

Abstract

Joe D. Friday Jr. A HISTORY OF THE WRECK OF THE USS HURON
(Under the direction of Dr. William N. Still Jr.) Department
of History, September 1988.

The purpose of this study is to document the career of a navy warship which sailed for two years during the nineteenth century when the United States Navy was experiencing large cutbacks, and reducing the number and size of its ships. The USS Huron sailed in the navy from 1875 to 1877. She wrecked on the coast of North Carolina while steaming south to the Caribbean during a storm. Ninety-eight of her crewmembers drowned as a result of the wreck.

This research discusses the condition of the United States Navy and how that affected the construction of the Huron and her two sister ships, the only iron warships built for the United States Navy after the Civil War. The thesis explores the Huron's role in the navy and her role in history as a factor in the development of the United States Lifesaving Service. It also documents the physical remains of the wreck through established underwater archaeological methods, and interprets the findings of the investigation in such a way as to enhance public awareness of the wreck's significance, and provide a basis for nominating the wreck to the National Register of Historic Places.

This thesis brings together an assortment of historical and archaeological information, and provides a reference point for other scholars interested researching the history of the North Carolina Outer Banks and the hundreds of other shipwrecks that occurred in that area.

A HISTORY OF
THE WRECK OF THE
USS HURON

A Thesis
Presented to
the Faculty of the Department of History
East Carolina University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in History

By
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I dedicate this to my parents.

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Chapter One

The Decline of The United States Navy: 1865-1875.

During the ten years after the Civil War, the United States Navy shrank from the world's largest naval force of approximately seven hundred ships, to a force of forty-eight obsolete vessels which could barely be described as being seaworthy.¹ Congress was too preoccupied with the Reconstruction of the South, and refused to appropriate sufficient funds for naval expansion and extensive cruising. The national attention at the time was directed primarily toward dealing with the freedman question in the South, completing the transcontinental railroad, and settling the western frontier. As a result of these factors, the post war reduction in the naval force was nearly carried to its absolute extreme.

Another factor that led in part to the decline in the American navy during this period was the refusal on the part of the naval hierarchy to recognize the importance of steam engineering and propulsion to the successful development of the fleet. In 1869 a general order from the Vice Admiral of the Navy, David D. Porter, directed that "Hereafter all vessels of the navy will be fitted with full sailpower."² Porter had been a successful navy commander during the Civil War, and was President Grant's first choice as Secretary of the Navy. Not wishing to resign from the

navy, Porter declined to accept the position. Grant compromised by naming a Philadelphia businessman, Adolf Borie, as secretary, with Admiral Porter his special assistant. Borie had no interest in the navy, and Porter was able to run the service from his position as Borie's assistant. For all practical purposes, Porter was the Secretary of the Navy until 1869 when Borie left office.³

An example of the Porter's view of steam propulsion was found in the wording of his orders concerning the full use of sails on navy ships. Those orders stated that cruising under full sail "will not only have the effect to economize coal and save expense, but will also instruct the young officers of the navy in the most important duties of their profession."⁴ The important duties Porter wrote of involved the proper training and use of sails on board warships. A list of exercises in which officers would be expected to become proficient accompanied the admiral's orders. These included; " Sending up and down topgallant masts, lower yards, and topmasts at one time; getting under way from a single anchor with all sail set; and shifting three topsails at one time."⁵

As an incentive to avoid cruising under steam, ship captains were warned that the amount of coal consumed as a result of steaming might be charged to their personal accounts. Admiral Porter continued to advise the use of sail over steam until 1871, when he assumed the office of

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First Admiral of the navy. By then he realized the futility of sail powered warships, and had jumped on the bandwagon of officers advocating steam.
7

In addition to the governmental apathy and public indifference suffered by the navy, the inabilities and corruptions of the post-Civil War naval secretaries greatly detracted from the effectiveness of the service. Adolph Borie refused to give his full attention to the office. Instead he remained in Philadelphia overseeing his vast business interests.
8

Fortunately, Borie resigned from the job after four months in office.

George M. Robeson replaced Borie in June, 1869. Robeson's tenure lasted until 1877, during which time he used the position to award jobs at the various navy yards to his associates in exchange for personal and political favors. Robeson's patronage dealings further reduced the efficiency of the navy, and his critics accused him of robbing the service.
9

Richard Thompson assumed the post after Robeson resigned but lacked any kind of background in naval affairs. In fact, when Thompson saw his first ship in drydock it was reported that he replied with astonishment, "Why the durned thing's hollow - I always thought they were solid."
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Thompson was so insensible to needs of the service that he accepted a position with the French company that was

then attempting to build a canal across the isthmus of Panama. This of course was a direct conflict of interest for someone occupying the office of Secretary of the United States Navy, and led to his immediate dismissal in 1881.¹¹ The reigns of Borie, Robeson, and Thompson as naval secretaries represent the low mark in United States naval development and make up the "dark ages" of the American¹² navy.

Realization of the deteriorated naval condition finally resulted in February, 1873, in congressional authorization for the construction of new warships. The purpose of the construction bill, remarked Senator Aaron Cragin of Maryland, was not to "build up a large navy, but to preserve the semblance of a very small one."¹³ Eleven ships were scheduled to be decommissioned that year because their deteriorated condition made overhauling them more expensive¹⁴ than building new ships.

Opening senate debate on the naval construction bill stressed the fact that eight years had elapsed since the construction of any new ships for the navy, and that this lengthy period between new ship construction had never¹⁵ occurred before in the nation's history. Despite the obvious need for new ships, some congressmen, especially Senator William Hamilton from Maryland, stubbornly opposed the idea of constructing any new warships during peacetime.

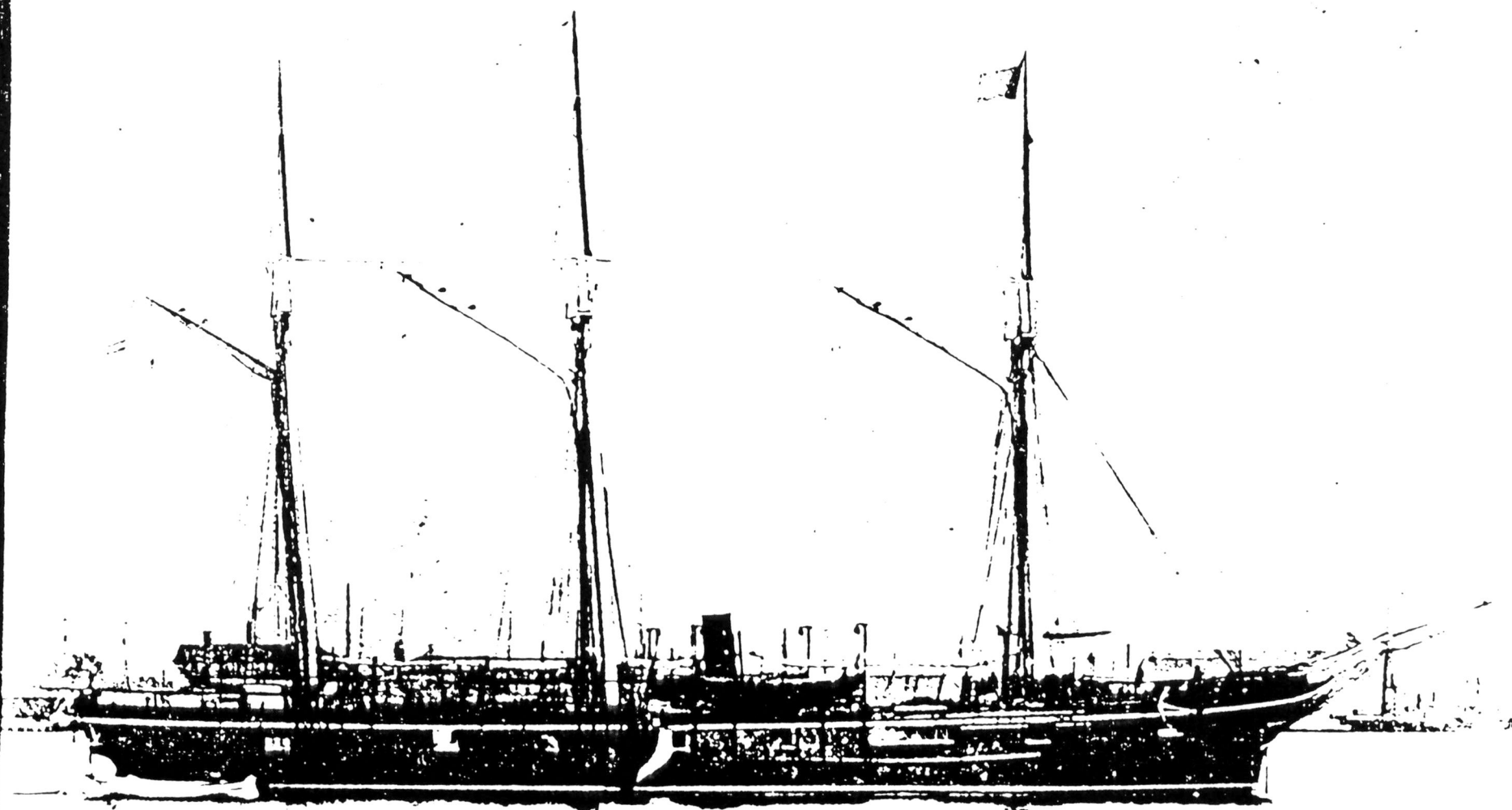
The original bill called for the construction of six new ships. The senate debated an amendment to increase the number to ten. Through continued debate a compromise was reached that placed the number of ships at eight. Hamilton gave a long speech to the senate in opposition to the bill. He said, "From 1815 down to this time not a force of ten frigates was ever required for any such purpose outside of war itself."¹⁶ Senator Hamilton opposed a standing military force in peacetime, and his argument characterized the attitudes of congressmen who fought the bill.

Most of the legislators in congress had absolutely no understanding of the prevailing technology that had then been established for building modern warships. A large percentage of the senators who spoke against the bill argued that because iron plate was so much thinner than wood beams, iron would be penetrated easily by cannon shot and the ships would sink. Senator James Nye of Nevada argued against building any of the proposed ships out of iron; "The tendancy of iron is always downward. The tendancy of wood is always bouyant and it will float even when it is shattered by balls. No nation will ever build ships of iron as long as they can get wood," he said.¹⁷

Fortunately, not every senator agreed with Nye and Hamilton. Congress finally agreed to allow the Secretary of the Navy, George Robeson, to determine the material used in constructing the ships. Congress also allowed for

private shipyards to bid for construction of at least three of the proposed vessels. Perhaps the most noteworthy part of the appropriations bill was the provision that all the ships to be constructed would be "steam vessels of war, with auxiliary sail power."¹⁸ This was a departure from previous administrations that had stressed sail over steam. Although the navy was still unwilling to forego sail power entirely, the wording of the bill represented a new philosophy, and signaled the end of the age of sail in American naval development. United States Navy ships would never again be referred to as "sailing vessels with auxiliary screws."¹⁹

The ships constructed as a result of the congressional appropriations bill were the wood frigate Trenton, the four wood gunboats Adams, Alliance, Enterprise, and Essex, and the three iron gunboats Alert, Ranger, and Huron. Except for two experimental torpedo boats, these were the only war ships constructed between the end of the Civil War and 1882, when congress authorized the construction of the four steel cruisers which marked the beginning of the modern steel navy. The eight ships authorized in 1873 were the last ships of the old navy.



USS HURON LOST OFF NAGS HEAD NOVEMBER 24, 1877

End Notes

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Chapter Two

The Construction and Physical Characteristics of USS Huron.

Being one of only three iron ships to be constructed after the end of the Civil War made the Huron significant in several respects. She was one of the last iron warships ever built for the United States Navy, one of the last to use combined steam and sails for propulsion, and one of the last warships to use smoothbore ordnance.

Her construction in Chester, Pennsylvania, at the Delaware River Shipbuilding Company was probably the result of political cronyism between the company's owner, John Roach, and the Secretary of the Navy, George Robeson.¹ Roach and Robeson had been associated in naval ship construction and repair for many years, and were suspected of making fortunes at the expense of the federal government in navy yard operations.²

Their close association, along with the huge percentage of business Roach received for naval repairs, triggered a congressional investigation of Robeson's business practices in 1876.³ Robeson often ignored the ethical procedures of the contract bidding process, and awarded naval repair and construction contracts to his associates and friends in exchange for kickback payments and political favors. Roach profited greatly from his dealings with Robeson.

Roach was also good friends with William Chandler, a shrewd Washington lobbyist. Several years later Roach coincidentally received the construction contracts for all four of the protected cruisers of the new steel navy when Chandler became Secretary of the Navy in 1883.⁴

Laid down in the fall of 1873, the Huron, originally planned to be named the Alliance, was built along the lines of another 541-ton iron gunboat, the Alert.⁵ Both ships were built at Roach's shipyard in Chester, near Philadelphia. A third ship built from the same design was named Ranger. She was built at Wilmington, Delaware by Harlan and Hollingsworth Shipbuilding Company.

The navy provided inspectors to oversee the actual construction of the ships because previous warships had sometimes been built with inferior materials. This problem probably resulted from Secretary Robeson's unethical activities concerning construction contracts.

The Huron and her sister ships were designated as third rate gunboats, which meant the ships carried approximately one third of the armament carried by a first rate warship.⁶ The Huron's hull was completed and launched in March, 1875. She remained at the shipyard to be fitted out with her masts and machinery, and was commissioned into service on November 15, 1875.

The Huron was constructed of iron frames, four inches thick, and plates which were five-eighths of an inch thick.

The close spacing of the frames, twenty-one inches, combined with the thick hull plating to make her one of the strongest vessels of her size in the world. She had a center-mounted iron keel, known as a side-bar keel because of the flat bar-like keelson which covered it, and two iron intercostal keelsons which ran between the frames and parallel to the center keel. Her keel and keelsons were extra wide and thick. In fact, the major portion of the Huron's construction components exceeded the recommended strength and thickness standards for ships of her size, which were set down by ship insurance underwriters in Liverpool,⁸ England. When the Huron wrecked in 1877, the court of inquiry investigating the tragedy ruled out the possibility of design flaws and structural failure. Table A at the end of this chapter lists the thicknesses of the Huron's iron plates and frames.

The navy designed, and John Roach built the Huron's two-cylinder, back-acting compound engine. The engine recycled steam from one high pressure cylinder, to a second low pressure cylinder. Five fire-tube boilers, each one eight feet in diameter and over eight feet long, provided steam for the engine. The ship had a four-bladed propellor, twelve feet in diameter to provide the needed thrust, and⁹ could steam under full power at a speed of over ten knots.

Described as a sloop-of-war, the Huron had three

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masts which carried sails similar to those of a schooner. The main sails were rigged fore and aft, and were loose footed on the fore and main masts, meaning there was no boom secured to the bottom of the sail. Only the mizzen mast needed a boom to secure the mizzen sail because the other sails could be secured to the decking aft of the masts. The presence of the smokestack amidships also prevented the use of a boom on the fore mast. The Huron also had four head sails forward of the fore mast, and carried gaff topsails¹¹ and staysails between the three masts.

The Alert and Ranger each carried a barkentine sail rig instead of the schooner rig used by Huron. She probably would have switched to a barkentine rig after her 1877-78 cruise, had she not wrecked. Commander Charles Carpenter, who commanded the ship from 1875 to 1876, had expressed his dissatisfaction with Huron's sail plan and recommended such a change to his superiors.¹²

The Huron's smoothbore ordnance marked her as an obsolete warship, but was the standard equipment of United States Navy ships during the 1870's. She carried an eleven-inch Dahlgren cannon mounted in front of the smokestack, a sixty-pounder Parrot rifle mounted on the forecastle, two waist-mounted nine-inch Dahlgrens aft of the main mast, and a twelve-pound Howitzer, which could be mounted on a field or boat carriage. She also had a fifty-caliber

Gatling gun. Her small arms inventory included sixty-three Remington rifles, thirty-seven Remington pistols, twelve¹³ Colt revolvers, and fifty-one cutlasses.

The Huron had a number of small boats from which she could land marines, sailors, or soldiers. These included, two launches, one cutter, one whaleboat, one dinghy, and one¹⁴ gig. She also carried two inflatable rafts called balsas. One of these rafts was used by the ship's junior ensign to reach shore and attempt a rescue of the crew when the Huron¹⁵ ran aground at Nags Head, North Carolina.

The Huron was 175 feet long, and had a beam of 32 feet. She drew 13 feet of water amidships, and displaced 541 tons¹⁶ dry, and 1,020 tons fully loaded. She had a length to beam ratio of nearly five and a half to one, and carried a crew of 16 officers and 118 enlisted men.

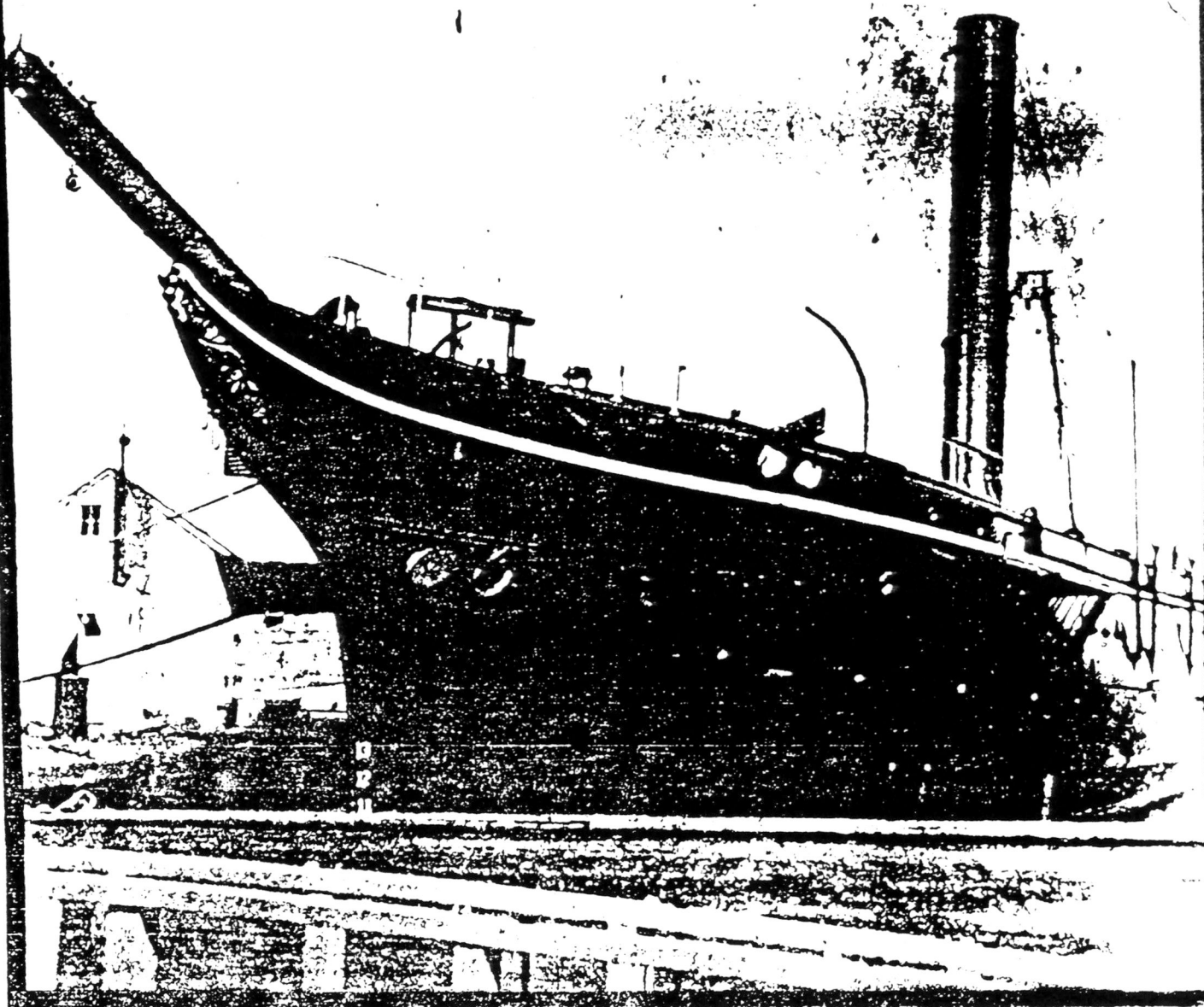
Although small when compared to first rate warships such as the USS Trenton, a 3,800 ton frigate with thirteen guns and a crew of over 470 men, the Huron was a strong ship, with a good engine. She served the United States for two years from her station with the North Atlantic Squadron. She went to Mexico in 1876, to protect American interests there during revolutions that year, and surveyed the northern coast of South America, and the Lesser Antilles islands in 1877. Had she not wrecked, she probably would have sailed with the navy in some capacity through the end of the first

world war. Her sister ship Alert lasted until 1922, and the
Ranger sailed through 1940.

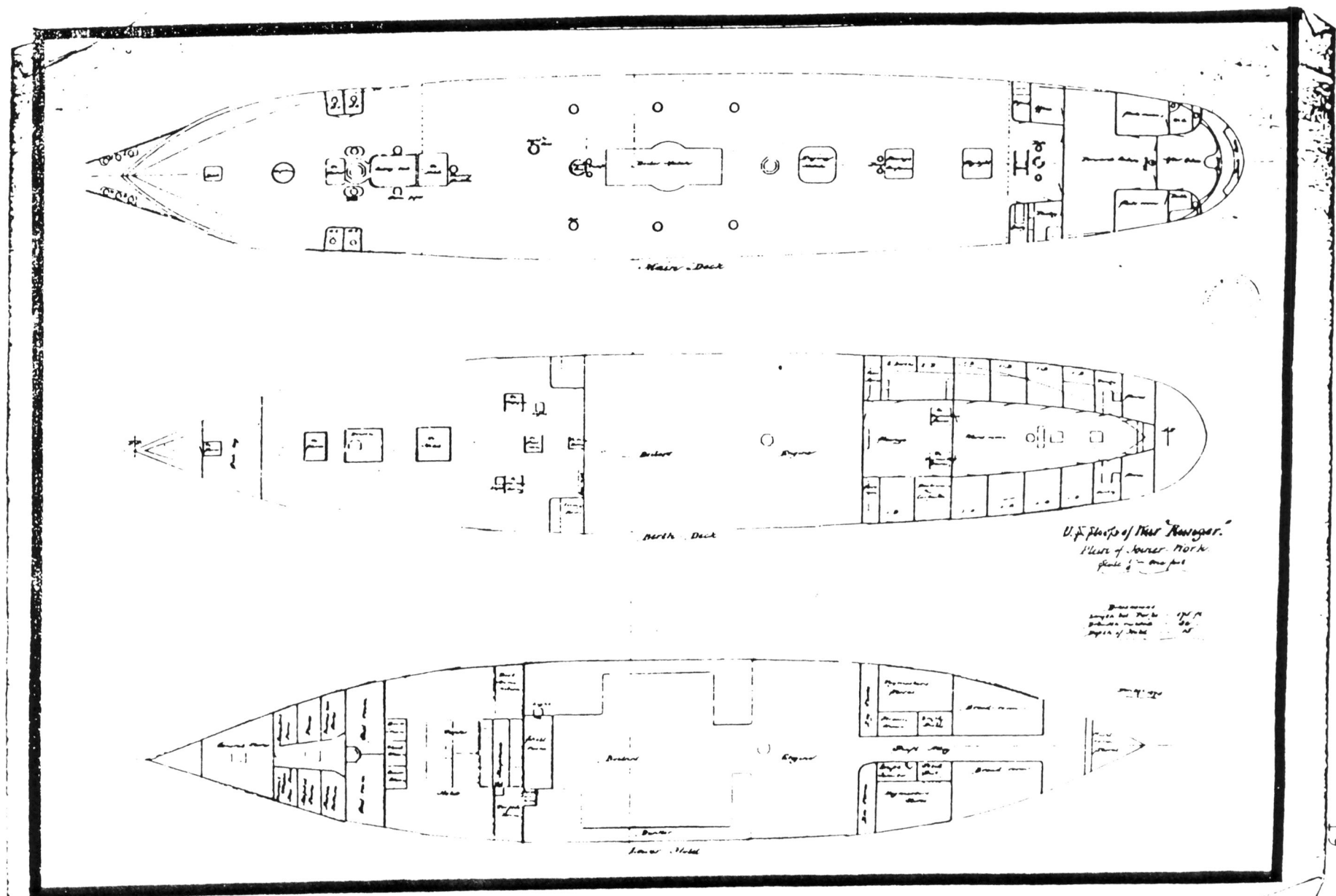
Table A:

A Comparison of Material Spacing and Thicknesses
 Recommended by Insurance Underwriters of
 Liverpool, England and Materials Used in
 Constructing the USS Huron.

<u>Keel:</u>	<u>Liverpool</u>	<u>Huron</u>
Thickness of Centerplate	1/2"	3/4"
Depth between floors	8"	12"
Thickness of sideplates	3/4"	3/4"
Horizontal keelsonplate, width	28"	24"
Horizontal keelsonplate, thickness	3/4"	3/4"
<u>Frames:</u>		
Spacing of frames	23"	21"
Dimensions	3 1/2"x 3"x 3/8"	4"x 3 1/2"x 3/8"
Reverse frames	2 1/2"x 2 1/2"x 5/16"	3"x 3"x 5/16"
<u>Floors:</u>		
Depth at center	21"	18"
Thickness	1/2"	3/8"
Intercostal keelson, thickness	3/8"	3/8"
<u>Plates:</u>		
Thickness, sheer plates	5/8"	11/16"
Side, bilge, bottom	9/16"	5/8"
Garboard	9/16"	11/16"
Bulwark	5/16"	3/8"
<u>Beams:</u>		
Depth	8"	8"
Depth of knees	20"	29"
Stringers, lowerdeck width	23"	15"
Stringers, lowerdeck thickness	1/2"	1/2"
Stringers, maindeck width	35"	Iron deck



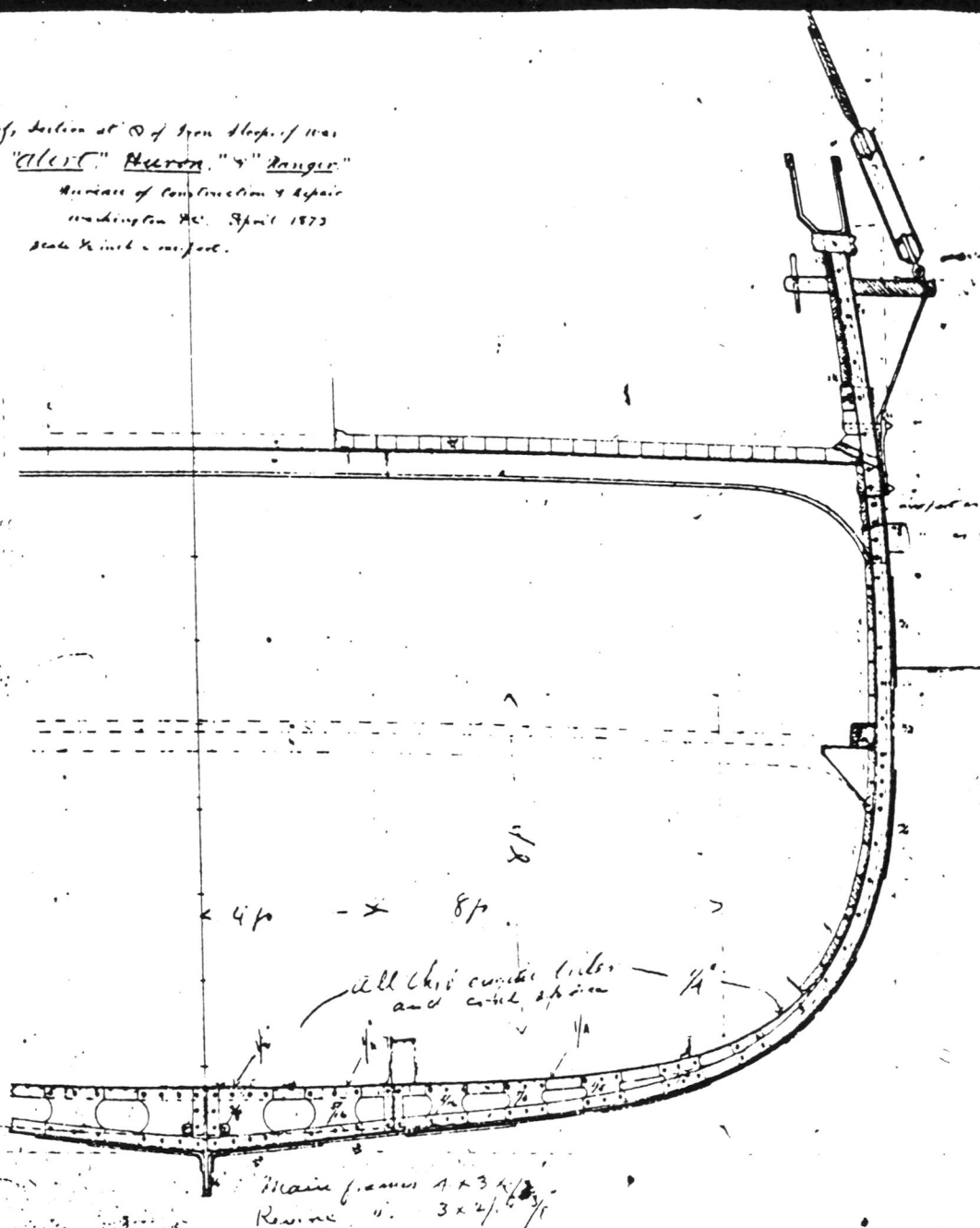
Alert Class Iron Gunboat: fitting out, circa 1871. Ship
of this class were: Alert, Ranger, and Huron.

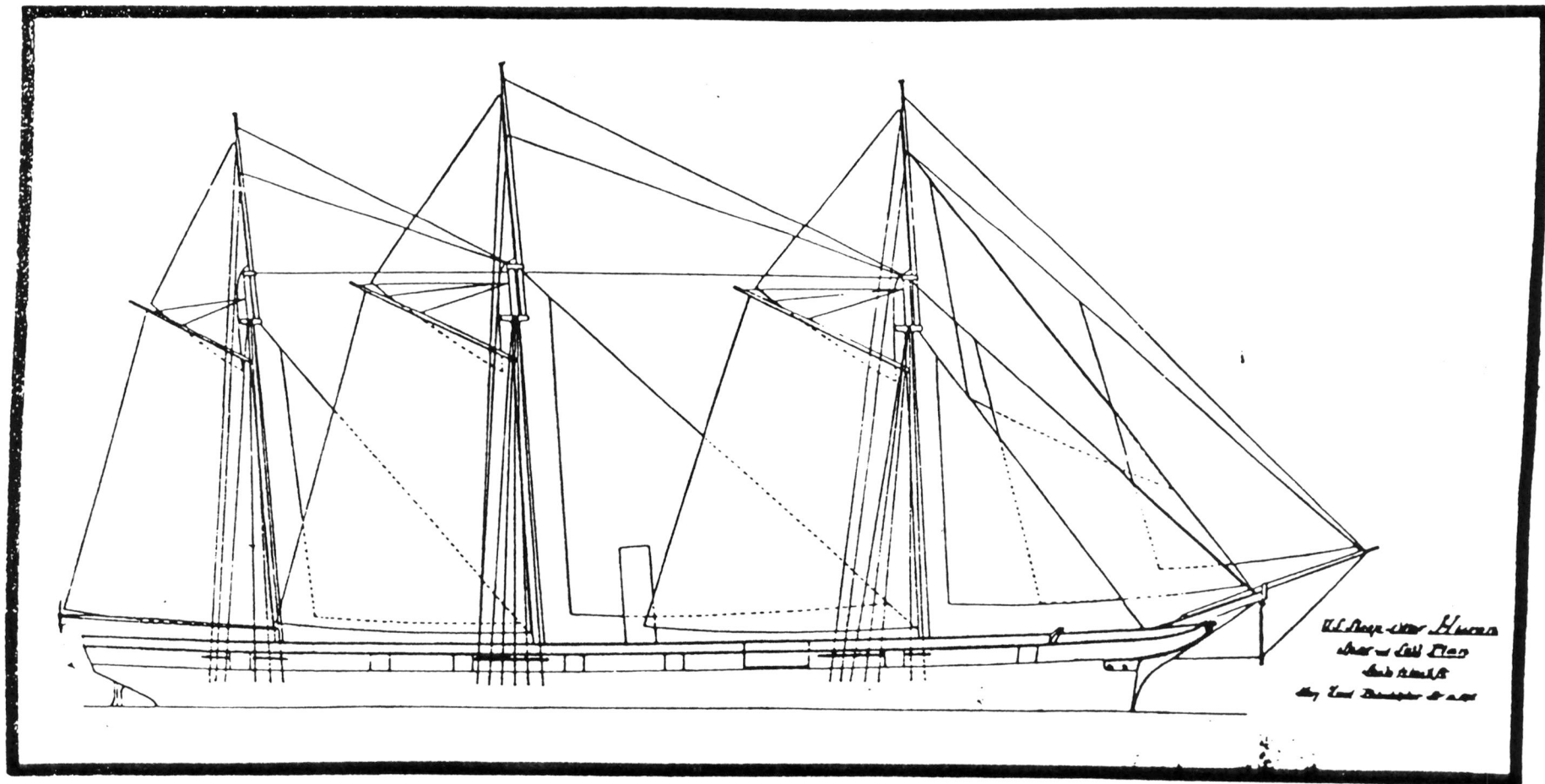


Deck plans of USS Ranger, which are the same as the Huron.

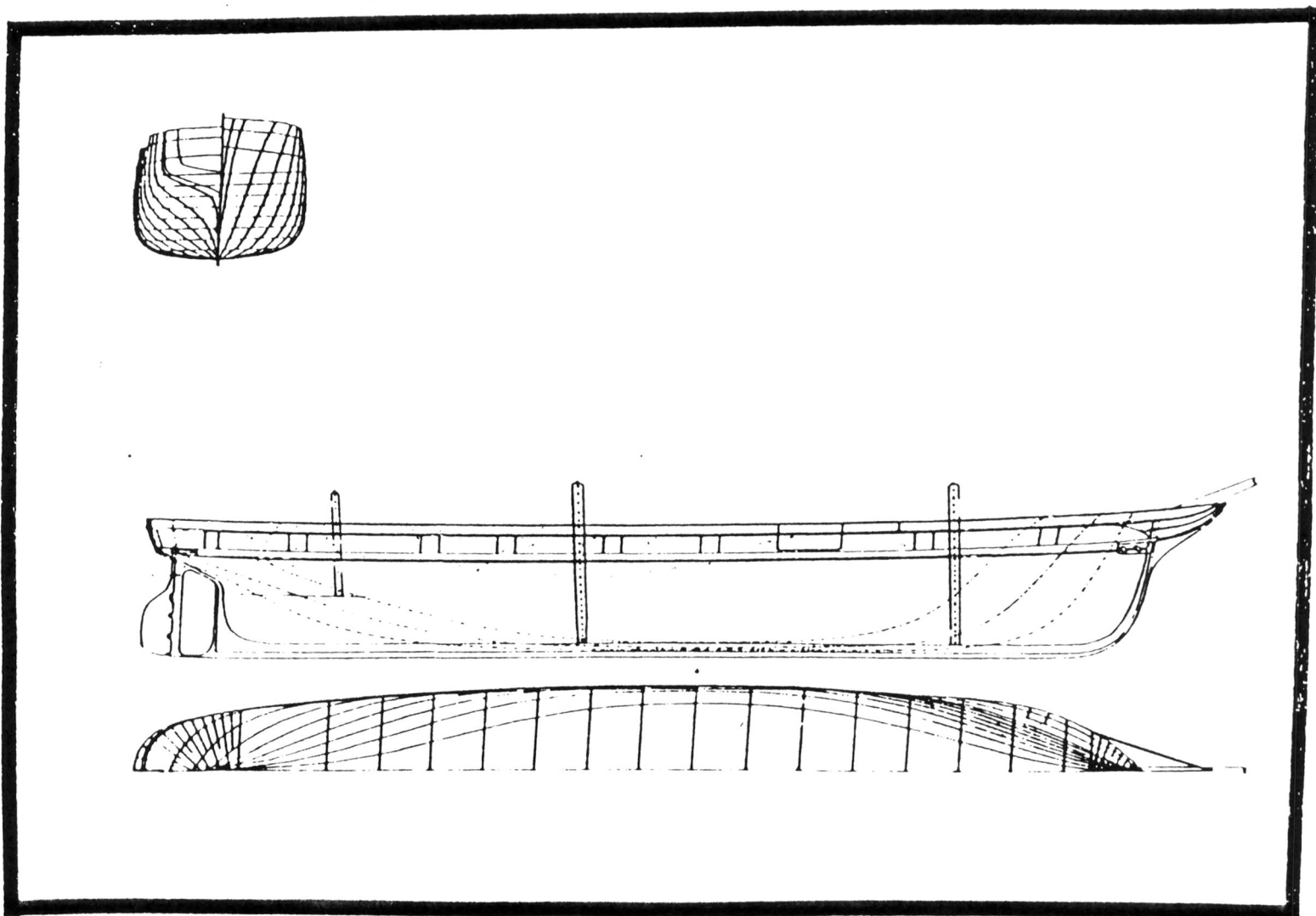
Cross Section at midpoint of Iron Sloops of war Alert, Huron, and Ranger. Bureau of Construction and Repair.

Cross Section at midpoint of Iron Sloops of war
"Alert" Huron, "Ranger"
 Bureau of Construction & Repair
 Washington D.C. April 1873
 Scale 1/2 inch = one foot.





U.S. Sloop of war Huron. Sail and Spar Plan.



Sheer, Half-Breadth, and Body Plans of USS Huron.

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Chapter Three

The Career of The Huron.

On November 15, 1875, at the Philadelphia Navy Yard, Master William Conway made the first entry into the deck log of the newly commissioned USS Huron: "At 12:00 midday the ship was put in commission, colors and pennants hoisted and turned over by Captain C.H. Welles, Executive Officer of the Navy Yard to Commander C.C. Carpenter U.S. Navy, who read his orders from the Navy Department and assumed¹ command."

The first crew members reported on board for duty after the commissioning ceremony. Work was begun immediately to load supplies and equipment onto the Huron. Although the ship was officially on duty, there was still much work to be done before she could get underway. The Huron remained tied up to the pier for several days while workers from the navy yard completed her final outfitting. Other crew members reported on board for duty throughout the week. Many of the crew had previously been quartered temporarily on board the receiving ship Patomac, which was anchored near the navy² yard.

The new ship's captain, Commander Charles C. Carpenter, graduated from the naval academy in 1865. He had served on board the Hartford and Wyoming, then worked in the Bureau of³ Equipment and Recruiting prior to commanding the Huron.

At 4:00 pm on November 18, a navy tug towed the Huron out into the middle of the river where she anchored in preparation for getting underway the following morning. On December 1, Commander Carpenter took the Huron down river to the League Island Navy Yard to receive additional supplies. Carpenter also wrote a letter to Secretary of the Navy Robeson the same day which said, "I have the honor to report⁴ the USS Huron, third rate, under my command ready for sea."

The Huron then got underway from League Island to Norfolk, Virginia, where the North Atlantic Squadron headquarters were located. The Secretary of the Navy ordered Commander Carpenter to report with the Huron to Rear Admiral William LeRoy, commander of the North Atlantic Squadron for duty with that force in the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea.

While at Norfolk, the Huron probably saw temporary⁵ duty towing monitors to and from various docking facilities. She remained there awaiting orders until March, 1876.

The Huron's first sea cruise began on March 20. Ensign Lucien Young made the entry into the logbook: "At daylight a pilot came on board. At 6:30 am, secured guns for sea, took off sail covers and made preparations for⁶ getting underway." A light snow fell across the harbor that morning as the Huron put to sea with the other ships of the squadron for a cruise to South Carolina.

Bound for the United States navy yard at Port Royal, the Huron steamed south off the stern quarter of the squadron flagship Hartford. The other warships steaming with the squadron to Port Royal were the Congress, Brooklyn, Dictator, Catskill, Marion, Pawnee, and Huron's sister ship, the Alert.

The squadron encountered heavy seas during the voyage, and the Huron lost part of her rigging when the jib broke loose. The squadron arrived safely at Port Royal however, on March 28, 1876. Commander Carpenter granted liberty to several members of the Huron's crew upon their arrival at the navy yard.

During their stay at Port Royal, the deck officers of the Huron conducted drills and inspections of the enlisted men, and supervised the loading of various supplies onto the ship. Some examples of the type and quantity of provisions carried on board the Huron include: 4,400 pounds of bread, 800 pounds of beef, 2,200 pounds of pork, 720 pounds of meal, and 1,140 pounds of coffee. Life on board the Huron quickly settled into a routine for the most part. However the ship and crew would soon be back at sea, bound for another port.

During the 1870's the United States and Mexico experienced several periods of tense relations resulting from various border disputes involving marauding Indians and Mexican bandits. The Indians and bandits conducted raiding

missions into the United States from hideouts in Mexico. Texas Rangers and American cavalry troops chased the raiders back to the Mexican border but were not permitted to enter Mexico in pursuit. During the same period, the Mexican central government was experiencing an overthrow attempt by one of its former military leaders, Porfirio Diaz. Diaz's revolutionaries were gaining power and disabling the central government by conducting violent attacks on the country's telegraph and railroad facilities. The revolutionaries also attacked the capital and several coastal cities. The political unrest inhibited the Mexican government's ability to conduct foreign policy with regard to the American border disputes.¹⁰

Concern in the United States Congress for American interests in the region finally resulted in the order to¹¹ deploy a warship to Mexico. Secretary Robeson ordered Commander Carpenter to take the Huron and proceed to Vera Cruz to monitor the situation in Mexico. Robeson instructed Carpenter to report regularly by mail on the state of the ongoing Mexican revolution, and on the status of American citizens and property in the country. He could visit other Mexican ports if he thought it necessary, and was to remain¹² in the region for a period of three months.

The Huron left Port Royal on April 9, bound for Vera Cruz, with a stopover at Key West. During her stay at Port

Royal several crew members had been confined for drunkenness and absence from the ship without leave. Now that the ship was at sea, Commander Carpenter ordered all prisoners released. They became "prisoners at large," working on board the ship until the Huron reached port again. They were then reconfined to serve out the remainder of their
13
punishments.

The ship's crew carried out a variety of routine exercises, navigation checks, course changes, ship sightings, and weather readings during the week-long voyage to Key West. The deck officers recorded the exercises and observations in the Huron's logbook during her voyage.

The officers also conducted regular review boards to consider promotions for some of the enlisted men. Three men, William Brooks, James Cooper, and James Pierce, received recommendations for promotion by a review board during the
14
Huron's cruise to Key West. The officers also conducted court martials on board the ship, and sentenced offending sailors to fines and confinement in the ship's brig.

The Huron pulled alongside the government wharf in Key West at 2:00 pm on April 12, 1876. She would load up with coal and provisions at the navy yard there before steaming to Vera Cruz.

As he had previously done in Port Royal, Commander Carpenter again granted liberty to several members of the Huron's crew in Key West. When a few of the crew failed to

return to the ship after their liberty was over, Carpenter offered the other crew members a ten dollar reward for their capture. Liberty was permitted on the following nights, despite the previous evening's problem of runaway sailors. The Huron's logbook recorded a continuous problem of drunken and absent sailors throughout the ship's career. This was probably typical in the United States Navy during the nineteenth century since life at sea was a hard way for a man to make a living.

During the Huron's second night in Key West, the deck officer noted in the log that many of the men remaining on the ship that evening went swimming in the harbor after supper. ¹⁵ One crew member, John Tainey, was brought on board late in the night, drunk and disorderly, and was confined in the ship's brig until morning. The officers and crew of the Huron experienced continued liberty and pleasant weather throughout their five-day stay in Key West.

The Huron completed taking on stores and coal, and prepared to get underway on April 17. The engineers started ¹⁶ the fires under the boilers at 4:30 that morning. By 6:30 am, enough steam pressure had built up to start the engines and get underway. A harbor pilot guided the ship out of Key West and was discharged at 11:00 am. The navigator took a departure bearing from the Key West lighthouse and set the ship's course for the southwest, destination: Vera Cruz,

17

Mexico. The passage to Vera Cruz took seven days, during which time the officers and crew conducted daily gun drills, navigation checks, and weather observations. Also by this time, Commander Carpenter had established a routine of inspecting the ship and crew every Sunday morning at 10:00.

Upon arriving at Vera Cruz, an officer from the Huron, William Conway, went ashore to make a visit to the American Consul's office. Conway might have been checking to see whether any new orders or dispatches had arrived for the Huron, or he could have been making a courtesy visit to announce the Huron's arrival at Vera Cruz, and reporting the status of events in the region. He wrote, "The revolution in this country appears to be gaining strength. The water which supplies the City of Mexico was cut yesterday. I am told the revolutionaries are under good discipline and do not rob, steal, or molest foreigners. The health of this place is unusually good." 18

The Consul visited Commander Carpenter on board ship a few days after the Huron arrived in port, probably to discuss the revolution. Meanwhile, the deck officers kept notes on the number and nationality of the different ships entering and leaving the port, and recorded the information in the ship's log. This may have been done for military intelligence reasons, considering the instability of the Mexican government at the time. It was also the kind of

activity generally recorded in a ship's logbook during that period. In the meantime, the crew of the Huron labored below the decks, cleaning the bilges and doing routine
19
maintainence.

Carpenter met with several Mexican officials, and on May 5, the Huron participated in a ceremony honoring the anniversary of the capture of the city of Puebla by the Mexicans. The crew dressed the ship with the Mexican flag at the fore mast head, and U.S. ensigns at the main and
20
mizzen mast. Several visitors came on board the Huron and the officers conducted gun firing demonstrations for them.

Commander Carpenter sent a second report to Secretary Robeson on May 18. He reported, "the railroad and telegraph to the City of Mexico had been cut by a force a few miles from here, trains fired upon and no communication for a
21
week." No Americans had been harmed, according to Carpenter's letter, and Mexican troops were reenforcing the
22
towns against the revolutionaries.

The Huron left Vera Cruz on June 3, 1876 and returned to Key West for coal. She remained there only long enough to take on coal and provisions, and then returned to Vera Cruz, arriving there on June 28.

In the meantime, three sailors from the Huron, Samuel Clark, James Murray, and Patrick Carroll, had been absent from the ship when she left Vera Cruz and declared deserters by Commander Carpenter. The three men were in the custody

of the American Consul when the Huron returned, and Ensign Young was ordered to shore to escort them back to the ship.²³ They were later court martialed for desertion.

The Huron cruised off the coast of Mexico during the remaining month of her assignment, visiting the port cities²⁴ of Frontera, Tabasco, Santa Anna, Chullysa, and Tampico. Carpenter wrote his final report of the cruise on July 21, 1876, detailing his observations of the Mexican revolution. In his report he stated, "all the coast except Frontera is in the hands of the Pronunciados (revolutionary forces), but there is no interruption in loading or depredations²⁵ committed upon the vessels."

The Huron left Mexican waters on July 25, 1876 and proceeded to Port Royal, South Carolina. Commander Carpenter was required to keep the ship in quarentine for four days before entering the navy yard to insure against²⁶ the spread of any disease. Once the quarentine period was over, the Huron entered the port and Carpenter reported to the commanding officer of the North Atlantic Squadron, Rear Admiral William LeRoy. Carpenter received orders to take the Huron to Portsmouth, New Hampshire for overhaul. The bottom of her hull was covered with barnacles, and her masts needed painting. The Huron made the voyage to Portsmouth in six days, arriving there on August 18, 1876.

In Portsmouth, the crew was put to work cleaning the

ship topside, painting the hull, interior, and masts and
²⁷ spars. The Huron then went to the Boston Navy Yard where
 she was put in drydock. There the bottom of her hull was
²⁸ scraped clean and repainted.

The Huron remained in drydock at the Boston Navy Yard
 from August 29, to September 4, 1876. Most of the cleaning
 and painting was done by the ship's crew, with the help of
 workers from the navy yard. When all the work was finished,
 the Huron was hauled out of the drydock and tied up at the
²⁹ wharf while her commanding officer awaited new orders.

On Friday, September 8, 1876, Commander George P. Ryan
 reported to the Huron and assumed command from Commander
³⁰ Carpenter. Carpenter left the ship to attend a torpedo
 instruction school. He would eventually obtain the rank of
³¹ rear admiral in 1894, and retire from the navy in 1896.

Commander George Ryan graduated from the naval academy
 in 1866. He served on board the Lanapee for one cruise,
 then was assigned to the naval academy as an instructor.
³² Later he served aboard the Sabine, and California. In 1874,
 Ryan was chosen to command an astronomic observation station
 on the island of Kerguelen, off the coast of South
 Africa. His mission during the command was to record the
 orbit of Venus as it came between the earth and sun in
³³ December, 1874.

The observance of the transit of Venus was a multi-
 national operation involving several other countries

besides the United States. The British and French sent observers to other stations scattered throughout the Pacific and South Atlantic. The United States Naval Observatory led the American observation efforts.

Ryan went to South Africa in the summer of 1874 and began at once setting up the observation station and taking astronomical readings. He also recorded specimen samples of the plant and animal life, and took several photographs of the island.³⁴

On December 19, 1874, Ryan's work paid off with the successful prediction and recording of the transit of Venus. Ryan expressed his pleasure in a letter to his wife: "What a joy it gives me to tell you that we have been successful. We have not failed. Imagine my feelings when I saw and marked the dark disk breaking the edge of the sun. I marked³⁵ the time and the (assistant) and I gave three cheers."

Ryan received a letter of appreciation from Secretary Robeson, signed also by Rear Admiral C.H. Davis, superintendent of the naval observatory, expressing gratitude for a job well done.³⁶

Commander Ryan took the Huron to sea on September 16, 1876, and steamed south from Boston to Hampton Roads, Virginia. Ryan and the Huron remained there through mid-November. During this time the crew worked on board the ship caulking the bridge and painting the sides of the hull.

The crew continued to get drunk regularly and many of the sailors were often absent without leave. One crew member, John Mahan, was arrested by civil authorities and charged with attempted rape. This resulted in his being dishonorably discharged from the navy.³⁷

Ryan took the Huron to Port Royal on December 4, 1876, to join the other ships of the North Atlantic Squadron. Work crews continued working on the ship in preparation of her next sea cruise.

In late December, the Huron went to the aid of a merchant ship which had run aground near the harbor. She towed the Harvey Mills off the shore and assisted in pumping the accumulated water from her hold.³⁸

In the meantime, Lieutenant Arthur H. Fletcher reported for duty on board the Huron as the ship's new executive officer. Fletcher had been previously attached to the USS Ashuelot, assigned to the Asiatic Station in the Far East. While on board the Ashuelot, Fletcher had been tried by court martial on the charges of drunkenness, incapacity to perform his duty, and indecent conduct.³⁹ Found guilty, Fletcher was sentenced to three months' suspension from rank and duty. In response to the charges against him, Lieutenant Fletcher told the court, "I have not been addicted to the habitual use of intoxicating beverages: On the contrary I have totally abstained for months at a time."⁴⁰ He later added that he had been extremely homesick for his

family and that the depression got the better of him,⁴¹
causing him to drink in excess on that one occasion.

Fletcher's assignment to the Huron was apparently his first after having regained his rank, and later added an ironic twist to her fate.

Commander Ryan's previous experience with astronomical measurements probably resulted in the Huron's next cruising assignment. Ryan received orders to take the ship to the north coast of South America and establish accurate longitude readings using new chronometers developed for⁴² navigation. The assignment took advantage of Ryan's astronomical abilities and also made good use of the warship during peacetime.

The Huron steamed to Charleston to prepare for her cruise. Commander Ryan took a week's leave in January, 1877, while the ship was being outfitted with needed scientific equipment. In the meantime, Lieutenant Fletcher had taken a three-day leave, then a two-week leave shortly after that. He came back early from his two-week leave, and Commander Ryan found him drunk in his cabin. Ryan suspended him from duty for one day, but found him drunk again two days later. Ryan suspended him again for two days. When the crew was called to muster prior to sailing on March 18, Fletcher was missing. Ensign Young volunteered to go ashore to look for him, but was unable to do so because the

Huron was scheduled to sail that morning. Commander Ryan waited until the afternoon, then steamed out of the harbor at 4:00 pm, without his executive officer.⁴³

Commander Ryan had a partial understanding of the strange behavior of his executive officer. Shortly before he left the ship, Lieutenant Fletcher had revealed to the commander that he had a terrible, unexplained fear of the Huron,⁴⁴ and of her upcoming cruise. Fletcher also spoke to the ship's chief engineer, E.M. Olsen, about his fear of the ship. He told the engineer that he was afraid a catastrophe would befall the ship, and that the thought of sailing on board the Huron led him to drink too much.

Fletcher turned himself in after the Huron left Charleston for her cruise, and was held for court martial upon her return in the summer. In August, 1877, Fletcher testified to a court martial at the Washington Navy Yard that his fear of the Huron forced him to leave the ship.⁴⁵

Fletcher told the court that he had spoken to Commander Ryan about the ship saying, "I don't want to go to sea with this hanging over me. I don't know what is the matter with me, but I have a horror of the sea, and a particular horror of this trip."⁴⁶

The Huron's captain substantiated Fletcher's testimony about his unusual fear of the Huron, and the court suspended the former executive officer from duty for two years.

Fletcher never returned to the navy after that incident, and

when the Huron wrecked in November, 1877, his "unusual fear" became part of the Huron's history.

Fletcher's apparent omnipotence about the fate of the Huron cannot be taken too seriously however, considering the fact that he had already been court martialed once for drunkenness on duty, and the disaster at sea he envisioned for the Huron occurred several months later than he predicted. Fletcher was in all probability an alcoholic or slightly insane.

After leaving Lieutenant Fletcher in Charleston on March 18, 1877, the Huron steamed south to St. Thomas, arriving there on March 28. The ship remained at St. Thomas for three days while Commander Ryan and his officers worked on their assigned longitude calculations, then steamed to
47
Port of Spain, Trinidad.

The Huron remained at Trinidad for four days while Commander Ryan and the officers calculated the longitude positions. During the next month and a half, Ryan took the Huron west along the northern coast of South America, touching the Lesser Antilles island group, and to Venezuela and Colombia, putting in at Santa Marta, and Cartagena. Ryan made periodic visits to the American Consuls which were in the areas, probably to report his progress to the Navy Department, and perhaps as a courtesy to the Consuls,
48
informing them of the Huron's presence in the area.

All during this time, he continued calculating longitudes, as well as taking depth soundings for navigation charts. He also had the officers of the ship draw several maps of the local harbors, and landscape views of the islands for future reference.

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The Secretary of the Navy, Richard W. Thompson, included a summary of the Huron's movements and ports of call on her cruise to South America in his annual report to Congress. Thompson wrote that, "Huron, Cmdr George Ryan, had determined the following geographical positions on the north coast of South America, and the outlying islands of Unare Bay: Testigos Islands, Puerto Santo Bay, Pampatar, island of Margarita; Cumana; Tortuga Island; Corsariros Bay; Orchila Island; Los Rogues Island; La Guayra; Puerto Cabello; Island of Curacoa; Vela de Cora; Orange-Stadt; Estanquez Point; Bahia Honda; Cape la Vela; Santa Marta and Cartagena; carrying longitudes chronometrically between Port Spain, Trinidad and Aspinwall."

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Thompson added his praise to the long list of islands visited by Ryan and the Huron. He wrote, "At the same time a survey was made of the harbor of Orange-Stadt by the officers of the Huron. This work was carefully executed, and reflects much credit upon those connected with it."

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The officers of the Huron completed their survey and longitude work in mid-June, 1877, and proceeded north to Key West for coal. Arriving there, Ryan received a letter from

Secretary Thompson instructing him to take the Huron immediately to Mobile Bay, Alabama. The Secretary ordered Ryan to survey the remains of the wrecked monitor Tecumseh,⁵² and report her position to the Navy Department.

Ryan arrived at Mobile Bay a few days later. The Huron's crew proceeded to survey the wreck. They determined the Tecumseh's position and the depths around the wreck,⁵³ then returned to Key West for coal. Ryan requested that the Huron be ordered into drydock to have the bottom of her hull scraped. He reported that her speed had been reduced to five and a half knots as a result of the accumulated⁵⁴ barnacles underneath the ship. Rear Admiral Stephen Trenchard, who had replaced Rear Admiral LeRoy as Commander of the North Atlantic Squadron, forwarded Ryan's request to Secretary Thompson. Ryan received approval from the Secretary and proceeded with the Huron to the New York Navy Yard, with a scheduled stopover at Norfolk.

The Huron arrived at the Norfolk Navy Yard on July 22, 1877. Before he was able to take the ship on to New York however, Commander Ryan received orders to take the ship to⁵⁵ Washington and to stand by there until further notice.

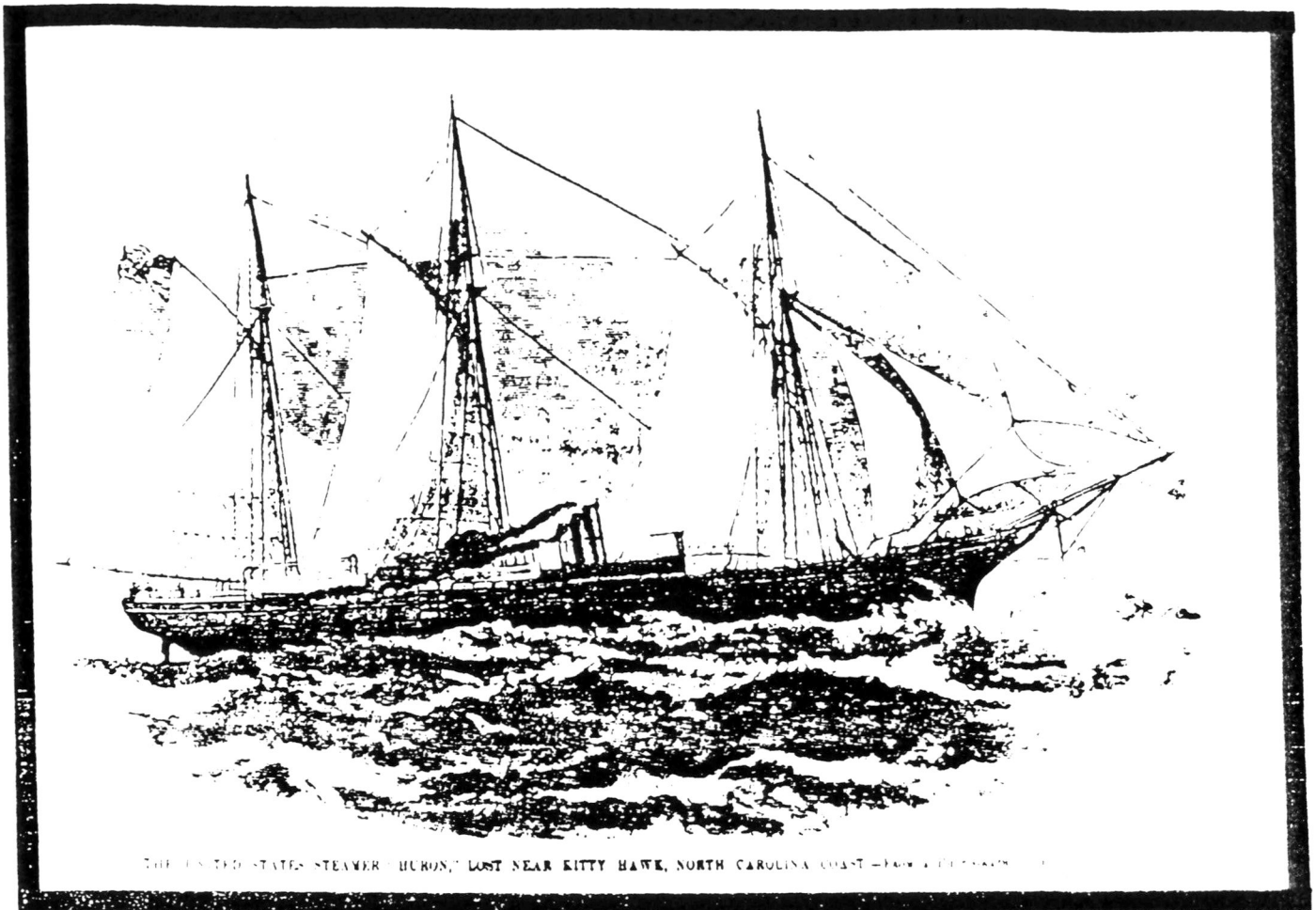
Railroad workers were striking in Washington and Baltimore, causing fires and riots in the cities. Several ships from the North Atlantic squadron, including the Huron, were sent into the area to protect the cities and help stop

the rioting. Each ship carried a contingent of United States Marines who were landed in the cities and used as⁵⁶ an intimidating force to suppress the rioters.

The Huron guarded the Washington Navy Yard for over two weeks, from July 26 until August 11, 1877. While in Washington, Commander Ryan and several other officers were called to testify at the court martial of Lieutenant⁵⁷ Fletcher.

When the labor strike threat ended, Commander Ryan took the Huron back down the Chesapeake Bay to Hampton Roads. Then according to his orders, he proceeded to New York to dock the ship for overhaul. The Huron remained in⁵⁸ New York until the end of October, 1877.

The Huron had thus far been a valuable ship to the United States Navy. Both of her commanders were praised as competent and skillful officers. Her next cruise was supposed to be another scientific expedition to the Gulf of Mexico, but ended in tragedy with her loss that of most of her crew.



Drawing of the Huron with her sails set from Harper's Weekly, December, 1877.

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Chapter Four

The Loss of The Huron.

The Huron's final voyage began at the navy yard in New York where the ship had been in drydock having her hull scraped and receiving a new propellor. On October 13, 1877, Secretary Thompson transmitted orders to Commander Ryan to "proceed to Havana, island of Cuba, whence you will make a reconnaissance of the coast of Cuba, determining the doubtful points in positions, in coastlines and in outlying dangers." ¹

Before the ship could leave for Cuba she had to be tested in steam trials with the new propellor. These trials were conducted on the 29th along the Hudson River. ² The Huron steamed for four hours along the river averaging a speed of ten knots. She used 8,608 pounds of coal and generated 325 horsepower in her high pressure cylinder and 350.65 horsepower in her low pressure cylinder. ³ Her total average horsepower amounted to 605.30. The engineers conducting the trials reported the performance of all machinery as entirely satisfactory. ⁴ On November 15, after the completion of all steam trials, the Huron set sail for Norfolk and Fort Monroe, Virginia. She would undergo her final outfitting at Hampton Roads, then proceed to the West Indies as her orders instructed.

The ship arrived in Hampton Roads on the afternoon of November 17, to find a telegram waiting for Commander Ryan from Secretary Thompson. The message instructed Ryan to stand by with the Huron for the arrival of a draftsman from Washington who was to join the ship on her cruise. After loading with coal on the November 20, the Huron anchored in the harbor to await the draftsman. The Huron got underway on November 23, with draftsman John J. Evans on board.⁵ Rear Admiral Stephen Trenchard, in command of the North Atlantic Station, later telegraphed the secretary "The Huron sailed for Havana at ten this morning."⁶

Ensign Lucien Young took over the watch at 12:00 noon, relieving Master W.S. French. Young set the crew to work preparing the ship for sea; securing the boats, guns, and anchors and storing the chains. A harbor pilot guided the ship out of Hampton Roads and left the Huron just north of Cape Henry around 1:00 pm.⁷

Ensign Young was a promising junior officer. Three years before, he had received a letter of commendation from the Secretary of the Navy for jumping from his ship, the Alaska, into the Mediterranean Sea to save a drowning sailor.⁸ Now Young watched over the activities of the crew of the Huron.

He informed the navigator, Lieutenant L.G. Palmer, of the Huron's course and speed throughout the afternoon.⁹ At 2:00 pm Ensign Young ordered the Huron's sails set and

logged the wind direction east-southeast at force six.¹⁰ He experienced one minor incident with the engine when a relief valve stuck open causing one of the steam cylinders to lose pressure. This was quickly fixed and the engine regained¹¹ pressure in a short while.

With all things then running smooth, Ensign Young turned the watch over to Ensign F.W. Danner at 4:00 pm. Danner's watch proved to be slightly more eventful. As the day wore on, the wind force increased so that the stay sail¹² was carried away.

Master William Conway relieved Ensign Danner of his watch at 6:00 pm. Conway set a storm sail and reefed up most of the other sails. At 6:45 he took a sounding with the lead line and reported a depth of fifteen fathoms to Lieutenant Palmer. The navigator reported that the sounding¹³ agreed with the positions he had plotted on the charts.

Conway noted the wind force at seven or eight with the barometer holding steady at 30.04 inches. The Huron was steaming at five and a half knots and tacking into the wind on an east-southeast course. Master Conway turned the watch over to Master J.M. Wight at 8:00 pm as Currituck Lighthouse¹⁴ appeared on the starboard quarter.

Leaving the deck, Conway stopped in the navigator's cabin to have a look at the charts. Commander Ryan was standing by and remarked to Conway that their present

course ought to take the ship out far enough, and that if they went out any further he feared they would hit the gulf stream. Ryan also spoke of waiting until the ship made Hatteras before retiring for the night. Lieutenant Palmer asked Conway the state of the weather; Conway's reply was short, "Bad."¹⁵

Conway left the cabin after this conversation with Commander Ryan and went below to the berth deck. He returned to the deck about 10:30 pm and observed Currituck Light off the stern quarter, barely visible. Dense fog prevented the lookouts from seeing Bodie Island light. Master Conway returned to the berth deck and turned in for the night.¹⁶

Master Wight maintained the watch until midnight, during which time no changes in course or speed were made. Conditions on board the ship remained quiet during the final hours of November 23.¹⁷ Master French relieved Wight and continued the routine of the watch. He took depth soundings on the hour as Wight had started doing at 8:00 pm. Engineer Edgar Warburton recalled stopping the engines three times between 8:00 and midnight so that depth soundings could be taken.

French ordered the engines stopped and took another sounding at 1:00 am. He reported a depth of ten fathoms to Commander Ryan, and four bells were sounded as a signal to start the engines forward again. But before the order could

18

be carried out the Huron struck ground.

The jarring crash awakened nearly everyone on board. Engineer Warburton had just turned in after coming off duty in the engine room when, as he said, "I was awakened by the shock of the ship striking." ¹⁹ He immediately dressed and went up on deck to see what had happened. Then he reported to the engine room to help maintain steam and engine power. He remained there until orders were given for all hands to come on deck.

The other officers gathered in the main cabin while Commander Ryan and Lieutenant Palmer tried to determine their position. Palmer estimated the ship to be eight to ten miles from shore and guessed that they had struck a shoal ²⁰ covering a submerged wreck. When Master Conway pointed out the shoreline to Commander Ryan, the commander exclaimed, ²¹ "My God! How did we get in here?!"

The enlisted men reported to their stations ready to help return the ship to her proper course, although some sailors went immediately to the forecabin. That was the only area on the ship safe from the waves that washed across the deck. Seaman Antonio Williams reported "assisting in cutting away sails and throwing the guns overboard" before being "washed ²² to the forecabin." He eventually jumped overboard.

The engine room crew believed the Huron might be able to back off the sandbar with her engines. Engineers Denig,

Warburton, Olsen, and Loomis, along with a crew of some twenty fireman, worked to maintain pressure and steam. They reversed the engines and stoked the fires for nearly an hour until around 2:00 am.²³ The ship remained lodged on the sandbar, rising and falling with the waves. Spars and rigging pieces broke and fell through the hatch covers, allowing water to pour into the engine room. Engineer Denig said later, "At each thump of the ship her bottom buckled inward, and each time apparently resumed its original form." He also stated, "I heard several loud cracks, as if some portion of the engine frame were breaking." Engineer Warburton said he heard the same noises but could "discover no leaks." "Shortly before two o'clock the starboard boiler shifted slightly bending the steam pipe,²⁵ and necessitating hauling the two starboard fires."

Chief Engineer Olsen ordered all hands to extinguish the fires at 2:15 am. Five minutes later the men were scrambling toward the deck through the engine room hatch. Engineer Warburton remained below until all the other men²⁶ were on deck before he left the engine room.

Up on deck Ensign Young, having been awakened by the ship's striking bottom and by the shouts of officers and sailors, began at once to take in the storm sails. Having no success at taking in the sails he ordered men aloft to cut the halyards, releasing the sails. Young asked for permission to throw the nine-inch guns overboard. Commander

Ryan gave the order and a crew set about to remove the guns. Waves breaking over the rails washed sailors back and forth, making it impossible to work the tackle for moving the huge
27
cannons.

Young realized the task was impossible and went to the signal office to retrieve two boxes of distress rockets. "Burn all you can," said Commander Ryan. On that order Ensign Young positioned himself in the starboard watercloset. From there he fired over 100 signals during
28
the next three hours.

In the meantime Commander Ryan and Lieutenant Palmer went back and forth from the cabin looking at charts, to the deck directing the men. Master Conway left the two officers in the cabin and made his way to the forecastle. He stood by as the order came from Commander Ryan to cut away the masts. The enlisted men cut the starboard lanyards of the fore shrouds and the foremast fell away to port. Conway extinguished all the lamps on the forward berth deck to avoid fire, and with the rest of the enlisted men, found
29
shelter along the forecastle rail.

By now the seas were breaking all over the ship.
30
Commander Ryan ordered all hands forward to the forecastle. After exhausting his supply of signals Ensign Young left the water closet and began to make his way forward. As the ship's surgeon, Dr. Culbreth, made his way along the deck

in front of Ensign Young and Master French, a series of huge waves broke across the ship and carried several men into the water, including the doctor and the ship's paymaster, C.N. Sanders. French was able to save himself by climbing into the rigging of the main mast. Young made it safely to the
31
forecastle.

Commander Ryan and Lieutenant Palmer climbed into the starboard launch. It was stuck in the davits and could not be put overboard, but it commanded a good view of the circumstances and provided a vantage point from which the two men could direct the crew. By this time Huron was inclined about forty-five degrees on her port side. There was no way to refloat the ship, and the crew knew their only
32
hope was to receive assistance from shore.

Soon after the crew moved forward the ocean crashed onto the stern cabin area and literally crushed it. The main deck was awash and huge waves were breaking across the forecastle. Waves swept over the launch occupied by Commander Ryan and Lieutenant Palmer. The commander fell between the boat and ship and was killed. Lieutenant Palmer held onto the boat for a few minutes, then fell into the
33
ocean and drowned.

About this time the crew spotted a light on shore. The beleaguered crew tried to attract the attention of the shore
34
party by yelling. No help would come from the beach, however. The light seen by the crew belonged to some fishermen

who had spotted the rockets fired by Ensign Young earlier.

By this time the Huron had been aground over four hours. The ocean grew more intense as each moment passed, and the sailors fell more and more fatigued. Each set of waves washed a tired sailor from the ship. One wave swept away twelve men at once. Several men climbed out onto the bowsprit and lashed themselves to it to keep from being washed away.

Ensign Young took soundings from the forecastle and found a depth of about eight feet with the tide rising steadily. Realizing that the crew would be lost without some help from shore, he asked for a volunteer to help him launch a small raft with a line attached to go to the beach. Seaman Antonio Williams came forward and helped Young secure a line to an inflatable balsa raft and float it clear of the ship. It was a difficult job in the cold and turbulent water, and the two men took almost half an hour to get clear of the ship.³⁵ They floated free with the raft and line for a few moments, but were soon washed back up against the ship and became entangled in the hanging rigging and spars. In order to free the raft, Young was forced to cut the line he planned to bring ashore. The men now cleared the ship a second time.

They were immediately swept by the current out to sea. Once Williams and Young were clear of the ship's wreckage,

the current pushed them north capsizing the raft and men end over end. Seeing what appeared to be the masts of a ship, Ensign Young yelled for Williams to swim hard toward them. What Young had actually seen were telegraph poles behind the dunes on shore.³⁷ Before either man realized what was happening, they washed up onto the beach three quarters of a mile north of the wreck.³⁸

Sunlight edged over the eastern horizon as the two men crawled out of the surf. They could see the Huron, and the crowd that now gathered on the beach to see the wreck. The two men made their way south along the beach toward the people, stopping only to pull exhausted sailors and dead bodies out of the surf. They met Master Conway as he emerged from the water after having been washed overboard.

The crew members still on board the Huron realized that if they were to be saved it would have to be by their own efforts, and several men began to swim to shore. Engineer Warburton had seen enough men washed away. Now he slipped down into the water and was carried away by the current. Floating north, Warburton managed to stay up for several minutes. Finding his strength ebbing, he grabbed an oar and used it to rest on. Soon after that he hit the beach a mile north of the wreck.

Unable to stand and caught in the strong undertow, Warburton rolled in the surf nearly back out to sea. Fortunately two shoremen came to his aid and pulled him

39

from the water. He recalled later, "I was taken to a shanty, where I found a fire lighted and a dry blanket,... I had no idea how long I was in the water. I was so bruised that I couldn't move when I got ashore and was obliged to remain in the shanty 'til late in the afternoon. When Mr. Conway decided to move the party to the lifesaving station, I was carried in Sheriff Brinkley's cart."

40

When Ensign Young reached the crowd that had gathered on the beach opposite the Huron he asked them if they had seen the distress signals or had sent for the lifesaving service. They told him they had seen the signals, even the first ones, and had sent a man to nearby Roanoke Island to summon the keeper of the lifestation.

41

U.S. lifesaving stations had been established along the coast in 1874. They were manned from December to April to assist stranded mariners. The Nags Head station was three miles south of the Huron wreck site but still closed, and not expected to open for another week.

When Ensign Young asked the group why they didn't get the lifesaving equipment themselves instead of waiting for the station keeper to get there, they told him the station was locked and they were afraid to break into it alone.

42

Ensign Young dispatched one of the men with a horse to the telegraph station at Kitty Hawk, to notify the naval authorities of the wreck and to request help. Then he and

several of the others set out for the Nags Head lifesaving station.

Back on board the Huron Master French continued to hang on in the rigging of the main mast. About 8:00 am the main mast fell across the smokestack and into the water. Master French and Micheal Trainor, the captain of the afterguard, both jumped into the sea and began to swim to shore. Trainor made the beach a short time later, and two men hauled him out of the water. Master French was never seen⁴³ again. (His body was not identified among those later recovered.)

Ensign Young was barefoot and badly bruised from his ordeal in the surf. He and the others reached the⁴⁴ lifesaving station around 9:30 in the morning. Sheriff Brinkley of Dare County met them as they arrived. Young broke into the station and the men began loading the lifesaving equipment into the sheriff's wagon. The men got back to the wreck site around 11:00, but they were too late⁴⁵ to be of any help. As they were coming back toward the⁴⁶ wreck they saw the mizzen mast fall into the water. By this time there were no sailors left alive on board the Huron. Nothing more could be done except to patrol the beach dragging bodies out of the surf.

While the fishermen searched the beach for bodies, Ensign Young and the other survivors went to a nearby fishing hut where a fire and some food had been prepared for

47
 them. Thirty enlisted men and four officers were all that
 remained of the Huron's crew. Ninety-eight men were
 48
 missing.

That afternoon Sheriff Brinkley took the survivors to
 the lifesaving station and furnished them with more food,
 clothes and bedding. The survivors stayed there during the
 night while volunteers from Nags Head continued searching
 49
 for any more survivors and bodies.

On Sunday morning, November 25, the warships Swatara,
Powhatan, and Fortune, and the wrecking ship B & J Baker
 arrived at the scene of the wreck. Heavy surf prevented the
 ships from landing any of their surf boats during the
 morning.

At 1:00 pm a naval relief party arrived via the inland
 canal from Norfolk bringing medical stores and supplies for
 the survivors. Doctors tended to the crew and prepared a
 50
 boat for their transportation back to Norfolk.

Around 3:30 pm a boat from the B & J Baker attempted to
 land through the strong surf. E.M. Stoddard, captain of
 the Baker, and Captain John J. Guthrie, Superintendent of
 the Lifesaving Service's seventh district, were passengers
 in the surf boat. Henry L. Brooke, a reporter for the
 Norfolk Virginian, accompanied the two men. A crew of six
 manned the surf boat's oars.

Eyewitnesses later described the crew's attempts to

land the boat through the surf: "The boat came towards shore gallantly until she reached the surf breaking over the outer bar, about 200 yards from shore and just about 100 yards south of the Huron. She passed the first breaker and shot ahead...the next lift of the sea seemed immediate, and in a twinkling hoisted the surf boat broadside on, and catching it on the crest of the waves, threw it bottom upwards about ⁵¹ ten feet in the air."

Captain Stoddard, Mr. Brooke, and one of the crewmen managed to gain hold of the capsized boat. Captain Guthrie and the other five men all drowned.

Late in the afternoon the survivors were transferred to the soundside dock at Nags Head village. They boarded the side-wheel steamer Bonito and proceeded up the Albemarle Sound and through the inland canal back to Norfolk.

A naval detachment under the command of Lieutenant-Commander J.G. Greene arrived in Nags Head on November 27 to retrieve the bodies and identify the dead. The retrieval of the drowned crewmembers was a grim job. Few bodies survived with any personal effects on them making positive identification difficult. The families of those killed later accused the area residents of robbing the bodies as they washed ashore. Many of the bodies drifted over thirty miles north before washing ashore. Some were so disfigured that they could only be identified by the tatoos ⁵² they were wearing.

Huron crew member Samuel Clark drew the ghastly chore of accompanying the burial party on its beach patrol and identifying the tatooed sailors. Clark was the man who had performed the tatooing process on most of his shipmates. The search for bodies continued for two weeks.

A naval court of inquiry convened on December 5, 1877, to determine the cause of the disaster. The court stayed in session for twelve days and heard testimony from the surviving officers and several of the enlisted men. Officials from the naval bureaus of Steam Engineering, and Equipment and Recruiting reported on the Huron's condition at the time she put to sea for what was to be her final voyage.

The court concluded that Commander Ryan was primarily responsible for the wreck by setting a course too close to shore and by carrying too much sail with a leeward shore. The court also found Lieutenant Palmer negligent in his duty by failing to take the proper bearings off Currituck Lighthouse after the ship passed abeam of the light.⁵³

It should be noted that the court added the following statement to its opinion of the wreck: "In conclusion, the court would state that the evidence shows that many well-found merchant steamers, wooden and iron commanded by experienced navigators of our coast have been wrecked near the point on which the Huron was lost."⁵⁴



The wreck of the Huron, from Frank Leslie's Illustrated Newspaper, 1877.



THE UNITED STATES STEAMSHIP "HURON" ATTEMPTING TO PASS AGAINST THE FLOOD ON THE RIVER OF SOUTH CAROLINA.



THE SALVAGE PARTY MANEUVERING FOR THE BODY.



THE LIFEBOAT CAPSIZING IN THE RIVER.

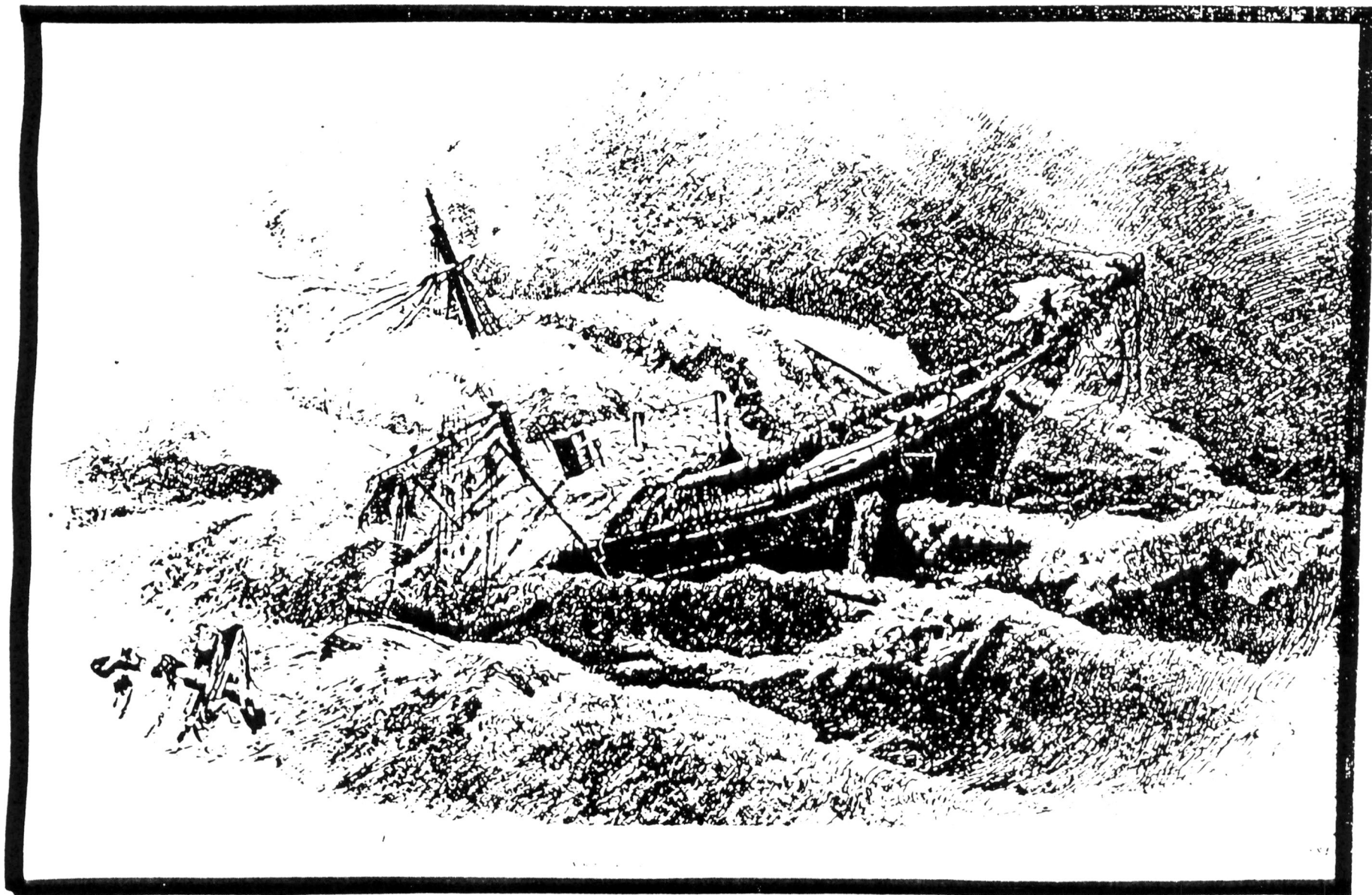


RECOVERY OF THE UNITED STATES LIFEBOAT, CAPSIZED IN THE RIVER.

RECOVERY OF THE LIFEBOAT, CAPSIZED IN THE RIVER.

SOUTH CAROLINA—SCENES AND INCIDENTS IN THE WRECK NEAR OCEENON INLET OF THE UNITED STATES STEAMSHIP "HURON," WITH THE LOSS OF OVER ONE HUNDRED LIVES, ON THE MORNING OF NOVEMBER 24, 1877.

Scenes of the wreck of the Huron, November 24, 1877.



Engraving from "Fag Ends", 1881, Depicting the ship's
loss near Nags Head, NC, on November 24, 1877.

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8

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9

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10

Senate Executive Document #26, p. 14. Wind speed is measured on the Beaufort Scale, from force one to force eight. Force six is equal to approximately 35-40 knots.

11

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12

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13

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- 16 Senate Executive Document #26, p. 4.
- 17 Senate Executive Document #26, p. 26.
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- 24 Senate Executive Document #26, p. 11.
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- 26 Senate Executive Document #26, p. 22.
- 27 Senate Executive Document #26, p. 15.
- 28 Senate Executive Document #26, p. 15.

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- 50 Senate Executive Document #26, p. 18.
- 51 Army and Navy Journal, p. 262, 263.
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- 53 Senate Executive Document #26, p. 33-36.
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Chapter Five

The Aftermath of The Wreck.

A few days after the Huron disaster, the wrecking tug B And J Baker, Captain E.M. Stoddard commanding, returned to the wreck site with a crew of divers and began salvage operations on the hulk of the sunken gunboat. Meanwhile, in Washington, the naval court of inquiry was investigating the causes of the wreck. During this same time, newspapers along the east coast printed details of the disaster, including statements of the survivors and reports by the Navy Department. All of these activities continued for several weeks.

The nation expressed shock at the disaster. The United States Congress voted unanimously for immediate compensation to the families of those lost in the wreck. The Army and Navy Journal illustrated the media's impression of the disaster when it wrote that "the nearest parallel of late years to the loss of the Huron is the Custer massacre." ¹

The salvage crew from the B And J Baker used explosives to blow away the after portions of the wreck, so that divers could enter the submerged hulk to search for bodies and ²salvageable materials. Stoddard sent a few reports to the commanding officer of the Norfolk Navy Yard which were published by a Norfolk newspaper, the Landmark. He reported that the crew could save the cannons, anchors, and chains,

and that only one body had been recovered from the wreck. Stoddard and his wrecking crew probably had a particular interest in finding the paymaster's chest since the New³York Times reported that it contained \$10,000 in gold. The crew recovered the chest a few days after the wreck, and returned to Norfolk with the gold and other salvaged goods two weeks later.

The naval court of inquiry investigating the cause of the disaster placed the blame for the wreck squarely on the ship's captain and her navigator. Led by Vice Admiral Stephan C. Rowan, the court wrote that "every officer in command of a ship is in supreme command. It is he who is responsible for her course; it is he who is to see that proper allowances are made for every cause which may deflect the vessel from her intended direction; and it is he who is responsible for any accident which may occur in her⁴ navigation."

Commander Ryan should have known his ship's position in relation to the shore, according to the court, and he should have realized that the sails would cause the ship to drift downwind of her course. Lieutenant Palmer, accused by the court of failing to take navigational bearings from the Currituck Beach Lighthouse, was also censured. The court concluded that neither man "exhibited seamanlike attention⁵ or precision when taking soundings and bearings."

The verdict of the court does not appear to be unfounded in its indictment of the late Commander Ryan. Ryan's decision to steam inshore of the gulf stream, combined with other factors such as compass errors and the strong northwesterly currents, ultimately led to the disaster. But his past record of service with the naval academy, and his command of the observation station tracking the transit of Venus, serve as evidence that the commander was an able and experienced navigator.

The family and friends of Lieutenant Palmer never accepted the court's verdict concerning the late navigator's role in the disaster. Palmer's father, James Palmer, had been the surgeon general of the navy from 1871 to 1873. He argued that no evidence had been presented in the court of inquiry which specifically stated that his son had failed in his duties. The senior Palmer cited court proceedings and testimony stating that bearings were taken as far as the surviving officers knew, and that no testimony was ever given saying bearings were not taken. Palmer also noted that no charts or logbooks survived from the wreck which might have confirmed or denied that bearings were taken.

The former surgeon general reasoned it unfair for the court to convict his son of negligence without hard facts. He used his son's service record and reputation as a devoted, conscientious officer as further evidence that the lieutenant would never have neglected his duty on board ship.

The former surgeon general found support for his arguments with one of Lieutenant Palmer's Annapolis classmates, then Lieutenant Richard Wainwright, who would later rise to the rank of admiral. By reviewing the court of inquiry records, Wainwright was able to show that a critical compass error had not been made known to Lieutenant Palmer, and that under the conditions in which the Huron sailed this error was enough to place the ship off her intended course and caused her to run aground on the beach at Nags Head.⁷ This compass error had been introduced at the court of inquiry but was ignored by the court in considering possible causes of the wreck.

Wainwright's evidence, along with the testimony of the court of inquiry submitted by Surgeon General Palmer and a letter from Ensign Lucien Young about the night in question, gave substance to the arguments that the Huron's navigator took the necessary bearings from Currituck light on the night of the ship's loss.⁸ Unfortunately several years had elapsed by the time all of the evidence concerning Palmer's role in the wreck was gathered and presented.

In 1883 the elder Palmer, along with his son's widow, wrote to former Secretary of the Navy George Robeson about the case. Robeson contacted then Secretary William Chandler and presented the case to him on behalf of the Palmer family. Chandler reviewed the material and wrote to Robeson

saying that he agreed with the conclusions reached by the family, but that he could not reconvene the court of inquiry after the lapse of six years to consider new evidence about Lieutenant Palmer's role in the wreck.

Chandler agreed to submit the letters and evidence about Palmer's role in the wreck to Congress as part of his annual report. This, Chandler reasoned, would for all practical purposes serve to absolve the name of the Huron's navigator from responsibility for the wreck. Chandler asked Robeson to contact the Palmer family and to inform them of his action regarding the report. The fight to clear his son's name must have taken its toll on the former surgeon general, because he died in April, 1883, just a few months before Secretary Chandler presented the Palmer family's evidence to Congress.

Some older naval officers blamed the Huron wreck on the tendency of officers to trust machinery, rather than to apply the skills needed in sailing a ship at sea. The critics argued that the naval academy was turning men into technicians rather than competent naval officers. Old debates about the value of steam propulsion versus sail power were renewed and published in the pages of the Army and Navy Journal. One such letter stated, "We can only hope that the lesson will not be lost on the American navy officers in the future."

Naval officers writing in the Journal refused to

acknowledge the possibility of compass error, as later suggested by Wainwright, as a cause for the disaster. They argued that the Huron's role as a survey ship required accuracy in her compasses, and knowledge of their variations¹² by the navigator. The critics writing in the Army and Navy Journal called Commander Ryan reckless for steaming so close to shore during a storm. They wrote, "all the barracks training of Annapolis can find no way to remedy the disaster¹³ caused by recklessness or a want of practical seamanship."

Naval stratagist Alfred T. Mahan worried about the impact of the wreck on the naval community. In a letter to a colleague, Mahan wrote, "It was a wretched affair, and will do us harm, from the great loss of life."¹⁴ Mahan said that the wreck would cause problems for the navy and especially the naval academy, and that it was unreasonable to blame the academy but that the critics would invariably do so. He also joined Commander Ryan's critics saying, "I fear the poor fellow must incur grave censure. I find myself confronted by the fact that he had no business to be running so close to shore, familiarity led him to undertake a risk I¹⁵ should never have cared to run."

Speculation about the cause of the wreck came from many other sources besides the navy. A then well-known meteorologist named Dr. William Blasius attributed the wreck to the inabilities of the naval authorities to accurately predict

the weather using only the barometer as a guide to an impending storm. In a paper presented to the American Philosophical Society at Philadelphia in December, 1877, Dr. Blasius argued that the Huron's captain was following established naval doctrine concerning the navigation of ships during a storm, but that the doctrine was old and unreliable because it depended upon the barometer as the sole instrument for determining the severity of a storm.¹⁶

Some superstitious sailors noted that Commander Ryan took the Huron to sea on a Friday, which was always considered as being unlucky by seafaring men.¹⁷ The omen was mentioned in several letters that were printed in the newspapers.

Other people accused John Roach of shoddy construction in building the ship.¹⁸ Harper's Weekly reported in a story the rumor that "the Huron was a wretchedly built ship, with defective boilers, and ill-fitted for a storm."¹⁹ But the facts about the Huron's construction as reported in the court of inquiry proved the critics wrong in that regard. The Huron was one of the strongest ships in the fleet.

The most heated debate concerning the wreck of the Huron centered around the United States Lifesaving Service. As soon as the facts about the wreck were made known, newspapers along the east coast demanded that the federal government take a more active role in providing for the rescue of stranded mariners. The recently created Life-

saving Service needed more funds and equipment to operate efficiently, they said, and the lifesaving stations must be opened earlier in the year before the winter storm season began.

The Economist of Elizabeth City, North Carolina printed one of the first editorials asking Congress to extend the active season of the Outer Banks stations: "The ill-fated Huron teaches us that the 1st of December is too late for the commencement of the duties of the lifesaving service," the paper said. "In the name of humanity gentleman, let
20
the service begin on the first day of November."

Other papers reflected that argument, demanding that an allowance be made for opening the stations in November or October. The Boston Post wrote, "the disaster might have been greatly lessened had our lifesaving station been what it should have been. This branch of our service has been proved to be sadly weak and undisciplined, and more
21
organization is needed all along the coast." The Norfolk Landmark also published editorials about the Lifesaving Service: "The crews should be on duty all year, had the station been manned Saturday last, all of the officers and men (of the Huron) would in all probability be living today
22
to serve the government."

Thomas Nast, a popular political cartoonist of the era, satirized what had been up to that time the federal govern-

ment's attitude towards the Lifesaving Service. In an issue of Harper's Weekly, Nast pictured an Uncle Sam figure standing on the beach at Nags Head watching dead sailors from the Huron wash ashore. Nast quoted Uncle Sam saying, "I suppose I must spend a little on lifesaving, surfboats, etc, but it is too bad to be obliged to waste so much money."²³

The demands for improving the Lifesaving Service increased after January 31, 1878, when the merchant steamship Metropolis, loaded with laborers and construction materials bound for Brazil, began taking on water and ran aground twenty miles north of the Huron wreck site. Eighty-five men drowned as a result of the wreck even though the Metropolis was only 100 yards from shore, and despite the best efforts of the lifesaving crew from the Currituck²⁴ Beach lifesaving station.

Several factors accounted for the high loss of life in the Metropolis incident. The ship ran aground midway between two lifesaving stations that were eight miles apart. The Lifesaving Service lookout had completed his patrol of that area less than an hour prior to the wreck and was not due to return for several hours, so that a long period elapsed between the time the ship wrecked and the time she was²⁵ discovered. The lifesaving line used to secure the breeches bouy to the shipwreck broke in half, forcing the lifesaving crew to fire another line with its mortar gun to the ship. A different kind of gunpowder was used to fire the mortar gun

on the second attempt, causing the lifeline to miss the wreck. Finally the lifesaving crew ran out of gunpowder for the mortar, and was forced to attempt to rescue the crew members as they swam ashore. All during the time, a storm worse than the one that wrecked the Huron pounded the shore with giant waves and fierce winds.

26

The futility of the lifesaving crew's efforts during the wreck of the Metropolis showed the need to improve the Lifesaving Service in more ways than by just extending the active season. New stations, that were not so far apart from each other, were badly needed to make the Lifesaving Service sufficiently effective.

As a result of the wrecks of the Huron and Metropolis, Congress began work on a bill to increase the efficiency of the Lifesaving Service, especially on the coast of North Carolina. Debate over the efficiency of the Lifesaving Service continued in Congress through the middle of the summer of 1878.

Congress passed a lifesaving bill in early June that increased the number of lifesaving stations along the nation's coasts by thirty, with fifteen new stations built on the Virginia and North Carolina coasts. The pay for station keepers was raised from \$200 to \$400 per year, and surfmen received \$8 apiece each time they rescued a ship's crew. The active season for lifesaving stations was

rescheduled to begin on September 1, and last through May 1
²⁷
 each year.

The lifesaving bill of 1878 was the only act to pass Congress during the second session, demonstrating the recognized importance of the bill and the need for
²⁸
 improvement in the United States Lifesaving Service. Part of the significance of the wreck of the Huron lies in the origins of the lifesaving bill of 1878.

Interest in the Huron disaster faded after the passage of the lifesaving bill. However in November, 1878, a man claiming to be one of those lost on the ship reported to the Washington Navy Yard asking for back pay from 1877. The man claimed to be William Buder, a landsman, and said he had been washed out to sea and picked up by a passing ship. Navy authorities investigated the man's story and found him
²⁹
 to be an imposter, whereupon he quickly disappeared.

This bizarre attempt to cash in on the Huron's dead led some to renew speculations about the wreck which implied cowardice and incompetence on the part of the crew during the time of the disaster. This led one of the surviving officers, Edgar Warburton, to publish an account of the wreck in the military journal, The United Service. Warburton defended the Huron's crew and claimed that no man ever exhibited cowardice or acted incompetent during the wreck. He wrote, "Such words of censure seem unmanly and unfair. It matters not what caused the disaster, or upon

whom the blame shall rest, no criticism or sneering word can change the story, or dim the record of the men who, calmly and fearlessly, met death on that fatal November night.³⁰"

As time passed the wreck of the Huron was forgotten. It became a small paragraph in the pages of naval history remembered only by the lifesaving crews and residents living along the Outer Banks of the North Carolina coast. In later years, the lifesaving crews from the stations that were created in part from the Huron disaster, achieved much fame for the daring rescues they performed along the treacherous shoreline of the Outer Banks. Many a stranded mariner after 1878 probably never knew his life was saved partly because so many others had died when the Huron went down, November 24, 1877.

THE HURON!

SPECIAL NOTICE.

Congress having passed the bill granting relief to the surviving officers and seamen of the Huron, and to the heirs of those lost on said ship and to the heirs of Captain Guthrie and the crew of

BAKERS' SURF-BOAT,

I AM PREPARED TO MAKE OUT THE PAPERS AND PROSECUTE THE CLAIMS

In said cases immediately.

JOHN F. DEZENDORF,
Pension and Claim Agent,
85 Main Street, Norfolk, Va.

This advertisement appeared in the Norfolk Landmark after the Huron disaster, when the United States Congress approved payments to the families of those who had died in the wreck.



The bodies of those lost on the Huron disaster were removed from the Outer Banks in early 1878, and buried at the cemetery on the grounds of the United States Naval Academy, Annapolis Maryland.

Several graves, such as the one pictured above, are marked "UNKNOWN".



DEATH IS NOT A JOKE

U.S. "I suppose I must spend a little on Life-saving Service, Life-boat Stations, Life-Boats, Surf-Boats, etc.; But it is too bad to be obliged to waste so much money.



THE ONLY THING WORTH SAVING.

Thomas Nast satirized the divided U.S. Congress with the above cartoon illustrating the only bill to pass during the second session, 1878.

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Chapter Six

Archaeology And The Huron.

For many years the wrecked hulk of the Huron laid on the sandy bottom off Nags Head undisturbed except by an occasional fisherman. The wood decks and iron frames and plates deteriorated from the exposure to the ocean environment. Sand and shells slowly filled in the hull. Sheepshead, flounder, and other fish species found habitat among the debris.

In 1927 The Independent of Elizabeth City, North Carolina recalled the great disaster fifty years after the fact. A local fisherman described the wreck for the newspaper as seen from the deck of his fishing boat: "She rests about 175 yards from shore, and the tank, and boiler and bell are plainly distinct," he said.¹

Today the wreck's shadow is often seen from shore, and on an occasional clear day her boilers might be discerned from the deck of a boat on the water's surface. The fisherman's description of the Huron wreck is similar in many ways to its present day condition, albeit the fisherman probably erred in his identification of the ship's bell. The Wilmington Morning Star recorded in 1881 that "Morning guests at the Nags Head Inn are awakened to breakfast each day by the bell of the wrecked Huron."²

The years of exposure to the ocean environment began to

take their gradual toll on the hulk. Portions of the wreck deteriorated beyond easy recognition, and the increase in popularity of sport SCUBA diving after World War II brought hundreds of divers to the wreck to retrieve leftover souvenirs. To the untrained observer, the wreck hardly resembles the proud navy gunboat she once was.

To the diving historian, the present day wreck will appear like a dramatic ghost ship as he descends through the usually dark, murky water. The sharp bow rises from the sand, extending close to fifteen feet toward the ocean's surface. Approaching from the bow the diver may notice the list to port and the debris strewn along the sides of the hull. Inside the hull the diver will find collapsed bulkheads and decking covered with a carpet of barnacles.

Exposed wood decking lies along the starboard side of the forward hold area. The wood is strong, indicating that it has been buried under the sand until just recently. Barnacles have not yet begun to grow on the exposed area. Underneath the decking is a storage compartment for deadeyes and rigging blocks.³

A large iron cylinder, big enough for a man to swim through, overshadows the forward hold area. This is the remains of one of the ship's starboard boilers. It was probably destroyed when the ship was partially salvaged. Perhaps the force of the explosives used during the salvage procedure accounts in part for the boiler's position far

forward of its original setting.⁴ Near the boiler lies what is believed to be the remains of the ship's capstan. It is attached to a large iron frame and sits upright in the center of the forward area. Barnacles cover nearly every structure around the hold area.

The Huron's freshwater tanks lie aft of the partially⁵ destroyed boiler in their original position. The four tanks form a square eight feet by eight feet. They are full of holes from the rust, are partially filled with sand, and serve as home to several large sheepshead. Iron beams, possibly deck beams, lie across the water tanks and extend diagonally to the port side of the hull. The beams may have been placed there as a result of the salvage activity.

Further aft of the water tanks and beams is the ship's magazine and shellroom area. Stray cartridges lie a few inches under the sand, and are often brought to the surface by sport divers. The wood shell box sits fully exposed. It contains forty spaces where naval shells were once stored for the Huron's 15,928 pound, eleven-inch Dahlgren cannon. Two or three shells remain in the box, visible to divers. Their fuses have been removed by sport divers, as have most of the other eleven-inch shells.

Aft of the magazine, along the port side, lies the coal storage area and the three port side boilers. They are usually covered with barnacles but still easy to identify.

The bulkheads that once separated the coal storage area stand in part around them. Anthracite coal may be occasionally found around the boilers. The absence of a huge quantity of coal suggests the supply was salvaged. The Huron would have carried as much as 190 tons of coal while at sea.⁶

Collapsed bulkheads, grating, and various pipes and debris can be found inboard of the port boilers and around the area where the starboard boilers were located. The engine compartment consists of pipes and partial bulkheads sticking out of the sand. Intrusive materials such as cement blocks, cans, bottles, and fishing lines and nets may occasionally be observed in the area. In conditions of poor visibility the diver can easily become disoriented in direction since this area of the ship is very wide and relatively flat.⁷

Moving aft of the boilers and engine compartment, the diver will encounter the partially exposed bulkheads separating the engine room from the after hold storage areas, and the propeller shaft passageway. The propeller shaft sits on top of the sand disconnected from the salvaged engine. Partial bulkheading stands along the passage alley. Assorted brass pipes and copper tubing lie everywhere, half buried in the sand. If the water were clear enough, the diver would be able to distinguish the remains of five separate storage areas outlined in the sand by partially

8
exposed bulkheads.

Remains from the various ship's stores lie along the inside of the hull. Sport divers recover any artifacts that are exposed, however many of the artifacts are concreted under a layer of rust and sand. Slates used for engine room duty rosters are stored on a half-buried shelf in the engine stores supply room. Ammunition and rifle parts may be seen concreted together along the sides where the shot locker once stood. Investigations on the wreck in 1987 found silver eating utensils exposed from the officer's wardroom storage area.⁹ Sport divers would have taken the utensils had they been found earlier.

This after portion of the wreck is the least intact. The tops of the hull remains stand only a few feet out of the sand in some places. The port side lies bent double from the force of explosives used in the salvage operations. Bulkheads around the shaft passageway and food storage areas stand less than a foot out of the sand, and are completely buried in most places.¹⁰

The sternpost, steering quadrant, and rudder stand exposed at the extreme end of the stern area. The rudder is turned hard to port as though that were the last order given before the ship struck ground. Gudgeon straps and pintles¹¹ are clearly visible on the rudder and post.

The diver should notice areas of bare metal in the stern section as opposed to the carpet of barnacles growing over other areas of the wreck. This portion of the Huron has been recently exposed after years of concealment under the shifting sandbar. The barnacle line clearly indicates the areas that were buried. Because the sandbar is continuously moving, the stern section could easily cover back up in the course of a storm season. The wreck site is notoriously dynamic, and each season dive shop owners ask the first divers out to the wreck whether it has been covered or uncovered by the shifting sands.

The diver might encounter other as yet undocumented structures outside the hull, depending on what has been uncovered by the sandbar's movements. More debris around the bow of the wreck has been uncovered in recent years. The port hawser pipes are the most prominent structures recently uncovered in that area. Partial hull plates and frames also lie exposed in the sand along the port side.¹²

The bow of the Huron points to the southwest on a rough heading of 225 degrees. The wreck site is located two hundred yards offshore from the area in Nags Head known as the Nags Head Public Beach. The site lies directly east of the Bladen street public beach access. Visitors to the site can find the wreck by swimming east from the Bladen street access, and by aligning the end of nearby Nags Head Fishing

Pier with the Nags Head Town water tower, located three miles to the south.

The site can be located on National Oceanic and Atmospheric Administration (NOAA) Ocean Survey Chart number 12204, "Currituck Beach Light to Wimble Shoals", using standard latitude - longitude positioning. The coordinates of the wrecksite are 35° 58' 30" north latitude, 75° 37' 54" west longitude.

The United States Department of the Interior has developed an alternate positioning system for pinpointing sites on the globe for the purposes of filling out nominations to the National Register of Historic Places. Their Universal Transverse Mercator (UTM) positioning system provides increased accuracy and greater detail. In the UTM system, the earth is divided into sixty numbered zones. A square grid imposed over each zone measures the distance north of the equator, recorded as the Northing reference, and east of a specific reference line, recorded as the Easting reference. The Huron site, located on the UTM system, is located in zone eighteen, (Northing) N3981470, (Easting) E443120.

Visitors to the site should know that North Carolina state law prohibits the disturbance of submerged cultural resources that are over ten years old, and are within three miles of the shoreline. The Huron site has been listed in a North Carolina study for consideration of its historical

significance and possible nomination to the National Register of Historic Places. It is illegal to excavate and remove artifacts without a permit granted from the North Carolina Department of Cultural Resources.¹³

As part of this thesis, a permit for exploration of the Huron site and the recovery of its artifacts was applied for with the state of North Carolina's Department of Cultural Resources through the Division of Archives and History, Underwater Archaeology Branch at Fort Fisher, N.C. The application required an outline of project objectives and goals that were hoped to be accomplished.¹⁴ The primary objectives of the project were: to first, produce an accurate map of the wreck site and identify the remaining structures: and second, to record the wreck site on film through video and still photography. The secondary objectives of the project involved recovering and identifying artifacts from the wreck, preparing a museum exhibit about the wreck, and nominating the wreck to the National Register of Historic Places.

A group of people with a common interest in the wreck was needed to facilitate the goals of the project, since such an undertaking could take one person several years to complete. Mr. N.H. Sanderson, of Nags Head, served as the director of the project. Joe D. Friday, an East Carolina University graduate student, served as the project

archaeologist. Volunteer sport divers made up the survey team.

The project archaeologist was responsible for determining the objectives and formulating a plan that would meet those objectives without compromising the site's archaeological integrity. In surveying the Huron site, one of the first goals recognized by the archaeologist was to prepare an accurate map of the wreck area. It was hoped that the extent of the debris field could be at least roughly determined. The survey team specifically wanted to map the area within the confines of the hull structure. Considering the length of the ship, about 175 feet, and the amount of debris in this area alone, mapping only this area was to be a major task.¹⁵

The director of the project completed the application in December, 1986. On January 22, 1987 the state underwater archaeologists issued the permit to the survey team. The state required that specific procedures be followed by the survey team. These special conditions were stipulated to¹⁶ insure proper archaeological conduct at the site. Violation of the procedures could cause the permit to be revoked.

Aside from mapping the interior of the hull structure, the survey team attempted to record the wreck site on video and still photography. These goals were met with limited success. The retrieval of artifacts from the site was not

planned to be a primary goal for the initial phases of the project.

The first step to constructing an accurate map of the wreck consisted of placing a permanent baseline on the site. Survey divers laid a baseline down the approximate center of the wreck, using the bowstem as a zero datum point and extending the line to the sternpost. The line was marked every five feet with plastic tags for distance references. Divers triangulated structural features from the zero datum point and the reference points on the line.¹⁷

Once a structure was mapped in, it could then be used as a supplemental datum point to triangulate other features. By overlapping measurements and triangulation, the survey team was able to draw an accurate two-dimensional layout of the area inside the hull of the wreck. Limitations in time and manpower prevented the construction of an accurate three dimensional plan. Ocean turbulence, visibility limits, the inexperience of the survey team, and time constraints all hampered the mapping process. However the end product was a map accurately representing basic structural features and their relationship on the site. The survey team members agreed that in an ideal situation, a grid positioned along the baseline would allow more accurate measurements to be taken and a photomosaic of the site might be produced. Because the wreck is located in a high energy surf zone,

this methodology was not warranted given the resources available for this project.

About halfway through the second month of the mapping process, visitors to the site destroyed the stem-to-stern baseline that had been established, possibly by accidentally dragging an anchor across the wreck. The archaeologist decided that rebuilding the line was not necessary since both ends and enough in-between structures had been plotted to facilitate continued triangulation.

A secondary baseline, salvaged from the remains of the primary line, was made that zig-zagged around the stern area to the amidships area. This line served as both a datum line, and as a reference line for working on the site during low visibility since the stern of the wreck is extremely broad and generally devoid of prominent structures.¹⁸

The project archaeologist compared the underwater structures as they were recorded with the ship's hold and deck plans obtained from the national archives. This aided in identifying the areas of the ship, the structural features, and the debris. Comparison of the map to the ship's plan helped the team identify which sections of the ship were salvaged after the wreck. The team found that the engine, coal stores, and stern hold area had been apparently salvaged along with the anchors, chains, and cannons.¹⁹

Historical documentation indicating precisely what was removed from the wreck has not as yet been found. However the Norfolk Landmark in 1877 records the use of divers and explosives on the wreck immediately after the sinking. The physical condition of the after portions of the hull clearly imply the use of explosives. The hull is twisted and bent double on the starboard side from the stern, forward about thirty feet. The port side of the hull is completely blown away from the stern forward about the same distance. Interior bulkheads are almost completely gone in the stern area.

One of the earliest problems in mapping the wreck involved the recording of artifacts found on the site. The survey team attempted to control artifact recovery on the site by not actively digging and by discouraging visitors from souvenir hunting while on the site. Although North Carolina law prohibits individuals from disturbing and removing artifacts from certain shipwrecks, most divers do in fact engage in active artifact hunting. Work on the Huron site was complicated by the presence of many artifacts lying directly on the surface of the wreck. During the first dive of the season the survey team found a variety of artifacts sure to attract scores of sport divers.

After consulting with state archaeologists, the team decided to adopt a "recover on sight" policy to avoid the possibility of losing artifacts to private collectors. The

policy meant that team divers would recover any artifacts they encountered on the surface of the wreck, exposed or in plain view. The team did not engage in any controlled excavation. Nevertheless by the first of September over fifty artifacts had been recovered, their provenience recorded, and placed in storage.

The survey team tried to avoid alienating the sport divers who visited the site, because there was no way to control their presence. There were two instances during the project when the survey team actually confronted sport divers leaving the site with artifacts and confiscated the artifacts on behalf of the project. This direct action was used as a last resort and intended to serve as a deterrent to future divers not to disturb the site.

The survey team completed mapping the wreck and retrieved several significant artifacts suitable for historical interpretation. The team also managed to convince most of the visitors to respect the site as a non-renewable resource and to take photographs but not artifacts. The concept of cooperation between the survey team and the sport divers evolved into a major goal of the project archaeologist.

The local dive shop owners supported the project by informing their customers of the state shipwreck laws and by requesting cooperation when visiting the Huron site. Their

help with the project contributed to the sport divers's understanding of the objectives the survey team was
21
attempting to achieve.

In the final analysis of the project, it should be noted that this was a learning experience for all parties involved. Survey divers became aware of the intricacies of archaeology and historical surveys. Sport divers hopefully learned a little bit about the fragility of submerged cultural resources. And the project archaeologist learned more about working on-site and the problems involved with a project as comprehensive as this one, which was, in comparison to others, a relatively simple project.

After the diving season ended, the project archaeologist began work conserving the artifacts that had been recovered. Some of the artifacts went to the state conservation lab at Fort Fisher, others were conserved by the archaeologist at the East Carolina University conservation laboratory.

Ferrous metals underwent an electrolytic reduction process to facilitate the removal of impurities. Most of the artifacts recovered were made of non-ferrous bronze and brass. The archaeologist soaked these artifacts in cleaning solutions and solvents, alternated hot and cold baths, and air dried the artifacts before coating them in acrylic for preservation.

The archaeologist catalogued all artifacts in sequence of their recovery. The state underwater archaeology unit

assigns numbers to all wrecksites within its jurisdiction. Artifacts recovered from the Huron were given numbers that reflected the site number for identification purposes. For example, the site number is 00012BOB, and the first artifact recovered was assigned the number 00012BOB001.

The Huron artifacts reflect the individual and social aspects of the lives of the crew members as well as the institutional and military aspects of the navy. For instance, a Venezuelan penny, found in the area of the officers's wardroom stores, implies a visit to shore by one of the ship's officers. The penny, dated 1876, might have been dropped by the officer and rolled under a shelf or into a corner and forgotten until recovered by survey divers 110 years later. The coin also complements historical documents that record the Huron's presence in Venezuela in April of 1877.²²

Slate duty rosters for use in the engine room tell in part how the engineers kept track of the necessary jobs required for maintaining the proper steam levels. The slates were marked with lines and columns, hours of the day down one side, and jobs to be done marked on the other. The engineers marked the slates with spaces for one twenty-four hour period. Apparently, the slates were discarded at the end of each day and new slates were made for the next twenty-four period. A large supply of intact

blank slates, and the absence of many marked slates
 23
 indicates this to be the case.

The Huron carried large quantities of ammunition stores and firearms. The artifact catalog reflects in part the ship's role as a vessel of war, even though she was only a third rate gunboat. The Huron's list of ammunition stores is impressive despite the fact that most of her armament was obsolete equipment from the Civil War.

Although the Huron was a warship, she carried some ornately designed tools such as silver-plated eating utensils for the officer's wardroom. These were finely engraved with a U.S. Navy inscription. A skeleton key from the boatswain's stores was found scrolled with an ornate handle that goes beyond the basic functional use. Perhaps the key was the personal property of one of the crew members, rather than one that would have been used on board the Huron.

Several years ago, an area resident found a piece of scrap brass on the site inscribed with the words "Sam," "Fayette," and "Huron," on one side, and an American Bald Eagle on the other. The piece, on display now at the Cape Hatteras Lighthouse Keeper's museum, might have reflected a crew member's thoughts about his wife or girlfriend and his life in the navy. Only one Huron crew member was named Sam, that was Samuel Clark, the surviving sailor who
 24
 identified his dead companions by the tatoos they wore.

Other artifacts recovered from the wreck include a porthole, iron cotter pins, coal samples, a brass padlock, a rare fifty-caliber Remington pistol, ammunition stores, other coins, and various unidentified materials. Historical research has produced photographs and records that reveal more information about the ship's short career and the significance of her sinking.

The project director, with the approval of the state archaeologists, has arranged for the artifacts to be displayed with historical photographs and related material interpreting the wreck of the Huron and its impact on the local and national history at an Outer Banks area museum.

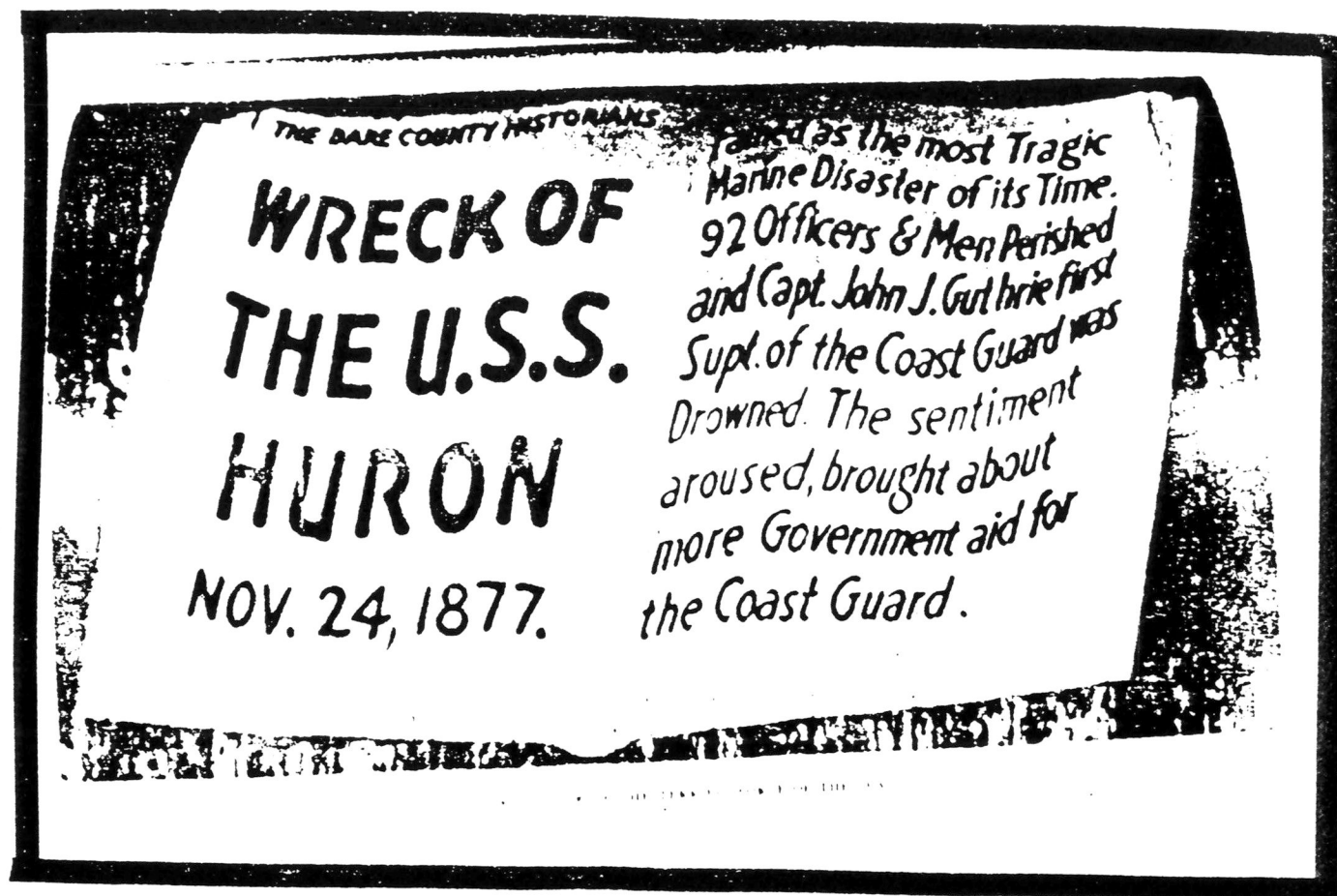
The concept of initiating a display about the wreck to enhance public awareness was one of the original objectives and will culminate the final part of the project. As of this writing, the exhibit details are being worked out with the director of the North Carolina Aquarium on Roanoke Island, North Carolina.

The nomination form for the National Register has been completed and reviewed by the state archaeologists at Fort Fisher, and was forwarded to the State Historic Preservation Officer for review and endorsement in July, 1988.

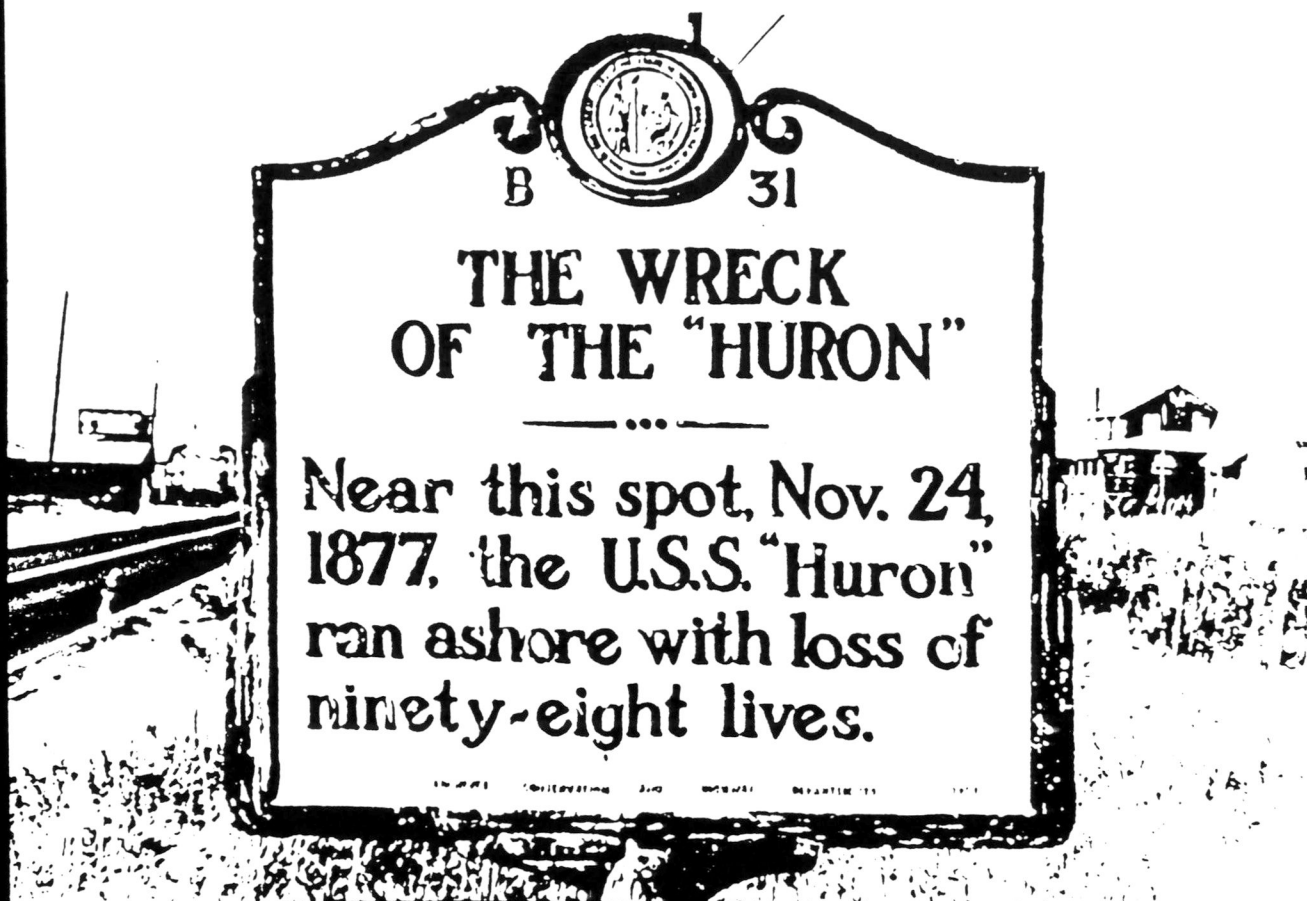
The Huron's important role in the formation of the United States Lifesaving Service, her construction and armament, and the time period in which she sailed combine

together as factors of significance that make the ship an important part of United States naval history. The Huron's inclusion on the National Register is not expected to provide her with protection from souvenir-hunting sport divers, but it might provide some public awareness of the wreck and her history. That awareness in turn could serve as a deterrent to looters and preserve this historic wreck for future generations.

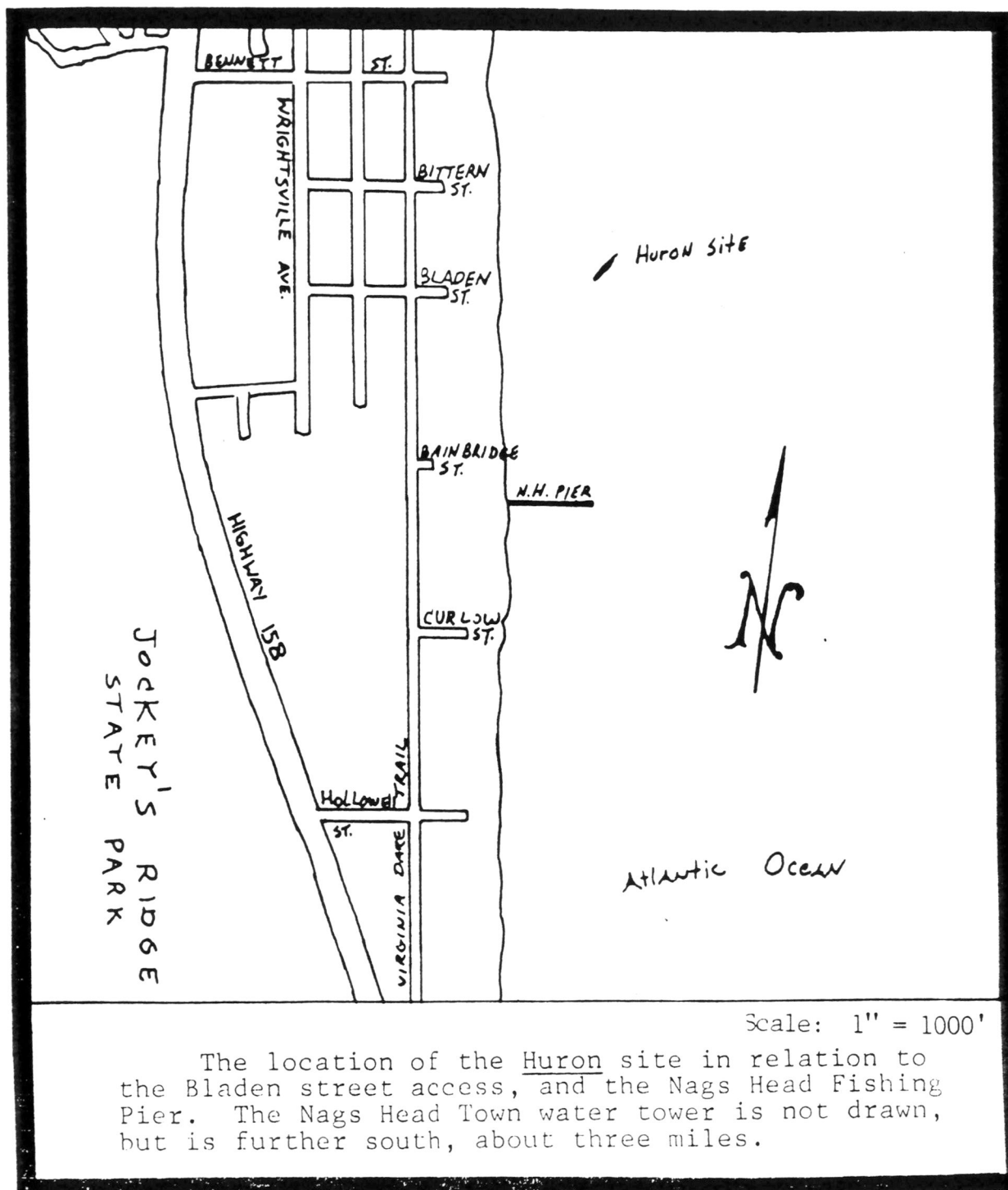
The Huron archaeological project was the first of its kind done on the Outer Banks. The lessons learned here can be applied to other future projects along this area of the North Carolina coast, where hundreds of shipwrecks lie offshore waiting to be documented.

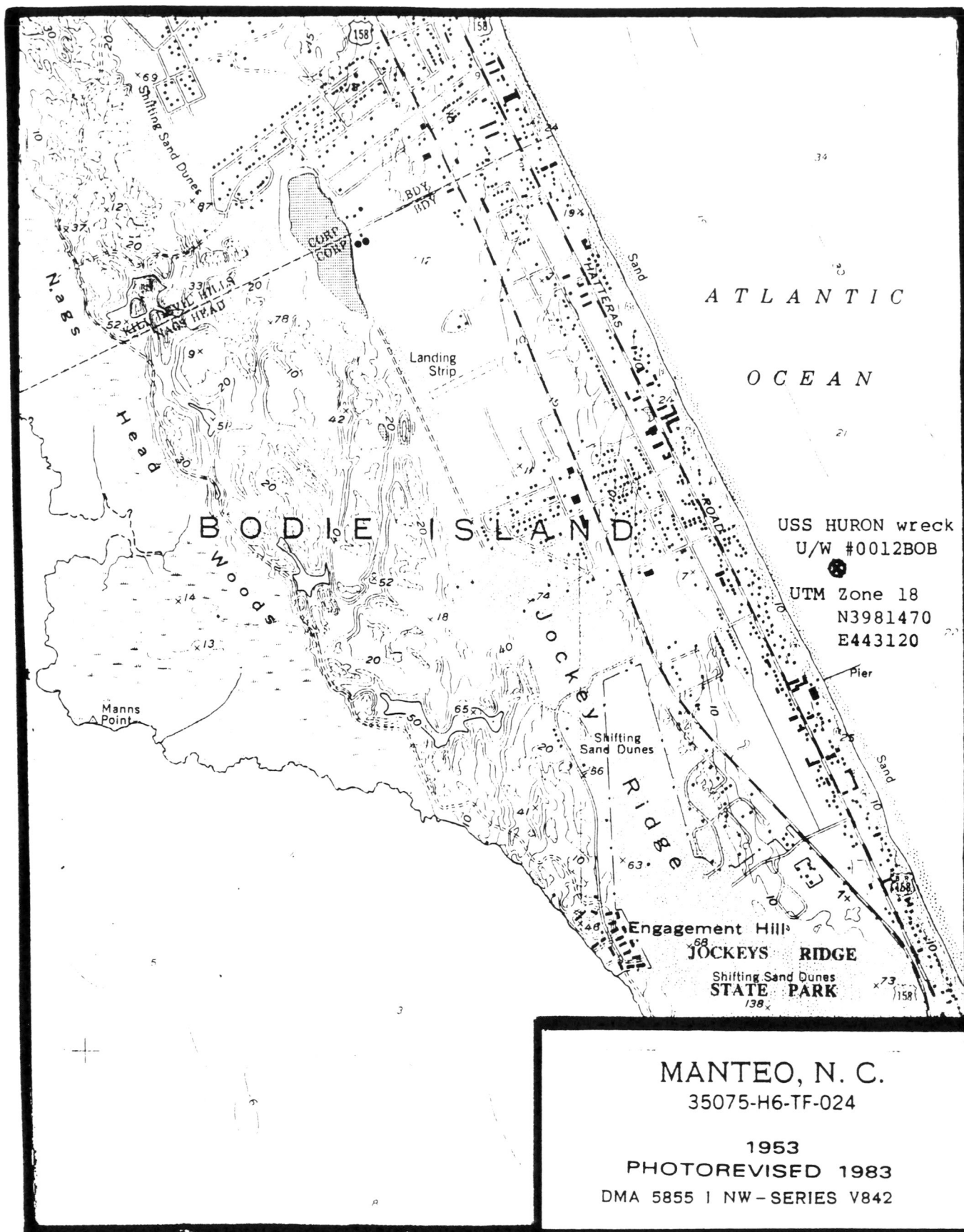


This billboard was constructed near the Huron wrecksite at Nags Head, sometime during the early 1920's or 1930's.



This state historical marker stands at the site of the Huron wreck, near the Public Beach area, in Nags Head, North Carolina





This map illustrates the Huron's position in relation to the village of Nags Head, and shows the UTM coordinates used to plot the wreck.



Aerial photograph taken from 2,000 feet showing the position of the Huron wreck, in relation to the shore. The distance from the beach to the wreck is roughly 200 yards.

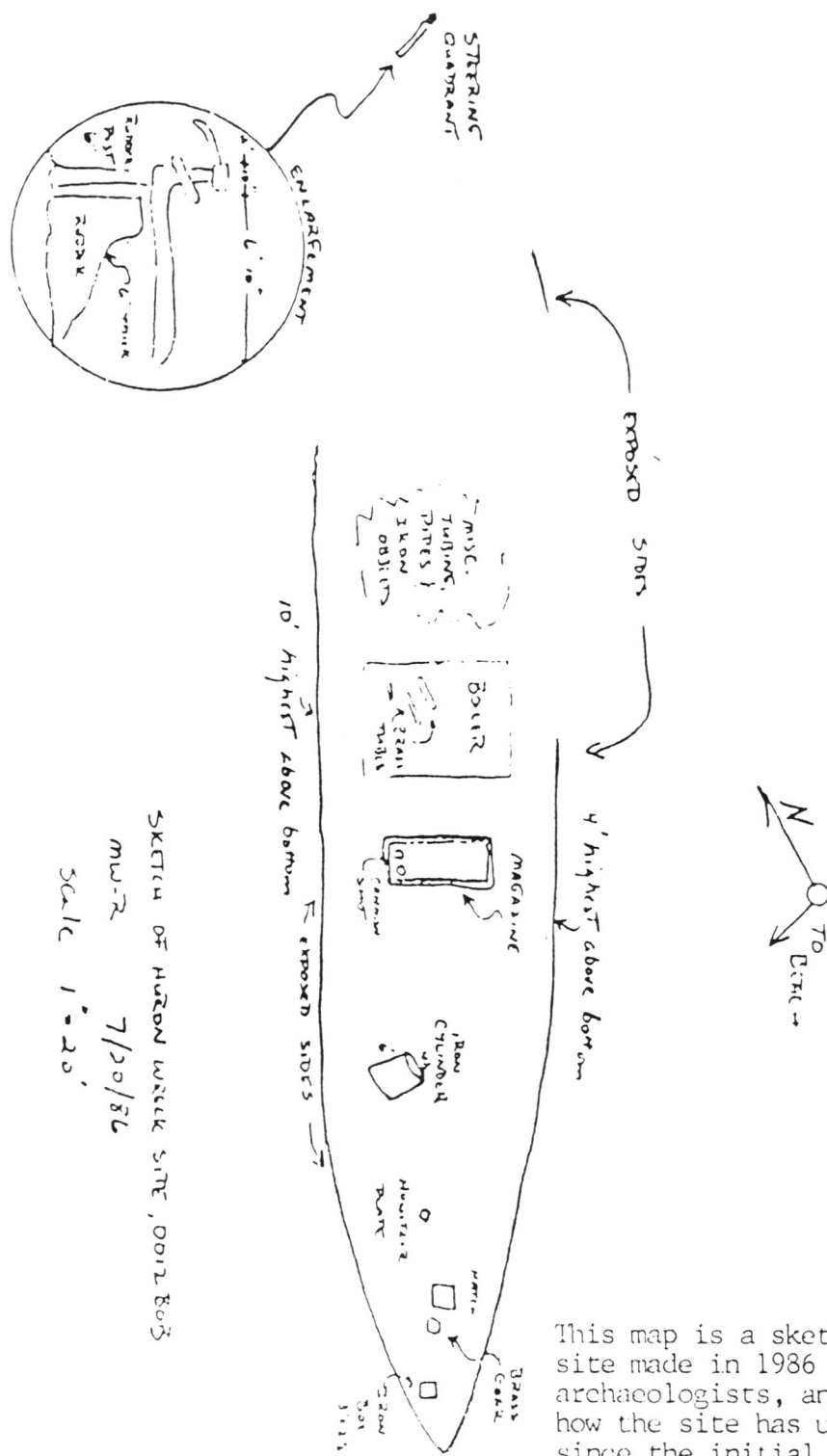
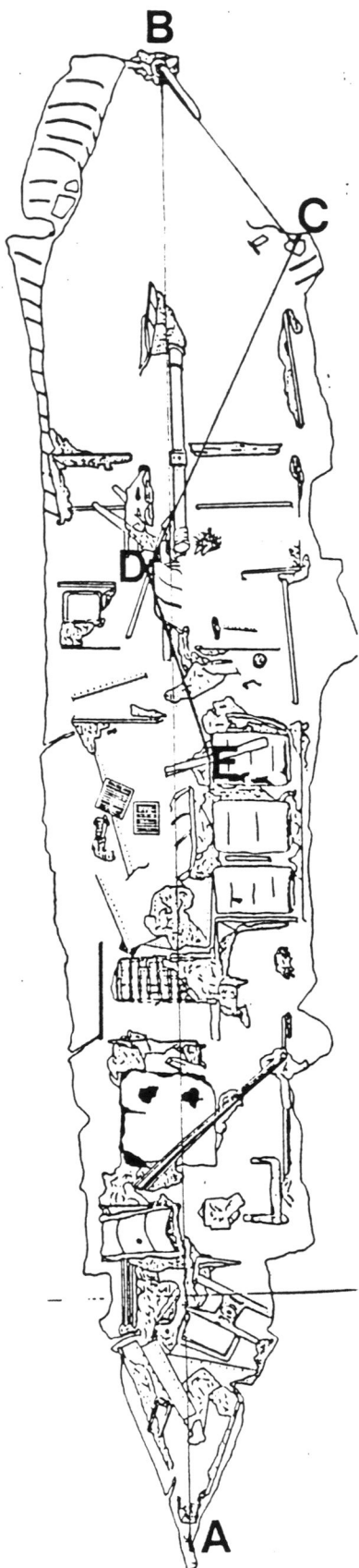


FIGURE 3

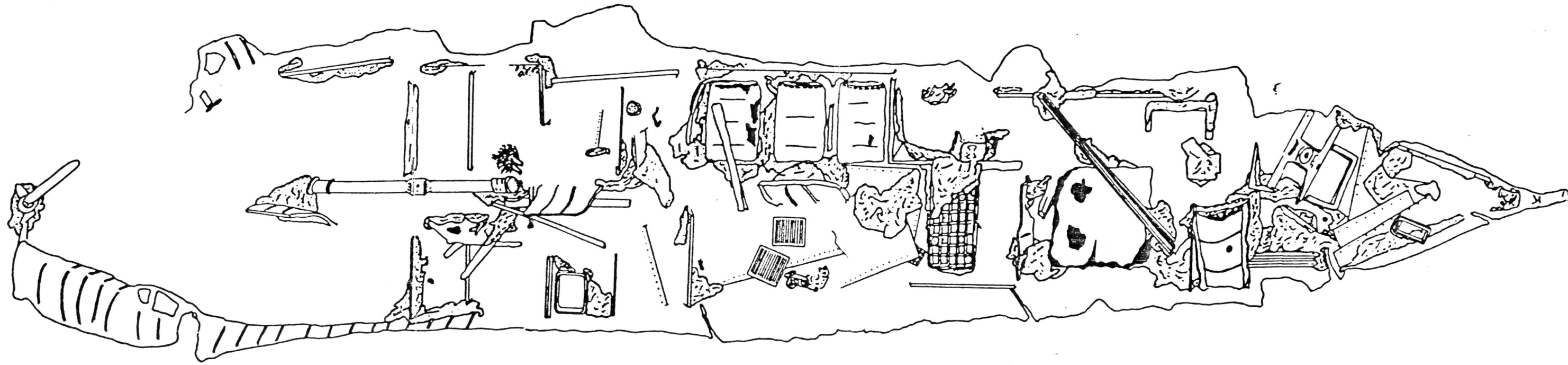
This map is a sketch of the site made in 1986 by state archaeologists, and shows how the site has uncovered since the initial investigation.



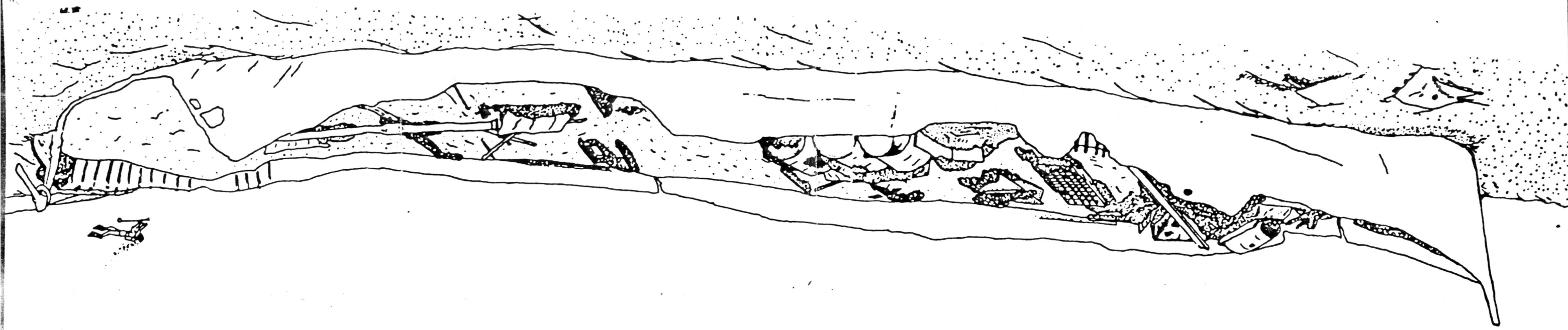
The two baselines used during the mapping phase of the project are illustrated by Line AB, and Line BCDE.

USS Huron
wrecksite map
1988

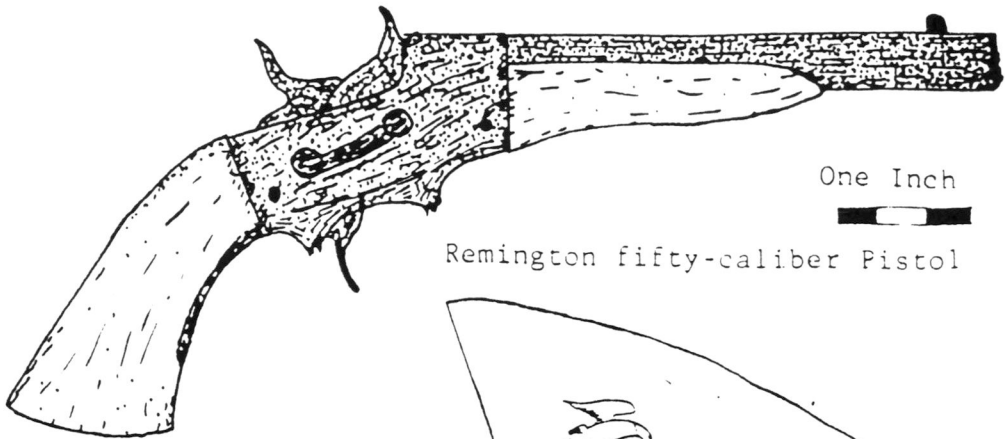
6ft.



artists' conception

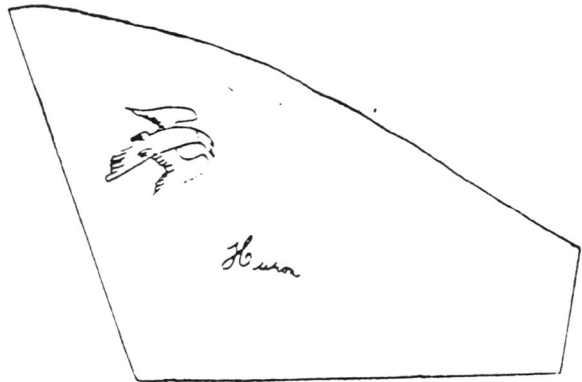


USS Huron
Artifact Illustrations



One Inch

Remington fifty-caliber Pistol



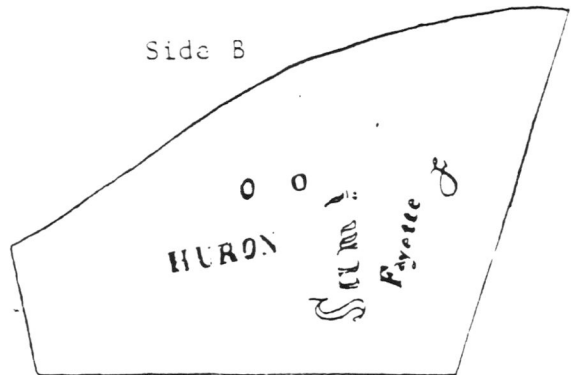
Inscribed Brass Plate
Side A

One Inch

Venezuelan Penny, circa 1876

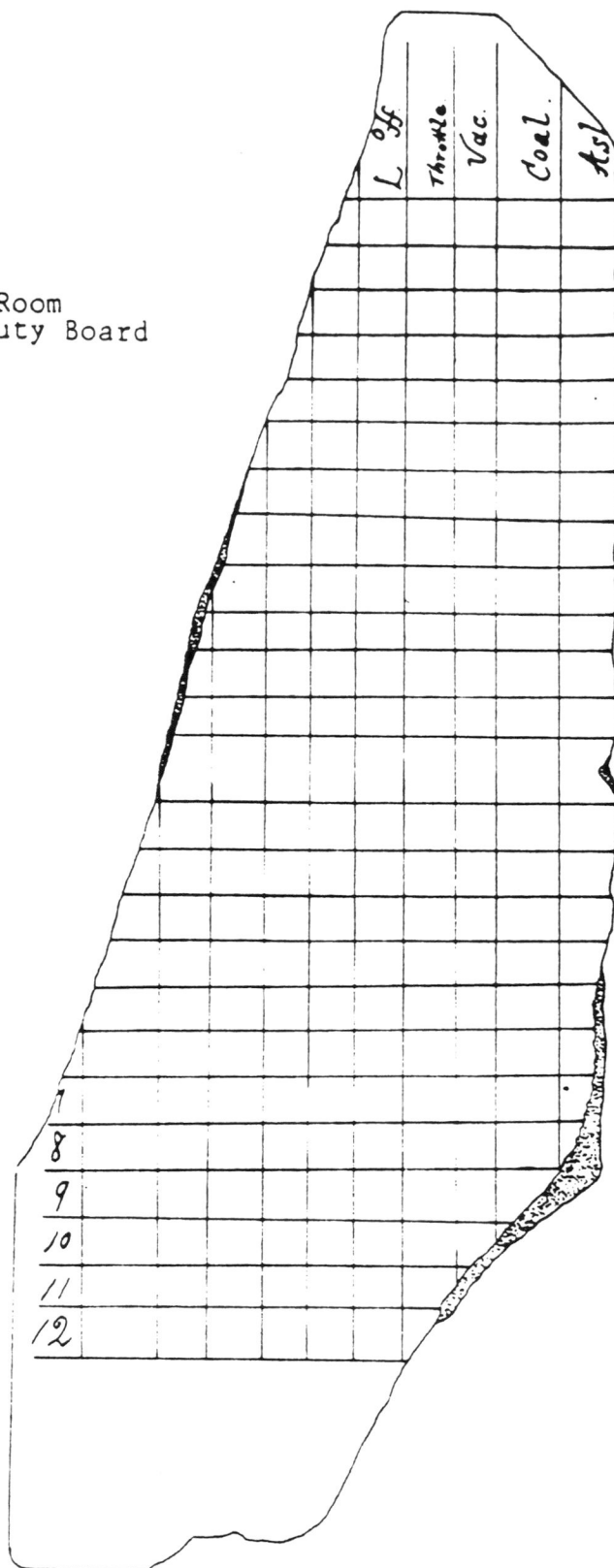


Side B



One Inch

Engine Room
Slate Duty Board



One Inch

HURON
00012308027
SLATE DUTY BOARD

U.S.S. Huron salvagers bring up bits of nautical history

NAGS HEAD — Salvagers bringing up artifacts from the S.S. Titanic have found themselves in a swirl of controversy lately.

They have been called grave robbers for daring to bring to the surface the debris of the famed luxury liner that struck an iceberg and sank in the North Atlantic in 1912 taking 1,513 people to their deaths.

Critics say they should leave the Titanic alone, leave it and everything on it as it was when it went down.

It is a curious sort of criticism. Hundreds of thousands of people flocked to see the treasures of King Tut's Egyptian tomb when the exhibit made a world tour a few years ago, and no one seem bothered that the treasures came from his actual grave and not from the scene of an accident that killed him.

Treasure hunters have scoured the South Atlantic and Caribbean for generations, looking for the gold the Spanish galleons had on board when they went down. Those ancient wrecks took men to their deaths as well. Treasure hunter Mel Fisher runs a popular museum in Key West that displays those artifacts, and no one seems to mind. Museums around the country are full of artifacts that in some way relate to the deaths of the people with whom they are associated. Archaeologists have been finding bones since they first began to dig into the past.



Dennis Rogers

What is so different about the wreck of the Titanic? For all the hoopla, it was just another ship.

It may be a distant dispute for most of us, but for Nags Head diver Sandy Sanderson and the team conducting underwater archaeological research on the remains of the U.S.S. Huron, which sank just off the beach at Nags Head in 1877, it is something they have considered.

"I don't think of it as grave robbing," Sandy said. "Nothing we are finding relates to anything personal. The French working on the Titanic may be bringing up personal items like jewelry and money while we're finding parts of the ships and armaments; things like pistols, cases of bullets and rifle bolts."

Sandy and a team of divers have spent much of the summer diving on the wreck of the Huron in a joint project with the Underwater Archaeology Unit of the

state Department of Archives and History.

"Sport divers have been diving on the Huron for years but no one has ever done any serious archaeological work there," Sandy said.

Sanderson, East Carolina graduate student Joe Friday and a team of sport divers spent more than 40 hours underwater mapping the wreck site and recovering the artifacts that remain after 111 years.

There is not much left, Sandy said.

"The hull is almost gone down to the sand," he said. "The high bow of the ship is still there and it is pretty dramatic looking. You can still see the boilers, the shafts and the propellers inside the hull, and you find a few shivers of wood, but almost everything wooden is gone."

"There was supposed to be \$20,000 in gold on board, but we've never been able to find the salvage log to find out what the Navy managed to salvage from it. The ship was salvaged after the wreck and the area where the paymaster's safe was supposed to be looks like it may have been blown away by explosives."

The divers did manage to find a few small items such as a pistol, a piece of brass bearing the name of James Adair (a name not listed on the crew list), some cannon balls, some rifle parts, a case of bullets, a port hole, a few coins and a silver spoon.

"A lot of people have been diving on it and taking things away over the years," Sandy said. "The nice

thing is that when the word got out that we were were doing serious work out there, they brought the things back to us."

The artifacts recovered from the Huron will be displayed in the area, possibly at the planned Life Saving Service museum at the Chicamacomico Life Saving Station being restored at Rodanthe.

It was not an easy dive, Sandy said. The ship is located in about 20 feet of water just 200 yards off the beach. That close to shore, the water is turbulent and murky.

"On a good day, you might have 10 feet of visibility and on a bad day, none at all," he said. "That kind of diving is not fun. It is like going in a closet and shutting the door. You do everything by feel."

The Huron is more than just another wreck. The sinking was considered a major disaster in 1877 and led directly to the expansion of the U.S. Life Saving Service that later became the U.S. Coast Guard. Had there been a life saving station operating nearby when the Huron went down, more than likely almost every man would have been saved. As it was, 98 died.

"The thing that struck me about it was here was a ship where men lived, where they ate in the galley and where they died and now, 111 years later, I was on the same ship," Sandy said. "That is a special kind of feeling."

This feature article appeared in the Raleigh News and Observer, September 2, 1987. Other news articles stimulated public awareness and interest in the history of the Huron and help lead to the creation of a museum display about the wreck.



Lucien Young, served on board USS Huron, 1876-1877.
He rose to the rank of Admiral.

NOV. 1977

In Commemoration Of A Sunken Steamer



BY LISA KRIEGER

NOVEMBER 24 was a chilly, rainy day and people up and down the Outer Banks stayed home and celebrated Thanksgiving near the warmth of their kitchen stoves.

Jim Stuart (left) and N. H. Sanderson (right), however, paid tribute to another stormy November 24 — exactly 100 years ago — when the man-of-war steamer Huron ran aground and sent 98 men to a watery grave.

Two Outer Banks residents placed a wreath on the wreck on the one hundredth anniversary of the disaster.

End Notes

1

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2

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3

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4

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5

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6

"Deck Plans".

7

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13

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14

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15

"Exploration Permit", page 1.

16

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17

Friday, "Year End Report".

18

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19

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Friday, "Year End Report".

22

"Logbook of the USS Huron", April 21, 1877, Record Group 24, National Archives And Records Administration, Washington, D.C.

23

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24

R. W. Thompson, "Letter from the Secretary of the Navy," February 13, 1878, Senate Executive Document #26, 45th Congress, 2nd Session, Serials Set 1780, page 45. Hereafter cited as Senate Executive Document #26.

25

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Appendix A

List of Officers and Crew Lost on USS Huron

Officers

Commander George P. Ryan	Surgeon George S. Culbreth
Lieutenant Sidney A. Simons	Paymaster C.N. Sanders
Lieutenant L.G. Palmer	Chief Engineer E.M. Olsen
Master J.M. Wight	Cadet Engineer E.N. Loomis
Master W.S. French	Draughtsman John J. Evans
Ensign F.W. Danner	Captain's Clerk Gillet

Enlisted

Armstrong, Thomas.....	Seaman.
Barrett, William L.....	Second-class fireman.
Boyle, William.....	Bayman.
Brown, Thomas M.....	Second-class fireman.
Burns, Frank.....	Seaman.
Buder, William.....	Landsman.
Banks, Patrick.....	Landsman.
Carey, A.W.....	Landsman.
Carson, Alfred.....	Machinist.
Carson, Charles.....	Landsman.
Chadwick, William.....	Quartermaster.
Chapman, Charles.....	Paymaster's yeoman.
Childs, Alex M.....	Chief gunner's mate.
Clayton, David.....	First-class fireman.
Collins, Patrick.....	First-class fireman.
Cooper, James.....	Ship's corporal.
Cooper, R.J.....	Landsman.
Couch, James.....	Captain forecandle.
Curry, John.....	Second-class fireman.
Clark, Joseph N.....	Landsman.
Davies, Alma.....	Baker.
Donnally, Edward.....	First-class fireman.
Emerson, H.F.....	Quartermaster.
Entwistle, W.S.....	Engineer's yeoman.
Fuess, Herman.....	Cook's mate.
Green, Matthew.....	Chief boatswain's mate.
Green, William.....	Yeoman.
Hahn, Conrad H.....	First-class fireman.
Hayes, John.....	Ordinary seaman.
Hayes, Matthias.....	Wardroom cook.
Hamilton, George.....	Machinist.
Harris, Elias.....	Landsman.
Harrity, Hugh.....	Boiler-maker.
Hodge, William.....	Ordinary seaman.
Ingham, Robert.....	Boatswain's mate.

Appendix A (continued)

Enlisted

Jackson, Green.....	Coal-heaver.
Jones, George.....	Wardroom officer's cook.
Keithley, Charles W.....	Captain's afterguard.
Loughran, Thomas.....	Quarter-gunner.
Monroe, -----.....	Apothecary.
Mahon, John.....	Bugler.
Malcolm, George.....	Machinist.
Martin, Joseph.....	Cabin steward.
McCallum, Frank.....	Quartermaster.
McCourt, Henry.....	Machinist.
McFarlane, Thomas.....	Coppersmith.
McLance, Charles.....	Seaman.
Merrill, John M.....	Chief quartermaster.
Millar, George W.....	Cabin cook
Overbaugh, Acman.....	Landsman.
Pierce, Jas. F.....	Carpenter.
Pooler, Charles.....	Armorer.
Price, George W.....	Ship's writer.
Pyne, George.....	Landsman.
Ponteflet, Adolphus.....	
Rivola, Gustav C.....	Steerage steward.
Rathje, O.F.....	Jack of dust.
Roll, Jesse.....	Ordinary Seaman.
Rogers, Bernard.....	Landsman.
Sailor, Albert.....	Quarter-gunner.
Schneider, Charles.....	Cockswain.
Stanton, William.....	First-class fireman.
Stringer, David.....	Captain hold.
Sullivan, J.W.....	Wardroom steward.
Tierney, John.....	Landsman.
Twoomey, John.....	Cockswain.
Waters, Henry.....	Second-class fireman.
Yager, Jeremiah.....	Landsman.
Torrence, William.....	Marine sergeant.
Oliver, Adam.....	Marine corporal.
Burke, Joseph.....	Marine corporal.
Brophy, James.....	Marine private.
Cameron, Alexander.....	Marine private.
Carroll, William.....	Marine private.
Coffey, Stephan J.....	Marine private.
Hanlon, Joseph.....	Marine private.
Linch, Alexander.....	Marine private.
Murray, Alexander.....	Marine private.
McDevitt, James.....	Marine private.
Robrick, John.....	Marine private.
Shea, Patrick.....	Marine private.
Wilkins, William.....	Marine private.

Appendix B

List of Officers and Crew Saved from USS Huron

Officers

Master William P. Conway
 Ensign Lucien Young
 Assistant Engineer Robert G. Denig.
 Cadet Engineer Edgar T. Warburton

Enlisted

Harry W. Avery.....	Second-class fireman.
W.W. Brooks.....	Second-class painter.
Daniel Burgan.....	Ordinary seaman.
Samuel Clark.....	Second-class fireman.
John Collins.....	Captain Forecastle.
Thomas Carley.....	Landsman.
Peter Duffy.....	Second-class fireman.
Michael Durkin.....	Landsman.
Daniel Devoy.....	First-class fireman.
Denis Deasey.....	Cooper.
Fredrick Hoffman.....	Ordinary seaman.
W.L. Houseman.....	Carpenter.
John E. Holland.....	Master at arms.
Joseph Hynes.....	Master at arms.
Patrick Kane.....	Ordinary seaman.
Michael Kennedy.....	Landsman.
August Lindquist.....	Coxswain.
Joseph Murphy.....	Ship's cook.
Frank May.....	Landsman.
William McHugh.....	Ordinary seaman.
Harry Nelson.....	Landsman.
Dom. O'Donnell.....	Ordinary seaman.
Thomas Price.....	Landsman.
J.J. Robertson.....	Ordinary seaman.
Robert Sampson.....	Landsman.
E.P. Trainor.....	Seaman.
Michael Trainor.....	Captain of guard.
Frank Watts.....	First-class fireman.
Antonio Williams.....	seaman.
Edward Aaronburg.....	Marine private.

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