150th Anniversary

"The fierce struggle in Hampton Roads on Saturday, and the terrible duel of the Merrimac and the Monitor on Sunday, have taught a practical lesson which no maritime power can afford to overlook. It was not merely the struggle of Loyalists and Rebels; it was a conflict of the old with the new and the new has won the day. It will stand out in bold relief in the history of naval warfare as one of the signal battles of the world."

— Philadelphia Inquirer, March 13, 1862
The first U.S. Navy Ironclad Warship

On Jan. 30, 1862, in the midst of the Civil War, the USS Monitor emerged from the Continental Iron Works in Brooklyn, N.Y. The strange, iron-plated warship was unlike anything the world had seen. For centuries, wooden vessels had ruled the seas, but when the Monitor clashed with the Confederate ironclad CSS Virginia at the Battle of Hampton Roads, it marked the dawn of a new era of iron warships. In 2012, NOAA celebrates the 150th anniversary of this revolutionary vessel and its role in shaping our maritime history.

Mastermind of the Monitor

Born in Sweden on July 31, 1803, John Ericsson was the son of cattle herders and grew up in poverty. After arriving in New York City as an immigrant without much money, Ericsson set to work to become an engineer. He worked on the Erie Canal and lived on a boat while repairing the locks in the canal. In 1846, he returned to England to work in a shipyard. The following year, Ericsson was hired as the U.S. Navy’s first government engineer. He was put to work in the Navy Yard in Brooklyn where he designed the USS Monitor and the USS Galena, the first ironclad warships to ever be built. In 1861, Ericsson oversaw the design and construction of the USS Monitor, leading one of the most remarkable engineering achievements in modern history.

Life Aboard

During the Monitor’s short time in service, the average age of sailors ranging from 18 to 20 was exchanged into the cramped space below deck. Through letters written to Commodore George 9. Devol, we learn that the life was difficult to say the least. In summer, temperatures inside the ship rose to 110° F. Many nights, the men slept on the deck for relief from the heat. Inside the ship, it was crowded and dirty with little space to move. Food was meager—bread and coffee were staples. Sunday were days off work, but the crew worked hard when they were off duty. When the crew washed their clothes, they used seawater, not fresh water. The Monitor was powered by two steam engines, and the sailors had to keep the engines running 24 hours a day to keep the ship afloat.

An Ironclad Opponent

The CSS Virginia was the Confederate Navy’s first ironclad. It was completed March 7, 1862, in the shipyard in Norfolk, Virginia, after a breakout of a possible ironclad. The two vessels were equal in size and power. However, the CSS Virginia was more maneuverable than the USS Monitor. With the Monitor’s design, Ericsson aimed to make the CSS Virginia a giant warship, but it was not as maneuverable as the Monitor. The CSS Virginia was armed with 10 guns, and the Monitor had 12. After the battle, the CSS Virginia was re-armed and improved, but it was never as effective as the Monitor. The CSS Virginia was sunk during the battle and was never recovered.

Turret Conservation

In 1960, the Monitor’s turret was uncovered from the sand for the first time in nearly 143 years. Today, the 125-ton turret rests on a site protected by an expedited clean-up of 150,000 cubic meters of seawater. Marine conservation efforts have been made to remove the damage done by more than a century of weathering and exposure to the elements. The site was designated a national marine sanctuary in 1996, and the turret was declared a national historic center in 2002.

Timeline

- Oct. 25 – Construction begins
- Jan. 30 – Launch
- March 9 – Battle of Hampton Roads
- Dec. 3 – Loss of the Monitor
- Aug. 27 – Wreck discovered
- Dec. 31 – Sanctuary designation
- 1861
- 1862
- 1873
- 1974
- 1975
- 1977
- 2002
- 2007
- 2012

Famous Firsts

- U.S. Navy ironclad warship
- Battle between ironclads
- Revolving gun turret on a warship
- In an entire class of warships
- National marine sanctuary
- Below-the-waterline flushing toilet

Find out more at http://monitor.noaa.gov/150th