

Monitor National Marine Sanctuary



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Chronology of the USS Monitor

Inception to Loss

1854

September

Swedish inventor, John Ericsson submits plans to French Emperor Napoleon III for an "impregnable battery" utilizing a revolving cupola.

1861

August 3

The United States Navy Department places advertisements inviting proposals for iron clad warships.

August 29

In a letter to Abraham Lincoln, John Ericsson offers to construct a, "vessel for the destruction of the rebel fleet at Norfolk. . . ."

September 11

Cornelius Bushnell presents a paste board model of Ericsson's "battery" to the Naval Board and President Lincoln. The Naval Board wants Ericsson to come to Washington and answer additional questions about his proposed ship.

September 14

Ericsson, after meeting with the Board, is instructed by Naval Secretary Gideon Wells, to "go ahead at once!" Ericsson has one hundred days to complete the vessel.

September 21

Ericsson is officially notified that his plan for an ironclad will be accepted.

September 27

Ericsson and his associates, Bushnell, John Griswold, and John Winslow, sign a formal contract stipulating that all four will share equally in the profits or losses of the project.

September

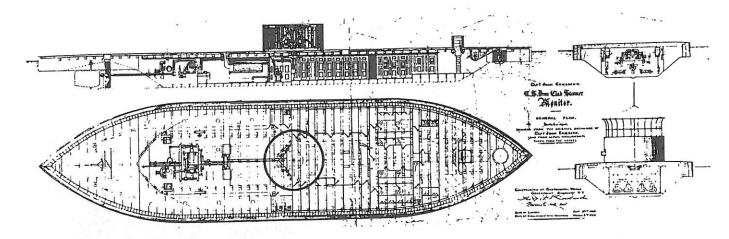
The keel plates for the battery are being rolled at the Continental Iron Works even before the government contract is drawn up.



John Friesen at the Time he Built the Monitor

October 4

Ericsson and his "Battery Associates" sign a contract with the United States government for the construction of his battery for the sum of \$275,000. The money will be paid in five installments of \$50,000 and one for \$25,000. The Navy Department also stipulated that twenty-five percent of each payment be held back as an assurance for the timely completion of the vessel.



October

Ericsson begins seeking out qualified foundries and iron works to manufacture materials needed to construct his battery.

October 25

Ericsson signs a contract with ship builder Thomas Fitch Rowland of Continental Iron Works at Greenpoint, New York. Rowland agrees to build Ericsson's iron hull for 7 1/2 cents per pound.

October 25

The plates previously rolled for the keel are laid at Continental Iron Works.

November

The primary work for iron plate, castings, fittings, etc. are contracted out to three New York mills. Holdane & Co. contracted for 125 tons of plate, Albany Ironworks and Rensselaer Ironworks begin manufacturing hundreds of additional tons of plate and castings.

H. Abbott & Sons of Baltimore will roll the one-inch-thick iron plates for the turret. These will be shipped to the Novelty Ironworks in New York for assembly into Ericsson's "shot proof" tower. Delamater Ironworks and the Clute Brothers Foundry are casting and assembling most of the components for the ships machinery.

Work on the iron battery is going at a "feverish pace." Materials from the foundries are assembled as soon as they arrive. A shiphouse one hundred and eighty feet long is constructed over the ways to allow work to continue in any weather and throughout the night.

November 16

The majority of the iron frames of the hull are in place and deck beams are beginning to be installed.

December 5

Ericsson receives a letter from Commodore Joseph Smith. Smith informs him that he has been made aware of severe delays in material. "I beg of you to push up the work. I shall demand heavy forfeiture for delay over the stipulated time of completion. You have only thirty-nine days left."

December 17

Boilers and auxiliary machinery arrive.

December 30

Boiler fires are lit and the steam machinery tested.

1862

January 11

Lieutenant John L. Worden is chosen to command the new ironclad.

January 12

The deadline for completing the battery.

January 20

In a letter to Asst. Secretary of the Navy, Gustavus Fox, Ericsson proposes, "to name the new battery *Monitor*."

January 30

The USS Monitor is launched at Greenpoint New York.

February 19

Final adjustments and alterations are made to the steam engines and ventilation systems.

February 25

The *Monitor* is commissioned into the United States Navy as a 3rd rate steamer and transferred to the Brooklyn Navy Yard.

February 28

Under way in the East River, the Monitor is found to steer, "like a drunken man on a side walk."



March 3

Ericsson completes repairs to the *Monitor's* rudder. The ship performs, "in all respects satisfactory..." The ironclad does not make the nine knots that Ericsson claimed she would. The contract requires the ship be capable of reaching eight knots, but her best speed is seven.

March 4

Heavy seas prevent the Monitor from leaving New York.

March 6

The *Monitor* leaves the Brooklyn Navy Yard at 4:00 P.M. in a snow storm. Lieutenant John Worden has orders to proceed to Hampton Roads. To ensure maximum speed, the ship will be towed by the navy tug *Seth Low*.

March 7

Just after dawn, stormy seas begin to roll over the *Monitor's* deck and slam into the turret. Water begins to pour in under the turret. Many of the crew, including Worden, are suffering from serious bouts of sea sickness. Waves are crashing over the *Monitor's* six-foot smoke stacks. The leather belts driving the ventilation systems begin to stretch. The blowers fail and with no draft, the boiler fires "burned with a sickly blaze. . . ." Carbonic and hydrogen gasses fill the engine room, threatening all inside. Those overcome by the fumes are taken up on the turret to get fresh air. Water continues to rush into the ship. With the engines waning, the pumps also fail. Hand pumps are put to work at once. Lieutenant Dana Greene signals the *Seth Low* to pull the ironclad towards land and smoother waters. After struggling five hours, the tug and the *Monitor* are finally in safer waters. Around 3:00 A.M., the seas began to calm.

March 8

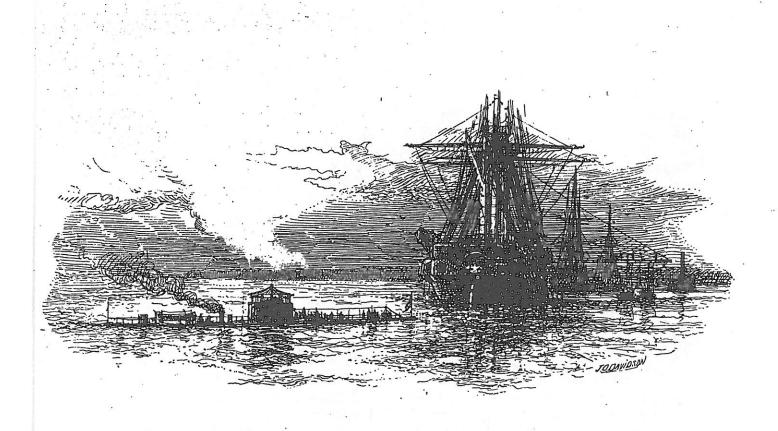
Just after 3:00 P.M., the *Monitor* is nearing Cape Henry. The crew can hear the sounds of cannon fire off towards Ft. Monroe. Rounding the Cape, flashes of light, and thick smoke are visible on the horizon. It is almost dark when a pilot comes aboard to take the ship into the shallows. He tells Worden of the terrific battle raging in Hampton Roads.

March 8

The *Monitor* is met by a host of sailing and steam ships fleeing Hampton Roads. Worden orders the decks cleared for action and the turret "keyed up." The crew quickly removes the turret awning, stanchions, and the iron smoke and ventilator boxes. The only things remaining on her flat deck are the turret and the pilot house. A red glow greets the ironclad as she nears Fort Monroe. The crew can see mast and spars of a warship engulfed in flames. A soldier in one of the Union batteries notes the arrival of a "Yankee Water Schooner," (a water tank on a barge used to resupply the blockading fleets fresh water).

At 9:00 P.M., the *Monitor* anchors next to the steam frigate USS *Roanoke*. Squadron Commander, Captain John Marston informs Worden about what has taken place that day. The CSS *Virginia* has come out and dealt the Union fleet a devastating blow. The Confederate ironclad rammed the sloop of war *Cumberland*. The two ships then exchanged broadsides for a half hour. Utterly destroyed, the *Cumberland* slowly sank by the bow. The *Virginia* then turned and atacked the sailing frigate *Congress*. The wooden ship ran aground and was unable to bring any of her heavy battery to bear on the *Virginia*. Senseless to continue fighting, the frigate struck

her colors. The Confederates then attempted to take ship and were fired on by the Union shore batteries. The *Virginia's* commander, Captain Franklin Buchannan, was wounded and he ordered his men to destroy the *Congress*. The Confederate sailors fired hot-shot into the wooden ship until flames lept from her gun-ports.



The steam frigate *Minnesota* had ran aground in Hampton Roads attempting to reach the battle. The Confederate ironclad moved to attack her next, but owing to a receeding tide was unable to approach closer than a mile. After firing a few shots at the wooden ship, she turned and steamed to Sewall's Point.

Knowing that the Confederate ironclad will return with the next day, Marston orders the *Monitor* to go to the assistance of the USS *Minnesota*. The burning hulk of the USS *Congress* acts as a somber beacon, showing Worden the way.

March 9

The *Monitor* anchors next to the *Minnesota* about 1:00 A.M. Lieutenant Greene notes, "An atmosphere of gloom pervaded the fleet, and the pygmy aspect of the newcomer did not inspire confidence among those who had witnessed the day before." "Between 1 and 2 AM the *Congress* blew up..." "Near us too, at the bottom of the river, lay the *Cumberland*... whose colors were still flying at the peak."

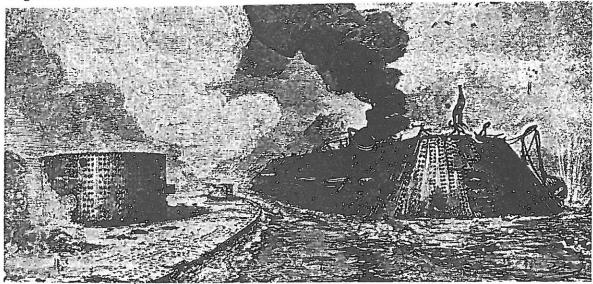
While the men on board the *Minnesota* are throwing tons of stores overboard in an effort to lighten their ship, the *Monitor's* crew begins preparing their ship for the days action.

March 9

Around 8:00 A.M., Worden is advised that the *Virginia* is approaching. The *Monitor* moves to intercept the Confederate ship. Around 8:45, the two ironclads begin exchanging fire at long range.

A shot from the Confederate ironclad slams into the turret. When asked if the shot came through, Lt, Greene replies, "it didn't come through, but it made a big dent. . . ."

The two ironclads continue circling and firing at ranges varying from one hundred yards to a matter of feet. The *Virginia* attempts to ram, but the nimble *Monitor* easily out maneuvers the *Virginia*. The result is a mere glancing blow.



Around 11:00 A.M., Worden pulls the *Monitor* out of action to replenish the supply of ammunition in the turret. The *Virginia* turns her full attention on the USS *Minnesota*. The wooden frigate fires several broadsides at the armored ship. While the shots bounce harmlessly off, the ironclad's shells turn her wooden sides into splinters.

By 11:30, the *Monitor* returns to the fight, Lt. Greene wrote, "At it we went again as hard as we could..." Each of the ironclads fires as rapidly as possible, searching for "soft" spots on their opponent.

The two ships have been fighting for about four hours. Worden manoeuvres the *Monitor* and attempts to ram the *Virginia's* stern to possibly damage her rudder or propeller. A well placed shot from the *Virginia's* stern pivot hits and explodes on the *Monitor's* pilot house. The explosion blinds Worden. Lt. Greene assumes command. Uncertain about Worden's wound and if the steering has been damaged, he orders the *Monitor* into shallow waters. Seeing the Union ship withdraw, the officers on the *Virginia* assume they have done the *Monitor* serious injury.

The Confederate ironclad again turns towards the *Minnesota*. She is again unable to approach within a mile of the steam frigate due to the receding tide. After firing a few shells, the *Virginia* returns to the Gosport Navy Yard to assess her own damage.

After surveying the pilot house, Lt. Greene turns the *Monitor* around and prepares to resume the battle. He sees the *Virginia* steaming for the Elizabeth River. Like his opponent, he feels that they surely must have damaged the Confederate ship. His orders from Worden are to save the *Minnesota*. Instead of pursuing the *Virginia*, he takes the *Monitor* back to the stranded frigate.

March 10

Lieutenant Thomas O. Selfridge, Jr. (formerly of the USS *Cumberland*) is placed in command of the *Monitor*.

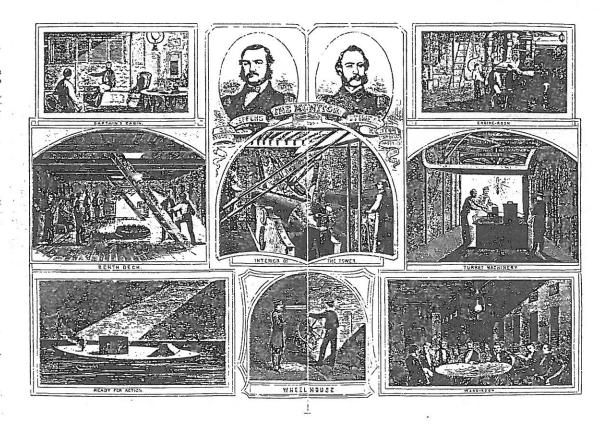
March 13

Lieutenant William N. Jeffers assumes command of the *Monitor*. The work of repairing her pilot house is under way.

{*The quick turn around in Commanders was caused by Secretary of the Navy, Gustavus V. Fox and is best explained by Selfridge, "Mr. Fox sent for me and stated that, previous to his having ordered me to command the *Monitor*, he had sent a dispatch boat to Commodore [Louis M.] Goldsborough, the Commander-in-Chief of the fleet, who was then off the coast of North Carolina, directing that Lieutenant Jeffers be sent at once to command the *Monitor*. Mr. Jeffers had just arrived and the Secretary was obviously embarassed by the situation. This was relived by my pointing out that Lieutenant Jeffers was many years my senior, and that under the circumstances I could have no objection to his superceding me."}

March 25

An artist from Harper's Weekly spends the day sketching the interior and exterior of the ship.



March 31

Vice President Hanibal Hamlin visits the Monitor.

March & April

Much of March and April is spent awaiting the reappearance of the *Virginia* and speculating about how severely they have damaged her. On March 10, 1862, Lincoln issues an order stating that the "Monitor be not too much exposed..." Unpopular with the ironclads crew, it is intended to insure that the *Monitor* does not unnecessarily risk serious damage in an engagement. Lincoln feels that as long as the *Monitor* guards the mouth of Hampton Roads, the Confederate ship can not slip out and attack at other points along the coast. A plan is also devised to run the *Virginia* down with "expendable ships." The President states that this attack is to take place in waters of their own choosing. Preferably where the large guns in Fort Monroe can also be used against her.

The Confederates are smart enough to realize the Union intention. The ironclad will not go under the guns of Fort Monroe but her commander does want to engage the Union ironclad. On two occasions, the *Virginia* steams back into Hampton Roads. She circles around inviting the *Monitor* to venture back to their old battle ground. The challenges go unanswered owing to Lincoln's March 10th directive.

April 11

The crew of the *Monitor* watches as the *Virginia* and her consorts enter Hampton Roads. The Confederate ironclad moves as far north as Newport News Point. Unable to entice the *Monitor* into a fight, the *Virginia* fires a few desultory shots towards Ft. Monroe and returns to Craney Island with 3 Union schooners captured by the CSS *Jamestown*.

April 16

The *Monitor* is visited by Captain W. N. W. Hewitt, of HMS *Rinaldo*. {Hewitt was in command of the British mail packet *Trent* when that ship was fired on and boarded by the USS *San Jacinto* in the Bahama Channel in November. Two Confederate Commissioners, John Slidell and James Mason were taken from the English ship. Their capture created an international incident which almost led England to a formal allegiance with the Confederacy. After a month of negotiations, the two men were finally released.}

May 8

The *Monitor* and other Union ships move across Hampton Roads to "test" the Confederate Batteries at Sewall's Point. The *Virginia* steams out to attack and just when another battle between the iron ships seemes imminent, the signal "resume moorings" is hoisted from the Flag-ship and the entire Union Squadron returns to Ft. Monroe.

May 9

President Lincoln visits the Monitor to meet with Lt. Jeffers and inspect the ship.

May 11

The Confederate forces evacuate the Norfolk area. Drawing to much water to reach Richmond, the CSS *Virginia* is destroyed by her own crew. The *Monitor* visits abandoned batteries, Norfolk, and the Gosport Navy Yard.

May 13

The *Monitor* receives orders to proceed up the James River and join the "On to Richmond" expedition under John Rogers commanding the Unions second ironclad, the USS *Galena*.

{The Galena was one of the three original ironclad designs approved by the Navy in 1861. She was essentially a sloop with her gun deck covered with a rounded shield. Her armor was made up of interlaced T-rails. Her battery consisted of four IX" Dahlgren shell guns and two 100 Pdr. Parrott Rifles mounted in broadside.}

May 15

The ironclads *Monitor* and *Galena* and three wooden gunboats are stopped on their journey up the James River at Drewry's Bluff. Unable to pass the obstructions placed in the river, the ships engage in a four hour duel with the battery. Commander Rogers is ordered to give the *Galena* a "fair trial." He anchors in the river below the fort, retiring only after expending all but six rounds of fixed ammunition for his large guns. The *Monitor*, unable to elevate her guns high enough to reach the top of the 90 foot bluff, circles around trying to draw cannon fire away from the *Galena*.

The Galena is a failure. By the time Rogers withdraws, his ship has been hit over forty times. Thirteen shot came completely through. Her gun deck is strewn with dead and wounded sailors. Rodgers later commented, "... she is not shot proof."

{The guns on Drewry's Bluff were manned by soldiers from Col. Augustus Drewry's Artillery Company, sailors of the James River Squadron, and crewmen from the CSS *Virginia*.}

May - June

After Drewry's Bluff, the *Monitor* and the other ships from Rodger's Squadron remain stationed around City Point. During the Seven Days Battles outside Richmond, General McCellan's Union army is being beaten back. He orders his transports and supply ships transferred from the York River to Harrison's Landing on the James. The *Monitor* and the other ships of Rodger's Squadron are kept in the vicinity to protect the ships. Their blockading duties become one of severe routine and boredom. With the exception of a failed expedition up the Appomattox River to destroy a rail road bridge, there is little or no action.

July 1

The Battle of Malvern Hill stops the Confederate Army from pushing McCellan into the James River. While other gunboats in the Squadron go to assist the Army, the *Monitor* is given orders to remain and protect the transports.

July 4

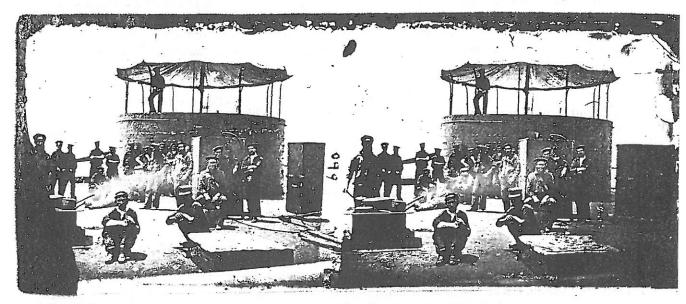
While patrolling the James around Turkey Island, the *Maratanza* and the *Monitor* come upon the CSS *Teaser*. One shot from the *Maratanza* bursts the gunboat's boiler. Severely outgunned, the *Teaser* is abandoned by her crew. The Union ship tows her back to Harrison's Landing. On board the captured ship are drawings of the "*Merrimac II*."

{The Merrimac II was the second ironclad being constructed at the Gosport Navy Yard. A few days before the Confederates evacuate the Norfolk area, the incomplete ship is towed to Richmond. After completion she is commissioned into Confederate service as the CSS Richmond. "Ram Fever" was sweeping through the US Navy Department and the ships in the James River. All summer long false cries of the "Merrimacs coming" kept the sailors on the Monitor and other Union ships chasing shadows.}

July 9

While off Harrison's Landing, President Lincoln, Asst. Secretary of War, Franklin Blair, and Squadron Commander Louis M. Goldsboro visit the *Monitor*. James F. Gibson, a photographer following McClellans army, comes aboard and makes a series of stereographic photos of the officers, crew, and the ship.

{These eight stereographic images are the only known photographs of the Monitor. }



July - August

Blockading duty on the James River proves to be quite extreme on the crew of the *Monitor*. Aside from boredom, swarms of insects, and the constant threat of enemy bullets, there is the Southern heat. Day-time temperatures inside the ironclad soar. One log entry records that while the ship was riding at anchor with the steam machinery secured, galley temperature reached 150 degrees, it was 125 degrees on the berth deck, and temperature in the water closet was 131 degrees. Her six months of service has taken its toll on the ship. Aside from inadequate ventilation, the steam machinery is due for overhauling. By the end of August, her bottom is so fouled with marine growth that the ship can barely make three knots.

August 15

Captain Thomas H. Stevens of the Maratanza is ordered to assume command of the Monitor.

August 30

The *Monitor* receives orders to return to Hampton Roads. Upon arriving, she takes up anchorage off Newport News Point between the wrecks of the *Cumberland* and *Congress*.

September 8

Commander John P. Bankhead replaces Stevens as commander of the Monitor.

September

All during September, the *Monitor* remains on blockade duty in Hampton Roads. The operating condition of the ship becomes increasingly worse. The routines of blockade duty in Hampton Roads offer little in the way of excitement.

September 30

The Monitor is ordered to the Washington Navy Yard to undergo repairs.

October

The *Monitor* arrives under tow on the 3rd. Many of the officers and crew are allowed to go on extended furlough. Several weeks are spent repainting, repairing, and modifying the vessel. A telescoping smoke stack and taller ventilator boxes are added. Davits and cranes are installed for hoisting the ship's new boats. Her battle damage is repaired with iron patches. Each scar is labeled according to its origin, "Merrimac," "Minnesota," "Ft. Darling," "Merrimac's Prow." The two XI" Dahlgrens are engraved on their breeches in tribute to the two men who made her famous;

MONITOR & MERRIMAC WORDEN

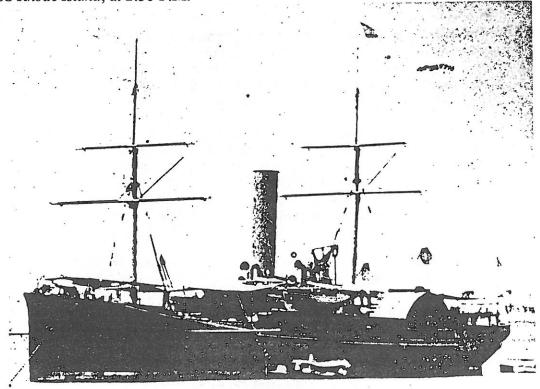
MONITOR & MERRIMAC ERICSSON

Below decks, the berth fittings are painted and stained. A new "oil cloth" floor is put down, and all of the rooms painted white, making things, "as bright and cheerful as could be desired," according to Keeler.

November - December

The *Monitor* returns to blockading duty in Hampton Roads. An armored shield is added to the top of the turret. Made of one inch thick boiler plate, it will afford those on top protection from musket fire. The monotonous routines of blockading duty set in once again.

On Christmas Day, 1862, Bankhead receives orders to proceed to Beaufort, North Carolina. Bad weather delays the departure until the 29th. The *Monitor* leaves Hampton Roads, towed by the USS *Rhode Island*, at 2:30 P.M.



Sinking Chronology

December 30

Around 5:00 A.M., the calm seas of the evening before give way to rising swells.

1:00 P.M., Cape Hatteras light is sighted, "WSW, fourteen miles distant." The seas begin rolling over the ironclads deck. Surgeon Greenville Weeks notes, "The little vessel plunged through the rising waves instead of riding on them as they increased in violence . . . so that, even when we considered ourselves safe, the appearance was of a vessel sinking." As the ship's deck continues to disappear Weeks hears one sailor lament, "Give me an oyster scow! - anything! - only let it be wood, and something that will float over, instead of under the water."

4:30 P.M., the seas calm quite a bit. Waves continue to roll across the ship. Cape Hatteras Light House is NW by W sixteen miles distant.

6:30 P.M., the ships enter the warm waters of the Gulf Stream. The wind, Keeler notes, begins "... blowing violently; the heavy seas rolled over our bows dashing against the pilot house and surging aft, would strike against the solid turret with such a force to make it tremble..." Just before dark, Commander Bankhead pulls alongside the *Rhode Island*. He informs Commander Trenchard that if the *Monitor* runs into trouble during the night, he will hoist a red signal lantern from the turret mast.

7:00 P.M., one of the tow lines snaps. The *Monitor* begins to yaw severely. The ship also starts rolling badly. The increased motion forces out portions of the oakum seal under the turret. The water level in the bilge is beginning to rise.

7:30 P.M. Ship's Surgeon, Greenville Weeks is on the turret. "At this time the gale increased; black heavy clouds covered the sky, through which the moon glimmered fitfully, allowing us to see in the distance a long line of white plunging foam rushing towards us, -- sure indication, to a sailor's eye, of a stormy time." "A gloom hung over everything . . . the moan of the ocean grew louder and more fearful."

By 8:00 P.M. the situation below deck is worsening. Engineer W. F. Watters notes that as he passed under the turret, water was pouring in through the areas where the oakum was displaced. "When the ship rose to the swell, the flat under surface of the projecting armor would come down with great force, causing a considerable shock to the vessel and turret, thereby loosening still more of the packing around its base." One sailor notices water pouring in through the coal bunkers.

The water has gained so much that Bankhead orders the Engineer to put the Worthington pump to work. When Watters returnes to the engine room, he finds that there is an inch of water on the engine room floor. The coal bunkers are also getting wet and as the coal heavers toss damp coal onto the fires, Seaman Francis Butts notices the acidic smell of wet burning coal. Assistant Engineer R.W. Hands reports to Commander Bankhead, "... the coal was too wet to keep up steam ..." The pressure which normally runs at eighty pounds has dropped dangerously low to twenty.

The *Monitor* is still being towed with her head into the waves. As the storm increases in strength, mountainous waves crash across her decks. The pilot house is almost continuously under water. Paymaster Keeler and some of the other officers are still on the turret, "... we were going 'head on,' or in other words were crossing them [waves] at right angles. Now her bow would rise on a huge billow and before she could sink in the intervening hollow, the succeeding

wave would strike her under the heavy armor with a report like thunder and a violence that threatened to tear apart the thin sheet of iron bottom and heavy armor which it supported." "Then she would slide down a watery mountain into a hollow beyond and plunging her bow into the black rolling billow would go down, down, down, under the surging wave till naught could be seen but the top of the black 'cheese box' isolated in a sea of hissing, seething foam, extending as far as we could see around us."

The pumps are doing all they can, but water below is still gaining. Bankhead orders the centrifugal pump started. It has a capacity of 3,000 gallons per minute. Seaman Butts sees, "... a stream of water eight inches in diameter spouting up from beneath the waves." Keeler reports, "... the water diminished, but it was of short duration."

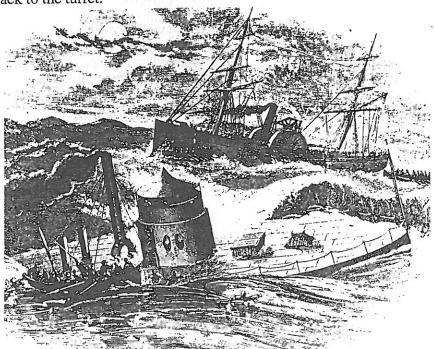
8:45 P.M., the quartermaster on the *Rhode island* records Cape Hatteras Lighthouse bearing "N 1/2 W, twenty miles distant."

Around 8:30 Bankhead signals the *Rhode Island*. The situation is getting graver by the minute. The centrifugal pump is working, but the water continues to gain. The *Rhode Island* slows her speed and attempts to bring the ironclad into the wind. For a brief while the *Monitor* seems to ride easier.

9:30 P.M., The wind continues to increase speed. The waves now begin "... burying her completely for an instant, while for a few seconds nothing could be seen of her from the *Rhode Island* but the upper part of her turret surrounded by foam."

10:00 P.M., Bankhead receives the report that the water is gaining below. The level is so high that the blowers are spitting water. Surgeon Weeks notes, "When the fires were reached, the vessel's doom was sealed; for with their extinction the pumps must cease, and all hope of keeping the *Monitor* above water more than an hour or two would expire."

Sometime after, 10:30 P.M., Bankhead gives the order for a red lantern to be hoisted. Some of the crew are forming bucket brigades, passing from below up to and out of the turret. The engines are operating as slow as possible, the majority of the steam being reserved for the pumps. The sagging tow line is causing the ship to become unmanageable and Bankhead asks for volunteers to go forward and cut it. Master Louis Stodder, Boatswains Mate John Stocking, and Quarter Gunner James Fenwick immediately climb down the side of the turret and begin making their way forward. Fenwick and Stocking are swept overboard. Stodder succeeds in cutting the line and makes his way back to the turret.



At 11:00 P.M. Commander Trenchard calls for all of the *Rhode Island's* officers and crew. He orders the engines stopped. As soon as they can, boats are put over the side answering the order,"away to the rescue!" The first boat in the water is the launch under the command of Acting Ensign A. O. Taylor.

At 11:30, Commander Bankhead orders the engineer to stop her engines and use all steam for the pumps. The two ships drift dangerously close to each other.

Shortly after stopping the engines, Commander Bankhead orders, "... the anchor be let go and all the chain given her..."

Soon the cry comes from below, "the water had reached the furnaces. . . ." Commander Bankhead gives the order for the men to leave the ship. Surgeon Weeks and a group of others begin making their way forward, clinging to the *Monitor's* ropes. Seaman Butts sees, "three of these men swept from the deck and carried leeward on the swift current."

The Rhode Island crashes into the Monitor. Taylor's launch is caught in between. The small

wooden craft is crushed, but still afloat.

The *Rhode Island* attempts to pull away, but the hawser, cut by Stodder, becomes tangled in the paddle wheel and pulls the ships even closer together. Sailors from the side-wheeler work to cut the ships loose. The wooden ship is rolling heavily on the waves and quickly drifts away from the *Monitor*.

Inside the turret, Seaman Butts sees, "A black cat was sitting on the breech of one of the guns, howling one of those hoarse solemn tunes which no one can appreciate who is not filled with the superstitions which I had been taught by the sailors, who are always afraid to kill a cat." Butts claims to have put the cat into one of the cannon and replaced the tompion, "...but I could still hear that distressing howl."

Masters Mate Rodney Browne is in charge of the 1st cutter. He pleads with Capt. Trenchard to allow him to launch his boat. Trenchard is apprehensive owing to the heavy seas but finally agrees. When Brown calls for volunteers, fourteen men quickly respond. He soon has his boat in the water and begins to, "pull for the *Monitor* whose red light was plainly visible." The distance between the two ships has increased considerably.

Men atop the turret have to climb down the vertical ladder and make their way as best they can along the rolling deck. Keeler writes, "two or three of our number had been swept off and those

who remained seemed to hang back fearing to make the effort."

Keeler vividly remembers everything, "It was a scene well calculated to appal the boldest heart. Mountains of water were rushing cross our decks and foaming along our sides, . . . the howling of the tempest, the roar and dash of the water; the hoarse orders through the speaking trumpets of the officers; the response of the men; the shouts of encouragement and words of caution; the bubbling cry of the strong swimmer in his agony and the whole scene lit up by the ghastly glare of the blue lights burning on our consort, formed a panorama of horror which time can never efface from my memory."

Once loaded, Taylor's launch begins the treacherous pull back to the *Rhode Island*. The boat is over full, and those men not manning oars are constantly bailing. The 1st cutter, driven by the sea, is heading right for them. Ensign Taylor watches the small boat cautiously, "We neared the *Rhode Island* but now a peril appeared. Right down upon our center, borne by the might of rushing water, came the whale boat sent to rescue others from the iron-clad." "We barely floated; if she struck us with her bows full on, we must go to the bottom."

Surgeon Greenville Weeks stands to meet the oncoming boat. He reachs out and pushs the bow around as she approaches. The two boats scrap heavily as they pass. Weeks right hand is caught between the two, crushing three fingers and his arm was, "wrenched from its socket..." The fingers will have to be amputated later.

12:15 A.M., the hawser is finally freed from the *Rhode Island's* paddle wheel. She immediately starts towards the launch. After waiting for her paddle wheels to stop, the small boat with her exhausted crew pulls alongside. Lines are thrown down and those who can pull themselves aboard. Others tie ropes about themselves and are hoisted up. Ensign Taylor brings off sixteen men from the sinking iron clad.

The launch is stove in and half full of water, Taylor attempts to return to the *Monitor* but his boat is so unmanageable, he has to abandon the effort.

Captain Trenchard orders Ensign William Rodgers to launch a third boat. "I got clear of the ship, and started for the *Monitor*, which lay quite a distance to the windward of us. The sea was running quite high, and it seemed at times as if our boat would end over."

The pumps on board the *Monitor* stop. Watters reports to Captain Bankhead that they have done all that is possible. Bankhead tells the Engineer and his men to,"Leave the engine room and proceed to get in the boats."

It is after 12:30 A.M. when Bankhead says, "It is madness to remain here any longer, let each man save himself."

Bankhead orders all hands to, "... leave the turret and endeavor to get into the two boats which were approaching us." Master's Mate Browne in the 1st cutter has just arrived. Ensign Rodgers arrives shortly after, "The appearance of the iron clad at this time was truly appalling. She lay in the trough of the sea, and the waves were making a complete breach over her decks. She looked like a half-tide ledge in rough water, and for most of the time her turret was only visible."

Rodgers gets seven of the *Monitor's* crew aboard and begins the arduous trip back to the *Rhode Island*, "I was obliged to leave the others on the sinking craft to their fate, as there were now thirteen of us in my already overloaded boat."

It is now around 1:00 A.M., Browne notes "We had now got in my boat all of the *Monitor's* crew that could be persuaded to come down from the turret. for they had seen some of their shipmates (who had left the turret for the deck) washed overboard and sink in their sight." "As the men came down from the *Monitor's* turret, holding by the life line, they were hauled into the boat. Some that were washed overboard from the deck of the *Monitor* we picked up and some we were unable to save." "The last to leave the the *Monitor* was her noble Captain, J.P. Bankhead, Lieut. Green, and several other officers. . . ." Bankhead felt, ". . . I had done everything in my power to save the vessel and crew, I jumped into the already deeply-laden boat and left the *Monitor*, whose heavy sluggish motion gave evidence that she could float but a short time longer."

Browne notices two or three men clinging to the top of the turret. They ignore the pleas of their shipmates to climb down and get into the boat, a boat that is already loaded well over capacity. Browne begins the long pull back to the *Rhode Island*, but promises to return for the others.

The *Rhode Island* has now drifted about two miles from the ironclad. As soon as the men from the launch were taken aboard, the ship heads for the the other small boats. Pulling alongside, the men in Browne's cutter have a difficult time getting aboard the paddle wheeler. She is rolling heavily in the rough seas. At times the small boat is, "below the wheel and then on the summit of a huge wave, far above the decks; then the two boats would crash together."

After several attempts, the men are finally hauled aboard. Unfortunately, half the boat crew also climbs back aboard their ship. Browne means to keep his promise, but he only has seven men to row the fourteen oared boat. Captain Trenchard hails Brown and directs him to wait while the men and the other boat are brought aboard and he will tow him to *Monitor*.

It is too late, Browne and his crew are already pulling as hard as they can towards the *Monitor* which is about a mile away.

As soon as Surgeon Weeks is on board of the *Rhode Island*, his arm is reset and three fingers are partially amputated. He comes back on deck and stands by his shipmates, "For more than an hour we watched from the deck of the *Rhode Island* the lonely light upon the *Monitor's* turret - a hundred times we thought it had gone forever, a hundred times it reappeared."

It is now about 1:30 A.M., Browne and his men are exhausted and working with half a crew, it is an anxious trip back to the foundering ironclad. "We made but slow progress and before we reached her, her light disappeared."

The cutter continues on to where they last saw the *Monitor's* light Hoping to find additional survivors in the water, all they find is swirling water produced by the sinking ship.

On board the *Rhode Island* Surgeon Weeks and others, "... looked, most anxiously, for the whale-boat which had last gone out under the command of Master's Mate Browne, but saw no signs of it. We knew it had reached the *Monitor*, but whether swamped by the waves, or drawn in as the *Monitor* went down, we could not tell."

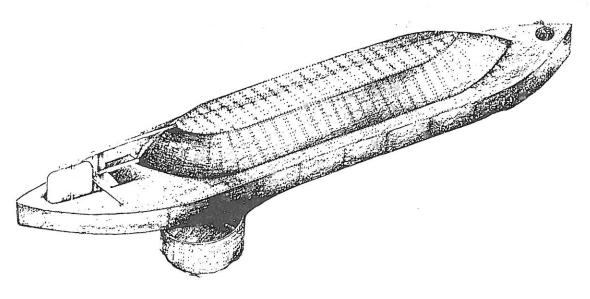
Browne and his men are still afloat and are now attempting to save their own lives, "... we started for the *Rhode Island*, but before long we found that she was steaming away from us, throwing up rockets and burning blue lights - leaving us behind." The men in the boat will spend a harrowing night at sea.

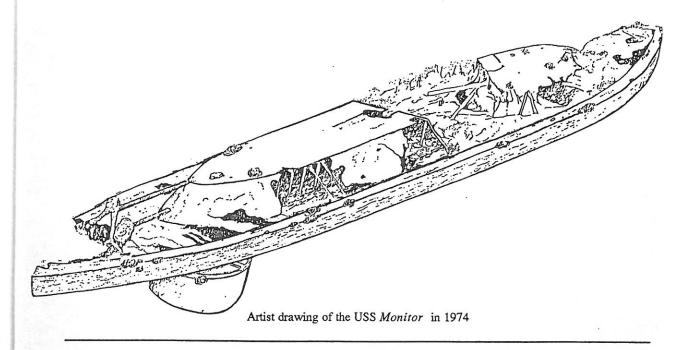
Captain Trenchard searches in vain throughout the night and for most of the next day for the men in the cutter. Late in the afternoon, the search is abandoned and the *Rhode Island* steames for Beaufort.

The cutter is picked up the next day by the schooner A. Colby and her crew is taken to Beaufort. Several days later the men return to their ship where they are received with "hearty cheers." Rodney Browne writes, "Capt. Trenchard met me at the gangway and throwing his arms around me gave me a good hug. This was the only time, during the time I served under his command that he ever forgot his dignity."

Jeff Johnston

Monitor National Marine Sanctuary





The wreck of the Civil War ironclad USS *Monitor* was located by a team from Duke University in August 1973. The wreck was discovered 16 miles south-southeast of Cape Hatteras Lighthouse lying in 230 feet of water. The wreck is upside down with the stern port side armor resting on the displaced turret. On January 30, 1975 the 113th anniversary of the Monitor's launching, the site was declared the Nation's first National Marine Sanctuary.

A photomosaic of the wreck in 1974 revealed areas of severe damage. A large portion of the stern armor belt was missing, the hull around the rudder and propeller had collapsed, and a large area forward of the mid-ships bulkhead had collapsed. It was quite unlikely that this kind of extensive damage was caused during the sinking or even through natural deterioration. Later, the US navy revealed that depth-charging had taken place in the vicinity of the *Monitor* during World War II. So the damaged areas of the wreck were attributed to human intrusion in to the site as opposed to natural deterioration of the night of the sinking.

From 1973 to 1987, no major changes in the wreck were observed. Now that has all changed. Between 1987 and 1990, noticeable changes began appearing in the wreck. Iron plates along the sides of the lower hull and on the bottom have been dislodged, and the mid-ships bulkhead has partially collapsed. Much of the damage to the Monitor can be attributed to the wreck's salt water environment, but human causes are also a factor. In 1991, a private fishing vessel was caught by the Coast Guard anchored on the wreck. The vessels anchor apparently snagged the propeller shaft or the rudder skeg causing them to tear away from the hull and drop radically to starboard. There is also evidence of other areas of severe damage that have been attributed to human intrusion. Even today, the problem continues. In 1995 and 1996, trawl nets and long line rigs were found tangled in the wreck.

