

The Center for WOODEN BOATS



SHAVINGS

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In the Shipyard! Lightship No. 83 “Swiftsure” Restoration
By Nathaniel Howe, NWS

Northwest Seaport’s big red Lightship No. 83 “Swiftsure” is usually a focal point of Lake Union Park’s Historic Ships Wharf. This summer, however, the 83’s dock is empty while the ship is undergoing major restoration work at Lake Union Dry Dock. Shipyard crews are removing the deteriorated wooden deck and deckhouses and then overhauling the steel beams beneath. When the ship returns, it will be ready for shipwrights to begin installing a new wooden deck. Visitors will be able to come aboard and watch the shipwrights and their apprentices work as they lay the new deck in the traditional way.

Lightship No. 83 is hard to miss. Its tall smoke stack, bright red hull, and brilliant beacon light grab the eye and spark the imagination. It is a quintessential steamship covered with big rivets, ventilation cowls, elegant woodwork, and literally all the ‘bells and whistles’ of the steam era. It also bears the signature lights, foghorns, and six-foot white lettering of America’s steadfast lightships.

Acting as floating lighthouses, lightships operated by the US Lighthouse Service and US Coast Guard guided thousands of ships around reefs and shoals into safe harbor channels. The first lightship was approved by Congress in 1819 and new ones were launched every few years until 1952. A total of 179 lightships were built to light America’s harbors and shipping lanes. During those years, lightships served on 116 different light stations on the East, West, and Gulf coasts as well as the Great Lakes. During the 1960s, automated buoys replaced manned lightships and the last one left its station in 1983.

Seattle’s Lightship No. 83 is among the oldest of its kind and it is the only lightship still equipped with a steam engine. It was built in Camden, New Jersey in 1904—eight years before *Titanic*. In the company of two other lightships, No. 83 steamed around South America (Panama Canal did not open until 1914) to enter West Coast service in 1905. During the next 55 years, it served on all five West Coast lightship stations (San Francisco, Blunts Reef, Columbia River, Umatilla Reef, and Swiftsure Bank). The Swiftsure Bank, marking the approaches to the Strait of Juan de Fuca and Seattle, is the station name painted on its side today.

During its years of active service Lightship No. 83 rescued shipwreck victims, narrowly survived collisions, served as an armed training ship in WWII, and made the transition from oil lanterns to electric lighting, radio, and radar. These systems are as significant as any valorous act of its crew. The advancements in shipboard electrification during the

ship's working life—most are still in the ship—brought sweeping changes to navigation and safety at sea. In 1960 Lightship No. 83 was replaced by automated offshore buoys and decommissioned. The ship joined the Northwest Seaport museum ship fleet in 1966 and became a National Historic Landmark in 1989.

Northwest Seaport is in the midst of Phase II of the Lightship Rehabilitation Project, a multi-year, \$1million project to replace the deck, rigging, remove hazardous materials, and restore the ship's primary electrical systems. When finished, the ship can be re-opened to the public. Volunteers can then join professional crews to restore the officer and crew cabins, revive some of the machinery, and bring the ship back to life.

In 2011 Lightship No. 83 was taken to the shipyard for Phase I to set up new rigging, conduct hazardous materials abatement, and to have a new electrical system installed. Now, in Phase II, much more work is being done. The deteriorated wheelhouse (built in 1937) and radio house are being removed and the ship's rotted wooden deck is also being removed. Shipyard crews will then clean rust and lead paint from the steel deck beams and crew spaces. The deck beams will then be repaired, primed, and painted and a tent erected over the open deck and the ship returned to the Historic Ships Wharf in late summer.

On May 21st, 2013 Lightship No. 83 was towed to the shipyard. Western Towboat Company donated the services of their tug *Flyer* to take the ship on its short journey across Lake Union. Easing up to the shipyard pier, workers came down to see the rare sight of a 1904 riveted hull arriving among the modern welded steel ships that fill the rest of the yard. For the crew assigned to work on the ship, it is a unique opportunity. Lake Union Dry Dock's general manager, Hobie Stebbins, pointed out "The restoration of Lightship No. 83 provides a bridge between past and present marine construction technology. Skills which were common at an earlier time but are no longer commercially relevant will be used in the restoration of this vessel." Lake Union Dry Dock prides itself in the handful of specialists they have been able to retain who still know how to work on large wooden or riveted steel hulls. One of the shipyard's carpenters stepped into the lightship's wooden wheelhouse, marveling at its stout seaworthy construction, and remarked "I've been a marine carpenter 14 years, but wow... This is something!"

Before any restoration work begins, Northwest Seaport ensures that any historic fabric that might be disturbed is thoroughly documented. Careful measurements have been taken and detailed blueprints are being produced for the historic wheelhouse, electrical system, steering and communication systems, and even the run of the deck planking. Northwest Seaport has enough restoration work underway to keep a full-time nautical archaeologist, Nathaniel Howe, on staff. Howe directed the documentation of the schooner *Wawona* in 2008-2009 and has now refocused on Lightship No. 83. Howe asserts, "We get an awful lot out of the work we do; archaeological documentation records the methods used to build the ship, it reveals new stories about its history, and it guides the restoration work that will follow."

In 2010 Howe brought in a crew of three more nautical archaeologists to map all the ship's wiring below the main deck, the crew spaces, and the rigging. For 6 weeks, Jaqueline Marcotte, Morgan McKenzie, and Lindsay Smith chased wires through the ship and measured shadows in the paint from long-gone bunks and shelving. In 2011, Howe worked with shipwright Brian Johnson of Ocean Bay Marine to examine the rotting deck and determine the method used to position, fasten, and terminate each run of planking. Ripping an old plywood patch off the deck, shipwright Johnson pointed to a diagonal seam across the end of a plank "See? This is a traditional straight-laid deck with the ends nibbed in half a plank-width and cut off square as the ship narrows. The guys who put this in back in the day were pros. They did it right."

Over the past month, documentation work has focused on the 1937 wheelhouse. "It is a lot more work than it looks," Howe said. "There are a lot of complex structural details in that wheelhouse and it takes a saw to get at them." To get all the work done, Howe was joined by Saxon Bisbee through the seaport's Nautical Archaeologist in Residence Program. Bisbee is a recent graduate of East Carolina University's nautical archaeology masters program and is spending several weeks assisting with documentation of Lightship No. 83's wheelhouse while staying aboard Northwest Seaport's other vessel, the 1889 tugboat *Arthur Foss*. Bisbee is also assisting with documentation and restoration work on that vessel. Aboard Lightship No. 83, Howe and Bisbee worked alongside shipwright Brian Johnson to carefully measure and record the entire wheelhouse, its joinery, to produce drawings, and remove all salvageable artifacts for preservation and later installation in the new wheelhouse.

When the ship returns from the shipyard, the really exciting work will begin. Shipwrights and their apprentices will start installing the new wooden deck. The work will be open for the public to come aboard and see. From catwalks stretched across the deck beams, visitors will get to talk to the shipwrights as they bolt down the new planks in the traditional way. They will also be able to see into the finely crafted crew cabins and officers' quarters below, almost like looking into a dollhouse. The biggest thing will be the rare opportunity for the public to observe traditional shipwrighting skills at work—skills that are usually hidden from view in commercial shipyards.

Re-opening Lightship No. 83 to visitors will launch the re-telling of life aboard a lightship and the hardship and danger faced in that service by the almost mythic characters who worked on these manned navigation markers—men who were a blend of lighthouse keeper, lifeguard, and steamship captain. The ship, too, is almost a caricature of the steamship era—rivets, heavy machinery, fine woodwork, and stout seaworthy construction evoking the spirit of adventure and bold technological confidence of a young industrial America. "Lightship No. 83 is amazing ship," Northwest Seaport president Shannon Fitzgerald remarks, "it has a totally different feel than any other museum ship around here that people are going to love." So keep an eye on the wharf for the big red lightship to return!