

Abstract  
Postmortem Archaeology:  
Reinterpreting Salvaged Sites using the CSS *Neuse* as a Case Study  
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Traditionally, salvaged wreck sites are disregarded by academia because contextual data are lost without detailed measured site maps. When these sites are ignored, the information that can be gained from individual artifacts and the collection as a whole is lost. Archaeologists have attempted to recreate salvaged sites to rediscover that contextual information. This thesis will examine a new set of methods called “postmortem” archaeology which will be applied to the American Civil War wreck of the CSS *Neuse*, which is the largest single collection of artifacts from a Confederate vessel. There are four issues affecting contextual data that have arisen since the salvage of the CSS *Neuse* wreck site: 1) how the ship was scuttled, 2) contamination by additional artifacts during excavation, 3) looting of artifacts during excavation, and 4) the timeline of the removal of the cannons. These four issues will serve as examples of broader problems that affect salvaged sites and possible methodologies that can be used to recreate the site. The “postmortem” methodology used to study the CSS *Neuse* can then be broadened and applied to other salvaged sites.



Postmortem Archaeology:  
Reinterpreting Salvaged Sites using the CSS *Neuse* as a Case Study

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## **Chapter 1: Introduction**

There is an “ethical obligation” on the part of archaeologists to study and analyze artifacts that have been removed from their original sites, whether salvaged or not (Rodrigues 2002:112). While it is unfortunate that much of the research of salvaged sites is compromised by a lack of professional excavation techniques and documentation, artifacts from salvaged sites can and do offer valuable information about past societies. When studying a site, archaeologists place significant value on the context of artifacts within space. To clarify, context denotes the relative positioning of artifacts to one another in the defined physical space of the site. Objects that are in proximity to each other often denote the use of the space. Sites that have been disturbed by salvors or looters compromise that context. Salvors often remove all artifacts and, many times, the ship itself from its original location, leaving no record of the original, undisturbed wreck site. When a site has been salvaged, its archaeological context has been destroyed and proper analysis is often impossible. Can archaeologists find ways to recreate context and interpret objects in space to, in fact, create a “postmortem” archaeological analysis of disregarded salvaged sites?

“Postmortem” archaeology is a term coined by archaeologist Bradley Rodgers (2013, elec. comm.) and refers to the interpretation of “archaeological data recovered from a site that has been completely disturbed or removed by looters or salvagers.” In this theory, looting or salvaging a site “disturbs a living undisturbed archaeological site,” in the end, destroying the contextual data (Bradley Rodgers 2013, elec. comm.). Postmortem archaeology, then, is an attempt on the part of an archaeologist to recreate the body of data that once existed in an undisturbed archaeological site (Bradley Rodgers 2016a, pers. comm.). Throughout this thesis, the term “postmortem” will refer to this archaeological theory proposed by Bradley Rodgers

(2013, elec. comm). The methodologies and analysis offered in this thesis will be done within the intentions of Rodgers' theoretical framework.

One example of a salvaged site that has been ignored by academia is the Confederate ironclad, CSS *Neuse*. After its scuttling in 1865, wreckage of the CSS *Neuse* lay buried along the bank of the Neuse River in Kinston, North Carolina for 100 years until its excavation by local citizens (Bright et al. 1981:17,19). One of the public figures of the salvage group, William Rowland, kept some documentation of the excavation process, but the maps and written descriptions do not provide archaeologists with enough detail to piece together the entire story of the CSS *Neuse*'s site formation and excavation. CSS *Neuse* provides an interesting case study to test the ability of archaeologists to use other methods, such as postmortem archaeological assessment, to recreate the contextual information of salvaged sites. Specifically, can the discrepancies in the historic record and oral history of the CSS *Neuse* be analyzed by using postmortem alternative methods within archaeological research?

The theoretical and methodological framework for this thesis will be heavily guided by the work done by Keith Muckelroy (1978) and Jennifer Rodrigues (2002). Briefly, Muckelroy's (1978:157-214) theory examines the devices that remove and shift artifacts from an archaeological site and how archaeologists can account for these devices on a disturbed site. Rodrigues (2002:108-128) attempts to give artifacts from a salvaged site context and meaning to gain a better understanding of the history and significance of the site as a whole. Together, the work of these two archaeologists will enhance the study of and help give a deeper understanding to the history of the CSS *Neuse*.

#### A Brief History of the CSS *Neuse*

Construction on the CSS *Neuse* began in October 1862 when the Confederacy was

running low on resources; the ship's builders often had to find resourceful solutions for the parts they needed (Bright et al. 1981:5-6). The Confederate government built the CSS *Neuse* to protect the interior of North Carolina from being invaded by Union ships moving up the Neuse River from the Union controlled city of New Bern. Ironclads were built to be "floating batteries" that could provide additional support to land-based operations (Bright et al. 1981:5). Leslie Bright, William Rowland, and James Bardon, authors of *CSS Neuse: A Question of Iron and Time* (1981:5-17), briefly describe the history of the ship. They state that the Confederate government was able to save time and money by using local pine and employing house carpenters to work with the shipbuilding company Howard and Ellis in Whitehall, North Carolina; instead of importing the preferred ship building material, hardwood oak, and hiring professional ship builders (Bright et al. 1981:6-7). Additionally, government documents state that the engines and boilers used on the ship were most likely salvaged from a decommissioned B&O Locomotive No. 34 (Bright et al. 1981:11; Bisbee 2012:227). When the hull was finished, it was floated down the Neuse River to Kinston for the final outfitting and service (Bright et al. 1981:9). The ship, however, could not be finished because of shipment delays in iron, the Confederacy's most sought-after resource; and so it sat for 15 months waiting for the necessary iron plating for its armor.

Moreover, the Confederate Navy lacked manpower; this eventually led to the impressment of enlisted soldiers to serve in the Navy (Bright et al. 1981:11). Many of the sailors on the CSS *Neuse* had little experience aboard ships. While waiting for the final fitting out of the ship, a 15 month-long process that began in March 1863, the newly drafted sailors rehearsed their drills and prepared for battle. The ship saw action well before it was finished. The Navy Department sent orders on April 22, 1864 for the CSS *Neuse* to make the short trip to New Bern



and engage the Union troops, but the ship ran aground just out of its dockage where it remained stranded until the middle of May 1864 (Bright et al. 1981:14-15). With no further need for the ship in New Bern and the water levels rising again, the CSS *Neuse* returned to dock in Kinston to continue waiting for the rest of its fittings, including its armor plating. In the meantime, a shipment of iron finally reached Kinston, allowing the ship to be finished in June 1864 (Bright et al. 1981:16). The only thing missing for its use was dedicated infantry support for river operations. By 1864, nearing the end of the war, it was highly unlikely the ironclad would see action (Bright et al. 1981:15).

The CSS *Neuse*'s final hours came when Union forces closed on Kinston, in early March 1865. Fort Fisher was captured by the Union in early January 1865 and Wilmington, North Carolina, fell a month after that; it soon became clear that the war was coming to an end (Bright et al. 1981:16-17). When Union forces approached Kinston on March 12, 1865, the CSS *Neuse* put up a brief defense. To prevent the ship from being captured, officers ordered the ship burned and scuttled. After this, the fate of the wrecked ship becomes obscured and all but forgotten until its salvage (Bright et al. 1981:17,19).

The first salvage of the CSS *Neuse* happened within a year after it was scuttled. The federal government approved for the site to be auctioned on October 9, 1865, allowing the new owner access to everything on the ship except for the naval guns (*New Berne Daily Times* 1865a:1; Morris Bass 2016, elec. comm.). Part or all of the casemate and the stern of the ship were most likely damaged while trying to remove the valuable goods, including the guns, boilers, engines and propellers, though there is no documentation of the damage (Campbell 2009:59).

After this first salvage in 1865, no other large efforts were made to recover the ship or

any of its contents for the next 70 years. The record of the salvage attempts occurring in the 20th century has mostly been passed down through newspaper articles and oral history. A summation of these accounts is described in the book *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:19-27). Late in the 1930s, a Kinston local, Henry Clay Casey, explored the site briefly before losing interest (Bright et al. 1981:19). There do not appear to be any state records of his findings. Shortly after, in 1940, Mrs. W.D. Pollock asked the Army Corps of Engineers to help raise the ship and relocate it to a safer location, hoping to protect the ship from further damage caused by its waterlogged environment. After an examination of the site and historic records concerning the ship, the Army Corps of Engineers determined that the ship was not posing any hazard to navigation and would be too costly, about \$20,000, to remove. The report of the Army Corps of Engineers also noted at this time that fishermen had damaged the ship by removing spikes for use as weights and by dragging their nets across the site (Bright et al. 1981:19).

The final salvage process that led to the eventual full excavation of the ship began after six high school boys recovered 14 live Brooks percussion fuse projectiles, one of the types of ammunition used in the naval guns on the ship, from the site in the summer of 1954 (Bright et al. 1981:19). Henry Clay Casey regained interest in salvaging the site when he heard about the boys' discovery. Casey asked a professional logger, Lemuel Houston, to help pull the ship out of the river, and the two began work in 1956. It was not long into their excavation attempt that they determined that this was going to be a very time consuming and costly venture. One major problem with the excavation was the two men only had shovels to complete the monumental task of removing the sand that had consumed the hull. They asked Thomas Carlyle, who owned a dragline, to assist them. Carlyle agreed and brought his dragline to the site on October 27, 1961. The three men agreed to evenly share any profits made in the assumed eventual sale of the ship

and artifacts (Bright et al. 1981:19).

Casey, Houston, and Carlyle had no training in archeology, nor any idea of the size or importance of the site. They assumed that the ship was about 50 feet long, having done no historical research before starting their salvage activities (Bright et al. 1981:19). Further, they had not planned for potential problems, such as changing water levels, the weight of the sand or ship, or the equipment that would be needed to complete the excavation (Bright et al. 1981:19-20). When they started their work, the river's water level was 3.17 ft., and falling. Their original plan was to build a cofferdam with the sand removed from the site, which would have been effective given the low water level (Bright et al. 1981:20). They quickly brought mud pumps to the site to help clear the sand from inside the hull and strung lights so work could progress both day and night. They had early success in finding artifacts, which brought public interest and help from the residents in and around Kinston (Bright et al. 1981:20).

After only two weeks of progress, physical and financial problems with the excavation became a formidable reality (Bright et al. 1981:21). The cofferdam began to leak, threatening the progress of the sand removal. Even more devastating to the salvage efforts was the fact that the \$700 originally estimated to cover the full cost of the excavation was exceedingly insufficient. The trio began contacting county and state government representatives to inquire about support, which they eventually received, allowing the salvage efforts to continue (Bright et al. 1981:21).

Work was halted yet again on the site when the question of ownership arose at the end of November 1961, not two full months after the project was started (Bright et al. 1981:22). Casey, Houston, and Carlyle believed that they had ownership of the site because it was their efforts and money that started the salvage process. Others believed that either the federal, state, or county government owned the ship. Neither county nor state officials had an answer for those

questioning the ownership, particularly as there was no state law for historic sites at the time. The county offered a solution by having the salvors sign an agreement stating that, if they released all claims on the ship they would be compensated for all the expenses incurred during the excavation of the ship and would be given \$4,000 upon completion of the excavation (Bright et al. 1981:22).

Work continued on the site with the hopes of raising the ship by Christmas and before the winter rains (Bright et al. 1981:23). Cables were run under the ship and 122 sealed drums were connected to the ship, lifting the bow from the riverbed. Rising water caused the cofferdam to fail, forcing the salvors to attempt to remove the ship quickly before it filled with sand again. A large drum was connected to the ship and attached to a winch on shore; the mechanism began pulling the ship out of the river, but the cable supporting it broke. Steel cables were then used to connect the hull to the shore; but again the attempt to raise the ship failed and the project was put on hold until the river conditions were more favorable (Bright et al. 1981:23).

In February 1962, the question of ownership was again raised, when the heir to the land where the recovery work was occurring, Mrs. Helen Cox Muzinich, claimed the CSS *Neuse* and its artifacts were her property (Bright et al. 1981:23-24). The claim, backed by Kinston residents wanting a definitive answer on ownership, went into legal arbitration, where the Cox heirs agreed to release their ownership claim to the site for \$5,000 (Bright et al. 1981:24-25). The reimbursement predominantly came from public contributions, with the three main salvors giving a combined \$1,500 (Bright et al. 1981:25).

The salvage did not immediately continue after the river fell the next spring (Bright et al. 1981:25). The hull then sat mostly out of the water. Air exposure quickened the decay of the wood and several cases of vandalism occurred outside the presence of the salvage crew and

spectators. The county stepped in to finish removing the vessel, allotting \$4,500 to remove the ship from the river, with some of that money going to the original salvage crew for their efforts to this point. The contract for the removal of the ship was given to Humphrey House Movers, costing the county \$5,000. The movers planned to lift the hull and put rollers under it to move it out of the river, but the removal operation was started too late and the rising river level in mid-January 1963 again stopped the progress. Humphrey House Movers did not return to the site (Bright et al. 1981:25).

In the spring of 1963, another house moving firm, D.C. Murray, was commissioned to move the hull (Bright et al. 1981:25). The crew flattened the riverbank and built another cofferdam around the site before lifting the ship and putting rollers underneath it. One-inch holes were also drilled into the sides and bottom of the hull so cables could attach the ship to heavy moving equipment on the shore. The cables snapped on the first attempt to pull the ship from the river; but after additional lifting and reinforcements, the ship was pulled out of the river a week later (Bright et al. 1981:25-26). During the removal, the remnants of the decking, that had not previously been removed, collapsed (Bright et al. 1981:26).

The damage done to the ship did not end when it was pulled from the water. The wood dried and deformed during the summer of 1963 and individuals removed planks and spikes as souvenirs (Bright et al. 1981:26). To protect the ship, it was decided to move it to the Caswell Memorial Park. Governor Terry Sanford apportioned \$10,000 to move the ship and add wood preservatives in November 1963. High water again prevented immediate action from occurring and the plan to move the ship was postponed until May 1964. The roads and bridge leading to the Caswell Memorial Park could not withstand the estimated 500-ton weight of the ship, so the decision was made to cut the ship into three sections for the move. Chainsaws were used to cut

the ship apart with only minor issues, such as breaking a chainsaw on the spikes. Cables were used to brace and support the hull during the cutting process with additional steel “T” beams and dollies used during the move (Bright et al. 1981:26). The ship was placed on blocks upon its arrival at the Caswell Memorial Park and, eventually, in a permanent cradle that supported the whole hull (Bright et al. 1981:26-27).

One final salvage attempt, prompted by the hope that there were still valuable artifacts not recovered in the decade-long process to remove the ship from the river, began in August 1966 (Bright et al. 1981:27). The search was nicknamed “Operation Magic Hole” and recovered a portion of the casemate and various metal objects including tools and spikes. After about two weeks, this search ended, as did the major recovery efforts for additional CSS *Neuse* artifacts (Bright et al. 1981:27).

The ship and most of its contents were relocated in 2013 to a dedicated, climate-controlled museum space in downtown Kinston. In addition to a more stable environment for the ship and the artifacts, the new museum provides significantly more space than the Caswell Memorial Park for artifact exhibition and interpretation of the ship and its historic significance. The museum is part of the North Carolina State Historic Sites department. Each site under this department has a dedicated staff who are experts on the site. Their main roles are to care for and manage the artifacts, and to interpret the site to visitors. Additionally, the North Carolina State Historic Sites department has a team of staff members that travels to various sites and lends support for creating new exhibits, artifact curation, and large-scale maintenance.

#### Folklore and its Influence on the CSS *Neuse*

During the 100-year period when the abandoned wreck remained in the river, many stories concerning the ship became part of Kinston’s folklore. The term folklore, as described by

the American Folklore Society (2016:par.1), cannot be succinctly defined as it encompasses all types of knowledge passed through a culture in an informal manner. In this thesis, the term folklore denotes the stories, passed down either orally or through writing, that do not have a defined point of origin or can easily be proven based on known historic facts. Some of the folklore concerning the CSS *Neuse* has, over time, influenced the way the site formation process and archaeological evidence are perceived. This makes it difficult to compile an objective history of the vessel. The dedicated staff members at the CSS *Neuse* Civil War Interpretive Center have asked that these stories be investigated in this thesis, in order that the most accurate history can be presented to the public in the new museum space (Morris Bass 2013, pers. comm.).

The oral histories of the ship's scuttling reference differing Confederate and Union accounts. There are nine different accounts of the exact means used to sink the ship. Four of them are from sources contemporary with the scuttling of the ship. The remaining five sources are modern. Each source's narrative differs, in some cases drastically, from the others. Each of the modern sources cites at least one of the other sources as its reference, even if the accounts do not match. With nine differing accounts, it is easy to see why this has become such a complicated and confusing matter for the site staff to interpret to the public.

The next major issue that complicates the history and site formation process of the CSS *Neuse* involves the contamination of the site by the addition of outside metal scraps. The bulk of these contaminants were most likely added during the long final excavation process, which took place between 1954 and 1966, because of the salvors' belief that they would receive compensation for the total number of artifacts removed from the site (Morris Bass 2013, pers. comm.). Oral histories, primarily from individuals not directly involved in the salvage efforts, have been shared with site staff members attesting to this story (Morris Bass 2013, pers. comm.).

Miscellaneous artifacts, such as stove pieces and plow points, were brought up with the ship and have been included in the artifact collection, though they may not belong to the site. These additions, however, have caused a number of problems in the interpretation of the site. The compensation the salvors expected to receive at the end of the excavation did not ultimately occur due to complicated ownership issues described in the previous section. This expectation of compensation led to the addition of outside material and to the eventual looting of the site.

When the ship was brought into the custody of the state in 1961, the three lead excavators negotiated a deal that allowed anyone involved in the excavation the privilege of taking any number of artifacts as compensation for their work (Morris Bass 2013, pers. comm.). This deal, for which the site employees have no official documentation, is part of the oral tradition (similar to the contamination of the site) of the salvage of the ship and has been used by the salvors to justify the removal of items from the site (Morris Bass 2016, elec. comm.). In time, some artifacts were returned, but the salvage and looting, either with or without the permission of the state, significantly affected the ability of archaeologists to examine the collection as a whole and make interpretations from all of the artifacts. One good outcome of this sad episode is that the looting of the CSS *Neuse* forced the state of North Carolina to enact legislation that prohibits individuals from disturbing historic and archaeological sites (North Carolina General Assembly 2016).

As shown by the three issues presented above, the questions surrounding the scuttling of the ship, the contamination of outside artifacts, and the salvage and looting of the site, the excavation process damaged the archaeological record of the CSS *Neuse*. A lack of historical research and failure to understand the amount of damage done to the hull structure during the excavation have influenced the oral history of the ship as it is told today. Obviously, all of the



circumstances mentioned affect the ability of archaeologists to reexamine the archaeological record. Therefore, the three aforementioned stories, which have added the most confusion to the history of the ship, will need the most analytical attention in this thesis.

A fourth bit of folklore that can be briefly examined involves the fate of the naval guns. Oral history has suggested that they were taken off the ship by the federal government the year after the war ended. The site staff does not have any documentation of this in the official record (Morris Bass 2013, pers. comm.). Another possibility of the fate of the guns comes in the form of a newspaper article written in October 1865, discussing an auction of the ship (Morris Bass 2013, pers. comm.). The article does specifically state that the guns are not included in the auction, but may reveal the party that claimed ownership of the guns (*New Berne Daily Times* 1865a:1, Morris Bass 2016, elec. comm.). An examination of government records and this article may lead to some clues as to what actually happened to the guns. Since this claim does not affect the understanding of the history of the ship as fundamentally as the first three claims, it will not be a central tenet of this thesis.

## Thesis Objective

Oral histories have influenced much of the popular historical understanding of the ship; but when compared closely with actual artifacts, photographs, and documentation, these claims may not reflect reality. Therefore, “postmortem archaeological” methods will be needed to recreate context for this investigation. In addition to the theoretical outline proposed by Bradley Rodgers, the concept of scrambling devices and extracting filters, as proposed by Keith Muckelroy (1978:157-214), will also be applied. Broadly, Muckelroy’s (1978:158) theory states that five scrambling devices, taking place from the vessel’s wreck through its excavation, rearranged the context of the artifacts on the wreck site. Three of these scrambling devices are

extracting filters, including the salvage operations, material breakdown, and items floating away. These filters remove artifacts from the site (Muckelroy 1978:158). Rodgers' theory aims to expand upon Muckelroy's work by showing that, if the scrambling devices and extracting filters, specifically the salvage of the CSS *Neuse* in this case, can be theoretically reversed through an understanding of how these mechanisms have changed the wreck site, then a clearer picture of the working life of the ship can be formed. The unsubstantiated folklore and claims fall under the domain of scrambling devices and need to be better understood before archaeologists can reconstruct the ship during its working life and site formation. To determine the plausibility of this folklore, it is important to examine all the evidence pertinent to each individual unsubstantiated claim.

This thesis will also use the aims and hypotheses detailed by Jennifer Rodrigues (2002:108-128) in her study of salvaged artifacts off a jetty site in Holdfast Bay, South Australia. Rodrigues (2002:108-128) reconstructed the history of the jetty site through an examination of the artifacts salvaged from the site. She hypothesized that the history of the site could be determined without contextual information as long as a thorough understanding of the artifacts' functionality and morphology could be determined (Rodrigues 2002:112). Her study concludes that it is possible to gain a historic understanding of a salvaged site through the study of its artifacts (Rodrigues 2002:127).

The postmortem techniques used include an examination of the ship and artifacts, historic photographs, and documentation. Much of these historic documents and photographs come from the collection assembled by William Rowland located in Special Collections at East Carolina University's Joyner Library. By necessity, more reliance will be placed on the historic photographs and documents than the remnants of the ship. It can be posited that the photographs

have not been falsified, nor are they subject to scrambling devices or extraction filters.

Photographs show the ship over time and help give a clearer picture of what was left before the ship was excavated. An examination of the visual historic record is the only way to piece together an approximate timeline of the changes in the hull.

In addition, the scuttling method is assessed by first evaluating all the claims and their origins. Then, an examination of the remains of the ship and the physical limitations they pose are compared with the various scuttling stories to determine if one claim seems to be representative of the physical or photographic evidence. Historic documentation in the form of letters from the crew and the official records are also evaluated and compared to the scuttling claims and archaeological evidence left in the hull.

Contamination and looting claims will be evaluated by a postmortem examination of the artifacts. Possible contaminants have been revealed in recent examination of these artifacts by site staff and have shown that some of these artifacts, most of which are scraps of metal, may be modern. Each of these artifacts is identified and evaluated for the possibility that they are not original to the collection of the ship's artifacts. Artifacts labeled "miscellaneous" by the state conservators in the 1970s and 1980s are also examined as possible contaminants. These artifacts include items such as plow points, which were originally identified as pieces of the ship's armor or engine parts. If these artifacts can be dated to a later time period or identified as having been fabricated from more modern materials, then it may verify that these artifacts were thrown onto the ship to increase the total amount of metal salvaged by excavators.

State records concerning the number of artifacts in the collection and when those artifacts were added are also examined. It should be assumed that artifacts returned to the state were at one point salvaged or looted from the site. As there are no formal state records of the artifacts

taken by the salvors as compensation for their work, it is impossible to determine if the returned artifacts were legally or illegally taken. Written documentation and oral histories are the only way to determine what artifacts were taken and eventually returned; unfortunately, there is no way to know what is still missing from the collection.

Historical documentation will again be the only means of assessing the fate of the naval guns. Research for this section involved examining the newspaper article from 1865 to see if any clues concerning the naval guns whereabouts become obvious. Afterward, a more detailed examination of government documents occurred. This examination started by looking for details about the ship in the *Official Records of the Union and Confederate Navies of the War of the Rebellion* (Lamont et al. 1897).

This thesis will begin with a brief discussion of Civil War history; primarily focusing on the deficiencies in the Confederacy that caused the major delays in finishing the construction of the CSS *Neuse*. This will be followed with a discussion on the theoretical framework that will guide the examination of the CSS *Neuse* site. Finally, this thesis will examine the four large questions involving the folklore of the ship and analysis of the CSS *Neuse* using postmortem theory.

## Chapter 2: Relevant History

The conflict between the Northern and the Southern states during the American Civil War highlighted many of the disparities between the two regions. The South had many disadvantages in industry, resources, and foreign connections that plagued their ability to be victorious. The following is a description at the national, state, and local levels of the major shortcomings the South had and their effects on the CSS *Neuse*.

When the South seceded, it had a significant disadvantage in resources. The North boasted more industrial, military, and financial resources (Vandiver 1962:20). The North had about 14 million more people (2.5 million more males in the age range for military service) and a growing commercial and manufacturing economy that was much more complex and diverse in industrial production (Arrington 2011:par.1-6). In fact, the Industrial Revolution that started in the early part of the century had almost solely occurred in the North (Arrington 2011:par.1). The South, after a brief venture into manufacturing-based slave labor, found itself content with the traditional agriculture based economy (Arrington 2011:2). The South's reliance on slave labor was crucial when the Civil War started because it allowed the "white men to go into the army," leaving the slaves home to continue the necessary farming needed for the agriculture based economy (Davis 1881a:263).

This failure to modernize and industrialize left the South at a great disadvantage when the war started. Even the basics needed to keep the soldiers alive and fighting were disproportionate between Northern and Southern forces. In the North:

Two-thirds of all U.S. war spending went to pay for goods and services needed to outfit and sustain its forces in the field. In four years, the Union supplied its soldiers with roughly 1 billion rounds of small arms ammunition, 1 million horses and mules, 1.5 million barrels of port and 100 million pounds of coffee, 6 million woolen blankets, and 10 million pairs of trousers. Given such figures, it is not difficult to conclude that the million-man Northern army was, as one scholar put

it, “the largest, best equipped, best fed, and most powerful war machine ever assembled in the history of the world to date” (Wilson 2006:1).

To compare, J. L. M. Curry (1901:158), a U.S. and Confederate Statesman, lieutenant colonel in the Confederate Army, and author, so poignantly describes:

What a contrast to the Southern army, half clad, half fed, half armed; without any adequate supply of the needed transports, of the needed medical staff, of the needed engineers for bridging, for telegraph work and other engineer duties; with few depots of supply, and a gradual contracting area of territory shut off from the sea by a rigorous blockade.

Furthermore, the North had accumulated the appropriate military resources, including roads and trains that made troop transport easier and manufacturing centers that could easily be adapted for wartime production, for nearly a century before the war (Arrington 2011:pars.3,8,10). One striking example of the disparity between the North and South in military and manufacturing differences is that “the North produced 3,200 firearms to every 100 produced in the South” (Arrington 2011:par.3). President Davis himself even admitted that there were not enough weapons to arm all the “men willing to engage in the defense of their country,” estimating a total of 15,000 rifles and 120,000 muskets for the Confederate army at the start of the war (Davis 1881a:261,404). The only equalizer between the North and the South was that both parties benefited from the same military knowledge and training as they were once a unified force; some would even argue that the South possessed better military leadership than the North (Civil War Trust 2014b:par.5). This knowledge, however, was not enough to compensate for the South’s agrarian based industry and lack of material resources and production centers, such as iron and foundries, which put them at a significant disadvantage in producing the necessary resources for war.

Even with the extensive industrial disadvantages, the South assumed that they might have two distinctive advantages that would help them win their freedom. The first was cotton. “White

Gold,” as it was called, was in high demand, especially in Europe, and could serve as the South’s link to foreign aid (Vandiver 1962:20; Dattel 2008:par.3-4). Even though the diversified industry of the North gave it a high global status and economic buying power, the South banked on the fact that cotton, the most valuable export in the whole of the United States, would have high enough demand to secure support from European countries that could not function without the South’s main product (Arrington 2011:par.2). Confederate leaders believed that receiving foreign legitimacy would be a more viable alternative to winning the war than eroding the North’s moral and political will (Dattel 2008:par.3; Civil War Trust 2014b:pars.3). The South also relied on the assumption that its small size would be an asset. The North was connected with more than double the amount of railroad tracks, but was so large in comparison that the optimistic Southerners thought that, if they could use speed to quickly mobilize their small resources, they could defend their borders and win their freedom from the North (Vandiver 1962:20; Civil War Trust 2014b:pars.2-4). Neither of those hopes worked in the favor of the Confederacy in the end. The vast resources of the Union made the deficiencies of the South all that more apparent during wartime.

With war looming on the horizon, the newly elected President of the Confederacy, Jefferson Davis, was forced to develop a specific wartime strategy for the South. The overall Confederate strategy for war, designed by Davis, was not one of large offensive wins that would push their border outside of the already defined states. In a similar sentiment to the American Revolution, Davis felt that the members of the Confederacy should be left to govern themselves as they saw fit; and by not losing the war, they could accomplish this goal (Vandiver 1962:70; Arrington 2011:par.19; Civil War Trust 2014b:par.2,4). The focus for the South, therefore, was on defending borders, not conquering new territory. To maintain the initial *modus operandi* of

secession, the war would be fought within the realm of states' rights, which prevented offensive movements in many cases because of Governors' fears (Civil War Trust 2014b:par.4; Vandiver 1962:70). This strategy complemented the idea of simply maintaining the borders.

When viewed in this way, many of the decisions made by the Confederacy make perfect sense. One example of the South maintaining its ability to stay in the war was through its diplomatic interactions with the rest of the world. The Confederacy based all of its foreign interactions on the premise of cotton and the assumption that cotton's global desire would foster strong alliances. In fact, the South grew roughly two-thirds (around 5,400,000 bales) of the total amount of cotton produced globally (Arrington 2011:par.2; Vandiver 1962:51). Many of the Confederate leaders believed that, if the South could be recognized and supported as an independent country from some of the world's top players, then winning the war would no longer be a necessity (Curry 1901:113; Vandiver 1962:50). There was even great debate on how the cotton should be parceled to potential allies to achieve this goal, most agreeing that backing by England would be most crucial or even the sole ally needed (Curry 1901:115-116). This theory quickly became problematic. President Davis believed that England and France held all the power in determining the foreign legitimacy of the Confederacy, presuming that the rest of Europe would follow their lead (Davis 1881b:312). The Confederate representatives sent to these two countries were not given defined limits of power, but authority to ensure the welfare of the Confederacy (Curry 1901:127). England and France initially committed to giving the Confederacy belligerent status, or the affirmation that two independent states were at war (Vandiver 1962:51). Both countries, however, were reluctant to give full legitimacy to the Confederacy, as they also imported products from the North and did not need to make an enemy so early in the conflict (Vandiver 1962:52). Neither France or England needed cotton, a surplus



from the previous decade through 1860 still packed their textile mills, at the time belligerent status was given and both countries could afford to wait to see some results to determine with whom they would ultimately choose to side (Dattel 2008:par.5). Additionally, cotton could be obtained from other countries, such as India, Egypt, and Brazil, if necessary, further delaying the need for England and France to provide full support to the Confederacy (Dattel 2008:par.5).

As a final attempt for recognition, the Confederacy went to Mexico and Canada, in 1863 and 1864 respectively, for support, but was again met with a discouraging response (Vandiver 1962:63). Unfortunately for the Confederacy, the stall tactics used by England and France persisted throughout the length of the war and were echoed globally, never offering them the legitimacy they were seeking (Vandiver 1962:64-65). In his 1881 account of the Confederate Government, Jefferson Davis places blame on England and France for the atrocities of the war, truly believing that the war could have been prevented with their support of the Confederate States (Davis 1881b:313). This lack of foreign support took away the hope of gaining legitimacy from outside the conflict, and made the plan of just not losing less reliable. It also made the Confederacy's assumption that "King Cotton" would help them win the war a fallacy.

The second assumption, that their smaller size would be advantageous, also turned out to be flawed. Confederate leaders believed that the South's lack of infrastructure would not be problematic because the smaller geographic size of the South meant that they would not have to transport men and supplies as far as their Northern counterparts. In 1860, the concept of military logistics (converging men and supplies at the same place and time) was new. As the war dragged on, it demonstrated that the mal-resourced South could not compete with the industrial North (Vandiver 1962:30-31). As Frank Vandiver (1962:31) stated:

Generally defined as the science of managing a nation's resources for war, it became in the South a sort of economic sleight-of-hand. Since money and all

supplies were scarce, logistics grew into a science of makeshift, a matter of finding substitutes for necessities, of patching the unpatchable. All Confederate supply men—commissaries, quartermasters, ordnance officers, surgeons, engineers—were adept in the science of makeshift and worked minor miracles finding and issuing food and equipment.

The practice of makeshift, or using and converting what was at hand, had to be done for the Confederacy to continue their fight. This piecemeal approach was the only way the CSS *Neuse* could have been built and is a defining characteristic over the ship's lifespan.

One aspect of logistics that particularly affected the completion of the CSS *Neuse* was the transportation of materials via the railroad system. The rail system was a multipronged problem. The Confederacy started the war with only 9,000 miles of track, 13,000 miles fewer than the Union (Vandiver 1962:33). As the war progressed and the Union pushed through the Confederacy's borders, the South lost access to their rail tracks, slowing the transport of men and supplies all the more. This Southern deficiency in tracks dwindled further down towards the end of the war to only "...a long railway between Meridian and Richmond, over 800 miles with dilapidated equipment, furnished the single line of transportation for army and supplies" (Curry 1901:159). Even more damaging, the South had relied on the North to produce all of the supplies to develop a railroad system. Cars, tracks, locomotives, repair of these parts, and even expansion of track lines were almost solely done with Northern shops and money before the war. With the outbreak of the war, the South had only two foundries that could produce the necessary parts to expand the railways. To produce those parts, the foundries need iron, which was also a scarce commodity in the Confederacy (Vandiver 1962:33).

Additionally, the management of the railroads was completely ineffective because of the belief by the Confederate Government that the railroads should be managed and maintained by individual states and private owners (Vandiver 1962:34; Harris 1988:2). The Confederate

government did put money towards the construction of new railroads and even appointed a government official to be superintendent of the railroad system (Coulter 1950:280). Their efforts came too late, however, even to begin to develop a national railway system (Coulter 1950:280). The state-run system prevented standardization in equipment used, proper management (for lack of funds), and the inability for transportation of wartime necessities when more profitable private clients arose (Vandiver 1962:34).

In the end, the Confederate railroad system found ways to limp along and became one of the major reasons the war was sustained for so long (Vandiver 1962:34). This point is particularly prevalent in the story of the CSS *Neuse*. While those in charge of the railway were masters of makeshift and had worked wonders on a large scale to keep the railroads working, the lack of iron and the cars to move whatever iron had become available prevented the CSS *Neuse* from being completed in a timely manner.

Land-based operations, and the army in general, were considered more important to the success and ultimate survival of the Confederacy, as evidenced by the allocation of resources for army over navy. The railroad usage by the army, which was the predominant excuse given for the shortage of cars to deliver iron to the ships being built in eastern North Carolina, is just one example of this trend (Still 1985:153). Additionally, Jefferson Davis did not have much regard for the use of a navy and left his appointed Secretary of the Navy, Stephen R. Mallory, to his own devices (Vandiver 1962:15).

Mallory proved to be an innovative secretary who produced an effective navy with very few resources readily available (Vandiver 1962:16). The South had very few shipbuilding facilities; but under Mallory's guidance, it improved upon the design of cruisers and rams and created new ship types, including the ironclad and submarine (Vandiver 1962:16). Additionally,

Mallory shifted the focus of naval warfare from supporting land-based operations to a more economic role, turning some of the navy's attention to the disruption of the Union whaling economy (Vandiver 1962:16). North Carolina, because of its location, served as the frontline for many of the Confederacy's naval engagements.

Eastern North Carolina had been particularly dependent on their waterways as a means of transportation and was initially resistant to support expansion of the railways in the area (Harris 1988:1). North Carolinians had doubled their production of cotton during the decade before the Civil War and cotton was becoming one of the staples of the economy (Harris 1988:2-3). North Carolina did not have as many slaves or fit the Old South plantation stereotype, having a majority of small family operations (Harris 1988:6). One third of North Carolina's population was enslaved, but that number had increased with the increase in cotton production (Harris 1988:7-8). In eastern North Carolina, specifically, slaves composed 44% of the population (Harris 1988:8).

North Carolina as a whole did not see many large battles, but suffered a significant level of Union occupation, especially along the eastern part of the state (Morrill 2002:357). "There, major Union amphibious operations had struck hard and deep before the Confederates had been prepared to react" (Luraghi 1996:275). A large part of the Union's ability to keep control of Eastern North Carolina was its larger and readily available navy. To remedy this imbalance, Stephen Mallory proposed building new and more technologically advanced ships that could be used to take back control of the rivers and sounds (Morrill 2002:366). Mallory's three major developments to ships as summarized by Morrill (2002:366-267) are as follows:

1. Screw propellers that replaced bulky paddle wheels and afforded the ability to move the boilers and engines into the belly of the ship below the waterline for better protection.

2. Explosive shells that inflicted more damage than conventional solid rounds.
3. The addition of rifling to cannons, which allowed for more accurate shots at longer distances.

These three improvements were added to the new fleet of three ironclads (only two of which, the CSS *Albemarle* and the CSS *Neuse*, moved past the initial building stage) being built in northeastern North Carolina. Ironclad warships were defined by the armor plating, usually made from iron, which was applied to the top of the ship to help deflect cannon shot. Mallory hoped these ships could function as “moveable forts” that would stop Union encroachment and take back occupied property (Morrill 2002:367). Mallory’s plans for ironclad warships were a direct result of the Confederacy’s main goal of fighting a defensive war. To ensure his plans came to fruition, Mallory sent Flag Officer William F. Lynch to North Carolina (Still 1985:150). Lynch acted as an administrator for the crews building the ships and ensured proper resources could be obtained in a timely manner (Still 1985:150-151). Mallory also sent James W. Cooke to help oversee the building process of both vessels (Morrill 2002:368). Cooke was needed to help coordinate the procurement of the necessary resources to build the vessels (Morrill 2002:368). Cooke soon became known as the “Ironmonger Captain,” because he sent raiding parties to local farms to collect scraps of iron for the armor (Barrett 1980:215).

The first step taken in the building process of the CSS *Neuse* and CSS *Albemarle*, which started in 1862 for both ships, was securing the iron needed to complete the armor plating (Morrill 2002:368). Most of the iron needed, it was hoped, would come from railroad tracks in North Carolina; but any scrap of iron, including nuts and bolts, were collected (Morrill 2002:368; Barrett 1980:214). Mallory went to North Carolina’s governor, Zebulon Vance, to make the necessary arrangements to get the railroad tracks needed (Morrill 2002:368). Vance, who was a

strong fighter for states' rights, agreed to help find the iron needed for the vessels because they were being built in North Carolina for the states protection; otherwise, he would have been reluctant to help (Still 1985:152). There seemed to be a high level of confidence that this arrangement would work.

Once the tracks were acquired, they would be sent to either Tredegar Iron Works in Richmond, Virginia, or the Atlanta Rolling Mill in Atlanta, Georgia, where they were rolled into plates and transported back to the build sites in North Carolina (Morrill 2002:368; Still 1966:5). Under the initial agreement, the iron for the CSS *Neuse* would be obtained from the Atlantic and North Carolina Railroad Company (Still 1985:152). Governor Vance suggested that the iron for the CSS *Albemarle* be acquired from the Federally controlled Seaboard and Roanoke Road, but, this arrangement was not possible and another source of iron had to be found (Still 1985:152). Unfortunately, the agreement between Mallory, Cooke, and Vance was not enough; obtaining the supply of iron and the transportation to and from Virginia necessary was not as smooth a process as anticipated. The railroad companies found that they could not supply the iron, as they were trying to recycle it for their own dilapidated tracks, and anything they could spare put a strain on the rail system to transport back and forth (Still 1966:5; Morrill 2002:368). In a letter from January 1863, Mallory told Vance that the “vessels would not have been undertaken had the department not had good reason to believe the Rail Road iron could be obtained in North Carolina” (Still 1966:5). The iron was finally obtained, 400 tons in total, and sent to the foundries where it could be rolled; but it took the better part of a year for all of it to be transported back to the build sites in North Carolina (Still 1985:153).

These problems not only affected the building of these vessels; allocating or reallocating resources to the ironclads meant that they needed to be taken away from somewhere else.

Confederate commander of the army in Wilmington, North Carolina, Major General William Henry Chase Whiting, stated his contempt for the ships, saying, “so far the gunboats have caused more trouble, interfered more with government business and transportation, been bound up more and accomplished less than any other part of the service” (Still 1985:153). Further, the strained relations between the army and navy that plagued the whole of the Confederacy were particularly brutal in North Carolina. Whiting and Lynch were not civil towards each other in either their working or personal relationships (Still 1985:153-154). When finished, iron plates meant for the CSS *Neuse* and CSS *Albemarle* were delayed at Wilmington. Lynch prodded Whiting to spare the necessary railroad cars to transport them north. Whiting refused to spare the cars, stating that they were totally monopolized by the army to transport necessary food and goods (Still 1985:153). “The affair might be considered ludicrous, except for the fact that it contributed to the already strained relations between the army and navy at Wilmington and in turn affected the ironclad program, which was so dependent upon the army for success” (Still 1985:156). This interpersonal conflict significantly delayed to the completion of the CSS *Neuse* and CSS *Albemarle*. Had the transportation necessary to move the iron plates been granted in a timely manner, the fate of the ships could have been very different.

While waiting for the iron to arrive, work began on the ships. The sister ships were designed by John L. Porter, but were built by two different companies. New Bern’s Howard & Ellis shipbuilding company was contracted to build the CSS *Neuse*. The keel was laid in early November 1862 in a small town called Whitehall, where it would hopefully be protected from enemy forces in New Bern (Still 1966:1). Local pine and house carpenters were used to build the ship, as resource and money saving efforts (Bright et al. 1981:6-7). Other parts of the ship, such as the engines and boilers from the decommissioned B&O Locomotive No. 34, were also

salvaged and repurposed from available resources (Bright et al. 1981:11). On December 15, 1862, Union forces attacked Whitehall (Still 1966:2). Fear of possible attack prompted those working on the ship to place obstructions in the river, well before this assault, ensuring that Union ships could not attack from that route. Less could be directly done about the cavalry attack that occurred in December (Still 1966:2). On the evening of December 15, 1862, a Union soldier attempted to swim across the river and burn the shell damaged hull of the CSS *Neuse*; however, Confederate rifle fire kept him from completing his task (Barrett 1980:145). The fighting lasted two days. The ship was not damaged seriously and repairs could be made relatively quickly. The hull was launched into the river in late April or early May to be towed to Kinston for its final fitting out (Still 1966:2,4).

The slow completion process of the CSS *Neuse* and CSS *Albemarle* caused many problems for the Confederacy. In early January 1864, General Robert E. Lee, after hearing that the North Carolina ironclads were close to completion, decided to attack the Union-held city of New Bern and recapture it for the Confederacy. General Lee had envisioned the ironclads engaging with the Union ships and saw the ironclads as paramount to the success of the mission. The two ships, however, were not completed enough at the time to be able to engage in battle and Lee chose to continue with the mission without them. The Confederate forces were unsuccessful in their venture. Those involved in the administration of the battle believed that the main reason for the loss was the missing force from the Confederate ironclads (Morrill 2002:370-373). The commanding general of the raid on New Bern, Major General George E. Pickett, asserted, “I would not advise a movement against Newbern or Washington again till the iron-clads are done” (Morrill 2002:373).

CSS *Albemarle* was completed first and commissioned to help with the capture of



Plymouth in April 1864. The campaign was successful in taking back Plymouth from the Union (Morrill 2002:336-378). Confederate forces, supported by CSS *Albemarle*, then captured the town of Washington, North Carolina with great ease (Luraghi 1996:295). The success of CSS *Albemarle* in action only reinforced the idea that the ironclads were essential for victory in North Carolina. The new commander for Eastern North Carolina, General Robert Hoke, envisioned using CSS *Albemarle* and CSS *Neuse* to force Union ships and troops from the sounds and coastal region. This idea made losing the ironclads all that more devastating. CSS *Albemarle* was damaged on May 5, 1864 when it attempted to engage federal ships waiting in the Albemarle Sound just outside of Plymouth on her way to engage in the battle for New Bern. After being damaged in the brief battle, CSS *Albemarle* returned to the safety of Plymouth. CSS *Albemarle* never saw action again and was blown up with a torpedo on October 27, 1864 by raiding Federals (Morrill 2002:380-384).

In April 1864, just before CSS *Albemarle* started its fateful raid on the Albemarle Sound, the crew of CSS *Neuse* had been drilling twice a day for weeks on end, waiting for the ship to be finished (Morrill 2002:381). The crew, as one officer described, was mostly “long, lank, *Tar Heels*” (Still 1966:9). In describing their work, the same officer stated, “they are all legs and arms and while working at the guns their legs get tangled in the tackles and they are always in the wrong place and in each other’s way” (Still 1966:9). CSS *Neuse* was initially supposed to attack New Bern at the same time CSS *Albemarle* was raiding Plymouth; but CSS *Neuse* was not complete. It was considered imperative that CSS *Neuse* be available in the campaign to capture New Bern, the last remaining Union-held town in the sound region. CSS *Neuse* lifted anchor on April 22, 1864, but ran aground on a sand bar only a half-mile from her mooring. Efforts to push CSS *Neuse* off the sand bar were futile and the ship remained stuck for the next month (Luraghi

1996:296). Nature seemed not to be on the side of either CSS *Albemarle* or CSS *Neuse*. The Roanoke and Neuse rivers were far below their typical water levels, and fell further, as much as 12 inches in a single day, with each passing day (Luraghi 1996:292). CSS *Albemarle* was able to move down river before the water level fell farther; but CSS *Neuse* was not so fortunate (Luraghi 1996:292).

March 1865 saw the end of the war for CSS *Neuse*. Union forces moved towards Goldsboro from the Atlantic coast; ensuring that the railroads were under Federal control (Still 1985:221; Barrett 1980:285). The two-day battle, culminating with the Confederate retreat from Kinston and the destruction of the CSS *Neuse*, began on March 7, 1865 at Wise's Forks, a patch of land just outside of Kinston. However, the Confederates defense was too small to prevent the Union forces from continuing their march to Goldsboro (Barrett 1980:286-290). On March 9, General Bragg ordered the city of Kinston to be evacuated, with the CSS *Neuse* left behind with the orders "if practicable, before sacrificing, [she was] to move down the river by way of diversion, and make the loss...as costly to the enemy as possible" (Still 1985:221; Barrett 1980:290). CSS *Neuse* put up a valiant effort, firing at the oncoming forces, even though lack of provisions, including coal, prevented her from moving downstream (Still 1985:221). When it was time to scuttle the ship "the crew spiked the guns, set her on fire, and abandoned ship" (Still 1985:221).

### **Chapter 3: Theoretical Framework**

The concept of creating a postmortem analysis of a shipwreck site is not new to the archaeological community. However, it has never been fully defined or had an established protocol to follow when recreating a site. Below is an examination of two theories that will be crucial to the analysis of the CSS *Neuse* site and creating the postmortem analytical concept.

Keith Muckelroy proposed his theoretical framework of extracting filters and scrambling devices in his 1978 work, *Maritime Archaeology*. Extracting filters and scrambling devices are some of the various processes that a ship goes through in the wrecking process, creating the final wreck site (Muckelroy 1978:158-159). As their name implies, extracting filters remove items from the final wreck site, whereas scrambling devices shift items from their original location during the working life of the ship but keep them within the boundaries of the archaeological site (Muckelroy 1978:165,169).

Muckelroy lists extracting filters as the processes that remove items from the ship during the wrecking process, including decomposition and salvage operations. Light items can also easily float off a site as the ship is sinking or be removed through sustained heavy wave action. Organic materials, in particular, are prone to disintegrating in aquatic environments; and, in general, the longer the site is underwater, the less probability of finding organic material. Finally, salvaging removes artifacts from a site, leaving little or no evidence of their existence. Salvors are not typically trained archaeologists and usually do not create a detailed record of the site they remove artifacts from. This lack of proper documentation usually means that archaeologists cannot use the site for contextual analysis and comparison. Occasionally, there is evidence of artifact disappearance, which can be noted for analysis, such as an imprint in a protected area. Archaeologists can accurately make interpretations of wreck sites as long as they account for the

missing artifacts caused by extraction filters (1978:158,165-169).

Muckelroy notes that scrambling devices are slightly more complicated procedures starting from the time the ship begins breaking down and ending when it is finally excavated. The contents of a wreck site are perpetually affected by wave action, sea floor structure, disturbance by animals, humans, acts of nature, and possibly even the excavation process itself. Random acts of nature, such as storms, could cause artifact movement on the wreck site. Sea creatures, such as octopi, often move small items to build their habitats. Similarly, recreational divers and fishermen often disturb the sites with which they come in contact. Unskilled divers and insufficiently trained archaeologists can inadvertently move objects during the excavation process (1978:158,169-182).

Archaeologists can account for scrambling devices by assessing the amount of potential disturbance during each of the stages of the life of a wreck site (Muckelroy 1978:182). Scrambling devices could look very different depending on the location of the wreck site. Muckelroy's (1978:175-182) plans to find similarities across very different locations involved studying very specific seabed conditions to make comparisons. This technique, however, requires extensive and time-consuming data collection on the physical characteristics of the water and floor around wreck sites, which may not always be in the project's scope. Like extraction filters, there is intermittent evidence for scrambling devices that can be taken into account in the archaeological record.

The theories of extracting filters and scrambling devices were new when *Maritime Archaeology* was published. Muckelroy used this book as a platform to briefly describe the theories and the sources he was studying to further define them. Muckelroy hoped to create a better understanding of all shipwreck sites by finding the similarities on wreck sites created by

extracting filters and scrambling devices (1978:157). Ultimately, Muckelroy (1978:157) wanted to use the similarities in extracting filters and scrambling devices as analytical tools, to better understand sites where “archaeological and documentary...evidence is more fragmentary and confused.” As mentioned, salvaged sites often lack proper archaeological documentation. Applying the theoretical framework of extracting filters and scrambling devices can be used as a starting point to better associate salvaged sites into maritime archaeology’s body of knowledge.

Scrambling devices affecting the CSS *Neuse* site were predominantly caused by human interaction. When the CSS *Neuse* was scuttled, the ship did not have to sink far to reach the bottom of the riverbed, causing minimal disturbance to the organization of the ship. The hasty removal of personal possessions by sailors abandoning the ship acted as both extraction filters and scrambling devices, most likely causing more disorganization than the wrecking process itself. Furthermore, artifacts were likely not significantly disturbed during the ship's time on the riverbed because the hull was almost fully intact and the majority of artifacts were heavy enough not to be disrupted by the flow of the river even during periods of flooding between 1865 and 1954. Since its scuttling, part of the hull was raised from the water as it sat on the riverbed and was very susceptible to human interaction. The site was even more damaged during its various excavation attempts; the final, occurring from 1954-1964, being the most damaging. The top of the ship, from just below the waterline to the top decking, was removed by the various tools used to salvage the ship, including a bulldozer and dragline, during the final excavation to allow access to the interior. Certainly, artifacts in the upper layers that were removed during the final salvage would have been significantly disturbed from their original location, especially problematic as no mapping of their original location was done. Artifacts were also most likely shifted by the salvors during each excavation attempt.

It can be surmised that, in the case of the CSS *Neuse*, extracting filters played a much larger role in creating the current condition of the site. The extraction filters can be traced back to human interaction with the site. Kinston residents frequented the site, occasionally taking items from the ship as keepsakes (Morris Bass 2013, pers. comm.). This small-scale removal of items by Kinston residents seems to have occurred throughout the hundred years the ship was in the river and even after it was excavated from its wreck site (Bright et al. 1981:19-27). Aside from the notes taken by William Rowland in the final excavation, little documentation was ever written about where artifacts were taken from, especially during the small-scale removal of artifacts. Fortunately, William Rowland's notes did include some rough maps showing where finds considered valuable were located. Figures 1 and 2 show a recreation of this map in *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:130-131). From an archaeological viewpoint, this map shows the relative location of finds, allowing basic contextual data of these items to be pulled from the site.

In the case of the CSS *Neuse*, Muckelroy's theory does not account for the addition of contaminants to the wreck, which is one of the larger problems that affects the site. Additionally, there are very few sites that have completed the intensive detailed analysis of the water action and benthic environment to provide a comparison with the CSS *Neuse* site. Therefore, there can be no direct comparisons made with other sites based on these specific qualities. To supplement the theoretical framework provided by Muckelroy's theory, the work performed by Jennifer Rodrigues (2002:108-128) will also be guiding the postmortem techniques employed by this thesis.

Rodrigues (2002:108-128) conducted one example of such a study in her examination of artifacts salvaged off a jetty site in Holdfast Bay, South Australia. Upwards of 5,000 artifacts

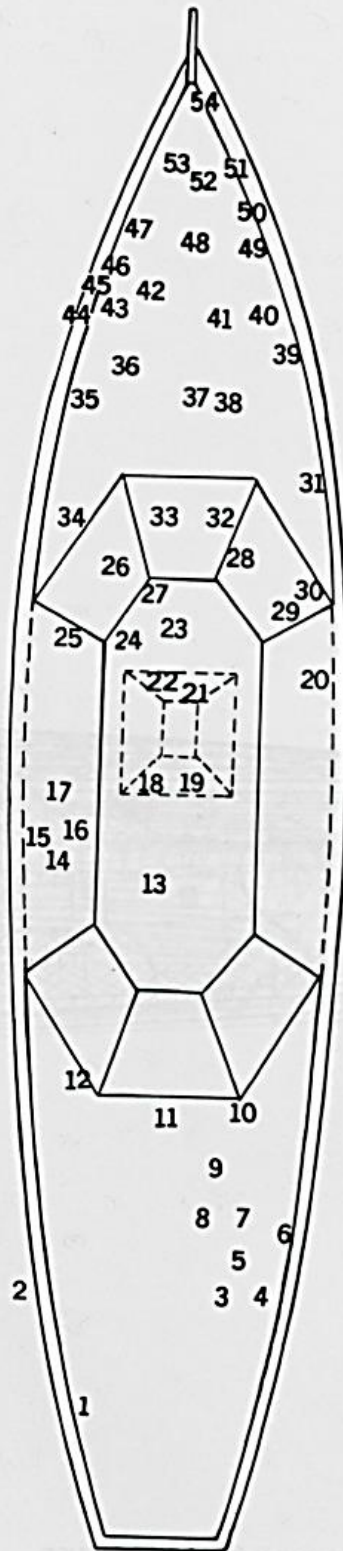


Figure 192

Figure 1. William Rowland's map showing significant finds (Bright et al. 1981:131).

1 PILLOW BLOCK	29 SOOT RAKE
2 PERCUSSION AMMUNITION	30 COOKSTOVE, POTS AND PANS
3 BELT BUCKLE	31 GRAPE AND CANNISTER SHOT, STACKED
4 INK BOTTLE	32 COOKSTOVE
5 DESK	33 FOUR CANVAS FOLDING STOOLS
6 PORCELAIN HAT AND COAT HANGER	34 GRAPE AND CANNISTER SHOT
7 BRASS KEY AND A HOLE COVER	35 LEATHER LEGGINGS
8 PORCELAIN DOOR KNOB	36 SWORD BAYONET
9 TWO SHOES	37 FIREBRICKS
10 INK BOTTLE	38 WOOD STOVE
11 WINE BOTTLE	39 WOODEN POLE
12 TWO LEVER WRENCHES	40 28 POUNDER BALLAST ROCKS
13 SHIP'S BELL	41 INK BOTTLE
14 ARMOR PLATING	42 STRAIGHT RAZOR
15 STEPS	43 UNASSEMBLED HEATER
16 BLACKSMITH TOOLS	44 BAYONET
17 BOILER MOUNTS	45 BAYONET
18 BOILER HOES AND RAKES	46 GRAPE AND CANNISTER SHOT
19 GEARBOX	47 FOUR SHOES
20 WOOD STOVE	48 BLOCK AND TACKLE
21 INK BOTTLE	49 ROPE
22 SHIP'S WHEEL	50 HOOKS
23 FIREBRICKS	51 FOUR GRAPPLES
24 BOILER GRATES	52 SIX HANDLES
25 ASH PAN	53 FOUR AXES
26 TWO LEVER WRENCHES	54 WOODEN BARREL
27 SHIP'S WHEEL	55 HATCH
28 WOOD STOVE	

**Figure 192.** Location of artifacts found on the NEUSE.

Figure 2. Key for artifact location map (Bright et al. 1981:130).

were salvaged from the ruins of an old jetty in the mid to late 1970s and had not been examined until Rodrigues' study was started in 1999. Most of the artifacts did not have specific contextual data or follow a systematic excavation plan. Any contextual information was obtained through later recollections of the divers and was not specific. Rodrigues chose to study the artifacts based on their functionality to avoid the problem of contextual data (Rodrigues 2002:108-109).

Rodrigues (2002:112) clearly identifies the project aims and the hypotheses that guided them as:

The project aims:

1. To identify, record and catalogue the artifacts and enter the information into a relational database to facilitate analysis and accessibility.
2. To identify the original function and use, as well as their ideological and symbolic meaning where possible.
3. To assess the archaeological significance of the site based on its associated material culture, and to compare it with the results of the Long Jetty and Albany Town Jetty excavations of western Australia



4. To set the stage from which further research on the assemblage can progress, and provide comparative data.

The aims were guided by three hypotheses:

1. To test that the dates of the artifacts coincided with the age of the original jetty, since the areas excavated were based on the structural plans of the first jetty.
2. To reconstruct associated aspects of the past and test the hypothesis that these coincided with events described and reflected in historical documents and old photographs.
3. To test the proposal that the artifacts reflected the changes in the use of the jetty and represented the historical development of the township and the State.

The method used by Rodrigues to compose her database was to identify the original function and date each artifact. Once completed, the functions of the artifacts were compared across time to identify changes. The artifacts were also compared with those from other jetty sites in Australia. While her research was successful, Rodrigues was able to identify several problems with her methodology. One of the largest problems was that the salvors had biases for bringing up artifacts that they thought were the most valuable, leading to a skewed representation of the total types of artifact functions present. She concludes that this study did provide important data of the use and cultural significance of the jetty site (Rodrigues 2002:126-127). She acknowledges the limitations of working with salvaged sites and pleads for better protection of sites until they can be excavated with proper archaeological techniques (Rodrigues 2002:127). This study conducted by Rodrigues has unleashed a new way to think about salvaged sites and their potential to add to the archaeological and historic record.

A similar study was conducted by Nicholas Nelson-Delong (2015:1), a recent graduate from the Maritime Studies Program at East Carolina University, which used artifact typology from an archaeologically-excavated shipwreck to determine the function of the ship, with the eventual hopes of confirming the believed identification of the ship. Nelson-Delong (2015:2-3) also compared the artifacts from the site to other known ships in the same vessel class to the

artifacts on his site “in an attempt to define and understand the function” of his ship. While Nelson-Delong’s main goal does not necessarily correspond to the main goal of this thesis, his work is a natural extension of Rodrigues’ efforts and represents another potential method that can be used to study salvaged sites.

There are many similarities between the jetty site Rodrigues’ focused on and the CSS *Neuse*. Both sites produced a large number of artifacts excavated over a several year period of time by nonprofessionals that did not record contextual data, any of which was typically added into the record years after the excavation. Additionally, the artifacts from both sites were moved around frequently to different storage sites and museums, did not have a consistent labeling system, and many artifacts did not have labels at all. The sites are both historically significant and can offer a better understanding of the culture that left them.

Most importantly, many of Rodrigues project aims, hypotheses, and methodology can be applied to the CSS *Neuse* site. Aims one and two, which deal with finding the use of the site from artifact function, will be looked at briefly but are not the main scope of this thesis. The historic record of the CSS *Neuse* clearly identifies the ship was a vessel of war and it served as such during its working life. This thesis will only use some aspects, including cataloging and analyzing the function of the artifacts, of these two aims on certain artifacts to help with the questions regarding contamination and looting. The third and fourth aims and first two hypotheses, with some adjustments to reflect the context of the CSS *Neuse*, will be the central tenants of this thesis. On the larger scale of aims three and four, this thesis will serve as a reminder that the site of the CSS *Neuse* can be archaeologically significant to the cultural understanding of Confederate sailors and shipbuilding practices once a clearer picture of its contextual information is discovered through postmortem techniques. Additionally, the

methodology that will be outlined subsequently in this thesis will hopefully be applicable in recreating other salvaged sites. Similarly to the first two aims, the first hypothesis is directly applicable to the study of the artifacts believed to be either contaminants or looted, as being of the correct time period will be indicative of including them in the collection. The second hypothesis directly relates to the claims involving the scuttling and removal of the cannons, using the archaeological remains, historic documentation, and photographs to determine the most likely series of events that led to these claims. The third hypothesis is not directly applicable to this thesis's postmortem examination of the CSS *Neuse*, as it will not examine either artifact morphology or the changes in the use of the site.

The one major difference between Rodrigues' jetty site project and this one concerning the CSS *Neuse* is that the focus will not be on the function of the artifacts, most of which have already been identified on the site, but on the recreation of the history of the site. This thesis will use a similar train of thought as Rodrigues' study to focus on using historical documentation, photographs, and the artifacts to solve the mysteries surrounding the history of the site.

## **Chapter 4: Historically Testing Four Folklores**

The intention of this chapter is to examine all of the claims that the site staff at the CSS *Neuse* Civil War Interpretive Center, the new museum space that now houses the ship and its contents, believe have affected the history of the ship. Each claim will be presented in its own section, starting with a brief presentation of the claim. An examination of the archaeological and historical evidence related to each claim will follow. Final discussion of how each claim has affected the history of the ship and how it will help to create the postmortem reconstruction of the site will follow in the next chapter.

### **Scuttling Method**

The exact method used to scuttle the ship has become convoluted by both word of mouth and written text over the past 150 years, offering different accounts and folklore of what happened on March 12, 1865. The research presented here includes a total of nine stories from eight sources that describe the scuttling of the CSS *Neuse*. Period accounts, including those from officers, sailors, and newspapers, primarily state that the ship was burnt. Later accounts add the use of an explosive charge or the ship's own gun to sink the vessel. These accounts, especially the latter ones that are most often portrayed and easily accessible by the public, have confused the history of the ship and render the retelling of an accurate history by the site staff more difficult. This section will begin with an examination of the sources describing the various scuttling methods and then discuss the validity of each claim with evidence from the remains of the ship, historical documentation, and photographs. It is imperative for the history of the ship that the scuttling method is examined in greater detail. Archaeological analysis of the scuttling claims provides an opportunity to understand the formation process and possibly aid in the reconstruction of the site.

There are four contemporary accounts of the scuttling of the CSS *Neuse* included in this research. The first two accounts come from either side of the battle, one from a Confederate officer on the ship and the other from a Federal General in Kinston. Confederate Second Lieutenant Richard Bacot wrote to his sister after the Union capture of Kinston and his arrival at a safe location. The CSS *Neuse* site's digital copy of the March 27, 1865 letter reports:

My old home the "Neuse," is gone, all the troops were withdrawn from Kinston and the Yankees 18,000 strong came upon us and not having any prospect of being relieved before our provisions gave out and being in a narrow river where we could not work the ship under fire, after shelling the Yankee Cavalry for a little while, we removed our powder and stores and burnt the vessel (Bacot 1865:1).

This letter is the source most referenced by historians accounting for the loss of the vessel. Corroborating this account is a letter sent between two high-ranking Union officials. In a correspondence two days after the invasion of Kinston, Union General J. D. Cox wrote to Union Rear Admiral A. C. Rhind, located in New Bern, the CSS *Neuse* was "burnt; her wreck is in sight" (*Official Records of the Armies* 1(47.2):838). These two letters, and the third below, will be referred to in the rest of this thesis by their authors. That the ship burned is not contested by any other account, but the details of its burning are where the ship's history gets more complicated.

A third contemporary account of the scuttling comes from an unpublished letter, a digital photograph of which has been given to the site staff by the person who currently owns the letter, whose initial goal was to sell the letter to the site. The letter is from a man named Eugene and sent to his sweetheart Maggie. Eugene vividly describes his part in the scuttling of the ship, stating:

Our first knowledge of our state of affairs came direct from Gen. Bragg in the shape of an admonitory dispatch that he would abandon the place at 4 P.M. At the hour indicated, the bridge, previously prepared, was fired. All was in readiness with us. An instant after and dense volumes of smoke were rolling from the ports

of the “Neuse”. How greedily the red tongues of fire licked her noble sides! How speedily was she devoured! I watched that ship with an emotion of pain. That my hand had helped prepare her for destruction, that my torch had given her to the flames was a sad consciousness – At six the Magazine took fire: one burst of fire [sic] flame and the river closed over her. While above pall like hung a white sulphurous [sic] smoke.

For forty minutes previous to abandoning her we shelled the enemy on the opposite of the river vigorously. That booming was her funeral knell. You will believe my heart was heavy when I tell you I hoped, nay supposed, we were going to Newbern. All thought so, not I alone, we had the troops, the “Neuse” was most formidable, what should prevent? (Eugene 1865:2)

This description duplicates the previously mentioned accounts, but includes the time in which the magazine exploded as six o’clock, when the CSS *Neuse* filled with water and sank soon after. It is important to note here that the physical copy of this letter has not been seen by the site staff and cannot be fully authenticated at this time.

The fourth contemporary account comes from a newspaper article that can be found on North Carolina Department of Historic Sites' website, which is the main source for public information on the CSS *Neuse*. On the page entitled, “The Destruction of the *Neuse*” (North Carolina Department of Historic Sites 2015a) is a copy of a newspaper article from the *New York Herald* on March 23, 1865. The article, written by a correspondent in Kinston, North Carolina, depicts the aftermath of the Union invasion with the author describing the destruction of the ship in a lengthy paragraph, stating:

The ram Neuse was destroyed by fire and sunk. Her smokestack can be seen now still standing. She must have been a formidable craft. Her crew, exclusive of officers, numbering ninety, surrendered themselves as prisoners. On the ram were twenty-one hermetically sealed cans of powder, two hundred pounds each, and two sixty-eight pounders, rifled guns—all of which at present slumber quietly in the bosom of the Neuse. The rebels had fixed a train of powder running from the magazine, two inches deep, four inches wide and two hundred yards long. At the entrance of the magazine percussion shells were placed on end, covered with about a bushel of powder, which would have raised the whole concern to the heavens. Capt. Haskins, of the 13<sup>th</sup> Iowa, detached and cut off this train before anything could be done, as he, in company with two other officers,

preceded the troops in crossing the river (North Carolina Historic Sites 2015a:par.6).

This version of the “burnt vessel” story is by far the most detailed and eccentric in its tale of the Union foiling the crewmembers’ plan to blow up the ship. An examination of the ship and comparison with the details of this story should help determine its validity.

The North Carolina Department of Historic Sites (2015b:par.84) has another page labeled “Life on the CSS *Neuse*,” which quotes the Bacot letter, and then summarizes that: “The *Neuse* was soon engulfed with flames, and a massive explosion on her port bow sent the vessel to the bottom of the shallow river.” The sources cited in the creation of this page are *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981) and *Kinston, Whitehall, and Goldsboro Expedition: December 1862* (Howe 1890). The site staff deems this reference as the most accurate account based off the current remains of the ship. However, the presence of this interpretation seems odd on the site's website. When this description of the scuttling was added to the website, the site staff did not know about the letter by the CSS *Neuse* crewmember, Eugene, which was the only primary account that goes into detail about an explosive charge sinking the ship.

Another website, dedicated to the story of the CSS *Neuse* and its replica *CSS Neuse II* and operated by the non-profit private organization CSS *Neuse* Foundation, contains a similar story to the one described above. In its brief history of the ship, the scuttling is described:

By March 10, 1865, Union troops had advanced along the Neuse River to within five miles of Kinston. Commander Price realized his chances of safely journeying the 60 miles to New Bern were almost non-existent. After shelling Union troops under Union Gen. Jacob D. Cox with canister and grape shot from the *Neuse*, Price ordered a charge to be placed on the bow and the gunboat set afire to prevent the *Neuse* from falling into enemy hands. The explosion blew a hole eight feet in diameter in the vessel’s port side (CSS *Neuse* Foundation 2015:par.3).

The website cites that this interpretation of the ship's scuttling is adapted from a text submitted by William Rowland to the organization. It provides an exceptionally detailed description of the damage done by the charge to the hull.

William Rowland was one of the primary salvors of the ship during the final excavation and helped write about that process and the history of the ship in *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981). In this work, the scuttling method is attributed to fire and the authors support the claim by referencing the Bacot letter. In a later chapter concerning the architecture of the ship, the authors mention that the timbers, which are "broken and splintered," from the port bow facing aft 30 ft., must have been "ripped apart by a strong force" (Bright et al. 1981:29). This curious comment might be the origin for the next set of divergent scuttling stories involving the ship's gun.

The first written account that states that the ship's gun was responsible for its sinking was a 1940 newspaper article. The article, published in the *Kinston Daily Free Press* on April 24, 1940, reveals that the Federal government will not provide support to remove the ship from the river, much to the community's disappointment. In the article's brief history of the ship, the author describes its scuttling with two possible accounts, stating:

The Federals did come. To keep them from capturing her the crew set fire to her, according to an account credited by local historians. The residents of Kinston held their ears and waited for a great explosion. Instead the flame-damaged craft sank—the flames did not reach the magazine. Another account is that the crew fired a shot through her bottom to sink her (*Kinston Daily Free Press* 1940:1).

The author does not cite any sources for these different theories, beyond their status as oral traditions. The lack of previous written accounts also claiming shell damage to cross reference or the ability to talk to the citizens of Kinston at the time of the scuttling poses problems validating these statements. Before continuing to the next account there are a couple of important points to



note about this claim that will be discussed later in more detail. The first is that the crew fired the shot that sank the ship. The second is that the article does not state if the gun was located on the ship or on the riverbank.

William Still wrote the second gun claim in his 1966 article, entitled “The Career of the Confederate Ironclad ‘Neuse.’” He states:

...after shelling Union cavalry for a short period, the remaining stores were removed, the guns were spiked, and the ironclad was set on fire and abandoned. She was supposed to blow up when the fire reached her magazine, but a loaded gun discharged, blowing a hole in her below the waterline. Within a few minutes she sank in shallow water (Still 1966:12-13).

Still cites this claim as coming from a combination of the three sources discussed above, the letters written by Bacot and Cox and the *Kinston Daily Free Press* article written on April 24, 1940; but his summary diverges from the assertions made in the earlier sources. Still claims the guns were spiked, meaning a metal spike was driven through the touch hole to disable the cannon, and that one of the guns, despite being spiked, spontaneously fired the shell still in its bore, creating the hole that caused the CSS *Neuse* to sink. Still (1985:221) continued to perpetuate this story of the scuttling of the CSS *Neuse* in his later works as well. Fellow historians have often cited this description, though unsupported, as fact.

The later accounts, written recently and from more publicized sources, are often the explanations used to describe the CSS *Neuse*’s scuttling. Unfortunately, the claims are unsupported and have confused the interpretation of the ship’s demise. Additionally, even when citing older sources, the newer interpretations often vary significantly from the events described in the sources they cite; this difference in interpretation is highly problematic. The diagram in Figure 3 shows the various scuttling accounts and the connection between the sources the authors have claimed to use to come to their conclusions. The differences in the stories and the incorrect

citations are even more evident when shown in a visual method. It is clear that these types of inconsistencies have made it difficult for past researchers to determine the real method used to scuttle the ship. The scuttling method is not the only instance in which sources and their citations have not been consistent when looking at the history of the CSS *Neuse*. This is where a methodology, such as postmortem archaeology, could help bring to light the truth. In the specific case of the method used to scuttle the CSS *Neuse*, it is important to examine the accounts above for inconsistencies in both the historical and archaeological record, along with real-world truths. To start this examination, the cases that are most unlikely to have happened will be presented first.

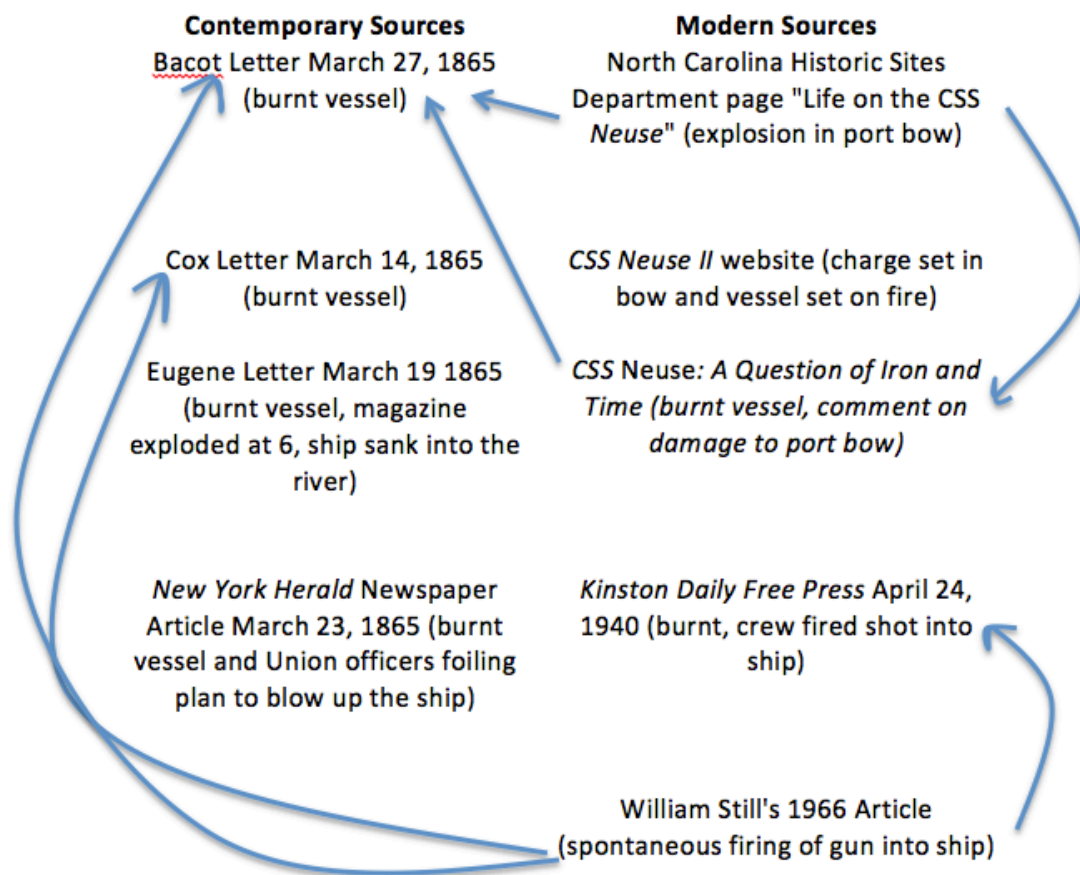


Figure 3. Diagram depicting the various scuttling stories and the author's source citations (Drawing by author).

The first two stories that will be examined claim that the ship used its own guns in the scuttling process. To start, this section will provide an examination of the possibilities and limitations of the Brooke 6.4 rifled gun. There are many sources that discuss John Mercer Brooke's process in designing his new guns and his major contributions to the Confederacy during the war. These sources, however, are not directly related to the purpose of this project. Primarily, the limitations of the gun in this case deal more with the limitations of the cannon carriage used. Unfortunately, there is little available information on carriages from the Civil War period, specifically those discussing the limitations of the elevation and depression of the gun in the carriages. One of the more popular carriages before and during the American Civil War, the Marsilly carriage, only allow for an 8° depression of the gun, which was further reduced to 7° to ensure the muzzle did not strike the bottom of the gun ports (Tucker 1937:207,209). It seems illogical that even different types of ship carriages, such as the pivot carriage believed to be on the CSS *Neuse*, would diverge greatly from this standard as the physical limitation of the ship itself still persists. According to two site staff members, who are also avid reenactors and have worked with guns similar to those on the CSS *Neuse*, gun carriages at this time were relatively standardized (Morris Bass 2015, pers. comm.; David Stone 2015, pers. comm.; Canfield 1969:8). They suspect that any deviation from the standard of the CSS *Neuse* guns was to allow for more stability and better ability to maneuver the guns in and out of the gun ports (David Stone 2015, pers. comm.). These changes would have come in the form of lengthening the back of the carriage so the gun could be pulled further out of the gun ports and lowering the front transom so the gun would fit more snugly and further out of the gun ports (David Stone 2015, pers. comm.). However, there is very little literature that discusses the limitation of cannon carriages, and none specifically regarding those on the CSS *Neuse*. To definitively conclude that the

cannons on the CSS *Neuse* were not involved in the process used to scuttle the ship, a deeper examination into the limitations of the casemate and a mathematical explanation of the degrees of depression and rotation needed to have caused the damage currently associated with the cannon shot is needed.

Further preventing the depression of the gun would be the physical dimensions and fit of the gun port. The gun ports were designed to not allow much room for the external objects to enter, i.e. enemy fire. Additionally the CSS *Neuse* sat low in the water with the cannons just slightly above the water line, so the cannons did not typically need to depress much to make a lethal shot. It was more important to be able to fire a shot higher for ships that sat higher in the water; more room was left at the top of the gun port to accommodate this need. The amount of space on the sides of the gun in the gun ports was also very limited. These physical constraints of the gun ports alone dictated the ability of the gun to fire on its own ship. It cannot be determined based on the limitations of the carriages and gun ports if the CSS *Neuse*'s own cannon could have caused the damage attributed to it without calculating the degrees the gun would have had to have been rotated and depressed to fire the shot.

Beyond the limitations of the cannon carriage and gun ports are the limitations of the physical space where the cannon sat. The cannon was housed in the casemate which had three layers of pine, one layer of oak and two layers of iron totaling about 26 in. thick (Campbell 2009:55,72; Bright et al. 1981:33). There were 10 gun ports, 5 for each gun, in the casemate (Campbell 2009:72). As the area that is associated with this claim is located in the port bow, it makes sense that only the forward gun would be the one inflicting the damage. As a shot would not likely have made it through the layers of the casemate, the deck, and side of the hull in such a straight trajectory, it is more likely that any shot was done through one of the gun ports.

Additionally, the only gun port that could have been used to create the damage would have been the forward gun port, not the 45° or side gun ports. To shoot in the direction of the damage, the gun would have needed to be depressed 16° and rotated 20° to the port side.

The easiest way to find the number of degrees the cannon needed to be depressed is to create a right angle using the center of the cannon (*a*), the vertical drop from the center of the cannon to the point of impact of the shell (*b*) and the distance from that vertical to the center of the actual damage on the ship (*c*). A diagram of this can be seen below in Figure 4. The distance between *a* and *b* form one leg of the triangle (distance 1, *d1*), the distance between points *b* and *c* form the second leg (*d2*), and the hypotenuse is created when points *a* and *c* are connected (*d3*). *D1* was estimated using the architects' plans for the ship, as the top of the ship is no longer intact. There is a square marking chiseled out of the keelson that shows where the support station for the gun carriage would have intersected it. This spot gave a starting point to find an accurate measurement to the damage on the ship's port side, which was allegedly caused by the gun. *D2* was measured using a measuring tape on the remains of the hull. The angle that the cannon needed to be rotated to make that shot was determined using a protractor and laser pointer. Simplifying the above figure into just the pertinent information, Figure 5 shows simply the right triangle formed when the points are connected. Using the basic rules defined in trigonometry, an unknown angle ( $\theta$ ) can be found on a right triangle as long as two leg measurements are known. In the case of the CSS *Neuse*, *d1* and *d2* have been measured or calculated. It is important to note here that  $\theta$  does not represent the depression angle of the cannon, but is necessary to find so it can be subtracted from 90° to give the correct depression angle (labeled  $\delta$  in Figure 5). The tangent function represented mathematically as the formula  $\tan(\theta) = \frac{\text{the length of the opposite leg of the unknown angle } (d2)}{\text{the adjacent leg of the unknown angle } (d1)}$  will be used to find  $\theta$ .

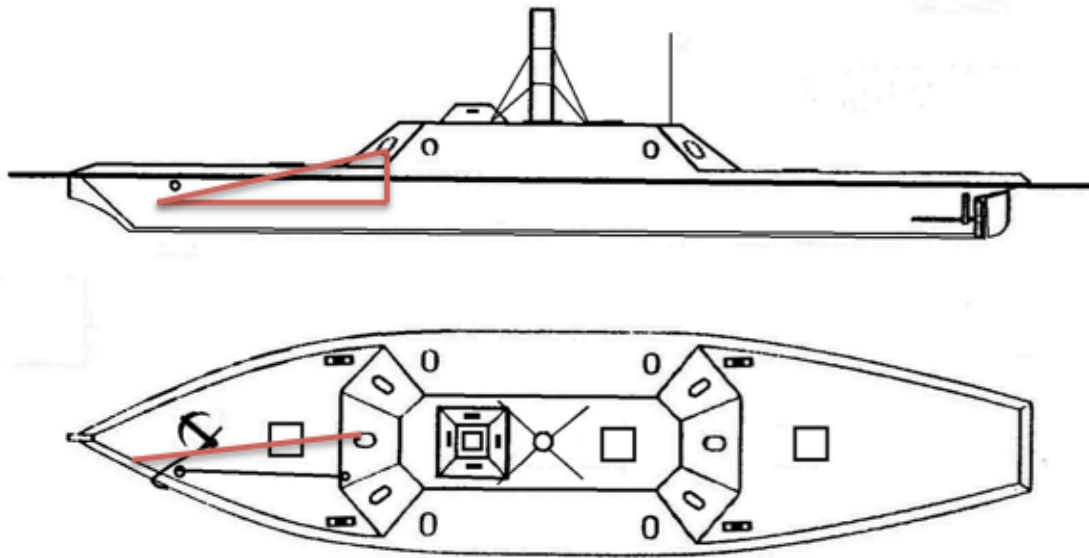


Figure 4. Diagram of the triangle created from the points originating from the cannon and area of damage in the bow. (Lines drawings courtesy of Rebelatsea 2014).

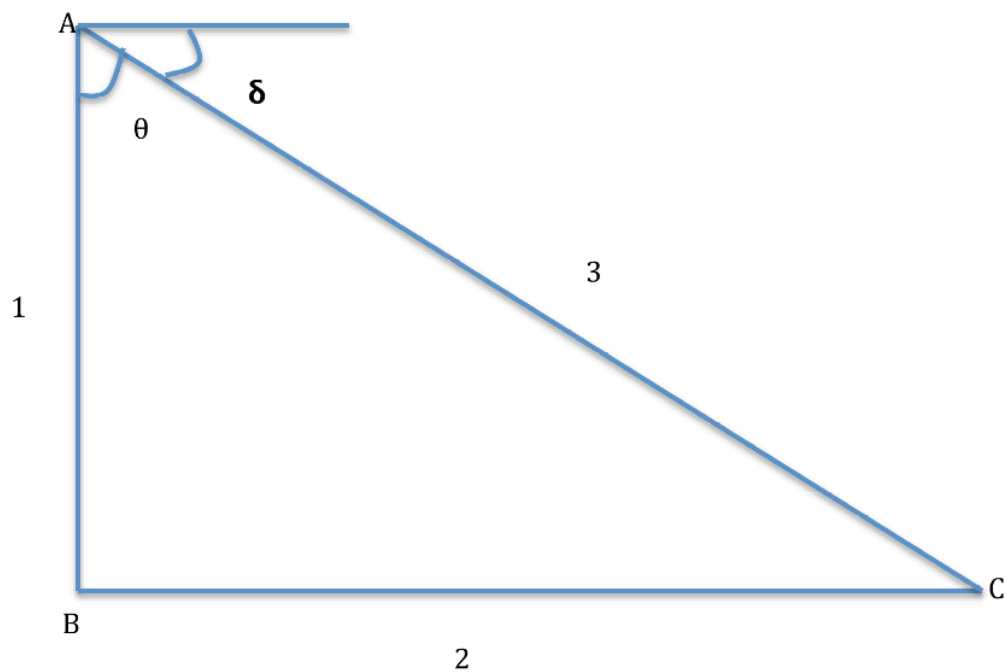


Figure 5. Simplified diagram of the triangle created from the points originating from the cannon and area of damage in the bow (Drawing by author).

As the goal is to solve for  $\theta$ , the inverse tangent function will have to be taken of the ratio of leg length ( $d2$ ) over leg length ( $d1$ ) creating the formula:

$$\theta = \tan^{-1}((D2)/(D1))$$

With the correct values added in for length of leg 1 and length of leg 2 the equation is represented as:

$$\theta = \tan^{-1}(31.41/9) = \tan^{-1}(3.49) = 74.01^{\circ}$$

$\theta$  then equals  $74.01^{\circ}$  and when subtracted from  $90^{\circ}$ ,  $\delta = 16^{\circ}$ . Coupled with the physical limitations of the gun ports discussed above, it is clearly impossible for the CSS *Neuse*'s own gun, whether spontaneously or with crew help, to have caused the damage to the ship. Photographs taken during the final salvage attempt add further evidence that this claim did not happen. The photograph shown below in Figure 6 should have a rather large hole, located approximately where the man in a white shirt is standing, if the ship's gun had caused the damage on the port side. The lack of a hole in this photograph and every other one showing the bow of the ship with the decking still intact only supports that the ship's guns did not cause the damage to the port side. If the shot did not come from ship's own gun, it would have had to come from the opposite bank of the river, as the starboard side was adjacent to the right bank. The pattern of the break on the supposedly gun-damaged port side, however, appears from a strong force pushing out of the vessel not into it. The physical evidence on the ship does not support the theory of outside fire from the crew or other party either.

The third claim that seems to be the most problematic is the story of the Union soldiers interrupting the trail of powder that led to the magazine of the ship with the hopes of blowing it up. The specific details that seemed to give the account legitimacy are the exact aspects that can be used to prove it is a false interpretation. To begin, there is no indication that the 13th Iowa

fought in the battle of Wyse Fork, which was the battle in which Kinston was occupied by the Union army and the CSS *Neuse* was destroyed (National Park Service 2015:par.2). According to



Figure 6. Photograph taken during the final salvage attempts showing the approximate area where there should be damage in the decking if the CSS *Neuse*'s own gun shot through the ship causing its scuttling (North Carolina Historic Sites 2015c).

the official record of their movements, the 13th Iowa had just arrived in Fayetteville, North Carolina, moving north from South Carolina, on March 11 and traveled to the battle of Bentonville around March 20-21 (National Park Service 2015:par.2). It is over 80 miles from Kinston to Fayetteville, a distance that is impossible to travel in a day without the use of mechanical means. Bentonville is located between Fayetteville and Kinston so logistically it does not make sense to travel that distance to Kinston when they were expected at Bentonville so shortly after their arrival. Secondly, the entire ship's crew did not surrender themselves; many were able to escape Kinston and sent letters home confirming their safety to their families (David Stone 2015, pers. comm.). This thesis alone discusses three such letters from crewmembers on the CSS *Neuse* who escaped immediate capture. Finally, it would not have been possible to set up a 200-yard trail of black powder from the magazine or to have someone brush the trail away



before the ship caught on fire (David Stone 2015, pers. comm.). The magazine was located in the hold and only had a ladder as an access point to the top of the ship and to the shore. It would have been impossible to make a continuous trail to the magazine from the shore (David Stone 2015, pers. comm.). Additionally, black powder does not slowly burn and spark as it meanders to its final destination, as is most often depicted in the media, but burns quickly and a 200-yard trail would have burned in under a couple of seconds, much quicker than would have been possible to interrupt it once lit (David Stone 2015, pers. comm.). Furthermore, the ship could not have been burnt, as the article's first line states, if the trail of powder meant to destroy the ship was interrupted. It seems that this story is more likely a result of the author either confusing events or creating a fictional story to emphasize the scuttling of the ship and the bravery of the Union troops. The reality of the situation is likely more closely aligned with the opening statement of the paragraph dealing with the destruction of the ship: "the ram Neuse was destroyed by fire and sunk" (North Carolina Department of Historic Sites 2015a:par.6).

The only claims that cannot be proven partially false are the letters from Bacot and Cox, because they are so simple in their description of the scuttling process. Neither of these accounts state that the ship's magazine exploded as a result of the fire. The archaeological and photographic evidence of the site during the final salvage provides further verification that an extremely large explosion, the size that would be expected if the magazine exploded, occurred. There is some evidence of fire damage on what remains of the wood, cracking and charring in a manner that is consistent with burning. Although, the fire damage is not extensive on the current remains, signifying that the fire went out quickly, which indicates that something caused the ship to sink shortly after it began burning. This leads to the last set of accounts that include a smaller explosion than would be seen if the entire magazine exploded.

The last four claims, all dealing with an explosion during the fire which caused the ship to sink, will be discussed together as the archaeological evidence is most strong for this scuttling type of event to have occurred. The problem with most of the accounts that fall into this category is that the details do not seem to match with the sources they claim to have used or the archaeological evidence present on the current remains of the ship.

Spreading false information about the history of the ship, whether intentional or not, has been very damaging to the academic interpretations and presentation of the information to the public. This has become such an ingrained and accepted practice that the staff of the site itself and Department of Historic Sites have come to rely on it in their presentations concerning the ship. This can clearly be seen on their website, entitled “Life on the CSS *Neuse*” (2015b:par.84). The article on the website states that the ship was set on fire, then an explosion in the bow ultimately sank it. The two sources used to cite this description, however, do not corroborate this claim. The first source cited, *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:17), used the Bacot letter as its only description of the scuttling. The non-contextualized author’s conjectural comment made about the damage in the port bow is the only possible explanation for the source of this scuttling method presented here. The second source listed, *Kinston, Whitehall, and Goldsboro Expedition: December 1862* (Howe 1890) was written specifically about the activity in Eastern North Carolina during the year 1862 and does not mention the scuttling of the CSS *Neuse* in 1865. Realistically then, only the modern book, *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:17), is the source of this scuttling method and this account diverges substantially from its sole source, the Bacot letter. The author’s conjecture is misleading and dulls the credibility of the source, even though this simplified explanation may hold some consistency with the remains of the ship.

William Rowland's later adaptation of the scuttling, as found on the *CSS Neuse II* website (CSS Neuse Foundation 2015), is yet another example of an unsubstantiated source. Here Rowland states that a charge was placed in the bow and exploded after the ship was set on fire, causing an 8-ft. hole in the port side of the ship (CSS Neuse Foundation 2015:par.3). This story, however, is plausible as it does give an explanation for the damage in the bow of the ship. The prow is completely missing from the remnants of the ship. Again, there are some problems with the way this story is presented. Firstly, there is no record of Price, the captain of the ship, ordering a charge to be used against the ship. Secondly, it would have made more sense to place the charge in the bow, where the pressure from its explosion in the contained space would do more damage, than placing it on top of the bow, where the explosion would have followed the path of least resistance and most likely only have caused additional fire damage (Morris Bass 2015, pers. comm.; David Stone 2015, pers. comm.). Finally, the size and location of the damage, although very specific in the dimensions of the damage caused by the explosion, does not necessarily correspond to the damage on the ship that can be seen today. While the port side of the ship has more damage than the starboard side, this could be explained by the position of the ship during its scuttling. The starboard side was positioned close to the bank of the river and the sides of the river may have supported the starboard side, making the port side less resistant to the force of the blow, inevitably causing more damage to the port side (Morris Bass 2015, pers. comm.; David Stone 2015, pers. comm.). The 8 ft.-diameter area of damage also does not correlate to the area that is damaged along the ship. The damage on the port side is much longer than 8 ft., although it might correspond to the height of the hull. Just describing the damage on the port side leaves out the damage done in the prow and starboard sides. The blast from a canister explosion would not just damage one side of the ship, but the entirety of the area, which

is consistent with the damage present today, but not with the story as told above.

There is one artifact that, possibly, may show some validity to this theory in the collection of artifacts recovered from the ship. It is a copper powder canister that has clearly been ripped apart by a violent force (Figure 7). The site staff believes that this canister was placed on the deadwood in the prow and exploded when the fire increased the temperature enough to ignite the black powder (Morris Bass 2015, pers. comm.; David Stone 2015, pers. comm.). While this seems to be a very logical explanation for the damage in the bow, this theory cannot be fully proven due to the lack of artifact find locations and other unclear visible signs on the remainder of the wreck. The only other source of evidence that could add credence or disprove this theory is a photograph of the prow before the salvors had removed the upper decking to ensure this was not caused by the process used to excavate the ship.



Figure 7. Part of a powder canister that has been blown apart (Photograph taken by author).

Unfortunately, a photograph showing this is not present in the collection of photographs given to either East Carolina University or the CSS *Neuse* Civil War Interpretative Center. The

only photographs available from these two collections show the bow, with the decking intact, from a viewpoint facing towards the bow with the photographer standing on the deck where the casemate would have been. In these photographs, parts of the deck are still mud covered and the forward end of the bow is fully encapsulated by mud. Photographs looking directly at the bow already have extensive damage in the prow, which could be caused from the removal of the decking. Photographic verification is needed in this case because of past falsifications of the excavation process by the salvors.

The most public figure during and after the salvage of the CSS *Neuse* was William Rowland. The site staff has provided several examples of him possibly modifying various media, including photographs and audio recordings, to better demonstrate his interpretations of the site (Morris Bass 2015, pers. comm.). Unfortunately, this precedent has made Rowland's later material an unreliable source for details concerning the ship during the excavation process. This means that additional independent evidence, especially in the form of original material, is needed to validate his, or any other claims, which concern the history of the ship.

One of the more important sources to highlight in the discussion of an explosion causing the scuttling of the CSS *Neuse* is the letter written by the crewmember, Eugene (1865:2). Even though it is an unverified source, this letter is important because it is an unpublished contemporary account; and if proven to be authentic, can offer greater detail into the scuttling of the ship. Initial examination of the description of the explosion in the letter does not seem to correlate with the damage on the ship. Eugene's letter presents the timeline and details of the scuttling in a rambling manner needing clarification. To summarize his account, General Bragg was leaving the area of Kinston at 4:00 P.M., which would mean the ship would have been scuttled just before that time so the crewmembers could evacuate with the protection of the army.

If the crew left with the army around 4:00 P.M. and shelled the incoming Union troops for forty minutes prior, it is reasonable to assume that they began their assault around mid-afternoon. The ship would have only been burning for about 2-2.5 hours before the magazine caught on fire, exploded, and cause the ship to sink at 6:00 P.M. (Eugene 1865:2). The area that contained the magazine during the ship's working life, however, does not appear to have any damage beyond the removal of its walls during the excavation, which would not have caused the CSS *Neuse* to sink. As stated before, an explosion in the magazine would have caused significant damage to the ship, which is not present on the current remains. Additionally, photographs taken during its excavation, such as the one in Figure 8, show the magazine and its ammunition intact at the time of the salvage. The site staff members, however, believe that this letter is fairly accurate and have offered their interpretation of what Eugene describes (Morris Bass 2015, elec. comm.; David Stone 2015, elec. comm.). The site staff believes that the timeline in the letter correlates with the other accounts of the day's events. They also think that the term "magazine" could have meant a charge or store of powder. As has been discussed earlier, there is damage to the prow of the ship, leaving a hole large enough that, if it were caused during the scuttling, would have sunk the ship rapidly. So it is possible that the prow was loaded with a store of powder causing an outward explosion, which opened a space for water to rush in. The term magazine might have been used to simplify the event for the letter's intended civilian audience; it was common knowledge that, if a powder magazine caught fire, it would explode, causing great damage. Either way, using the interpretation provided by Eugene's letter possibly gives a much fuller understanding of the scuttling process. This account seems to be the most accurate, detailed, and fitting of the damage that can be presently seen on the ship, but its authenticity must be verified before it is deemed the most reliable account.



Figure 8. Photograph taken during the final excavation showing the intact magazine area (Rowland 2007).

### Contamination

The next major claim that complicates the history and site formation process of the CSS *Neuse* involves the contamination of the site. While contamination has most likely occurred throughout the whole site formation process, the most damaging contamination comes from the addition of outside metal scraps added during the long excavation process, which took place between 1954 and 1966. As the site staff recount, the excavation process begun with the hope of reimbursement for artifacts collected and labor expenses paid retroactively to the salvors from the federal or state government (Morris Bass 2013, pers. comm.). It was believed by the excavators that the amount of reward would be primarily based on the amount of metal removed from the wreck site (Morris Bass 2013, pers. comm.). Possibly motivated by greed, some excavators may have added metal scraps to the site (Morris Bass 2013, pers. comm.). An

anonymous patron of the CSS *Neuse* and Governor Caswell Memorial site informed the staff that her father and his friends, who were helping excavate the site, went to farmhouses and abandoned factories in Kinston collecting old metal goods. These men then, reportedly, distressed the goods and threw them on the site one night (Morris Bass 2013, pers. comm.). Miscellaneous artifacts, identifiable as contaminants, were indeed brought up with the ship and are considered to be part of the artifact collection. These additions, however, have caused a number of problems in the interpretation of the site.

Over the years, the site staff have identified several items that they believe are contaminants to the site. Many of the items were initially labeled miscellaneous pieces of either armor plating or metal items used for unknown purposes on the ship. Morris Bass and David Stone, both members of the site staff, with Stone also working as a historic blacksmith for the State Historic Sites Department, have broad knowledge of metal artifacts from the Civil War era and have been able to determine contaminants using their knowledge of historic metal processing methods and artifact morphology. Below is a discussion of their interpretation of artifacts identified as contaminants.

One of the first artifacts identified as a contaminant is shown in Figure 9. It is a polygonal piece of iron with a hole. Originally, the artifact was identified as a piece of armor plating covering the ram. On first inspection this artifact seem too small to have been part of the covering on the ram. The sister ship of CSS *Neuse*, CSS *Albemarle*, had an 18 foot prow (Barrett 1980:215). William E. Geoghegan, a Smithsonian Institute specialist, compared the remains of CSS *Neuse* with the Porter's construction plans from CSS *Albemarle* and determined that the architecture of the ships were almost identical, with CSS *Neuse* being slightly larger (Bright et al. 1981:31). This artifact is small than apiece of standard copy paper and only about a half inch



thick, significantly smaller than what was needed to protect and make an effective ram for the ship. Morris Bass, however, recognized the artifact as having a similar shape to the plow points he saw as a child. With further research, he was able to confirm that it was, in fact, a plow point from the mid-20th century and not a piece of the armor plating. The material is also not consistent with the supposed Civil War date. This artifact's corrosion pattern is more aligned with that of steel than iron; iron was the material used to create the armor plating on the CSS *Neuse* (Rodgers 2004:73). There is no known contextual date for the artifact other than that it was found on the ship (Morris Bass 2015, elec. comm.).



Figure 9. Artifact initially identified as a piece of the armor plating and later found to be a contaminant. Photograph courtesy of Morris Bass (2015, elec. comm.).

The next contaminant is the pair of iron balls seen in Figure 10. At first, they were identified as cannon balls. However, they appear to have the number 12 stamped on them, which was not common for military issued artillery. Common military issued cylindrical projectiles also often had fuses, especially those meant for naval guns (Dickey et al. 1993:28-51,349-364;

Canfield 1969:13). Further, cylindrical projectiles were primarily used with smoothbore guns; not rifled ones, such as those on CSS *Neuse* (Dickey et al. 1993:28-51,346-364). David Stone (2015, elec. comm.) believes that they are not the correct shape for cannon balls, having a flattened side. He believes that these are, instead, items that would have been used as counter balances or for exercise. These pieces are also too small to be cannon balls for the type of guns on the ship and too large to be canister or grape shot. The diameter of the balls is significantly smaller than the diameter of the barrel of a 6.4-inch Brooke rifle gun or the standard ammunition used by this gun, so they would not fire out of the gun without extra packing around them (Canfield 1969:20; Rodgers 2016b, pers. comm.). It is possible that these items were fired into the ship when the Union Army arrived, as this type and size cylindrical solid shot was common for smaller landbased 12-pounder smoothbore guns, or were brought on by a crewmember (Dickey et al. 1993:34). A more detailed examination and metallurgic study will need to be performed before final conclusions can be made about these two items. Again, there is no contextual data for these items.



Figure 10. Iron artifacts that are thought to be contaminants because of their size and shape (Photograph taken by author).

The third contaminant, shown in Figure 11, is a fastener used to attach railroad tracks to

the supports below. It is listed in *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:80) as a track mount for the gun carriages. David Stone (2015, elec. comm.) believes this artifact is actually from a railroad track and has a slightly more modern form than the ones used during the Civil War. Through observations of images of Civil War era pivot carriages, similar to those on *CSS Neuse*, it is easy to infer that the form of these carriages was different than those of railroad tracks. Pivot carriage tracks were countersunk into the decking, most likely to limit tripping hazards, and were necessary to provide a sturdy base that reduced friction. This would determine the types of wheels that could be used. Those needed for a pivot carriage were smooth and flat, so they could glide over the tracks; while railroad wheels were shaped to fit upon a raised track. If the tracks on *CSS Neuse* were, in fact, countersunk as the image research indicates, then they would not need fasteners to hold them into place (Coggins 1962:143,91-93; Bright et al. 1981:12; Canfield 1969:9; Rodgers 2016b, pers. comm.). This item does not have specific contextual data.



Figure 11. Railroad fastener believed to be a contaminant (Photograph taken by author).

The final item that has been identified as a contaminant is a cylindrical iron piece, shown in Figure 12. It seems to be a socket-like object with a cut out, possibly used for locking. The cut out appears to have been done with a more modern technique than those available before and during the Civil War (David Stone 2015, elec. comm.). Although the function of this item is unclear, its status as a contaminant is not. Similarly to the other items, this one also lacks specific contextual data.



Figure 12. Socket believed to be a contaminant (Photograph taken by author).

This is only a small sample of the items believed to be contaminants, but they are representative of the larger issues contamination causes to the site. These artifacts were chosen because they have already been identified as objects that could not have been present during the working life of the CSS *Neuse* because of their later manufacturing date and intended use. Contaminants, especially the large number that have purportedly been added to the CSS *Neuse*, create an additional burden on the site staff. The site specific and statewide supporting staff must examine the contaminated artifacts and initially treat them as if they were artifacts contemporary to the site. That includes the documentation, cleaning, stabilization, conservation, storage, and

funding it takes to complete these tasks until the object is proven to be a contaminant. Furthermore, as shown with some of the items here, assigning the wrong interpretation to the artifacts can drastically change the understanding of the ship. The most egregious example discussed in this thesis is the plow point. The initial classification of this artifact as part of the armor plating protecting the ram distorted the reality that the shape of the ram was blunt, not pointed. The history of the ship and the lives of the sailors who occupied it cannot be fully understood until the inaccurate conclusions from contaminated pieces can be identified. The other objects presented here had less of an impact on the historic interpretation of the ship but have still used more of the state's resources than necessary.

Beyond the effects of the contamination of the historic record, the purposeful addition of material did not translate into the result the salvors wanted. The big reward the salvors expected to receive based on the weight of the salvaged materials did not ultimately occur due to complicated ownership issues, and led to the contamination and eventual non-professional salvage of the site.

### Salvage and Looting

The remains of the CSS *Neuse* were not well protected in its wreck site, as part of the hull was exposed during periods of normal or low water levels in the river and its close proximity to the riverbank made it easily accessible (Bright et al. 1981:19). The wreck was often used as a fishing spot and makeshift dock for children to swim during its extensive time in the river (Morris Bass 2013, pers. comm.). Its location and lack of protection made the removal of artifacts from the site effortless, even outside of the numerous salvage attempts. The term looting can be a very emotionally charged word. In this thesis, however, it refers to the removal of artifacts, whether done during or outside a salvage attempt, with the intention to bring it into a

personal collection as a souvenir. As mentioned above, the final salvage and full removal of the ship did lead to one of the largest incidences of looting from the site. To mitigate the disappointment of not receiving monetary compensation for their work, the state allowed those helping with the excavation of the ship to take artifacts before the collection was fully transitioned into state ownership (Morris Bass 2013, pers. comm.). The complication of bringing the CSS *Neuse* into state custody and the lack of professional archaeological excavation prompted the state to enact legislation which declared that all historic and archaeological sites are property of the state and illegal to loot (North Carolina General Assembly 2016).

Over time, some artifacts that were looted from the site have been returned. These artifacts will be used to examine the issue of looting and the possible impacts it has had on the interpretation of the site. Some of the better known looting occurred when fisherman pulled spikes out of the hull to use as line and net weights (Bright et al. 1981:19). The CSS *Neuse* site staff have reported that a number of these spikes have been returned to the site collection over time and seem to be the most frequently returned type of artifact (Morris Bass 2015, elec. comm.; David Stone 2015, elec. comm.). Another artifact type that has often been returned to the site is the percussion fuse shell, typically ones that have not had the powder removed (Morris Bass 2013, pers. comm.).

Site staff members have confessed that they are more likely to remember the return of larger and more unique or distinguished artifacts (Morris Bass 2015, elec. comm.; David Stone 2015, elec. comm.). Some of the most recent ones include a couple of wooden planks, one that is about 6 feet tall, burnt on one side with white washing on the other, and is believed to have come from the interior of the hull (Figure 13). Another is a candleholder that had been made with some wood recovered from the ship (Morris Bass 2015, elec. comm.; David Stone 2015, elec. comm.).

State officials have been able to provide a more detailed list of artifacts that have been returned since the ship was brought into state custody (Table 1 in Appendix 1) (Martha Jackson 2015, elec. comm.). Most of the returned artifacts listed in the state's records are small and completely disarticulated from any contextual information.

This is particularly true for the pieces of interior planking, of which the site only had a very few, small fragments before the planks were returned. With this one plank alone, the site staff has been able to confirm the use of white wash on the interior walls and examine the amount of fire damage that was done to the interior of the ship during the scuttling. The one problem with returned items is that they still cannot help with the contextual information. Unless the salvor knows where the item came from, and their memory may or may not be reliable, or has a picture of the artifact *in situ* before it was removed, the piece cannot be analyzed to the standards of modern archaeology. Theoretically, for returned pieces of the ship, an archaeologist might be able to properly place it in context if fastener holes can be aligned. This method would be a tedious process and would only work if factors such as warp and physical presence of the remains could be accounted for. For artifacts that were not directly attached to the ship, it would be impossible to determine exactly where they were placed before their removal. The facts provided by looted artifacts can only be beneficial if the items have been properly examined for clues.

Just as compelling as the artifacts that have been returned are the ones that have not. One item, in particular, that the site staff knows was looted from the ship during the recovery process is a large piece of armor plating, shown below in Figure 14 (David Stone 2015, pers. comm.). The item is still in the possession of the individual who took it, who stated intentions of not returning it to the state (David Stone 2015, pers. comm.). William Rowland brought the





Figure 13. Interior plank with charring on the top and remnants of white washing seen towards the middle of the plank (Photograph taken by author).

photograph in Figure 14 to show the site staff as proof of its existence (David Stone 2015, pers. comm.). The large piece of armor plating, which is larger than most of the pieces in the state's possession, has an anomalous projection coming out of the side, which the staff would like to examine to determine its function (David Stone 2015, pers. comm.). Unfortunately, without the ability to gain access to the armor plate, the site staff and outside researchers cannot determine



the significance of this piece and its relation to the history of the ship.

Once placed into the custody of the proper authorities, looted artifacts can add to the overall understanding of the ship during its working life and site formation process. While the contextual information they could have provided to archeological studies if they had been left in place is gone, looted artifacts can deepen the understanding of the site in a variety of ways. The artifacts returned to the CSS *Neuse* site have helped the staff gain a better understanding of the building process and armament of the ship.

### Removal of the Naval Guns

A fourth example of folklore that can be briefly examined involves the fate of the naval guns. Oral history has suggested that they were taken off the ship by the federal government within a year of the war ending. There is also a more modern opinion that the guns possibly were placed in the river and are still there waiting to be discovered. A few copies of newspaper articles are the only documentation that the site staff has regarding the removal of the naval guns (Morris Bass 2015, pers. comm.). They are unaware of any official government documentation of the removal of the naval guns; a brief examination of the newspaper articles reveals clues as to why. On October 3, 1865 the *New Bern Sun Journal* ran an advertisement for the upcoming auction of the CSS *Neuse* (*New Bern Sun Journal* 1865:1). William Rowland provided the site staff with a copy of this advertisement after he found it in 2004. As can be seen in the reproduction of the advertisement in Figure 15 below, the guns were not included as part of the sale of the vessel. Specifically, the advertisement states that the guns “will be reserved until further orders,” indicating that they were still present on the ship, at least until the time of the advertisement if not the auction (*New Bern Sun Journal* 1865:1). The site staff has another copy of this ad as well



Figure 14. Photograph given to the site staff showing a large piece of armor plating still not in the possession of the state of North Carolina (Photograph taken by author).

as several others, all from the *New Berne Daily Times* (1865a), discussing the ship before and after the auction; however, these additional articles do not offer any additional information on the naval guns other than the one discussed above (Appendix 2). It is important to note that all of the articles do highlight the items that were considered valuable on the wreck site, including the

large pieces of iron and coal.

The only other pertinent information given by the article is that the auction was being held following instruction from the Secretary of the Treasury. Peter Campbell (2009:58-60) followed this lead in his thesis and discovered that the treasury representative in New Bern, William Heaton, auctioned the ship in the name of the federal Department of the Treasury, a common practice for Confederate property after the war. The naval guns were large iron objects that would have had usefulness, either being reused or melted down for scrap, making them very valuable to the government. The newspaper article leaves out one major clue that now hinders the search for the cannons: which government agency had jurisdiction on deciding their fate? This could rest in the hands of several federal departments, although, logically, it seems the most likely to be either the Department of the Treasury or one of the armed forces, probably the Army or the Navy. Unfortunately, the number of possible locations for these records has made them difficult to find.

This lack of public knowledge of the fate of the naval guns most likely started the rumor that they were still in the river. Evidence of this belief is seen in the numerous attempts to locate and recover the cannons from the riverbed. The first attempt, called “Operation Magic Hole,” started in 1966 and anticipated finding the ship’s machinery and naval guns (Bright et al. 1981:27). It was unsuccessful in recovering these items, but was able to retrieve a 9 ft. x 12 ft. piece of the casemate, two large pieces of armor plating, several tools, and various miscellaneous metal artifacts (Bright et al. 1981:27). Through modern times, including the most recent state funded river expedition in 2014, any search for additional CSS *Neuse* artifacts holds the hope of finding the naval guns (Kenney 2014:par.2). Unfortunately, each search has been unsuccessful in finding them.

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# THE REBEL RAE

TO BE SOLD AT

## PUBLIC AUCTION.

IN accordance with instructions from the Secretary of the Treasury, the Vessel known as

### THE REBEL RAM,

Partly sunk in the Neuse River, about one mile from Kinston, will be sold, as Abandoned Property, at Public Auction, at the North Carolina Bank Building, in New Berne, North Carolina, on

**Monday, Oct. 9th, at 3 o'clock, P. M.**

This vessel contains the following valuable property, which will be sold with the vessel at the same time and place, viz :

*TWO LARGE ENGINES,  
ONE DONKEY ENGINE,  
ONE LARGE BOILER,  
Of Eighty Horse Power ;  
THREE CABLE CHAINS,  
AND  
THREE ANCHORS,*

The length of the Chains being from 35 to 50 fathoms. The amount of Iron belonging to the Vessel is about 250 Tons. There is also in the Hull of said Vessel about twenty Tons of COAL. The two large cannon on board will be reserved until further orders.

The above Property presents a splendid opportunity for those who wish to purchase for profit. By order of the Supervising Special Agent

**E. HUBBS, As't. Sp'l Ag't.**

**W. L. POAER, Auctioneer.**

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Figure 15. Digitized copy of the advertisement for the auction of the ship. Courtesy of Morris Bass (2016, elec. comm.) (*New Berne Daily Times* October 3, 1865:1).

The fate of the guns after the war, however, does not affect the overall understanding of the ship during its working life. In the interest of theoretically recreating the site using postmortem techniques, the importance of this claim lies in understanding the damage that was done to the ship in its first salvage after the auction. Campbell (2009:59) discusses the damage

done to the structure of the hull during this initial salvage, which removed the armor plating, casemate, and parts of the deck and stern to recover the boilers, engines, and propellers. This initial salvage altered the ship and the course of its site formation drastically.

All of the claims and folklore discussed above help to explain the changes in the physical remains of the ship and understanding these changes will help in the postmortem reconstruction of the site. The next chapter will focus on the effect these claims have had on the site formation and how an archaeologist may work backwards to recreate the site before it was salvaged.

## **Chapter 5: Postmortem Assessment of the *CSS Neuse***

The goal of this thesis is to use the information gathered by the study of four smaller questions concerning the *CSS Neuse* to create a postmortem understanding of the site.

Understanding the damage that has been done to the site from the scuttling and salvage, including the contamination and looting from the final salvage, can allow us to piece together the site and bring a better understanding of how it might have looked before human interference. The previous chapter examined each of the four questions with the intention of comparing the oral history of the ship with the physical evidence available today. The goal of the contamination and looting questions is relatively simple: does the evidence in the collection support the claims that the site was contaminated with outside items and that valuable artifacts were taken from the site and initially left unexamined in the collection? In both of these cases, the evidence in the collection does support the claims that the site was contaminated and looted.

Investigating the claims and analyzing the data involving the scuttling of the *CSS Neuse* and the removal of the naval guns is much more intricate and convoluted. The multiple scuttling claims could be proven or dismissed by using the physical remains and basic mathematics, leading to the most plausible tactic used to sink the ship. There was no physical evidence of cannon removal that could not also be attributed to the first salvage of the ship after its auction. Historical documentation should be considered the main tool used to determine the whereabouts of the naval guns after the war, since it is more likely that the guns were salvaged than left in the river. The investigation into the removal of the naval guns gave a better understanding of the damage done to the ship after the auction to remove the items deemed valuable and reusable. It is the examination of the damage done to the ship as a direct result of the four issues discussed above that lead to the ability to use postmortem techniques to recreate the wreck site of the *CSS*

*Neuse*.

To begin a theoretical recreation of the wreck site, a compilation of the entire data set gathered from the examination of the four questions above, involving the scuttling of the ship, contamination, looting, and removal of the naval guns, must be done. After it was scuttled, the CSS *Neuse* was nearly intact structurally, minus the damage in the prow where a charge most likely exploded. The first salvage of the ship after the auction in 1865 fully removed the casemate and damaged the stern when trying to remove the parts of the ship that could be reused or melted down. The damage inside the hull was minimal as photographs taken before the final salvage show that most of the deck and the interior walls were intact (Figures 16 and 17). Damage to the bow also occurred during the final salvage attempt, between 1954 and 1964, when the decking and interior walls were removed. Photographs of the ship taken before the final salvage confirms that the bow section in total was much more complete (Figure 16). Both the historical and archaeological records can account for damage caused to the structure of the ship by the numerous salvage attempts. Understanding the damage to the structure is a critical first step in determining how the four claims would have affected and disturbed the artifacts within the hull.

Accounting for the displacement and movement of the artifacts inside the ship is more difficult and should be considered more the work of a scrambling device than an extraction filter. Structural and cultural components of the ship during its working life would have affected artifact displacement after it was scuttled. The officers serving on the CSS *Neuse* did not live on the ship, but in a small house about a quarter mile away from the ship, meaning many of their personal belongings would not have been kept on the ship (Bright et al. 1981:141-142). Crewmembers had forewarning that the ship was to be scuttled and most likely had a short





Figure 16. Photograph taken during the final salvage showing the forward portion of the decking intact (North Carolina Historic Sites 2015c).



Figure 17. Photograph taken during the final excavation showing the interior walls of the hull before they were removed by the salvors (CSS *Neuse* Civil War Interpretative Center 2013).



amount of time to gather their most important personal possessions, which can be seen in the lack of personal items left in the collection today.

The densely-built structure of the ship added some protection to the artifacts in its hull in spite of the scuttling. The lack of excessive charring over the whole of the ship indicates that the fire set during the scuttling was extinguished fairly quickly. That being said, there is not enough fire damage to have caused structural failure on a large scale where items would have easily been extracted and dispersed away from the site, either from the explosion or later effects of the river current. The possible explosion in the bow would have most likely only disturbed items in the front compartment of the ship. Items placed further back in the ship would have been protected from the blast by the interior walls and would have been disrupted less than items closer to the explosion. An example of this can very clearly be seen in a photograph from the last salvage where the shells are shown neatly stacked *in situ* (Figure 8 in previous chapter). This leads to the conclusion that the majority of artifact disturbance came from human interaction during the salvage attempts.

Obviously, the salvage process itself served as an extraction filter removing the artifacts from the ship and destroying any contextual information that could have been collected if the site would have been left untouched. Additionally, the contamination and looting of the site before and during the salvage attempts added layers of confusion onto the archaeological record. Having knowledge of contamination and looting, however, should now allow researchers to discount any artifact that was clearly not on the site originally and account for gaps in the collection. The next step in recreating the site will be determining what resources available will provide the necessary details for artifact placement on the ship. Similar to the work done by Rodrigues (2002:108-128) on the jetty site in Australia, contextual data concerning the artifacts

on the CSS *Neuse* will have to be compiled from an examination of the information shared by the salvors. Oral histories and photographic evidence given by the salvors are two possible ways to determine the original resting place of the artifacts before the final salvage. These two methods are dependent on the detail of the photographs and credibility of the person giving their account. Additionally, this information would be needed for all the salvage attempts.

Unfortunately, much of the information from early salvage attempts is very limited for both methods, leaving only the account of the final salvage. Artifacts disturbed before the final salvage may not represent their original location in the documentation provided by the salvors of the final salvage.

William Rowland is by far the most public member of the final salvage team and one of the few to have kept written records from the final salvage efforts. He gave most of the records he kept of the salvage process to East Carolina University's Joyner Library in 2007. He also shared his research on the CSS *Neuse* with the site staff. Most of the photographs taken during the final salvage are of the ship on a larger scale and do not have enough detail to show individual artifacts. There are only a handful of photographs that show the artifacts *in situ*, one example is of the neatly stacked shells in Figure 8 in the previous chapter. The rest are of individual artifacts after they had been removed from the site and were cleaned. While the photographs of the individual artifacts are important for knowing what was in the collection, they are devoid of any contextual information and, unfortunately, do not help with identifying where they were on the ship.

Rowland did draw maps of important artifact finds during the final salvage of the ship. The original maps were donated to Joyner Library and reside there in the Rowland Collection (Rowland 2007). A reproduction of the original map appears in the book *CSS Neuse: A Question*

*of Iron and Time* (Bright et al. 1981:130-131) and Rowland has provided additional reproductions to the site staff on several occasions. The location of artifacts depicted in the various versions of Rowland's map change with each new reproduction; this is very problematic for researchers trying to recreate contextual information for the site with these maps. A sample size of three maps, the original from Joyner Library, the copy in *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:130-131), and one provided to the site staff during the research process for this thesis, were used to examine the changes made over time. These maps can be seen below in Figures 18, 19, 20, and 21. When comparing the three artifact maps, several discrepancies immediately present themselves. The date of the documentation went from 1965 to 1966 on later copies of the map (Figures 19, 20, and 21). Additionally, the co-creator of the map, W. E. Goeghegan, has been left out in later versions (Figures 19, 20, and 21). Finally, an additional five artifacts are added to the latest version of the map (Figure 21).

On closer inspection, even more discrepancies are apparent, including shifting the location and changing the names of several artifacts. Artifacts 2 and 32 are shown in a different location both in the original map and the copy in *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:130-131) than in the last reproduction. The name has been changed of artifacts 17, 28, 30, and 55, including the removal of a stove piece in the description of artifact 30 and addition of two covers in the description of artifact 50, in the last map. Artifact 47 is in a different location in both of the later reproductions. Artifact 55 is listed in the artifact key but not on the map in *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:130-131). Additionally, the original map has some specific details that were left out of later versions, including the identification and placement of two stoves and drawings and measurements of several artifacts.

The details missing, shifted, and altered in the newer maps have very serious ramifications for modern interpretation of the wreck site. The newer maps are the ones most readily available and used to make interpretations of the ship; yet any interpretation based off the newer maps would be inaccurate. In general, the distortion of information in the maps over time highlights a larger problem with doing a postmortem interpretation of the CSS *Neuse* site.

#### Limitations Preventing a Full Analysis of the CSS *Neuse* Site and Conclusions

To fully recreate the site of the CSS *Neuse* is extremely difficult because of the problems with the site after it was excavated and brought into the custody of the state. The site faced irrevocable damage from years of human interaction during and between the various salvage operations. The human interference on the CSS *Neuse* site created powerful scrambling devices and extraction filters that removed nearly all of the contextual information. That process continued when the ship was removed from its original wreck site. The historical records detailing the physical disturbances of the wreck site have also been distorted, and this false information has often been passed down by those involved with recording the history of the site as unsubstantiated folklore.

To start, the disparities in the three artifact maps are just one example of Rowland's distorted, or perhaps forgotten, information that has often been presented to the public. The site staff has been able to show several examples of media, including photographs and audio, which may have also been altered by Mr. Rowland for various reasons even after giving the information to the state. Ultimately, researchers must question all of the work he has produced regarding the CSS *Neuse*.

Secondly, a lack of communication between site and state support employees has caused several challenges with the collection and curation of the artifacts. The artifacts in the state

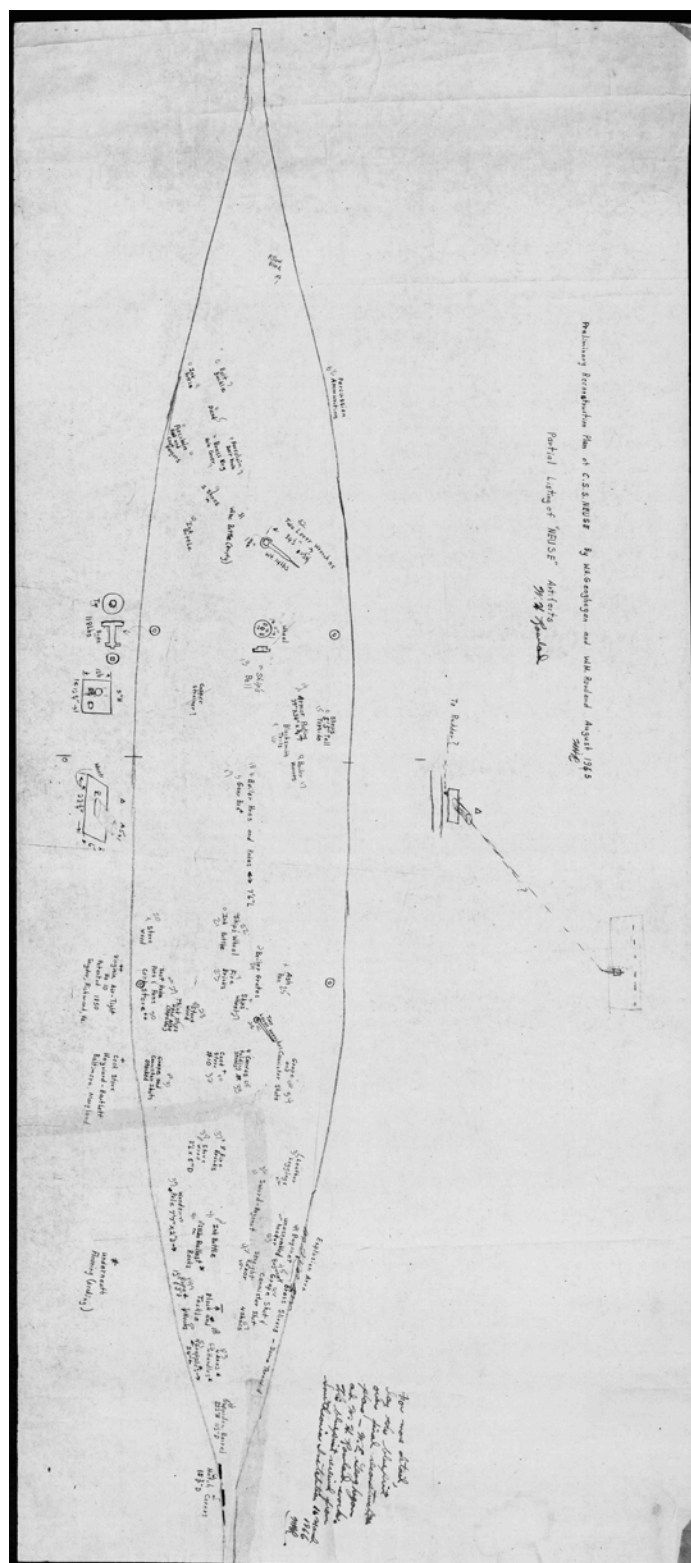


Figure 18. Original artifact map created by William Rowland (Rowland 2007). See Appendix 3 for enlarged sections of map.

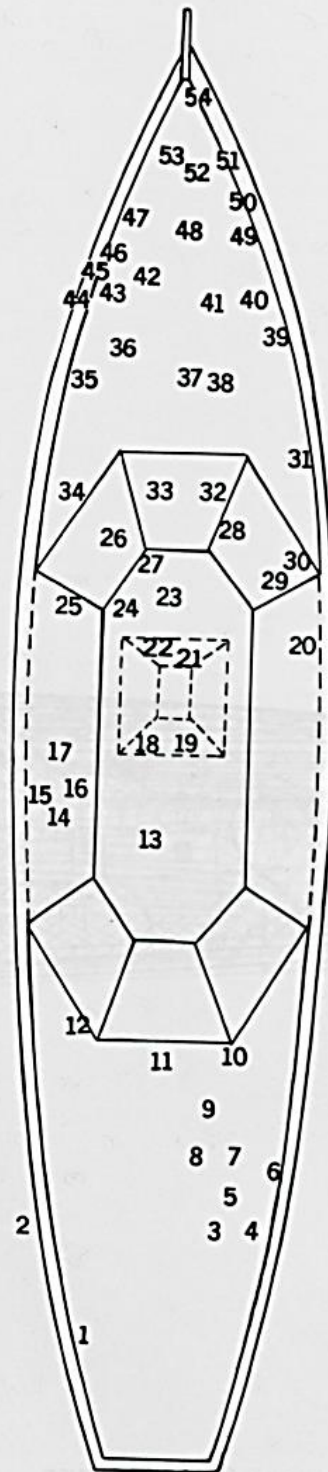


Figure 192

Figure 19. Artifact map from *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:131).

1 PILLOW BLOCK	29 SOOT RAKE
2 PERCUSSION AMMUNITION	30 COOKSTOVE, POTS AND PANS
3 BELT BUCKLE	31 GRAPE AND CANNISTER SHOT, STACKED
4 INK BOTTLE	32 COOKSTOVE
5 DESK	33 FOUR CANVAS FOLDING STOOLS
6 PORCELAIN HAT AND COAT HANGER	34 GRAPE AND CANNISTER SHOT
7 BRASS KEY AND A HOLE COVER	35 LEATHER LEGGINGS
8 PORCELAIN DOOR KNOB	36 SWORD BAYONET
9 TWO SHOES	37 FIREBRICKS
10 INK BOTTLE	38 WOOD STOVE
11 WINE BOTTLE	39 WOODEN POLE
12 TWO LEVER WRENCHES	40 28 POUNDER BALLAST ROCKS
13 SHIP'S BELL	41 INK BOTTLE
14 ARMOR PLATING	42 STRAIGHT RAZOR
15 STEPS	43 UNASSEMBLED HEATER
16 BLACKSMITH TOOLS	44 BAYONET
17 BOILER MOUNTS	45 BAYONET
18 BOILER HOES AND RAKES	46 GRAPE AND CANNISTER SHOT
19 GEARBOX	47 FOUR SHOES
20 WOOD STOVE	48 BLOCK AND TACKLE
21 INK BOTTLE	49 ROPE
22 SHIP'S WHEEL	50 HOOKS
23 FIREBRICKS	51 FOUR GRAPPLES
24 BOILER GRATES	52 SIX HANDLES
25 ASH PAN	53 FOUR AXES
26 TWO LEVER WRENCHES	54 WOODEN BARREL
27 SHIP'S WHEEL	55 HATCH
28 WOOD STOVE	

**Figure 192.** Location of artifacts found on the NEUSE.

Figure 20. Artifact map key from *CSS Neuse: A Question of Iron and Time* (Bright et al. 1981:130).

collection have undergone several rounds of examination and reclassification since the state has gained custody of them. This has created confusion concerning the artifacts themselves and the state's ability to maintain them. Initially, the artifacts were given state identification numbers and most went through conservation. However, many of the identification numbers were written on paper tags and attached to the artifacts with either string or wire. Unfortunately, the paper tags did not withstand the storage environment, and many are now missing or unreadable. Over the years, some artifacts had new identification numbers placed on them with a white medium and ink under a clear coating. It is unclear to the site staff when this change happened, but the two identification systems do not seem to correspond to each other. Additionally, the site staff does not have any of the initial conservation records, a complete list of the artifacts in the collection, a



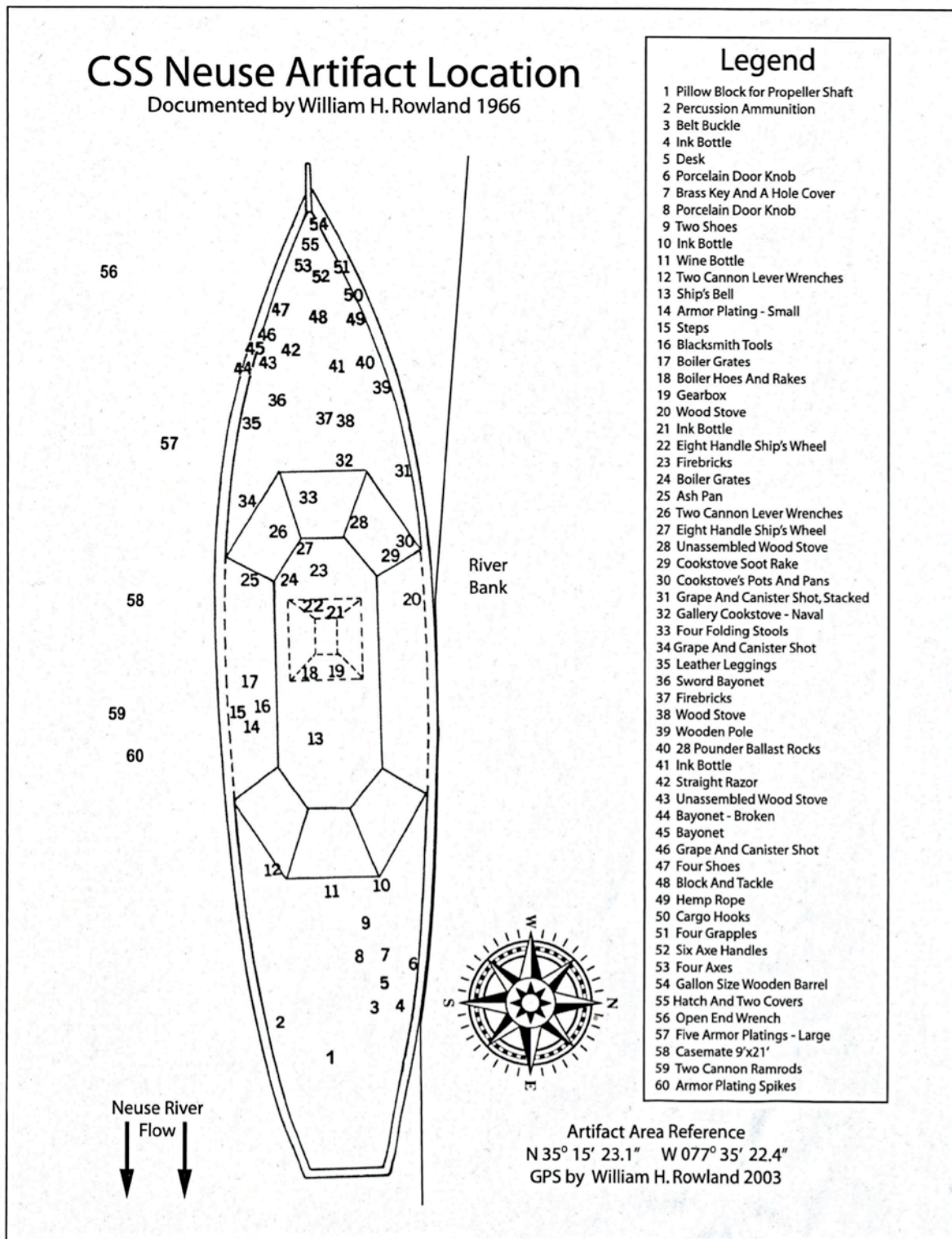


Figure 21. Final artifact map given to the site staff by William Rowland (Morris Bass 2015, pers. comm.).



list of the artifacts returned to the site from looting, or a list of where loaned artifacts might be located. The present North Carolina Historic Sites department has a better sense of these lists, but there is not an effective means of communicating this information to the site employees. It is entirely possible that information is unaccounted for in both records.

The inconsistencies in the salvors, site, and state records have been one of the more difficult obstacles to the progress of this thesis. Before any further serious work can be done in an attempt to theoretically recreate the site of the CSS *Neuse*, these issues must be addressed. This thesis was not able to develop a full postmortem methodology for recreating the wreck site of the CSS *Neuse*. It did begin the daunting process of examining the effects of folklore in oral traditions and salvage efforts on the historic interpretation of the ship. The false information that has been part of the history of the ship has greatly influenced the way the ship is understood both historically and physically. These false understandings and oral traditions had to be examined before the complex task of theoretically recreating the site could begin.

In addition, this thesis was able to answer four of the bigger questions that the site's staff had in regards to the site. The examination of the various scuttling stories in conjuncture with the actual remains of the ship and historic documentation and photographs revealed that most of the stories are inaccurate. The archaeological and historical evidence can only definitively support the earliest accounts of the ship burning. The examination of the state records and individual artifacts did confirm that artifacts were both added and removed from the site during the final salvage process. While the study of what occurred to the naval guns did not provide a definitive answer to their whereabouts, it did clarify the damage done to the ship during the first salvage operation and the overall effect that had on the site. Researching each question allowed the false information that had led to inaccurate interpretations of the site to be identified and be removed

from further historic research. From these questions, a better understanding of the effects that human interactions, specifically the salvage attempts, had on the physical remains of the ship emerges. Understanding the damage done to the physical remains and the impact it had on the artifacts is the first step in recreating the site.

A full postmortem reconstruction of the CSS *Neuse* site can only be finished through a full understanding of both the historical record and physical archaeological remains. There is still more work to be done sifting through the distorted history of the ship before a more accurate postmortem analysis is completed. However, the CSS *Neuse* site remains a valuable contribution to the archaeological record of the American Civil War. Its large collection of artifacts offers invaluable typological and morphological artifact data even without the precise contextual information of the site. If, one day, the contextual information could be pieced together, then the site would have enhanced archaeological significance as well.

#### Future Research Beyond Postmortem Archaeology

This thesis has become a mere starting point from which to examine the remains of the CSS *Neuse* in the hopes of theoretically recreating the site to give contextual data to the artifacts. A full postmortem methodology could not be completed because of insurmountable curatorial issues, including a full list of artifacts from the site, or a unified identification system, which were outside the scope of this thesis. For a full reconstruction to occur, several larger projects would need to be conducted.

Initially, a full study of all of the artifacts cross-referenced with both state and site records must occur. This would include collecting all of the artifacts, identifying and labeling them under one system, and ensuring both the state and site have this information. Further, all of the information regarding the artifacts needs to be put into a system that can be easily accessed

and modified by both the site employees in Kinston and state employees in Raleigh.

Once a complete record of the artifacts on the ship is available, it should be compared to the original Rowland/Goeghegan artifact map to give some basic contextual data. Letters written by the crew and historical uses of space on ships should be used as a check against the contextual data pulled from the original artifact map. Similar to the Nelson-Delong (2015) study, this information can then be compared to other known Civil War ironclad warships to further verify that the assumed contextual information is, in fact, historically accurate and consistent.

Finally, a detailed study of all the documentation provided by the salvors would need to be compared to all the information above. Several questions could be examined along this line of research, including:

- Are the artifacts present in the places we expect them to be? For example, there are six stoves listed in the bow of the ship but none in the stern for the officers or captain; would this be a probable occurrence?
- There are several duplicate sets of artifacts, would this number be historically consistent for a ship the size of the CSS *Neuse*? For example, would there historically be six stoves, four cannon lever wrenches, inkbottles, and two hatch covers on the ship?
- Why would artifacts be located outside of the normal use area? See above examples.
- Could artifacts be considered contaminants based on inconsistency with historical norms (for example, the number of stoves)?

The next step in the process would be identifying and removing from the research all contaminants. This would give a good start on a deeper study of the contextual data stripped from the site. Future research would then more naturally evolve, depending on the result of this more in-depth examination of the site.

One final interesting possibility for this research stems from the work done by Nicholas Nelson-Delong (2015). Nelson-Delong (2015:4) compared artifacts from known ships to those on his unidentified site and determined that some categories of artifacts were found in similar percentages, indicating potentially similar function. This line of research could be extended to the case of the CSS *Neuse*. As a known site, the artifacts from the CSS *Neuse* could be compared to other unknown but suspected military vessels, especially if the vessel is believed to be from the Civil War. This comparison with CSS *Neuse* artifacts could help archaeologists pinpoint the function or identity of an unknown site. This concept has great potential in expanding our archaeological knowledge base.

#### Final Conclusions on Postmortem Methodology and Techniques

This thesis represents a first step in the development of postmortem techniques that can be used to recreate an archaeological site that has been disturbed or fully excavated by salvors. It can be concluded that a full postmortem archaeological method is possible given time and resources. Logically, this methodology would include finding all of the earliest historical, photographic, and descriptive accounts of the site and comparing it to the existing archaeological evidence in the artifacts. Using postmortem techniques can theoretically give salvaged sites basic context and make them relevant in archaeological study.

It can be seen from this study of the CSS *Neuse* that, in examining the effects of folklore on the archaeological and historical understanding of a wreck site, only the earliest written accounts can be trusted for their historical content. This concept was strongly enforced with the examination of the scuttling stories and artifact maps produce by William Rowland. This study also demonstrated that Rodger's suggested postmortem archaeological methods and theory must account for site contamination as well as Muckelroy's extraction filters and scrambling devices.

Though this study demonstrates that a full archaeological “postmortem” methodology is not yet possible on the wreck site of the CSS *Neuse*; it ultimately does hold promise.

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## Appendix 1

List of all the artifacts returned to the state that are part of the CSS *Neuse* site

- HS.2003.13.1 Spike
- HS.2003.109.265 Case shot
- HS.2003.109.267 Bolt ("first bolt cut on the Neuse", according to donor)
- HS.2003.109.270 Canteen
- HS.2003.109.271 Governor weight from steam engine
- HS.2003.109.272-273 Grapeshot stand rings
- HS.2003.109.274 Bag of coal
- HS.2003.109.275 Metal fragment; function unknown
- HS.2003.109.276 Nail
- HS.2003.109.277 Screw
- HS.2003.109.278-280 Nails
- HS.2003.109.281 Screw
- HS.2003.109.282-283 Pitch fragments
- HS.2003.109.284 Bag of rope fragments
- HS.2003.109.285 Shovel; head only
- HS.2003.109.286 Wood fragment; function unknown
- HS.2003.109.287 Walking cane; head only
- HS.2003.109.735-736 Case shot (canister balls)
- HS.2003.117.1 Leather pouch
- HS.2003.117.2-6 Metal fragments; functions unknown
- HS.2003.117.7 Black granular material; possibly gunpowder
- HS.2003.117.8 Firebrick
- HS.2003.117.9 Locking wedge
- HS.2003.117.10 -11 Tin can fragments
- HS.2003.117.12 Clay sherd; charred
- HS.2003.117.13-15 Coal fragments
- HS.2003.117.16 Glass sherd; dark green
- HS.2003.117.17-18 Stoneware sherds
- HS.2003.117.19 Glass sherd; colorless
- HS.2003.117.20 Wire fragment
- HS.2003.117.21 Two earthenware sherds
- HS.2003.117.22-24 Stoneware sherds
- HS.2003.117.25 Glass sherd; colorless
- HS.2003.117.26 Stoneware sherd
- HS.2003.117.27 Glass sherd; light green
- HS.2003.117.28 Iron nut; square head
- HS.2003.117.29 Lead fishing weight
- HS.2003.117.30-31 Minie bullets
- HS.2003.117.32 Leather fragment
- HS.2003.117.33 Brass key
- HS.2003.117.34 Glass sherd; colorless
- HS.2003.117.35 Metal fragment; possibly grommet

- HS.2003.117.36-37 Leather fragments
- HS.2003.117.38 Button; NC sunburst
- HS.2003.117.39 Button; CSN; cuff or vest
- HS.2003.117.40 Boat hook
- HS.2003.117.41 Spoon handle
- HS.2003.117.42 File; half-round; fragment only
- HS.2003.117.43 Metal fragment; function unknown
- HS.2003.134.1 Kettle

Table 1. List of returned artifacts provided by Martha Jackson (2015, elec. comm.).

## Appendix 2

Digital copy of the two additional articles about the auction of the ship in 1865.

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THAT REBEL RAM.—Every body in North Carolina has heard of the "Rebel Ram" in the Neuse river near Kinston. The "ram's horns" blown at Jerico, scarcely had more notoriety in that famed locality than existed in all this region about a year since, when it was known this celebrated Ram at Kinston was "all ready." All the belligerent characteristics known to belong to the pugnacious and war-like animal, for which it was named, was supposed to be concentrated in this floating monster. A thousand ears in New Berne were always open ready to hear the startling exclamation, "the ram is coming!" Time passed on, but the Ram never come. The Neuse river, up as far as Kinston, never seemed to have water enough to float, successfully, a vessel as huge, loaded with so much war-like material. The experiment was given up in dispair; and when General SCHOFIELD marched that way with his victorious army, the Ram was scuttled, and now rests quietly, partly under water, awaiting the familiar voice of POALK to "knock her off" on Monday afternoon next. All persons ready for a good speculation, we advise them to take a look at this notorious Ram, for there is "money in it" as well as a great many other things of value.

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Figure 22. Article from the *New Berne Daily Times* on October 4, 1865 (*New Berne Daily Times* 1865b; Morris Bass 2015, elec. comm.).

**THE RAM SALE.**—The Rebel Ram fell yesterday, according to previous notice, under the telling stroke of POALK'S auction hammer and was taken by Mr. JOHN SATTERLEE, of the well known firm of SATTERLEE, LYON & Co., of New York, hide and tallow, head and horns, without even giving the butcher a chance to skin him.

Mr. S. now has a full grown Rebel Ram all to himself with guns, chains, rope, and tackle all complete, moved by two powerful engines with plenty of coal on hand for an extended cruise. What he intends to do with the brute has not transpired, but it is mooted in private circles that he intends declaring war against the Fenians.

Figure 23. Article from the *New Berne Daily News* on October 10, 1865 (*New Berne Daily Times* 1865c; Morris Bass 2015, elec. comm.).

### Appendix 3

The original artifact map drawn by William Rowland and W. E. Goeghegan in 1965 broken up in to sections and enlarged for legibility (Rowland 2007).

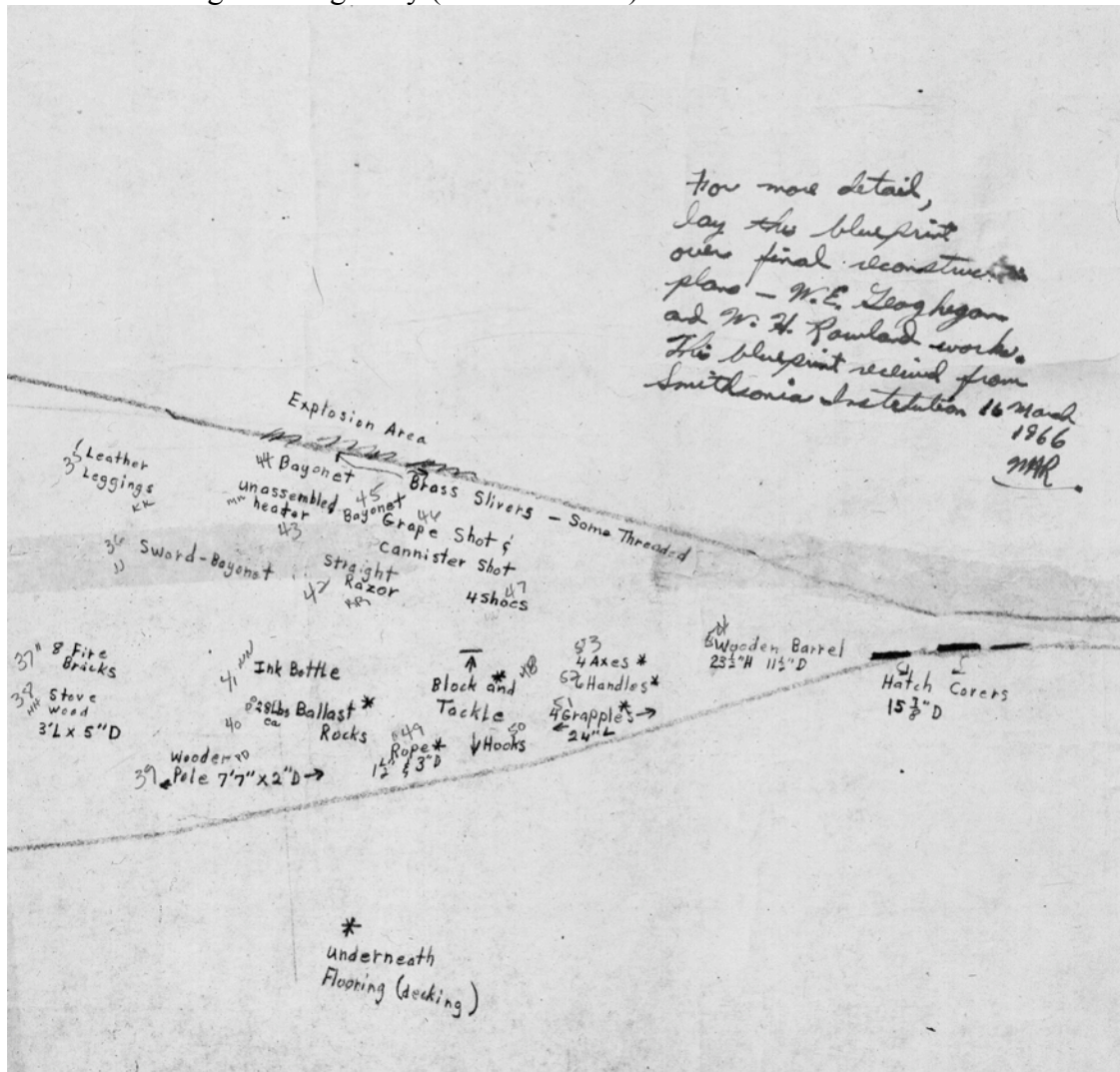


Figure 24. Bow section of the map (Rowland 2007).

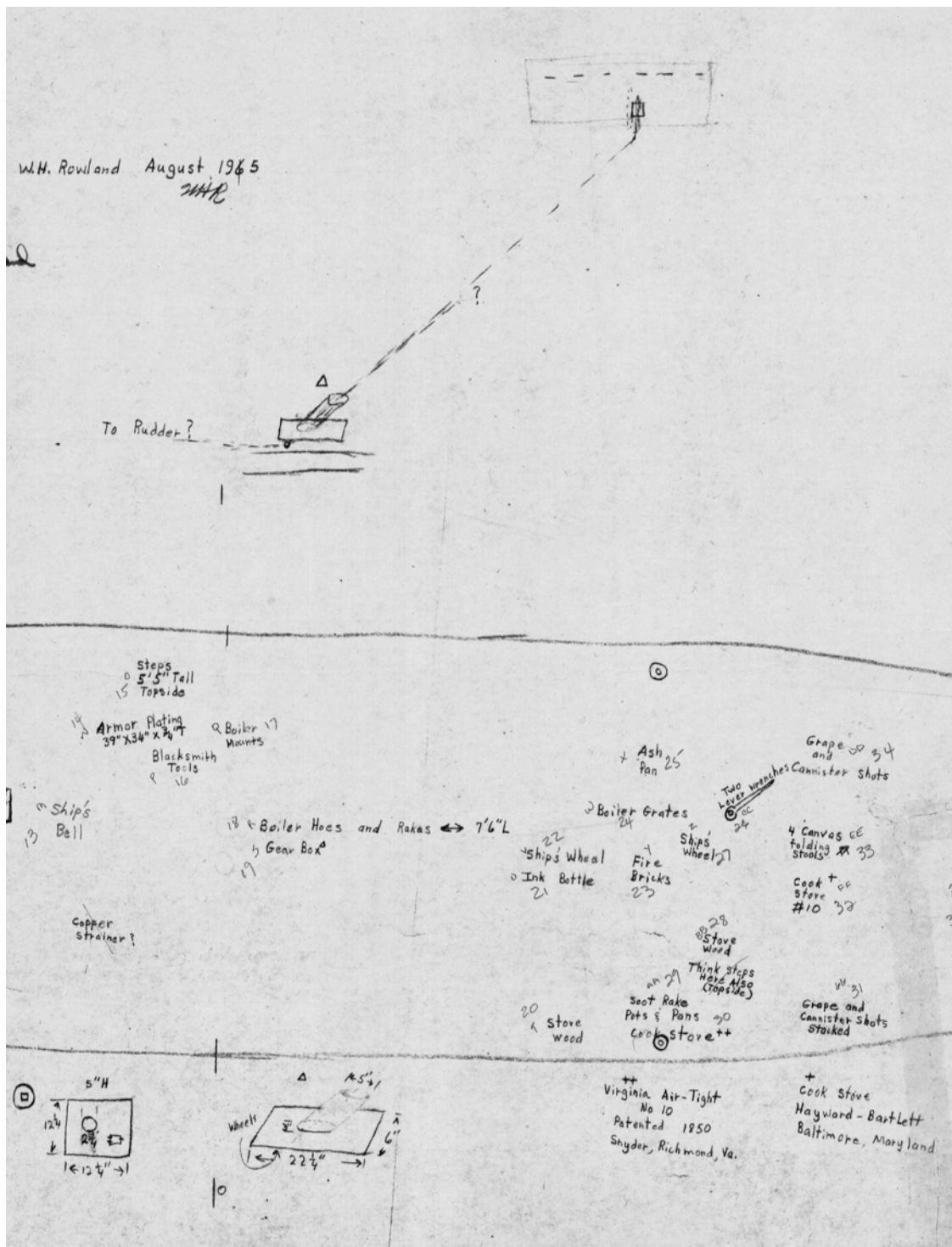


Figure 25. Middle section of the map (Rowland 2007).



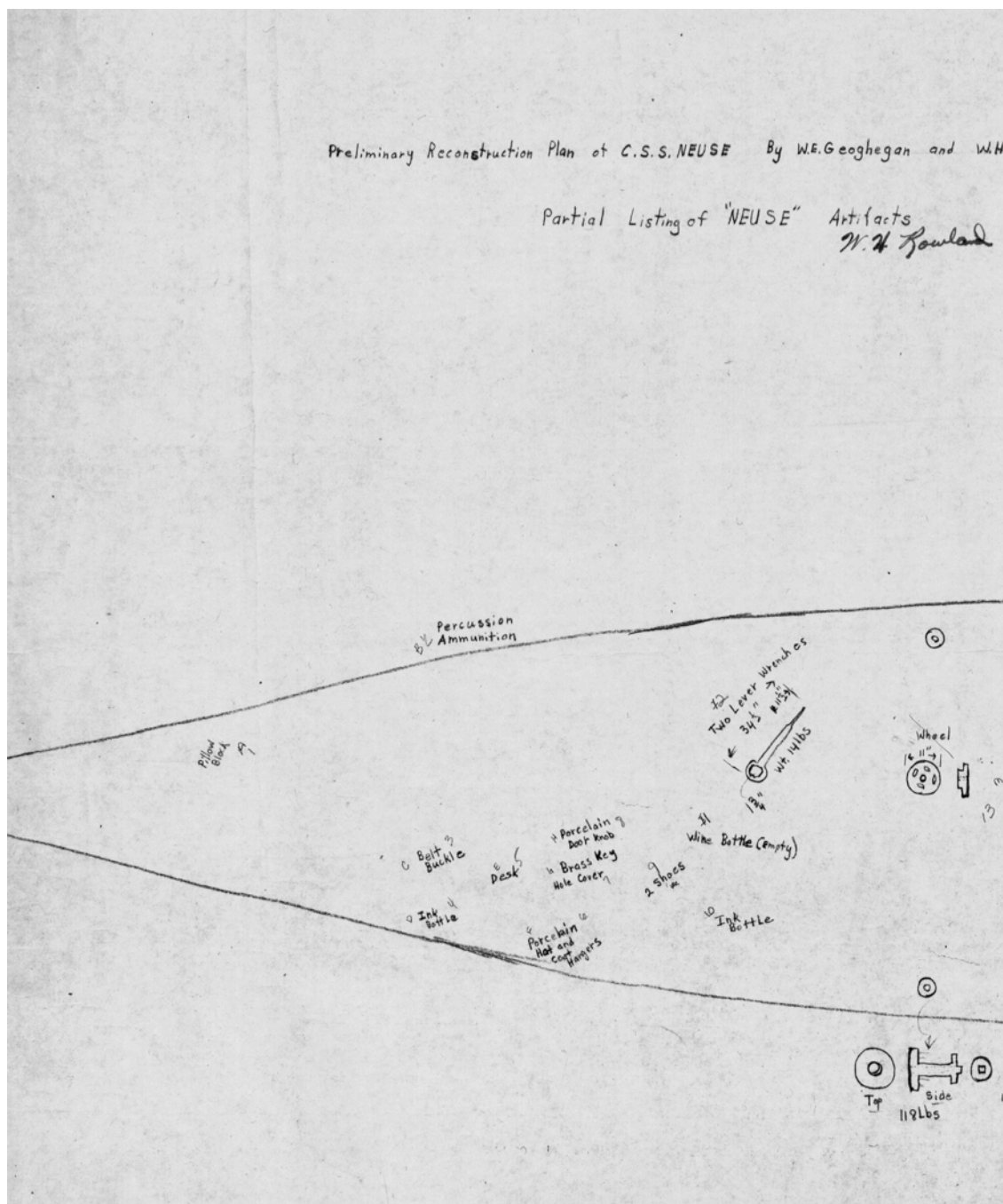


Figure 26. Stern section of the map (Rowland 2007).