

USS Constitution Dry Docking Background for Media

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Background on the Dry Docking of *Constitution*

Commander Sean Kearns, 73rd in Command, USS Constitution

Note: On 18 May 2015, USS Constitution entered Dry Dock 1 at Charlestown Navy Yard, Boston National Historical Park, for a 26-month restoration. The ship will be undocked on July 23, 2017. Some work remains, but the ship does not need to be docked for that work to continue. The following text is adapted from background information developed in advance of the 2015 dry docking by Commander Sean Kearns, the 73rd Commanding Officer of USS Constitution.

The Importance of Restoring *USS Constitution*

USS Constitution is the only survivor of the United States Navy's original six frigates. Her mission was to keep the sea lanes open for commerce, fight pirates, land Marines in trouble spots (...to the shores of Tripoli...), and prevent the slave trade. The U.S. Navy carries out similar missions today. As in the days of sailing warships, today's Navy trains its officers and enlisted personnel to the highest standard, while incorporating the very best designs and materials into its ships. The U.S. Navy's heritage is embodied in the successes and legacies of *USS Constitution*.

Building a New Navy for the New United States

Upon the close of the American Revolution, the new United States sent its merchant fleet far and wide to trade American products for goods from Europe and the Far East. After 1785, however, there was no Continental Navy and U.S. merchant vessels sailed unprotected. The vulnerable merchant fleet was harassed by the British and French in the Atlantic and the Caribbean in the 1790s. At the same time Barbary Corsairs of North Africa captured American vessels and crews and held them for ransom.

The U.S. Congress authorized a new navy in 1794 "in defense of commerce" and between 1794 and 1800, six frigates were built. *USS Constitution*, launched in Boston on October 21, 1797, is the sole survivor of the original U.S. Navy. Joshua Humphreys, the principle designer, determined that the frigates had to be the strongest, fastest, and most heavily armed warships of the era.

Constitution's hull is 3 layers: exterior and interior oak planking and dense live oak framing (ribs) spaced close together as the middle layer. At the waterline, the ship is over 22 inches thick and this strong and dense hull makes up her "iron" sides. When hit with enemy fire, *Constitution's* hull either repelled the cannon shot or absorbed it, thereby preventing serious damage or great loss of life. Between 1798 and 1854, *Constitution* captured 33 vessels and her greatest fame rests in her 3 stunning battle victories over Royal Navy warships in the War of 1812.

Maintaining and Restoring an Icon

"Old Ironsides" was able to resist enemy fire in battle, but her oak structure is liable to wood rot. Since her early years, sailing out of Boston to the Mediterranean Sea, around the world in 1844–1846, and later as a Navy training ship from the 1860s to the 1880s, she has needed periodic repairs and overhauls—some minor, some extensive—to keep her sailing. Each repair not only kept her seaworthy, but also altered her for continued use. In time, her gun battery was upgraded, improvements were made to her sailing rig, classroom space was added, and finally at the end of her storied career in the 1880s, a large "barn" was installed and she became a receiving ship with barracks and offices. *USS Constitution* returned to Boston for her 100th

birthday in 1897, and the Charlestown Navy Yard (part of the Boston National Historical Park) has been her home ever since.

In the 20th century, the ship underwent several restorations. In 1906–1907, the barn was removed and she was cosmetically restored to a sailing warship, and in 1927–1931, about 85% of the ship was “renewed” (i.e. replaced) to make her structurally sound. To thank the school children who contributed to a “pennies campaign” in 1925 and the donors of materials during the Great Depression, *Constitution* was towed to the three U.S. coasts, visiting 76 ports and hosting over 4.6 million visitors from 1931–1934. The 1992–1996 restoration recreated the ship’s structural strength according to Joshua Humphreys’ original 1794 instructions for building the frigates. The work of that 4-year restoration enabled *Constitution* to mark her 200-year anniversary by sailing under her own power for the first time in 116 years on July 21, 1997.

The frequent repairs, overhauls, and restorations to this 1797 warship raise the question: “How much of USS *Constitution* is original?” Determining the percentage of “original” material in the ship is not an exact science; it has been estimated that approximately 8–12 percent of *Constitution* dates to the 1795–1797 building period. Original material includes her keel, floor timbers, some exterior lower hull planking, and some internal structures.

21st Century Restorations and the Commemoration of the War of 1812

The first 21st century restoration on *Constitution* began in late 2007 and included: reestablishing the camber (curve) in the spar (upper) deck, lowering the bulwarks (upper sides), and opening the waist (mid-ships area of the bulwarks) of the ship, per the ship’s 1812 configuration. Naval History and Heritage Command, Detachment Boston, conducted the work in Charlestown Navy Yard, Boston National Historical Park. Detachment Boston is part of the Naval History and Heritage Command, the official history program of the Department of the Navy. Detachment Boston’s mission is to perform all restorations of *Constitution* and, as far as practicable, restore the ship to the War of 1812 period.

USS *Constitution* briefly sailed unassisted in Boston Harbor on August 19, 2012, to mark her War of 1812 battle against HMS *Guerriere* and to commemorate 200 years of peace between the U.S. and Great Britain and the U.S. and Canada. In the battle with *Guerriere*, *Constitution* earned the nickname “Old Ironsides” when an American sailor, noting that some of the British cannon balls fell harmlessly off the ship’s stout oak hull, purportedly shouted, “Huzza! Her sides are made of iron!”

The 2015 restoration marks the first time that *Constitution* will have been dry docked since 1992. Dry Dock #1, in the Charlestown Navy Yard, is the second oldest operational dry dock in the U.S. and *Constitution* was the first warship to enter that dock on June 24, 1833. The work of this restoration will include replacing lower hull planking and caulking; removing the 1995 copper sheathing and replacing it with 3,400 sheets of new copper that will protect the ship’s hull below the waterline; replacement of select deck beams; and on-going preservation and repair of the ship’s rigging, upper masts, and yards. The estimated cost of the restoration is expected to be \$12 million to \$15 million and be paid for by the Navy. While *Constitution* is in dry dock, the Navy will rehabilitate her Pier 1 berth.

The Visitor Experience During the Dry Docking

The Charlestown Navy Yard, the location of Dry Dock #1 where *Constitution* will be for the 2015–2017 restoration, is open daily, free of charge. Other historic sites in the Navy Yard include the World War II destroyer, USS *Cassin Young* (DD 793), (open from 10 a.m. to 4 p.m.

from June 28 until September 7) and the USS *Constitution* Museum (open daily 9 a.m. to 6 p.m.).

USS *Constitution*'s upper deck will be open for limited visitation while the ship is in dry dock. Crew from the ship and USS *Constitution* Museum staff will explain "Old Ironsides" history and the current restoration work.

The USS *Constitution* Museum's newest exhibit, "Forest to Frigate," will open for summer 2015. Focusing on *Constitution*'s construction, "Forest to Frigate" will be a family friendly show that will feature hands-on interactive displays and rare artifacts. The exhibition will explore the building of the ship and how its superior design and construction made *Constitution* one of the most successful warships in the history of the U.S. Navy. Museum visitors will have the opportunity to meet and talk to a *Constitution* sailor. To mark their visit to *Constitution*, visitors will be able to engrave their names on the copper sheets that protect the ship's lower hull and which will be installed in the 2015 restoration.

Upcoming USS *Constitution* Tour Hour Changes.

Beginning Monday, April 27, *Constitution* will temporarily close to the public while final preparations are made for entering dry dock on May 19. On June 9, *Constitution* will reopen to the public with tours Tuesday through Friday from 2 p.m. until 6 p.m., and Saturday and Sunday from 10 a.m. until 6 p.m. (closed Mondays).

Key Web links

USS *Constitution*

<http://www.navy.mil/local/Constitution/>
<https://www.facebook.com/ussconstitutionofficial>

USS *Constitution* Museum

<https://ussconstitutionmuseum.org/restoration/blog/>
(Restoration blog)
<https://ussconstitutionmuseum.org/>
<https://www.facebook.com/USSConstitutionMuseum>

Boston National Historical Park

<https://www.nps.gov/bost/index.htm>
<https://www.facebook.com/BostonNHP>

Charlestown Navy Yard Boston National Historical Park

<https://www.nps.gov/bost/learn/historyculture/cny.htm>

Naval History and Heritage Command—USS *Constitution*

<https://www.history.navy.mil/browse-by-topic/ships/uss-constitution-americas-ship-of-state.html>
<https://www.facebook.com/USNHistory/>

U.S. Navy

<http://www.navy.mil/>

Defense Imagery & Imagery Distribution System (DVIDS)

<https://www.dvidshub.net/>

The DVIDS mission is to serve as a turnkey operation that facilitates requests for Public Affairs video, audio, still imagery and print products. Media can log onto the site, download HD products, and use them in part or in total, free of charge.

Aerial HD video USS *Constitution* under her own power on August 19, 2012, to commemorate the 200th anniversary of her victory over HMS *Guerriere* earning her nickname “Old Ironsides”

<https://www.dvidshub.net/video/152458/uss-constitution>

28 minute HD video documentary of USS *Constitution* “America’s Ship of State”

<https://www.dvidshub.net/video/292385/ship-state>

B-Roll USS *Constitution* crew Boarding Pike and Gun Drill

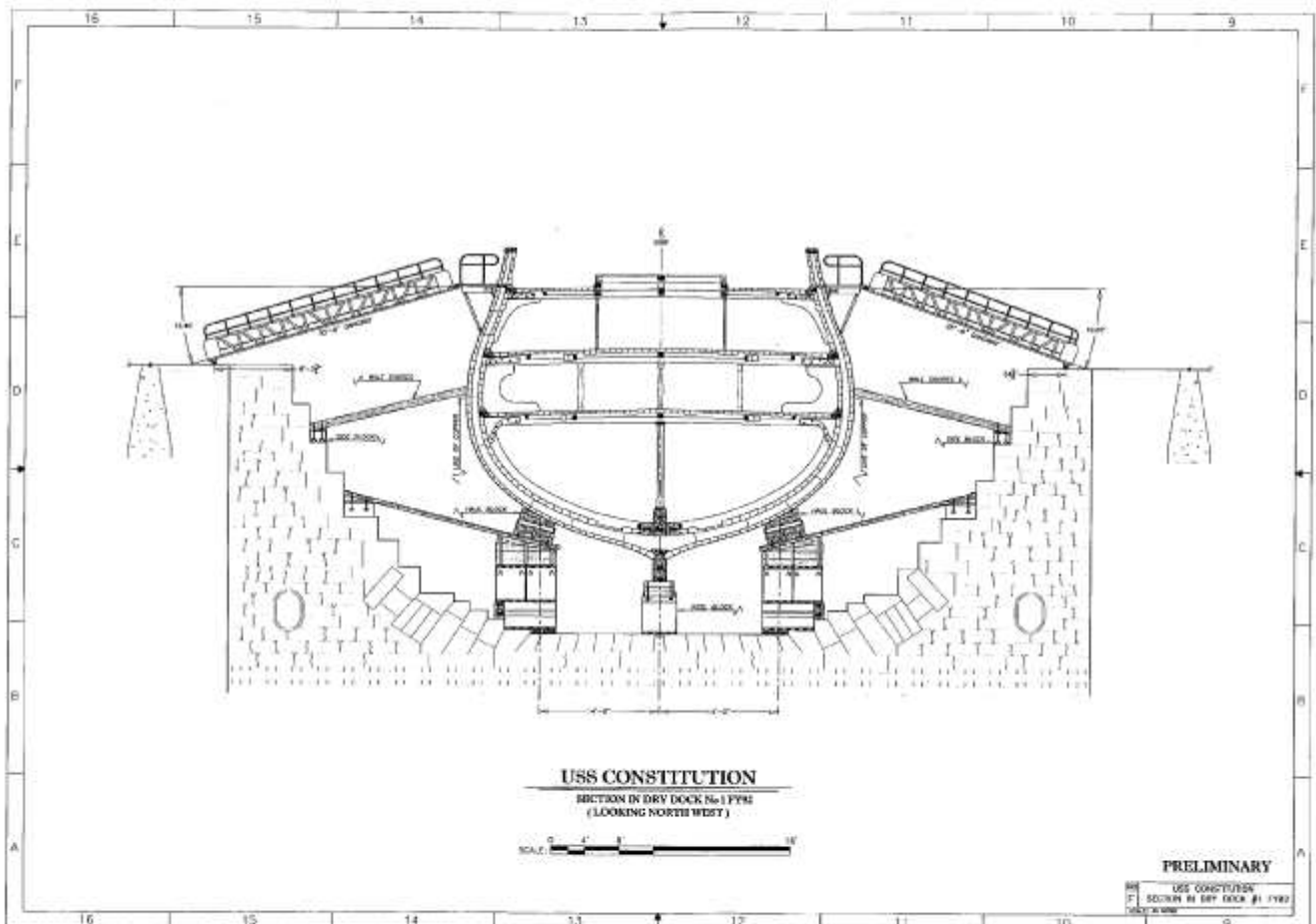
<https://www.dvidshub.net/video/148108/uss-constitution-boarding-pike-and-gun-drills-b-roll>

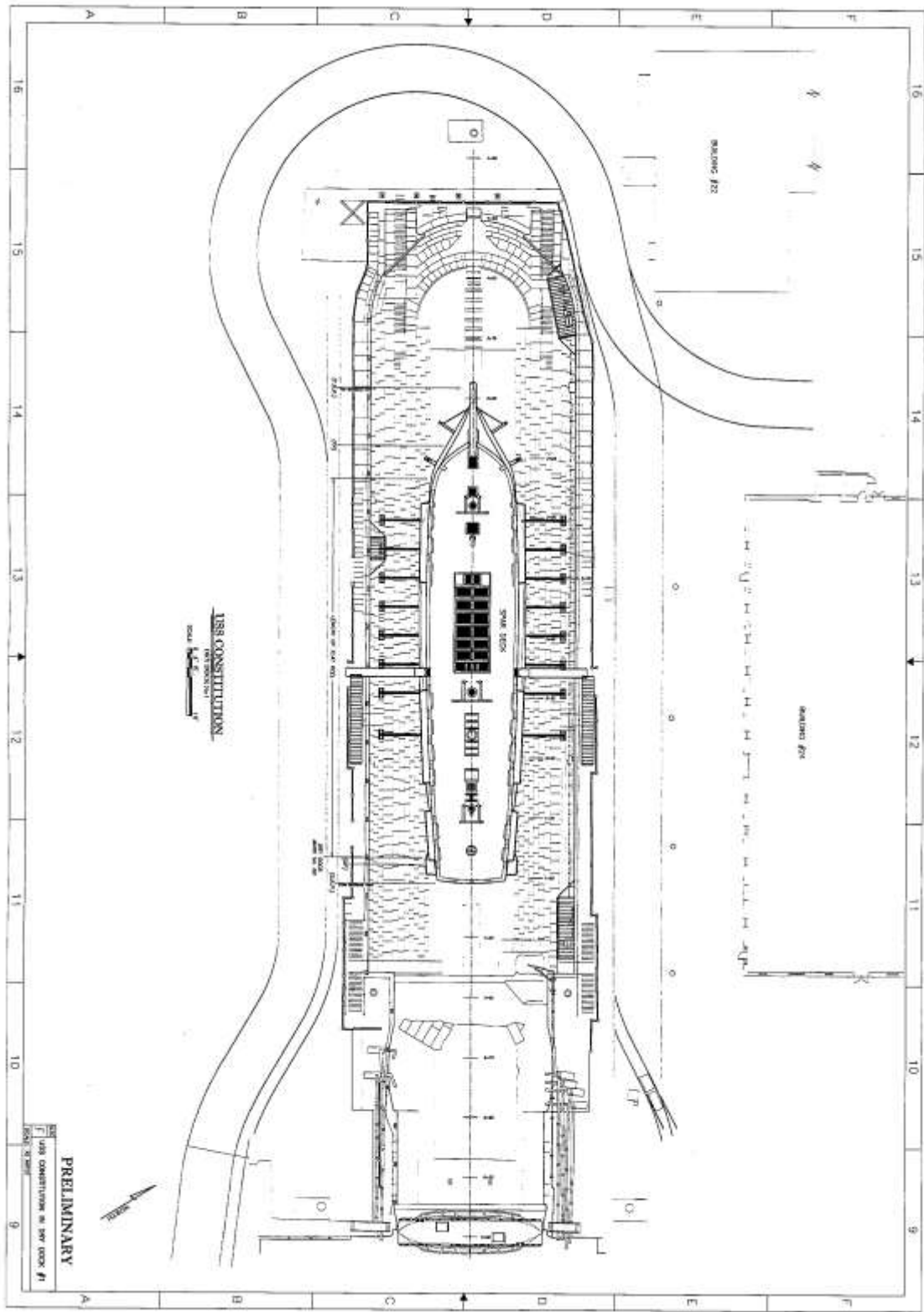
USS Constitution FY 2015–2017 Restoration Work List

Compiled by Naval History and Heritage Command, Detachment Boston

This restoration work list was compiled by the Naval History and Heritage Command Detachment Boston in advance of the 2015 dry docking. The preliminary drawings provide a sense of the dry dock setup.

- Down-rig USS *Constitution* and prepare Dry Dock #1, Charlestown Navy Yard, Boston National Historical Park
- Dry Dock USS *Constitution* and install support shoring and scaffolding
- Remove copper sheathing, lower hull of *Constitution*
- Remove lower hull caulking
- Remove and replace hull planks
- Inspect and restore cutwater (bow of *Constitution*)
- Caulk hull planking
- Install new copper sheathing on lower hull
- Undock and refloat USS *Constitution* and re-rig





USS *Constitution*—Significant Rebuilding/Repair/Restoration Periods, 1801–2017

From Naval History and Heritage Command, Detachment Boston

- 1801–1803 USS *Constitution* at May’s Wharf, Boston, for overhaul, including: new decking, select hull planking, repairs to chain and fire pumps, new yards and other spars; hove down for new copper sheathing, hull caulking, and preparations for departure for Mediterranean Sea as squadron flagship.
- 1804 Collision between USS *Constitution* and USS *President*, 12 September, Tripoli; extensive damage to *Constitution*’s bow area included: complete destruction of Hercules figurehead and cutwater; flying and standing jib booms and sprit sail yard carried away. Throughout the rest of September and into mid-October, *Constitution*’s bow was rebuilt, including a new billethead for decoration, re-caulking of decks, rigging and spar work, etc.
- 1812 April–June: Overhauled, Washington Navy Yard—included heaving down to clean and repair copper sheathing; new decking; new spars and rigging.
- 1812 and 1813 Repairs from battles with HMS *Guerriere* (19 August 1812) and HMS *Java* (29 December 1812), included being hove down, Charlestown Navy Yard.
- 1820–1821 Overhauled, Charlestown Navy Yard—included repairs from battle damage from 15 February 1815 battle with HMS *Cyane* and HMS *Levant*; hove down and copper sheathing replaced; prepared for departure for the Mediterranean.
- 1828 Winter/spring—“a complete overhaul” at Port Mahon, according to George Jones’ 1829 *Sketches of Naval Life...from the Brandywine and Constitution Frigates*, vol. 2; 219. Fall—survey of physical condition of USS *Constitution* at the Charlestown Navy Yard in preparation for extensive rebuilding.
- 1833–1834 First ever dry docking of *Constitution*, Charlestown Navy Yard (June 24, 1833 docked)—extensive hull and structural replacement work.
- 1847–1848 Overhauled, Charlestown Navy Yard—included longitudinal plans drawn of the ship by Samuel Pook, dated 1847 and 1849; beginning transition of USS *Constitution* from active warship to sailing training vessel for the United States Naval Academy.
- 1857–1860 *Constitution* at the Portsmouth Naval Shipyard; hauled (1858), part of the transition to a stationary school ship at the U.S. Naval Academy; classrooms and separate spaces set aside below decks for the instruction of the midshipmen, including a structure over the main hatch and a poop cabin on the after part of the quarter deck; it is likely that the stern windows were changed during this rebuild, from 6 original windows at the captain’s cabin to 3 windows and 2 portholes and 3 windows at upper transom level.
- 1871–1878 On-again, off-again rebuild of *Constitution*, Philadelphia Navy Yard; hauled, hull planking stripped off, billet head replaced along with much bow work. Ship was used as one of two transport vessels to take the U.S. exhibits to the

- Paris Exposition of 1878; cargo capacity of *Constitution* had to be at its greatest for this trip.
- 1879 17 January—While sailing from France on return trip to the United States, *Constitution* grounded off the south coast of England; 21 January—Dry docked at Dock #11, Portsmouth Shipyard, England, to make certain there was no permanent or structural damage; 24 January—Undocked; no visible damage from grounding. 5 September—Dry docked, Brooklyn Navy Yard; 10 September—Undocked, Brooklyn Navy Yard.
- 1906–1907 “Cosmetic” work on *Constitution*, Charlestown Navy Yard. Considered the first true restoration of *Constitution* as the goal was to strip away the receiving ship “house,” restore a sailing rig, correct the hull structure to her 1812 era, and create replica long guns so that *Constitution* would exhibit an outward appearance of that of a War of 1812 vessel. The restoration project was well-intentioned but historically inaccurate concerning the replica guns and elements of the rig; little to nothing below decks was restored or updated.
- 1927–1931 First significant 20th century restoration; 85% of *Constitution* was replaced while she was in Dry Dock #1, Charlestown Navy Yard. Ship’s plans from several 19th century eras used, thereby creating a representation of a warship that had never actually existed in the U.S. Navy. For 80 years, the vessel created from the 1927 restoration was billed as representing *Constitution* from her War of 1812 era, which was not the case.
- 1936–1964 USS *Constitution* was dry docked occasionally during this period for hull plank replacement, caulking, rigging work including masts and yards, etc. There is no significant work executed on the ship during this nearly 30-year period of time; in the 1960s the transition from hemp to polypropylene rigging occurred and the use of laminated white oak and Douglas fir began.
- 1973–1976 *Constitution* dry docked and significant below-the-waterline work was executed, including replacing the copper sheathing installed in the 1927 restoration, some framing and rigging work; beginning of research into the 1812 configuration of *Constitution*’s hull.
- 1992–1996 *Constitution* dry docked for the second most important 20th century restoration; using research into the historical record, this dry docking put forward the 5-part strengthening initiative—re-creating and installing into the ship structural elements with which she had been built, but which had long ago been lost; replacement of spar deck; significant updating of the ship’s rig. The oldest known model of USS *Constitution*, the 1812 “Isaac Hull” model at the Peabody Essex Museum was an important 3-D piece of historic documentation that helped to inform the upgrade to the rigging, etc.
- 21 July 1997 USS *Constitution* sailed under her own power, downwind for one hour, for the first time in 116 years, in commemoration of her 200th anniversary.
- 2007–2010 Water-borne restoration of *Constitution*; the upper bulwarks were lowered and the waist bulwarks were opened as per 1812 configuration—20 tons of unnecessary upper hull structure removed, thereby relieving excess weight

from 215-year-old keel; spar deck replaced; select deck beams replaced; select hull planking replaced.

- 19 August 2012 USS *Constitution* sailed for approximately 15 minutes, downwind, in commemoration of the 200th anniversary of the War of 1812 and *Constitution's* victory over HMS *Guerriere* on 19 August 1812.
- 18 May 2015 USS *Constitution* entered Dry Dock #1, Charlestown Navy Yard, for 26-month restoration including replacement of 100 hull planks and the 1995 copper sheathing, caulking, replacement and refurbishment of rigging, rebuild of cutwater, and installation of new trailboards on the bow.
- 23 July 2017 USS *Constitution* to be undocked from Dry Dock #1, Charlestown Navy Yard.

Sources consulted:

1. Martin, Tyrone G. *A Most Fortunate Ship, A Narrative History of Old Ironsides*. Naval Institute Press (Annapolis, MD: 1997).
2. Martin, Tyrone G. “*Constitution's* Major Maintenance.” List compiled from Martin’s essay “USS *Constitution* – Historical Maintenance & Structural Information” as part of the USS *Constitution* Maintenance Manual, 1982.
3. Desy, Margherita M. “USS *Constitution*—Dry-dockings & Costs: 20th Century.” Researched and written 2012, updated 2014.
4. Knox, Capt. Dudley W. *Naval Documents Related to the United States Wars with the Barbary Powers*. United States Government Printing Office (Washington, DC: 1939+), volume V.

Copper Sheathing for USS *Constitution*

From Naval History and Heritage Command, Detachment Boston

The 2015–2017 restoration of USS Constitution included work to replace the ship's copper sheathing. The following text from Naval History and Heritage Command, Detachment Boston, was prepared in advance of the 2015 dry docking and provides historical context for the work.

On March 27, 1794, Congress passed the “Act to provide a Naval Armament” which authorized President George Washington to acquire a fleet to create the new United States Navy. Joshua Humphreys, a ship designer in Philadelphia, had persuasively argued for frigates (medium-sized sailing warships) as they would be the most economical, allowing the new Navy to get the most ship for the \$600,000 allocated for creating the fleet.

Paul Revere, of “Midnight Ride” fame in the American Revolution, was a 60-year old silversmith, merchant, and foundry man in 1794. He contracted with Henry Jackson, the Boston Naval Agent in charge of obtaining materials for the building of USS *Constitution*, to provide the copper and brass fittings for the ship “...as cheap as anyone and as well.”¹ Revere’s foundry provided tons of drawn copper bolts used to fasten *Constitution*, a 242-pound bell, and other fittings between 1794 and 1798.

Each of the six frigates that made up the new U.S. Navy was to be “copper bottomed,” i.e., covered below the waterline in thousands of pieces of overlapping copper sheets. England’s Royal Navy began copper cladding its warships in 1758 and found it extended the life of the ships by preventing boring mollusks from destroying the wood. Copper sheathing also allowed for greater ease in cleaning barnacles and crustaceans from ships’ bottoms.² The U.S. Navy was to do the same, and because rolled copper sheathing was not yet manufactured in America, Paul Revere became the “middle man” and acquired English sheet copper that was then sold to the United States Navy. Enclosed with a letter dated April 21, 1794, Joshua Humphreys listed “An estimate of the quantity of Timber Plank &c for a frigate...” the size of *Constitution*, including the copper needed—“12000 feet of sheet copper for bottom.”³

On July 2, 1797, just months before *Constitution* was to be launched in Boston Harbor, the Secretary of War wrote to George Claghorne, *Constitution*’s Naval Constructor:

“It being of importance to the United States that the Frigate Constitution should be coppered on the Stocks before she is Launched into the Water – you will therefore be pleased to cause the said Ship to be coppered as high as light water mark as soon as the Bottom is prepared, as it will prevent heaving down afterwards and a Consequent heavy expense...”⁴

In early 1803 USS *Constitution* was readied by Commodore Edward Preble for a lengthy voyage to and deployment in the Mediterranean Sea against the North African Barbary Corsairs. The 1797 copper sheathing was worn out and new sheathing was needed. Enter Paul Revere again; by the 1803 re-fit of *Constitution*, he had a copper rolling mill in operation in Canton, MA, and was able to provide the thousands of sheets of copper needed for the ship.

Throughout the 19th century, *Constitution*’s copper sheathing was periodically replaced. Beginning with the 1833 docking of the ship in the new Charlestown Navy Yard dry dock,

souvenirs were fashioned from the copper sheathing (a miniature copper kettle was made from copper removed in the mid-19th century). In the 20th century, the sheathing was replaced several times. In the 1927–1931 extensive restoration of *Constitution* the final restoration report tallied the following about the copper:

“Ship has been copper sheathed from keel to 23’ 6” aft and to a height of 21’ 0” forward - 3,400 sheets of copper, 14”x 48”, in various weights; 28-oz. between keel and shoe, 26-oz. at turn of bilge and at water line; remainder 22-oz., all of which is secured to wood planking by 1 1/8” and 1 1/4” copper sheathing nails. Approximately 12.5 tons of sheathing copper, 1600 pounds [copper] sheathing nails, 38.4 tons new copper fastening[s] used; 4 tons old copper fastening [reused?], 8 tons old copper left in ship; a total of 63.7 tons of copper now in the ship.”⁵

Constitution’s copper sheathing was replaced in 1975, and again in the 1992–1996 restoration with the following amounts used:

- 3,400 sheets (14 inches x 48 inches) or approximately 10.2 tons (Weight per sheet = 6 pounds)
- Copper nails per sheet: approximately 120–150; approximately 2,500 pounds (Weight copper nails total)
- Rows of copper sheathing = 28
- Weight copper sheets and nails (total): approximately 11.45 tons⁶

Notes

1. As quoted in: Esther Forbes, *Paul Revere & the World He Lived In* (Boston: Houghton Mifflin Company, 1943), 378.
2. Edgard Moreno, “Patriotism and Profit: The Copper Mills at Canton,” in *Paul Revere – Artisan, Businessman, and Patriot: The Man Behind the Myth*, The Paul Revere Memorial Association (Boston, MA: The Paul Revere Memorial Association, 1988), 98.
3. Joshua Humphreys’ enclosure in letter, Secretary of the Treasury, Alexander Hamilton from Secretary of War, James McHenry, 21 April 1794. *Naval Documents Related to the...Barbary Powers*, Volume 1, 1785-1801 (Washington, DC: Government Printing Office, 1939), 73, 75.
4. Secretary of War, James McHenry, to George Claghorne, 27 July 1797. *Naval Documents...Barbary Wars*, Volume 1, 205.
5. Commandant, [U.S. Navy Yard], Boston, “U.S. Frigate CONSTITUTION (IX21) – Research Memorandum,” date stamped “Nov 27 1931,” 60. The final phrase, “...total of 63.7 tons of copper now in the ship” is ambiguous—does this weight refer to all copper in the ship’s structure, including pins, bolts, etc.? Or, did it mean only the copper sheathing and sheathing nails used below the waterline (whether new or re-used copper)?
6. Note: The 1992–1996 restoration weights provided do not include copper bolts in USS *Constitution*, therefore this is not a weight of the total amount of copper currently in the ship.

A Brief History of USS *Constitution*, “America’s Ship of State”

By Margherita M. Desy, Historian, Naval History and Heritage Command, Detachment Boston

At the close of the American Revolution in 1783 the new United States sent its merchant fleet afar to trade American products for goods from Europe and the Far East. After 1785, however, there was no Continental Navy and U.S. merchant vessels sailed unprotected. The vulnerable American fleet was harassed by the British and French in the Atlantic and the Caribbean in the 1790s. At the same time Barbary Corsairs of North Africa captured U.S. vessels and crews and held them for ransom. The U.S. Congress authorized a new navy in 1794 “in defense of commerce” and between 1794 and 1800, the Federal Government built six frigates. USS *Constitution*, launched in Boston on October 21, 1797, from Edmund Hartt’s shipyard (site of Constitution Wharf, U.S. Coast Guard base), is the sole survivor of the original U.S. Navy. Joshua Humphreys, the principle designer, determined that the ships had to be the strongest, fastest, and most heavily armed frigates of the era. *Constitution*’s three-layered hull, composed of exterior and interior white oak planking over dense live oak framing (ribs) spaced close together, forms a dense and sturdy structure more than 22 inches thick at the waterline. This is the ship’s “iron” sides.

USS *Constitution*’s career began on July 22, 1798, when she sailed to the Caribbean to protect American merchant vessels that were being stopped and captured by French privateers. This first conflict to involve the U.S. Navy came to be known as the Quasi-War with France. Several captures were made by *Constitution* and her crew, but a notable event under Captain Silas Talbot’s command was the first successful attempt at “underway replenishment.” Talbot, by trans-shipping supplies from a stores ship to *Constitution* without landing in a port allowed him to keep the ship at sea 347 days out of 366—a remarkable feat for the U.S. Navy in 1799.

By 1801, the North African state of Tripoli had declared war on the United States over perceived inadequate tribute payments to Tripoli by the U.S. Government. *Constitution*, under Commodore Edward Preble, sailed to the Mediterranean Sea in 1803. In October 1803, another American warship, USS *Philadelphia* ran aground in Tripoli Harbor and was captured, along with all her officers and sailors. Preble determined to remove the American frigate from the Tripolitans and rescue the imprisoned American crew. In a daring night raid on February 16, 1804, Lieutenant Stephen Decatur and a hand-picked group of junior officers and sailors snuck into Tripoli Harbor to destroy *Philadelphia*. The success of this dramatic event led to Decatur’s promotion to captain at the very young age of 25. Preble and his squadron carried out multiple bombardments on the palace at Tripoli in August and September 1804. By 1805, the conflict was drawing to a close and on June 3 the draft peace treaty with Tripoli was signed in *Constitution*’s great cabin, thus bringing to a close the first Barbary War.

As years went on tensions flared and steadily grew between America and Great Britain. With a rallying cry of “Free Trade and Sailor’s Rights,” the United States advocated for the right of neutral trade with warring nations. At the same time, the United States rejected the British Royal Navy’s practice of forcing American sailors to serve on its ships. *Constitution* was ready to put to sea when the United States declared war against Great Britain on June 18, 1812. Sailing in the

North Atlantic on August 19, 1812, *Constitution* came upon HMS *Guerriere* and the first frigate-to-frigate battle of the War of 1812 took place. Thirty-five minutes after the Americans opened fire upon the British, *Guerriere* had surrendered—an unexpected victory for the fledgling U.S. Navy. In this battle *Constitution* earned the nickname “Old Ironsides” when an American sailor, noting that some of the British cannon balls fell harmlessly off the ship’s stout oak hull, purportedly shouted, “Huzza! Her sides are made of iron!” “Old Ironsides” would repeat this victory in two more battles with the Royal Navy—a stunning War of 1812 record unequaled by any other warship in the U.S. Navy.

USS *Constitution*’s career continued for decades. In the 1820s and 1830s, she would regularly sail to the Mediterranean Sea to protect American commerce. In 1844, the aging warship began a two year around-the-world cruise that took her and her crew to over 25 foreign ports, including Mozambique, Borneo, Cochin China (Vietnam), Java, and Mexico. *Constitution* was only the ninth American warship to visit in China, showing how important the growing American-China relationship was to the U.S. During the American Civil War, “Old Ironsides” was a stationary training ship for the United States Naval Academy in Annapolis, MD. At the outbreak of the war, the warship was removed from Annapolis and away from the threat of being captured by Confederate forces. She spent the remainder of the war in Newport, RI, where the Academy had relocated.

Periodic repair and re-building episodes in *Constitution*’s long 19th century career kept the ship sailing until 1881. Upon being finally retired by the autumn of that year, she was sent to the Portsmouth Navy Yard to be turned into a “receiving ship”: a large barn covered her upper deck and included barracks and offices for sailors and officers. In 1897, just before “Old Ironsides” turned 100, the ship returned to Boston for a city-wide celebration of her storied career. After the turn of the 20th century, *Constitution* was restored at different times, including the massive 1927–1931 restoration that saw approximately 85% of the ship completely replaced. The “National Cruise” of 1931–1934 was in thanks to the American school children who had raised \$154,000 in a “pennies campaign” toward the restoration and for the many donations of materials for the rebuilding. *Constitution* was towed by a mine sweeper and visited 76 ports on the Atlantic, Gulf, and Pacific coasts, hosting over 4.6 million visitors. Since her return to Boston in 1934, the ship has only once left her home base at the Charlestown Navy Yard. After the 1992–1996 restoration, during which structural strength was returned to the nearly 200-year-old warship, she was towed to Marblehead, MA, on July 20, 1997. On the following day, July 21, 1997, “Old Ironsides,” in celebration of her 200th anniversary, set sail under her own power for the first time in 116 years.

In 2009 USS *Constitution* was designated as America’s official “Ship of State”—the only ship of state in the world. The ship has now seen service in four different centuries and “Old Ironsides” has accumulated many superlatives including that she is the oldest commissioned warship afloat in the world and the world’s oldest vessel that can still sail under its own power.

Two hundred years ago the National Intelligencer boldly stated in its May 23, 1815, edition: “Let us keep ‘Old Iron Sides’ at home. She has... become a Nation’s ship, and should be preserved...in honorable pomp, as a glorious monument of her own, and our other naval victories...preserve her from decay: that our children, and children’s children, may view this

stately monument of our Naval Triumphs.... Let us preserve her as a precious model and example for future imitations of illustrious performances!" The 2015 restoration demonstrates the commitment of the United States Navy to preserving and promoting its heritage by sharing the history of "Old Ironsides" and the stories of the men and women who have faithfully served with distinction on the warship's decks for 217 years. When a visitor steps foot on the deck of USS *Constitution*, he or she is making contact with the beginnings of the United States Navy, a navy that has kept sea lanes free for more than 200 years. USS *Constitution* is "a Nation's ship" indeed.

List of Vessels Captured by USS Constitution

Based on Research Compiled by Commander Tyrone G. Martin, (USN, Ret.)
58th in Command, USS Constitution

USS Constitution began her warship career on July 22, 1798, when she sailed to the Caribbean during the Quasi-War with France. Fifty-seven years later her active career ended in 1855, when she returned home from having been the flagship of the African Squadron. Constitution was one of the most successful U.S. Navy warships; she captured 33 vessels during her long and distinguished career.

1798

September 8	<i>Niger</i> (24 guns)	British privateer
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1799

January 16	<i>Spencer</i>	French prize; former British vessel
March 27	<i>Neutrality</i>	French prize; former American vessel
April 3	<i>Carteret</i>	French prize; former British packet vessel
September 15	<i>Amelia</i>	French prize; former Hamburg vessel

1800

February 1	<i>Swift</i>	Trafficker, American schooner
May 8	<i>Ester</i> (3 guns)	French privateer (later returned as it had been captured in a neutral port)
May 8	<i>Nymph</i>	French prize; former American vessel
May 9	<i>Sally</i>	Trafficker, American vessel
May 10	<i>Sandwich</i> (6 guns)	French letter-of-marque vessel

1804

September 11	_____	Blockade runner, armed Ottoman poleacre
September 11	_____	Blockade runner, armed Ottoman poleacre

1805

April 24	_____ (8 guns)	Privateer, Tunisian xebec
April 24	_____	Tunisian prize; former Neapolitan vessel
April 24	_____	Tunisian prize; former Neapolitan vessel

1810

May	<i>Golconda</i>	Trafficker, American vessel
May	<i>Rose</i>	Trafficker, American vessel

1812

August 10	<i>Lady Warren</i>	British brig
August 11	<i>Adiona</i>	British brig
August 15	<i>Adelina</i>	British prize; former American vessel
August 15	_____	British brig; burned
August 19	HMS <i>Guerriere</i> (38 guns)	Royal Navy frigate; former French Navy;

November 9	<i>South Carolina</i>	destroyed British-licensed American brig (capture later considered illegal)
December 29	HMS <i>Java</i> (38 guns)	Royal Navy frigate; former French Navy, <i>La Renomee</i> ; destroyed
<u>1814</u>		
February 14	<i>Lovely Ann</i>	British armed merchant ship; used as cartel
February 14	HMS <i>Pictou</i> (14 guns)	Royal Navy schooner; destroyed
February 17	<i>Phoenix</i>	British schooner; destroyed
February 19	<i>Catherine</i>	British brig; destroyed
December 24	<i>Lord Nelson</i>	British brig; destroyed
<u>1815</u>		
February 18	<i>Susanna</i>	British vessel
February 20	HMS <i>Cyane</i> (34 guns)	Royal Navy frigate
	HMS <i>Levant</i> (18 guns)	Royal Navy corvette (recaptured by the British)
<u>1853</u>		
November 3	<i>H.N. Gambrill</i>	American slave vessel

USS *Constitution* Fact Sheet

*Compiled by Margherita M. Desy, Historian, NHHC Detachment Boston/USS Constitution
January 2017*

USS *Constitution* was launched October 21, 1797, from Edmund Hartt's shipyard in Boston (site of present-day *Constitution* Wharf/U.S. Coast Guard base). She first sailed on July 22, 1798, as one of the six frigates that began the new United States Navy that was created "in defense of commerce." *Constitution's* final construction cost was \$302,718.84. She is remembered for capturing 33 vessels in 57 years of active service and for her three War of 1812 victories against the British Royal Navy. *Constitution's* first War of 1812 battle occurred on August 19 against HMS *Guerriere*. The defeat of *Guerriere* was the first frigate-to-frigate victory of the U.S. Navy over the Royal Navy, then the largest navy in the world. *Constitution* became "Old Ironsides" when an American sailor noticed that some of *Guerriere's* shot failed to penetrate *Constitution's* thick oak hull. "Huzza! Her sides are made of iron!" the sailor purportedly exclaimed, and thus the nickname was born.

USS *Constitution* became "America's Ship of State" in October 2009, is the world's oldest commissioned warship afloat, and is the oldest sailing vessel worldwide that can still sail under her own power. *Constitution* sailed for the first time in 116 years on July 21, 1997, to commemorate her 200th anniversary and again on August 19, 2012, to commemorate the 200th anniversary of the War of 1812 and her battle with HMS *Guerriere*.

General Characteristics

USS *Constitution* is the oldest commissioned warship afloat in the world. Nicknamed "Old Ironsides" in the War of 1812, USS *Constitution* is interpreted today to the 1812 era.

Builder: Col. George Claghorne, Edmund Hartt's Shipyard, Boston, MA

Launch Date: October 21, 1797

First Sail Date: July 22, 1798

Unit Cost: \$302,718 (1797 dollars)

1812 Propulsion: 48 sails, over 44,000 square feet of sail, equal to over 1 acre of canvas

Length: length overall 305 feet (93 meters); 207 feet (63.1 meters), billet head to taffrail; 175 feet at waterline (53.3 meters)

Height: Main mast, from the spar (upper) deck to the top of the mast, is 172 feet (54.4 meters) today

Beam: 43.5 feet (13.3 meters)

1812 Draft: 24 feet aft, when fully loaded (7.3 meters)

Draft Today: 22.5 feet aft (6.9 meters)

Displacement: 1,900+ tons (today)

1812 Speed: 13+ knots (approx. 15 miles per hour, 24 km. per hour)

1812 Armament:

—Spar Deck: 24, 32-pound carronades, 4–8 crew, range of fire approx. 400 yards; 1, 18-pound bow chaser

—Gun Deck: 30, 24-pound long guns, 7–14 crew, range of fire approx. 1,200 yards

1812 Boats: Used for transporting officers and crew between ship and shore for communication purposes, landing parties, transporting goods and services for the ship, and shore leave.

—36ft Launch (1)

—28ft whaleboat (2)

—27ft and 28ft cutters (4)

—Gig (1)

1812 Crew: Over 450 Sailors and Marines

Crew Today: 3 officers, 85+ enlisted U.S. Navy men and women

Homeport: Charlestown Navy Yard, Boston National Historical Park

Additional resources

www.navy.mil/local/constitution

www.usconstitutionmuseum.org

<https://usconstitutionmuseum.org/restoration/blog/>

<https://www.nps.gov/bost/learn/historyculture/cny.htm>

USS Constitution Chronology

Compiled by USS Constitution Museum

27 March 1794	The Naval Armament act authorizes the construction of six frigates (four 44 guns, two 36 guns)
1794–1797	USS <i>Constitution</i> under construction at Edmund Hartt’s Shipyard, Boston <ul style="list-style-type: none">• 10 May 1797, USS <i>United States</i>, 44, launched in Philadelphia, PA• 7 September 1797, USS <i>Constellation</i>, 36, launched in Baltimore, MD• 21 October 1797 USS <i>Constitution</i>, 44, launched in Boston, MA• 15 August 1799, USS <i>Congress</i>, 36, launched in Portsmouth, NH• 2 December 1799, USS <i>Chesapeake</i>, 44, launched in Gosport (now Norfolk), VA• 10 April 1800, USS <i>President</i>, 44, launched in New York, NY
22 July 1798	Sails from Boston to Caribbean on first cruise
1798–1801	Quasi-War with France; West India Squadron flagship, 1799–1801
1801–1803	In ordinary and repair, Boston (To say that a ship was “in ordinary” meant that it was temporarily out of commission in a dry dock or harbor. When ships were placed in ordinary, crews removed their masts, rigging, sails, and guns stored them ashore. Today, a ship in a similar state is said to be “mothballed.”)
1803–1805	Barbary War, Mediterranean Squadron flagship
1805–1807	Mediterranean Squadron flagship
1807–1809	Repair in New York
1809–1810	Flagship of the “northern division of ships for the protection of the American coast.”
June 1810–1811	Northern Squadron, Captain Isaac Hull in command
August 1811–February 1812	Voyage to France, England, and Holland

1812–1815	War of 1812 <ul style="list-style-type: none"> • 19 August 1812 Defeats HMS <i>Guerriere</i> • 29 December 1812 Defeats HMS <i>Java</i> • 20 February 1815 Defeats HMS <i>Cyane</i> and HMS <i>Levant</i>
1816–1821	In ordinary and repair, Boston
1821–1824	Mediterranean Squadron flagship
1824–1828	Mediterranean Squadron
1828–1831	In ordinary, Boston
1830	Harvard professor and physician Oliver Wendell Holmes, Sr. writes “Old Ironsides” poem
1832–1835	Undergoes significant refit, Boston <ul style="list-style-type: none"> • March to June 1835 Voyage to France with Minister to France Edward Livingston
August 1835–July 1838	Mediterranean Squadron flagship
April 1839–November 1841	Pacific Squadron flagship
November 1842–February 1843	Home Squadron flagship
May 1844–September 1846	Around the World Cruise—sailed 52,370.5 miles
1846–1848	In ordinary and repair, Boston
October 1848–1851	Mediterranean Squadron
1 August 1849	Pope Pius IX visits ship at Gaeta, Italy
1851–1853	In ordinary and repair, New York
March 1853–June 1855	African Squadron flagship <ul style="list-style-type: none"> • 3 November 1853 Captures slaver <i>H.N. Gambriel</i>, Constitution’s last prize
June 1855–July 1857	In ordinary, Portsmouth, NH

July 1857–August 1860	Refit and converted to school ship, Portsmouth, NH
August 1860–September 1871	School ship, U.S. Naval Academy, Annapolis, MD, and Newport, RI (USS <i>Constitution</i> returned to Annapolis with the Naval Academy when the Civil War ended)
1871–1872	In ordinary, Philadelphia, PA
1873–January 1877	Refit, Philadelphia, PA
1877	Training ship, Philadelphia, PA
1878–1879	Transports U.S. exhibits to Paris Exposition
1879–1881	Apprentice Training Squadron
1881–1882	In ordinary, New York
1882–1897	Receiving ship, Portsmouth, NH
September 1897	Returns to Boston for 100th birthday
1897–1906	On exhibition, Boston
1906–1907	Restoration
1907–1926	On exhibition
1927–1931	Restoration
1931–1934	National Cruise (three-coast tour, 76 ports, over 4.6 million visitors), returns to Boston
1934–1972	On exhibition in Boston <ul style="list-style-type: none"> • 24 August 1940 Named symbolic flagship of U.S. fleet • 1947 150th birthday • 1949–1954 Repair • 3 July 1954 Boston designated as homeport by Congressional Act, Public Law 523
1973–1976	Restoration

1976–1992	<p>On exhibition in Boston</p> <ul style="list-style-type: none"> • 8 April 1976 USS <i>Constitution</i> Museum opens in Navy Yard Bldg. 22 • July 1976 Leads Tall Ships parade, Queen Elizabeth II visits for national bicentennial
1992–1996	Restoration
1997	<ul style="list-style-type: none"> • 21 July Sails for first time in 116 years • 21 October USS <i>Constitution</i>'s bicentennial
1998	<ul style="list-style-type: none"> • July 23–26 USS <i>Constitution</i> Bicentennial Salute (International ships salute USS <i>Constitution</i>'s extraordinary career.)
2007–2010	Restoration to return ship closer to 1812 appearance
19 August 2012	USS <i>Constitution</i> sails on the 200th anniversary of her battle against HMS <i>Guerriere</i>

The USS Constitution Museum is located in the historic Charlestown Navy Yard, across from USS Constitution and on the Freedom Trail. The USS Constitution Museum is a nonprofit, educational institution whose mission is to serve as the memory and educational voice of USS Constitution, by collecting, preserving, and interpreting the stories of "Old Ironsides" and the people associated with her.

USS Constitution: “America’s Ship of State”

Commander Sean Kearns, 73rd in Command, USS Constitution

USS *Constitution* was officially designated as “America’s Ship of State” October 28, 2009.

USS *Constitution*’s primary mission remains education and public outreach, and any “Ship of State” functions are an adjunct to the ship’s primary mission, according the National Defense Authorization Act for Fiscal Year 2010, section 1022. It is the sense of Congress that the president, vice president, executive branch officials, and members of Congress should use *Constitution* for the conducting of pertinent matters of state, such as hosting visiting heads of state, signing legislation relating to the armed forces, and signing maritime related treaties. The law was signed into effect by President Barrack Obama, after the House of Representatives and Senate passed the bill earlier in October 2009.

“I am really proud and humbled to be a part of this honor,” said Commander Timothy Cooper, *Constitution*’s 71st commanding officer, when the legislation was signed. “USS *Constitution* has always been the most visible reminder of the beginnings of our Navy. Now, USS *Constitution* is a visible reminder of America, and all that we stand for.”

Constitution was launched into Boston Harbor on October 21, 1797. In her years of active service, from 1798 until 1855, the three-masted wooden frigate fought in the Quasi-War with France, the Barbary Wars, and the War of 1812. Today, “Old Ironsides” is the oldest commissioned warship afloat in the world, has a permanent crew of 70 active duty U.S. Navy Sailors, and is visited by nearly half a million people every year.

The origins of “Old Ironsides”’ status as “America’s Ship of State” were in July of 1997, when then Commander Chris Melhuish, *Constitution*’s 65th commanding officer, had a vision for the future of the ship, shortly before he took command. “The idea struck me after Commander Michael Beck [*Constitution*’s 64th commanding officer] challenged me to create my vision for the ship, following his vision, which was to sail the ship for the first time in 116 years for *Constitution*’s bicentennial,” said Melhuish.

The status of the ship had inherently changed after that historic 1997 sail, with *Constitution* no longer thought of as merely a pier-side museum exhibit. “The best description of the ship was ‘Ship of State,’” Melhuish said. “That was the vision, and then began the long process of translating that vision into a concept.”

In October 2006 Melhuish laid out that concept on paper, which was endorsed by the Congress of the Naval Order of the United States and by Deputy Secretary of Defense Gordon England. Then, Massachusetts Senator Edward Kennedy sponsored the bill in 2008, but it did not make final passage into the National Defense Authorization Act for Fiscal Year 2009, which would take another year.

“The people of this country, through Congress, have done the right thing, which should have been done in 1815,” said Melhuish, referring to a National Intelligencer article that appeared in 1815. “Let us keep ‘Old Ironsides’ at home,” the newspaper author opined, shortly after

Constitution won a string of victories against her British adversaries in the War of 1812. “She has, literally, become a nation’s ship, and should be preserved. Not as a sheer hulk in ordinary (for she is no ordinary vessel); but, in honorable pomp as a glorious monument of her own, and other naval victories.”

“One hundred and ninety-four years later, we have recognized our greatest ship,” Melhuish said. “I’m very, very happy about that.”

Naval History and Heritage Command, Detachment Boston

By Margherita M. Desy, Historian, Naval History and Heritage Command, Detachment Boston

The origins of the Naval History and Heritage Command Detachment can be traced to September 1897, when USS *Constitution* returned to Boston in time for the 100th anniversary of her October 21, 1797 launch. Although no one then could have predicted the ship's future, the responsibility for the long-term care of the aged warship was permanently transferred to the Boston (Charlestown) Navy Yard staff.

From the 1906–1907 restoration of the ship after her arrival in Boston through to the closure of the Charlestown Navy Yard in 1974, hundreds of shipyard workers helped to maintain, re-build, restore, and research USS *Constitution*. The closure of the Navy Yard did not interrupt the care of *Constitution* and from 1974 to 1991 SUPSHIP Boston was the supervisory department over the USS *Constitution* Maintenance and Repair Division in the Charlestown Navy Yard. Contributing to her significance, *Constitution* received two important recognitions in the mid-twentieth century. In 1954, Public Law 523 was passed—"An Act To provide for the restoration and maintenance of the United States Ship Constitution"—and in 1960, she became the first historic ship to be designated a National Historic Landmark by the United States Department of the Interior, National Park Service.

Since the transfer of oversight of the Detachment to the Naval Historical Center (today, the Naval History and Heritage Command [NHHC]) in 1991, the preservation and educational mission of NHHC has been embodied in the daily work of the Detachment Boston. NHHC's current [vision statement](#) is: "Enhance the warfighting effectiveness of the U.S. Navy, using the power of History and Heritage to pass on hard-won lessons, foster unit combat cohesion, and garner the continuing support of the American people." The Detachment Boston also strives to be the recognized authority on *Constitution*'s history and through its continuing work on "Old Ironsides" instill pride in America's early naval heritage. Approximately every 10 to 20 years the ship undergoes some element of re-building, bringing the unique skills of past and present shipwrights to the attention of *Constitution*'s visitors. Preserving *Constitution*, the oldest commissioned warship afloat in the world and helping to tell the story of the early U.S. navy through restoration work and public outreach is the everyday work of NHHC Detachment Boston. Every year, the Detachment also responds to hundreds of inquiries including those from high school students, national and international media, and historians writing on the early U.S. Navy. Over 500,000 international visitors walk the decks of *Constitution* annually and marvel at her physical structure; they are thrilled with the story of her battle with HMS *Guerriere* where she earned her nickname: "Huzza! Her sides are made of iron!" For over 115 years, the care, preservation, and history of *Constitution* have been in the capable hands of the staffs of the Boston Navy Yard and the Naval History and Heritage Command Detachment Boston ship restorers and historians.

The History of Boston National Historical Park's Charlestown Navy Yard

From National Park Service

Established in 1800 as one of the six original naval shipyards in the United States, the Charlestown Navy Yard is significant for its role in constructing, repairing, and providing service to U.S. Navy vessels from the time it opened until its closing in 1974. It is also significant as the site of one of the first two naval dry docks in the United States, the location of the Navy's only ropewalk, and for technical innovations such as die-lock chain. The yard evolved throughout its history to meet changing needs and naval technologies, and the current site contains resources from all periods of its existence.

In its early years the Charlestown Navy Yard was a small supply depot, but the War of 1812 changed that when Charlestown began work on the nation's first ship-of-the-line (battleship). In the 1850s Charlestown began constructing steam warships, and during the Civil War built *Monadnock*, an ironclad monitor. In the "New Navy" of the late 1880s and 1890s the yard was modernized, allowing it to service the steel ships fighting in the Spanish-American War.

Ambitious shipbuilding continued through World War I, but post-war naval treaties limiting the size of the world's major navies sharply curtailed the yard's activities. The Depression took away more work, and by 1931 there were calls to close the yard. President Franklin Roosevelt's recovery programs, coupled with Japanese aggression in Asia, led to a rapidly expanding navy. For the first time Charlestown was primarily a construction yard and it continued to build destroyers until the end of World War II. Its workforce swollen to 52,000, including a significant number of African Americans and women, the yard hummed day and night with the intensity of the war effort.

In the post-war years Charlestown found a new role modernizing old destroyers and specialized in missile, sonar, and radar conversions. The end of the rehabilitation programs and fleet cutbacks finally brought an end to Charlestown's long and honorable history.

When the yard was closed in 1974, 30 acres were set aside to form this historic site. A walk through Charlestown Navy Yard today conveys the awesome scope of production, array of skills, and complex and interrelated operations of naval shipyards. From the sleek lines of the World War II destroyer USS *Cassin Young* (DD 793) to the immense basin of the dry dock and the elegant Commandant's House that overlooks it, the yard shows the range of activities carried out by civilian workers and naval personnel.

Charlestown Navy Yard is part of Boston National Historical Park, one of 407 parks in the National Park System. Visit www.nps.gov to learn more about parks and National Park Service programs.

Boston National Historical Park is a unique collaboration of government owned and privately owned and operated historic sites associated with the colonial struggle for independence and the birth and growth of the United States. These nationally significant attractions include Old South Meeting House, the Old State House, Faneuil Hall, Old North Church, the Paul Revere House, the Bunker Hill Monument, the Bunker Hill Museum, Dorchester Heights Monument, and the Charlestown Navy Yard, including USS Constitution, the USS Constitution Museum, and USS Cassin Young.

The History of Boston National Historical Park's Dry Dock 1

From National Park Service

Before dry docks came into use in the late 15th century in England, the only way to service a ship's hull was to "careen" it—heave it over on its side, still floating, or laying in the mud at low tide. It was difficult and time consuming and put great strain on the hull. The answer was the dry dock. The concept is simple: float the vessel into a three-sided basin, then close the seaward end and remove all the water. The vessel settles on a cradle, its hull accessible. To undock: re-flood the basin, open the seaward end and float the vessel out.

But the concept's execution required a finely-engineered complex of masonry, engines, pumps, reservoir, tunnels, culverts, valves, and gates—in effect a huge well-coordinated machine. The Charlestown dry dock and the one built concurrently at Norfolk, VA, both designed by Loammi Baldwin Jr., were the first such naval structures in the United States. Six years under construction, the Charlestown dock was inaugurated in 1833 with the docking of *Constitution*. Over the course of its history Dry Dock #1 has been enlarged several times. In 1833, the dock was 341 feet; in 1858–1860 the dock was extended to 357 feet; the final extension occurred in 1947–1948, when the dock became 415 feet in overall length, the size that it is today.

It took the original eight pumps 4–5 hours to empty the tremendous basin. Other operations were to some extent governed by Boston Harbor's 10-foot tide. After the dock was enlarged the water level did not rise as rapidly as the tide during filling, so it took two high tides to do the job. For emptying and filling, the caisson (door) was filled with water and sunk in place between grooves in the dock walls. For docking and undocking, the caisson was emptied and floated out of the way on the high tide. It took 24 men working hand pumps for an hour and a half to expel the water from the caisson.

The original 1833 wooden caisson was replaced with a riveted steel gate that was launched October 31, 1901, and placed in service in 1902. Dry Dock #1 had its third caisson installed on April 1, 2015. The new caisson, built by Steel America in Norfolk, VA, weighs 296 tons and was launched from its barge into Boston Harbor by "Chesapeake 1000," the largest East Coast floating crane that is capable of lifting 1,000 tons.

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