis in two locations within the 1896 *Annual Report of the USLSS*, first outlining that the Women's National Relief Association aided, "the crew of the schooner *Rosa B. Cora*, at the Chicamacomico Station, coast of North Carolina, August 7, 1895," and the actual wreck details:

1895, Aug. 7. Am. sc. *Rosa B. Cora*. Chicamacomico, North Carolina. Capsized by a squall 10 miles from station in the nighttime. Crew rescued by boatman in tow at the

time of accident. Captain came to station for assistance. Station crew went to vessel in company with crews of Pea Island and New Inlet stations, but being unable to raise her, took her crew of two persons to station, gave them clothing and succor. Worked on the vessel the two succeeding days, finally getting her afloat. Towed to a good harbor.<sup>64</sup>

It is unknown what happened to *Rosa B. Cora* after 1914 – the vessel is not listed in any subsequent reports for vessels (of any type) in the 1915 report and is not listed in the list of vessels lost; it simply disappears from the historical record. It is not mentioned in any publications dedicated to North Carolina shipwrecks.<sup>65</sup>

#### Anna Laura (c.1892-unknown): 15 December 1896 incident

The shad boat *Anna Laura* capsized in Pamlico Sound off Loggerhead Shoals on 15 December 1896. The Roanoke Island-owned vessel (valued at \$150) was bound for Chicamacomico at the time of the event. The two people on board survived and were boarded at the Chicamacomico station for four days. The vessel and cargo sustained five dollars of damage.<sup>66</sup>

Life-saving station keeper L. B. Midgett, Sr's wreck report provides more information. 67 According to the wreck report, *Anna Laura* was an unregistered sprit-sailed shad boat, built around 1892 that operated between Rodanthe and Roanoke Island as a mail boat (captained by William M. Beasley and owned by William St. Clara Pugh). The boat, with its crew of two people (W. M. Beasley and W. W. Spenser of Roanoke Island and Hatteras, respectively), capsized in a gale while carrying mail and was later rescued with the help of four men from the Chicamacomico station (no vessels or other rescue apparatus were needed).

The ALMVUS lists only one *Anna Laura* (official number 105165) – a schooner of 19.17 gross tons (18.21 net tons) and dimensions 45.6 feet length, 15.9 feet breadth, and 5.0 feet draft built in Crisfield, Maryland in 1872 and operating out of Onancock, Virginia (and later Cape Charles, V.A.). <sup>68</sup> The discrepancy in build date and home port suggests these vessels are not the same *Anna Laura* – and tells us that the Roanoke Island-based *Anna Laura* was a different, much smaller boat (reinforced by the lack of official number noted in the wreck report).

A short notation in the USLSS's *Annual Report* of 1898 lists the rescue but differs in one detail

- that only three men were rescued from the capsized sailboat.<sup>69</sup> The authors are currently unaware of *Anna Laura*'s history before or after this 1896 event. None of the seminal published texts regarding North Carolina shipwrecks suggest it became a shipwreck in the state.<sup>70</sup>

## Lula Tillett (c.1887-unknown): 31 January 1898 incident

A vessel named *Lula Tillett* was involved in a marine incident four miles northwest by west of the Chicamacomico Life-Saving Station. All the information currently available about *Lula Tillett* is contained within L. B. Midgett, Jr's 1898 wreck report and the corresponding entry in the Life-Saving Service's 1899 Annual Report.<sup>71</sup>

The 1899 report contends that the incident (a capsizing) involving the Manteo-based "sailboat" *Lula Tillett* occurred on 29 January 1898, at a location four miles northwest by west of the Chicamacomico station. The boat was carrying no cargo at the time it capsized. The vessel itself was valued at \$125 (totally recovered). Two people were listed as being on board (both saved). Other details, such as the master, tonnage of vessel, and the people housed and fed at the station following their rescue are not noted.<sup>72</sup> Midgett's original wreck report, however, gives us much more detail, outlining the circumstances leading up to the vessel's capsizing, the rescue of the two crew, and the nature of the damage to the vessel (loss of two oars, four thwarts, and a tiller) and the loss of some of its cargo (ten sand bags).

As *Lula Tillett* was listed as a pleasure vessel and was likely less than five tons burthen, it is not listed in publications such as the ALMVUS, and therefore its life is difficult to track –almost nothing of its life or its fate following recovery is currently known. No vessel with this name is listed as being wrecked in the state.<sup>73</sup>

Unknown Boat (Fishboat)/Shad Boat/No name (unknown-unknown): 26 March 1899 incident

On 26 March 1899, a shad boat with no reported name was spotted by Chicamacomico station lookout B. W. O'Neal in the early afternoon west of the station at about one and a half miles distant. The boat had no cargo and was under command of Engean Seaman of Manteo with another crew member. O'Neal account describes how he continued watching the boat as it made its way from Chicamacomico for Manteo as the wind began to pick up. The north to northeast wind shifted into a gale, causing the shad boat to capsize. O'Neal quickly alerted station keeper L. B. Midgett who sent two of his crew with a neighbor's (Mr. Meekins), shad boat.

Additionally, another station keeper, Captain Pugh, spotted the boat in distress and sent some of his men in another shad boat to assist. Three civilians also rendered assistance. By 1:00 PM both Master Seaman and his crew member were brought ashore and taken to the station's boarding house while the shad boat was brought back into the harbor and saved.<sup>74</sup> The incident is mentioned in the *Annual Report of the Operations of the USLSS* in 1900, and describes the nature of the casualty and service rendered:

Capsized in a squall 1 ½ miles W of station. Surfmen from Chicamacomico and Gull Shoal stations and several citizens pulled out in shad boats, rescuing the two men who had been in the boat and bringing the boat to the harbor where they put it in trim. The rescued men went to their boarding house, close by.<sup>75</sup>

It is unlikely that the event culminated in the creation of any kind of archaeological signature and no such named vessel is mentioned in North Carolina shipwreck sources.<sup>76</sup>

Two Sisters (unknown build and loss dates): 5 December 1902 incident

There are five wrecking events in the Pamlico Sound attributed to multiple vessels named Two Sisters between the years 1902 and 1922 (1902 and 1914 at Chicamacomico Station; 1911 at Pea Island Station; two incidents in 1922 at Little Kinnakeet Station). The 1902 incident occurred within the vicinity of the project area. It is unknown if all the five events can be associated with one or more vessels named Two Sisters. There are multiple vessels with this name that had comparable service careers, and scant evidence regarding the vessels involved in the incidents makes differentiation and identification difficult. None of the wreck reports offer an official number for the vessel nor do any of the wreck reports, save one, give the age of the schooner. A wreck report from the 5 December 1902 does list the age of a vessel named Two Sisters, however when the record was transferred to microfilm, a crease in the page makes reading the age impossible (perhaps reading "5 years"). Finally, none of the reports state the schooner's tonnage.

Specifically, there are at least two vessels registered under the name of *Two Sisters* that can be identified as working the North Carolina coastal trade. One was a sloop built in 1893 with official number 145657, and the other was a schooner built in 1899 with the official number 145827.

The 1893 sloop was built at North River, N.C. Its length was 39.0 feet and in beam it was 11.1 feet with a depth of hold of 3.1 feet. The gross and net tonnage of the sloop are listed as 7.62 tons. In 1895, the sloop was registered in Beaufort, N.C.<sup>77</sup> It continued its service career out of Beaufort until 1903, when it was then registered in New Bern. It was noted to only require a crew of one sailor. The sloop remained in service until 1914 or early 1915.<sup>78</sup>

The second Two Sisters was the schooner built in 1899, although it was not registered until the 1900 ALMVUS. Its length was 43.2 feet, its breadth was 12.7 feet, and its depth of hold was 2.7 feet. In the 1900 Annual List, it is listed as having been built in Mount Pleasant, N.C. However, the next year, its port of construction is changed to Lake Landing, N.C.79 From this year forward, Lake Landing is always given as its build location. This schooner stands out from all the vessels discussed above because it is the only one whose homeport never changed. Throughout its service career, it is always registered in New Bern. This schooner also had the shortest service career, from 1900 to 1914 or early 1915. This fact may point to it being the Two Sisters that was reported sunk in a Charlotte Daily Observer article (expanded below).80 Even if it was raised and repaired, such a damaging event may have cut the service life of the schooner short.

On 10 July 1908, while off Maul's Point (10 to 15 miles from Washington, N.C.), the schooner struck a submerged buoy under owner and Master T. M. Credle. This Two Sisters had been a regular Pamlico River trader and the day before, had taken on a valuable cargo of general merchandise. After striking the buoy, the vessel sank in a few minutes, resulting in a complete loss of cargo and personal items of the crew. The schooner sank in a shallow part of the river, and the crew clung to the rigging before being saved by a passing vessel. However, the report does state that efforts to raise the schooner were going to be attempted.<sup>81</sup> The news article's only description of the schooner is that it was twomasted, an attribute it shares with the schooner in the life-saving station reports. However, it is unknown if the schooner from the wreck reports was regularly engaged in the Pamlico River trade or if the schooner from the Charlotte Daily Observer report was ultimately raised and repaired.

Nevertheless, on 5 December 1902, the schooner *Two Sisters* was making a run from Elizabeth City to Rodanthe with a crew made up of Master L. B. Midgett Jr. and the schooner's owner John Payne. They were shipping a cargo of general merchandise that had an estimated value of \$1,000. At 5:00 AM, the schooner's chain parted

leading to it becoming stranded about 300 yards from shore two and three-quarter miles south by west from the Chicamacomico Station. As Master Midgett Jr. was the son of the Station Keeper, he immediately put up a distress signal that was spotted by lookout B. O'Neal.<sup>82</sup>

The schooner was left where it stranded until 8 December. At 8:00 AM on that day, Midgett and six of the life-saving station crew, along with four from other nearby crews, met on shore at the wreck site. They hitched the schooner to the old boat wagon and re-floated the schooner by 4:00 PM. In addition to the old boat wagon, they also used skids to re-launch the schooner.<sup>83</sup>

In the wrecking event, the *Two Sisters* in question was saved, and no subsequent mention of a vessel of this name wrecking in North Carolina can be located.<sup>84</sup> A reference to the loss of a sloop *Two Sisters* is noted in Bruce Berman's *Encyclopedia of American Shipwrecks* as occurring off Hampton Roads, but the loss date (12 March 1888) demonstrates no connection to the incidents in Pamlico Sound.<sup>85</sup>

Lonie Buren (1902-c.1981): 15 September 1903 incident

Lonie Buren is reported as lost at a location near the Chicamacomico Life-Saving Station on 15 September 1903. This information is found in the Annual Report of the Operations of the USLSS, which outlines that on 15 September 1903, the nine-ton schooner Lonie Buren, out of Elizabeth City and under the command of "O'Neal," was a casualty three miles southsouthwest of Chicamacomico Station. Both the Chicamacomico and Gull Shoal Life-Saving Stations responded to the wrecked vessel.86 Midgett elaborates on these details in his 11 October 1903 wreck report.87 While some sources list Lonie Buren as a total loss (as implied by Midgett's report), further research suggests that the vessel was later recovered.88 A more complete picture of activities in Pamlico Sound concerning Lonie Buren are listed elsewhere in the USLSS report for 1905:

At 11 a.m. on the 16th instant, the lookout reported this vessel in Pamplico [sic] Sound, about 3 miles S. of the station, flying a signal of distress. The keeper and four surfmen proceeded to her in supply boat, and found that in the gale of the previous night she had dragged her anchors and was driven ashore on the marsh. She was high and dry, and, as nothing could be done until the master procured materials for launching her, the life-savers returned to the station. On the

28th instance, the life-saving crew, with the assistance of the crews of the Gull Shoal and New Inlet stations, placed skids under the vessel, and, working on her for four days, moved her across the marsh, dug a canal through a reef, and, on October 1 launched her into deep water.<sup>89</sup>

Indeed, the ALMVUS details that *Lonie Buren* would have an exceptionally long commercial life and a highly varied career. Charles T. Williams, II mentioned the building of *Lonie Buren* in his 1975 book, *The Kinnakeeter*, wherein he writes, "Zion B. Scarborough built the schooner *Lonie Buren*, the most beautiful, graceful, and prideful ship that ever sailed the inland waters of North Carolina." Preceding this quote is an implication that *Lonie Buren* represents the pinnacle of Kinnakeet shipbuilding (c.1890-1905).

First appearing in the 1903 register, Lonie Buren (official number 141820) is listed as a schooner built at "Kinnekeet" in 1902 of 9 gross tons (8 net tons), dimensions of 46.4 feet length, 15.6 feet width, and 3.1 feet draft, and a crew of one person operating out of Elizabeth City.91 Other than a 1908 newspaper notice that J. C. Clark & Son had purchased the vessel and installed a kerosene engine in it, the details remain the same until 1909 when Lonie Buren's homeport became Tappahannock, V.A.92 Sometime around 1911, Lonie Buren's entry is moved to the section on steam vessels (actually a motor vessel, as listed as gas screw). All other details remain the same (the horsepower of its engines is unlisted), although it was then operating as an oyster boat.93 The vessel would serve the oyster industry in Tappahannock until around 1914 when its homeport moved to Reedville, V.A.94 Lonie Buren called Reedville home for the next half-century.

Over this time, however, *Lonie Buren* underwent some changes. The vessel was involved in oystering out of Reedville in the above configuration until around 1921. From 1922 until 1927, the boat was employed in fishing, with the 1924 ALMVUS giving the horsepower of its engine as 4 indicated horsepower (ihp), and the 1925 register adding the name (W. S. Lankford) and address (Byrdton, V.A.) of the owner. 6

Lonie Buren underwent major modifications in 1928, with significant structural changes indicated by new dimensions (60 feet long, 16.4 feet wide, 4.4 feet draft), new tonnage (26 gross, 18 net), a new engine (40 horse power), and a new purpose – that of a freighter.<sup>97</sup> The vessel remained a freighter until sometime in late 1936

more years using it to fish.98 Around 1948 a new owner, James R. Atkins, also of Reedville, took over the vessel and it continued to fish (with an additional crewmember) for over thirteen years.99 In 1962, Atkins installed a new 165 horsepower oil engine in the old hull and reconverted the vessel back to a freighter (around this time the boat was also be given the radio call letters of WI4442) but sold it two years later. 100 From 1965-1971 a new owner (John P. Copper) would operate Lonie Buren out of Cambridge, M.D. From 1971-1977, Paul Joseph Cianferano took over its operation and continued to work out of Cambridge.<sup>101</sup> Starting in 1977 a new owner, Bronzie Douglas White took over Lonie Buren, operating the vessel out of Cape Charles, V.A. until at least 1981.<sup>102</sup> In 1979, the White family, and Lonie Buren, were featured in a Washington Post Magazine article examining the Maine Street Fish Market in Washington, D.C. It includes the following tract:

or early 1937, after which Lankford spent ten

Captain White's boat, the *Lonie Buren*, at the very end of the dock on the 12th Street side of the wharf, has a public address system, and the man at the mike hawks his fish like a county fair barker:

"Over 30 varieties of seafood!
"Come right on down -- our prices cannot be beat!
"The lowest prices to pay, you better come down today.
"I'm telling you, we got the lowest prices around,
"You better shop around,
"Captain White he give you sweet as honey,
"He give you cash money ..."

"When I'm finished here," says Billy White, heir to the captain, taking in his outfit with a rhetorical sweep of the arm, "I'm gonna be pulling' 'em off the bridge." He is remodeling his three-ship fleet, installing giant freezers and streamlining his logistics. This fall, there will be a grand re-opening of White's by its Young Turks. Says Billy White, with a visionary gleam: "Our business will be renamed Seafood City." 103

While the Maine Street Fish Market, and "Captain White Seafood City," is still around today, the fate of *Lonie Buren* after 1981 is currently unknown.

*Mabel E. Horton* (1905-1926): 11 December 1906 incident

Archival sources list an incident concerning the "gas launch" *Mabel E. Horton* on 11 December 1906 at a location three miles west by north of Chicamacomico Life-Saving Station that culminated in its rescue and recovery.<sup>104</sup>

Mabel E. Horton (official number 202730), crewed by two people, was an 8-gross ton (six net ton) gas launch freight vessel (20 ihp engine, until 1922 after which a 35 ihp engine was installed) built in Manteo in 1905. The vessel had dimensions of 40.2 feet length, 10.2 feet breadth, and 2.2 feet depth. The ALMVUS includes a listing of the vessel from 1906 to 1914. The vessel had a home port of Elizabeth City from 1905 to 1907, with Manteo becoming its home port from 1908 to 1915, before a final move to Philadelphia, P.A. from 1916 until 1926. Around 1911, Mabel E. Horton became a passenger vessel with a single crew member (two crew from 1924) and was employed as a towing vessel in the last two years of its life while owned by Ralph N. Cavileer, a resident of Atlantic City, N.J.<sup>105</sup> In 1926, the ALMVUS lists *Mabel E*. Horton in a list of vessels "Abandoned, Reduced, or Removed."106

The details of the 1906 incident are outlined in the Annual Report of the USLSS in 1908, which lists, "December 11, 1906. Chicamacomico, North Carolina. Gas.sc. Mabel Horton. Mail boat grounded three miles west of station. Life-savers went out and took off mail and passengers. Later delivered mail and passengers to her."107 L. B. Midgett's 1907 report provided much more detail, outlining how the vessel (owned by W. J. Griffon and company), laden with mail (valued at \$300), a crew of two (Henry Ward, master, and an engineer), and five additional passengers, stranded on the SW point of Pugh reef during "thick weather." The vessel was later refloated, as evidenced by later historical references of the vessel operating in the region (and its subsequent working life out of state).

Little is known about *Mabel E. Horton*'s commercial life in North Carolina, though one reference to its use is found in a two-part series of articles by Colonel Fred A. Olds in the *Charlotte Observer*, titled "A Trip Over the Route of the Proposed Inland Waterway." The second part of the article mentions *Mabel E. Horton*'s use by the Manteo Chamber of Commerce in support of a congressional survey of the intercoastal canal system of North Carolina. <sup>108</sup>

R.C. Beaman (1901-c.1917): 4 January 1910 incident

*R.C. Beaman* is erroneously classified as lying off Pea Island Beach (i.e., an ocean-side location), whereas the marine incident occurred three miles west of Chicamacomico Station – placing

it within the Pamlico Sound, and likely within the study area. 109

R.C. Beaman (official number 111387) was a two-masted schooner built in 1901 at Hatteras, N.C.; however, its construction must have been completed towards the end of the year as it is not listed in the 1901 ALMVUS.<sup>110</sup> It measured at 44.3 feet long, 15.9 feet in beam, and had a depth of hold of 2.6 feet. Its gross tonnage was twelve tons, while its net tonnage was nine tons, it was registered in Edenton in 1902, and later in Elizabeth City.111 The schooner's possible namesake was an influential minister, the Reverend Dr. R. C. Beaman, a prominent Temperance Movement activist in North Carolina. 112 The Reverend Dr. Beaman was noted to have lived in New Bern and presided over the Centenary Methodist Episcopal Church. He is reported to have had a period of long prosperity at the church, which was the largest in New Bern and one of the most influential in the state. 113

R.C. Beaman was involved with the USLSS at least two times in its life. On July 7, 1906, R.C. Beaman stranded at Durants, N.C.:

This vessel, lumber laden and with 2 men on board, stranded on Oyster Point, 3 miles N. of the station. She having filled with water the keeper, with assistance, bailed and pumped her out, then hauled her afloat, and took her into Durants Bay to a safe anchorage.<sup>114</sup>

Its second encounter was at the USLSS Station at Chicamicomico. On 4 January 1910, the schooner was enroute from Powell's Point, N.C. to Rodanthe under Master Harrison Midgett and crew member, Joseph Midgett. It had a cargo consisting of two cords of split pinewood estimated at a value of six dollars. It was also providing passage for ten people. At 3:30 PM, the schooner became stranded on the northeast point of Frank Reef, while coming into Rodanthe, three miles from shore and due west of the station. The schooner grounded due to a low tide and a damaged jib sail.115

Lookout A. O'Neal immediately informed Keeper L. B. Midgett of the stranded vessel. The keeper sent three of his crew to the distressed schooner in surfman J. Meekins' sailing skiff. The tide was too low for the station's supply boat. The crew met the vessel at 5:30 PM and found that the schooner was not in immediate danger. They took all ten passengers ashore: two men, two women, and six children. Master Midgett and his mate stayed aboard the vessel, and it

was brought into the harbor the next morning at 9:00 AM with the cargo and schooner both in good condition.<sup>116</sup>

A third and perhaps fourth incident is reported in two government reports of the U.S. Department of Commerce concerning the "Freighter *R.C. Beaman*" indicating the vessel may have run aground and stranded twice near the North Landing River Light Station (Virginia) in 1917 and required assistance from the light house service.<sup>117</sup>

Beginning in 1903, R.C. Beaman was registered out of Elizabeth City. It remained registered there for the rest of its service career until 1917.118 There is evidence that R.C. Beaman underwent a conversion during its service career, with the addition of a gasoline engine. In 1913, it was no longer listed under the merchant sailing vessel section of the ALMVUS. That year, it was moved to the section covering merchant steam vessels. Here it is listed as a freighter operating with a screw propeller powered by gas. 119 This year for the registry did not include a separate section for vessels power by a gasoline motor and placed R.C. Beaman in the steam category accordingly. This was remedied in 1915, when a motor craft section was added to the registry and the schooner was moved again to this section. 120 R.C. Beaman disappears from American vessel registries in 1916, and other than the rescue it was involved with in 1917 its fate is unknown.121

#### **Discussion and Conclusion**

This present study stands in contrast but also complements both Marano and Ropp's individual research. In both studies, hundreds of shipwrecking narratives to the east of Rodanthe overwhelmingly dominate the narratives and statistical analysis of coastal trade for the region, and evidence of marine incidents litter the landscape in the form of tangible shipwrecks. In this case study, there are twelve cases west of the same prominent place (Chicamacomico), of which no remains lie in situ.

The collection of vessels described in this paper were comprised exclusively of stranded-but-refloated passenger craft, pleasure boats, short-distance cargo haulers, fishing vessels and mailboats which ran aground while unladen, hauling general merchandise (i.e., goods not described in detail), or carrying low volumes of items like sandbags, firewood, or mail. Losses of cargo ranged from \$6 to \$1,000 in the year of loss (when adjusted for inflation equating to \$177.57-\$32,691.63 in value in 2022). The listed vessels were mostly described as sloops and schooners, though a schooner-yacht, and shad boats would strand in the earlier years

and small gas launches began to appear in the early twentieth century. The watercraft of cited dimensions were mostly in the 40-foot range in length (most 40.2-44.4 feet long) with narrow beams (12.5-15.6 feet wide) and very shallow drafts (2.2-5.0 feet deep, but most under 3 feet). One exception was the vessel Extra, an early (1887) stranding of a 73.5 feet long by 21.3 feet wide by 6.1 feet deep schooner, and likely the most difficult to rescue (though the authors were unable to locate the report detailing its recovery). The carrying capacity of these craft ranged from less than five gross tons to fiftyeight gross tons. The watercraft were mostly built in North Carolina, though examples constructed in Maryland (Baltimore) and Connecticut (East River) were also temporarily stranded. The value of the vessels (when listed) was worth between \$150 and \$2,500 in the year of incident (equating to between \$5,000 and \$75,000 when adjusted).

When examined as an assemblage, the connections between the grounded vessels and North Carolina coastal communities are clear. Their departure points were not far from Rodanthe, ranging from Elizabeth City, Powell's Point, Colington, Roanoke Island, Stumpy Point in the North and Avon (Big Kinnakeet) to the South. The intended and actual routes of the vessels were as short as approximately 18 miles long (i.e., Lou Willis's 1895 route from to Stumpy Point to Chicamacomico/Rodanthe) to about 67 miles (i.e., Rosa B. Cora's 1895 and Two Sisters' 1902 passages from Elizabeth City to Chicamacomico/Rodanthe). Of the collected craft, all were bound for Chicamacomico, except Haze (nearby New Inlet), and Mabel E. Horton and Lula Tillett (both bound for Hatteras). Together, these intended and actual routes illuminate a pattern of Pamlico Sound trade connecting present-day Dare, Currituck, and Pasquotank counties by the transportation network that likely lasted for many more decades than those covered in this paper.

All survived their grounding events, and most would continue to operate within coastal North Carolina, the exceptions being a few examples which would travel north to operate in the waters of Virginia and Maryland. When plying the waters of the Pamlico and Albemarle Sounds, the listed craft operated with small crews (1-2 people), and when carrying passengers transported small groups (mostly in the single digits, though in one case up to 14 people). While cultural factors contributed to the near losses of some vessel during their lifespans (e.g., the drunken crew of Lonie Buren in 1886), all the vessels coming to grief near Chicamacomico would do so due to the combination of gales and shallow waters, whether helped along by dragged anchors,

parted lines, or damaged sails.

In contrast, Allyson Ropp's study and this one share approximate parallels of latitude but the geological distinctions either side of a thin sliver of sand dramatically alter the stranding and wrecking patterns that are discerned adjacent to Rodanthe. Arguably, Ropp's wrecking pattern analysis represents the shape of trade for areas along the eastern seaboard of the nation. Rodanthe and north Hatteras Island, while actors playing a role in the loss of shipwrecks sit "in the background." In this study, the pattern perhaps bears a resemblance to the shape of trade for the region (and especially Hatteras Island). The authors agree with Allyson Ropp that "each wreck story adds to the overall story of the Graveyard of the Atlantic and the history of north Hatteras Island,"123 and would like to propose a friendly amendment. Adding the information pertaining to marine incidents (wrecking, stranding, and refloating events), the interconnections represented in vessel biography, and the geospatially projected trajectories also has the potential to illuminate changing patterns of coastal interactions for the centers of maritime commerce that are understudied to date.

#### **Endnotes**

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113. "Minister's Wife Skips," *Charlotte Daily Observer*, 22 June 1909, 1.

114. USTD, 1908, 75.

115. L. B. Midgett, Sr., "Form 1806, United States Life-Saving Service, Wreck Report: R.C. Beaman, January 4, 1910, Chicamacomico Station," U.S. Life-Saving Service Reports, 1823-1929 Collection (33 MSS-8), Box 6, Folder 58, Outer Banks History Center, Manteo, N.C.).

116. Ibid., see also USTD, 1911, 97.

117. U.S. Department of Commerce (USDC), Annual Report of the Commissioner of Lighthouses to the Secretary of Commerce for the Fiscal Year Ended June 30, 1917 (Washington, D.C.: U.S. Department of Commerce, 1918), 56; USDC, Reports of the Department of Commerce, 1917 (Washington D.C.: U.S. Department of Commerce, 1918), 191.

118. ALMVUS, 1903, 148; 1910, 99; 1911, 92; 1912, 84; 1914, 275; 1916, 294.

119. ALMVUS, 1913, 275.

120. ALMVUS, 1915, 300.

121. ALMVUS, 1916, 294; It is not listed in Stick, Graveyard of the Atlantic: Shipwrecks of the North Carolina Coast; Lonsdale and Kaplan, A Guide to Sunken Ships in American Waters; Freitag, Shipwrecks Unforgotten from New Jersey to the Gulf of Florida; Charles, North American Shipwreck Accounts; Duffus, Shipwrecks of the Outer Banks.

122. All inflation adjustments taken from Ian Webster's "CPI Inflation Calculator," <a href="https://www.officialdata.org/us/inflation/">https://www.officialdata.org/us/inflation/</a> with a comparison between the year of listed value (e.g. "1906") to the values given on 23 February 2022.

123. Ropp, "Wrecked at Chicamacomico," 61.

## Call for Submissions

Tributaries is North Carolina's only peer-reviewed journal fully dedicated to maritime historical and archaeological topics. This journal seeks to support continuing historical, archaeological, and cultural research by publishing articles related to the maritime history and culture of North Carolina and the Eastern seaboard. Therefore, *Tributaries* accepts a range of articles in the field of maritime studies. All members of the maritime history community, including students and independent researchers, are welcome to submit articles for publication. Contributors need not be members of the NCMHC or live in the state of North Carolina. Manuscripts submitted for consideration must be based on original research and analysis, and all manuscripts are subject to a peer review process at the editor's discretion.

Submissions should be addressed to the editor: Jeremy Borrelli, borrellij16@ecu.edu.

Submissions should be no longer than 30 pages, including citations. On the cover page, please provide: article title; author's names, positions, institutional affiliations, and physical business addresses; and a contact telephone and email address for the corresponding author. Authors should keep the editor informed of any address changes. If the article was presented at a conference, please supply the name and date of the conference on the cover page.

All manuscripts should conform to the Chicago Manual of Style (17th edition) – endnotes citation style. Please consult the Chicago Manual for citations, capitalization, abbreviations, numbers, and other grammatical uses. *Tributaries* uses bias-free language. For more information, please see CMOS "Bias-Free Language," 5.251 – 5.260. For additional resources on bias-free writing, please see Style Appendix at the end of this edition. If your manuscript does not conform to the style guide, it may be returned for additional editing before it can be considered. Photographs, tables, charts, and maps are welcome and encouraged. If images are included in your text, please also submit original images with your manuscript to retain image resolution. Please ensure submitted images do not have copyright restrictions.

*Tributaries* will not reprint or republish articles submitted to and accepted by other publications. Once a manuscript is accepted for publication, it becomes the property of the NCMHC and may not be reproduced elsewhere without NCMHC's permission.

If you have any additional questions about the submission process, please contact the editor: Jeremy Borrelli, borrellij16@ecu.edu.



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## Style Appendix: Resources for Bias-Free Writing

Please note that the conversations we are having now about bias-free writing will continue to change and develop over time. Our standards and best practices must continue to change and develop as well to ensure our language does not cause harm to others. Please refer back to these sources regularly to incorporate any new changes, and continue to develop sources of your own to inform your writing.

#### General

- National Park Service, Interpretive Development Program, Identifying and Removing Bias, <a href="https://www.nps.gov/idp/interp/201/identbias.htm">https://www.nps.gov/idp/interp/201/identbias.htm</a>

#### Ethnicity, Race, and Nationality

- Asian American Journalists Association, Guide to Covering Asian America, https://www.aaja.org/aajahandbook
- Australian Institute of Aboriginal and Torres Strait Islander Studies, Guidelines for Ethical Publishing,

https://aiatsis.gov.au/aboriginal-studies-press/getting-published/ethical-publishing-guidelines

- P. Gabrielle Foreman, et al, "Writing about Slavery/Teaching About Slavery: This Might Help," community-sourced document,

https://docs.google.com/document/d/1A4TEdDgYslX-hlKezLodMIM71My3KTN0zx Rv0IQTOQs/edit

- National Association of Black Journalists, Style Guide,

https://www.nabj.org/page/styleguide

- Native American Journalists Association, Guide on Terminology,

https://najanewsroom.com/wp-content/uploads/2018/11/NAJA Reporting and Indigenous Terminology Guide.pdf

#### Gender, Sex, and Sexuality

- American Philosophical Association, Guidelines for Non-Sexist Use of Language, <a href="https://www.apaonline.org/page/nonsexist">https://www.apaonline.org/page/nonsexist</a>
- NLGJA: The Association of LGBTQ Journalists, Stylebook Supplement on LGBTQ Terminology, <a href="https://www.nlgja.org/stylebook/terminology/">https://www.nlgja.org/stylebook/terminology/</a>
- Trans Journalists Association, Style Guide, <a href="https://transjournalists.org/style-guide/">https://transjournalists.org/style-guide/</a>

More resources and discussion articles on Ability and Disability, Age, Religion, and more, may be found at the Conscious Style Guide: <a href="https://consciousstyleguide.com">https://consciousstyleguide.com</a>.

If there are resources you'd like to see included in this list, please contact the Tributaries editor, Jeremy Borrelli, at borrellij16@ecu.edu.

## Student Paper Prize

Student participation in North Carolina maritime history is strongly encouraged by the North Carolina Maritime History Council. The Annual North Carolina Maritime History Council Conference regularly features students presenting papers related to undergraduate and graduate research on maritime historical and archaeological topics. To recognize this engagement, the Council awards a Student Paper Prize for the student who gives an insightful, well-researched, and well-presented paper at the Annual Conference. Awardees are given a one-year membership to the NCMHC, preference for publication in *Tributaries*, and receive free registration for the following year's conference.

In 2021, the Student Paper Prize was awarded to Lydia Downs, from the Program in Maritime Studies, East Carolina University who presented a paper titled: "The Cultural Significance of a Dugout Canoe to People of the Past and Present."

#### **Abstract:**

In 2019, a 650-year-old dugout canoe was found by a fisherman in the South River of North Carolina. This started the unraveling of one of North Carolina's lesser-known histories. This talk will explore who the Coharie people are by looking at this single artifact. By examining the entire life cycle of this canoe, including its creation, abandonment, rediscovery, excavation, preservation, adoption into the Coharie Tribe, and its final curation, the spirit of the people can be seen. This will explain how the cultural importance of such vessels can span hundreds of years and help preserve the spiritual connection between modern people and their ancestors.

Congratulations to Lydia on a job well done!



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