



Superstructure Preservation Project **Fact Sheet**

Purpose

- Comprehensive repairs and preservation are in progress on the exterior of the Battleship Missouri's superstructure above the 05 level, including the forward fire control tower, forward stack, and forward mast.
- The objectives are threefold:
 - Repair and replace severely corroded steel within the project area.
 - Maximize the lifespan of repairs, applying protective coatings and improving rainwater drainage to better shield the "Mighty Mo" from the sun and the corrosive effects of moisture combined with salt air.
 - Restore the appearance of select, prominent features removed from the ship's exterior during decommissioning, bringing the USS Missouri Memorial Association one major step closer to meeting its historical preservation goal of restoring the battleship's overall appearance on December 7th, 1991. (On that date, the USS Missouri took part in the 50th anniversary observance of the attack on Pearl Harbor—a capstone event at the end of the ship's 48-year operational history.)
- By returning the "Mighty Mo" to her former glory prior to decommissioning, the USS Missouri Memorial Association is focused on preserving the past to educate future generations about her time during peace and war.

Planning

- The Superstructure Preservation Project is the single biggest repair and preservation effort to take place on the Battleship Missouri since the ship's drydocking in 2009-2010.
- The USS Memorial Association has presently dedicated \$3 million to the project, which includes covering the work of the prime contractor and supplemental quality assurance measures like third party inspection of steel repair and coatings work.
- Funding for the project is provided by the USS Missouri Memorial Association, a non-profit 501(c)(3) corporation, primarily through admission sales.
- Planning for the project began more than three years ago, with initial inspections taking place in 2015 and execution becoming a top priority in 2017.

Execution

- The project will take 32 weeks to complete with a target end date of September.
- Once the scaffolding and containment (similar in appearance to white, plastic shrink wrap) are in place, the core preservation work consists of steel repairs and application of protective coatings to the superstructure.

- Additionally, replicas of two SLQ-32 electronic warfare antennas on the 011 level, as well as a radome involved in the operation of remotely piloted aircraft on the 09 level, will be fabricated and installed. The USS Missouri had this equipment before its decommissioning in 1992; restoring the appearance of these items will enhance authenticity and help to reach the historical preservation target.

Fast Facts

- Work will require preparing by abrasive sandblasting of nearly *27,000 square ft.* of steel superstructure.
- Work will involve complete removal and off-site repair of the tallest portions of the ship (the upper sections of the forward mast).
- An estimated 17,000 lbs. of steel will be replaced.
- An estimated 700 US gallons of paint will be used.
- An estimated 25,000 total man-hours will be needed to complete the project.

About The "Mighty Mo"

USS *Missouri* (BB-63)

Class: Iowa-class battleship
Length: 887 feet
Height: 209 feet from keel to mast
Beam: 108 feet
Weight: 58,000 tons (full load); 45,000 tons (unloaded)
Speed: In excess of 30 knots (35 mph)

Dawn of the USS *Missouri*

- The USS *Missouri*'s keel was laid on Jan. 6, 1941, at the New York Naval Shipyard, Brooklyn, NY.
- Her armament included the main battery of nine 16 inch (internal barrel diameter) guns and twelve 5 inch (internal barrel diameter) anti-aircraft guns.
- The USS *Missouri* was launched Jan. 29, 1944 and commissioned on June 11, 1944.
- She was assigned to the Pacific Third Fleet and steamed into Pearl Harbor on Christmas Eve, 1944.

USS *Missouri*'s Service

- **Tokyo:** The USS *Missouri* was part of the force that carried out bombing raids over Tokyo and provided firepower in the battles of Iwo Jima and Okinawa.
- **End of World War II:** The USS *Missouri* secured its place in history as the site of Japan's unconditional surrender to the Allied Forces on Sept. 2, 1945, ending World War II. The ceremony for the signing of the Formal Instrument of Surrender was conducted by Supreme Allied Commander, General Douglas A. MacArthur.
- **Korea:** The Mighty Mo's main battery firepower became a legend in Korea, with her nine 16 inch-barrel guns hurling 1,800-pound shells (as heavy as Volkswagens) over 23 miles in defense of U.S. land forces.
- **Decommissioning:** In 1955, the USS *Missouri* was decommissioned and mothballed at the Puget Sound Naval Shipyard.
- **Recommissioning:** The USS *Missouri* was recommissioned in 1986 after undergoing an extensive modernization and refurbishment.
- **Persian Gulf:** Mighty Mo was deployed to the Persian Gulf where it fired its 16-inch guns and launched Tomahawk missiles against Iraqi positions during Operation Desert Storm.
- **Last mission:** The USS *Missouri*'s final operational mission occurred on Dec. 7, 1991, when the battleship led a contingent of ships into Pearl Harbor as part of the commemoration to mark the 50th anniversary of the attack that thrust America into World War II. This particular date also marks the USS Missouri Memorial Association's target preservation date.
- **Second decommissioning:** In 1992, the USS *Missouri* was decommissioned for the second time. In 1995, it was removed from the Navy's ship registry, clearing the way for the battleship to be donated by the Navy for preservation as a memorial museum.

- **Her legacy:** In August 1996, the Navy selected the non-profit USS Missouri Memorial Association as caretaker for the battleship and Pearl Harbor as its permanent home. On May 4, 1998, the Navy made it official, transferring the Mighty Mo's care to the association.

Fast Facts

- Designing the Missouri took 175 tons of blueprint paper. The ship was built in three years and required over 3 million man-days to complete the job.
- For comparison's sake, the Missouri is 279 feet longer and 11 feet wider than the USS Arizona. The Mighty Mo is also 5 feet longer and 18 feet wider than the RMS Titanic.
- Just how big is the Missouri? If you could stand the ship on end, it would be 332 feet taller than the Washington Monument.
- The nine 16-inch guns are the Mighty Mo's trademark feature. Each gun barrel is 65 feet long, weighs an incredible 116 tons, and can fire a 2,700-pound shell 23 miles in 50 seconds — with pinpoint accuracy.
- The *Missouri* was the last battleship ever built. She was also the most formidable. Built for speed and firepower and possessed thick steel armor plating that protected the hull (13.5 inches), the gun turrets (17 inches in front; 13 inches on the sides), the citadel (17 inches), and the conning tower sides (17.3 inches).

Visiting the Battleship Missouri Memorial

Today, the Battleship Missouri Memorial sits bow-to-bow with the sunken USS *Arizona* in the hallowed waters of Pearl Harbor. It is open daily from 8 a.m. to 4 p.m. with extended hours in the summer. Mighty Mo Passes are \$27 for adults and \$13 for children (4-12). The pass includes a single admission, plus a choice from one of four tour options. For \$25 more, guests may upgrade to the Heart of the Missouri Tour, a 90-minute guided tour that focuses the extensive mechanics behind this Iowa-class battleship, which was designed for speed and firepower. Children must be age 10 or older for this tour and closed-toe shoes are required. For visitor information or to reserve a tour, call toll-free at 1-877-MIGHTYMO (1-877-644-4896) or visit ussmissouri.org.