

LUNA LOG

November 1, 2000

Homeport: Boston, MA
Position: Boothbay Harbor, ME
Activity: Preparing for \$ 750,000
TEA-21 Shipyarding

Dear Friends ...

Since our last update in early 1999, events have brought the National Historic Landmark tugboat LUNA to the happy threshold of her rehabilitation and return to Boston as an important part of the harbor's historical fabric and resources. At long last, the Federal and State TEA-21 program advanced through complex stages through bid, evaluation and award. On October 13th the LUNA arrived at Samples Shipyard in Boothbay for major hull rehabilitation. Boston High School students are busy working on key wood projects and significant progress has also been made in replacing almost all of the topside fittings that were stolen or lost between her retirement in 1971 and rescue in 1995. Our volunteers have done a fantastic job of keeping LUNA afloat and strong.

By the autumn of 2001, the LUNA will return to Boston Harbor, taking her place at the Charlestown Navy Yard as a historical vessel and platform for learning about the commercial Port of Boston. The LUNA is the last full-sized wooden hulled harbor tug on the US Gulf and Atlantic coasts, representing the thousands of wooden tugs that were built between the 1840's and 1930's that helped build the eastern half of coastal America.

As the first diesel-electric tug built for commercial ship assist service, the LUNA represents the first use of diesel engine power and direct current electrical generators and motors aboard a docking tug in the world.

Follow the Luna's progress in this newsletter. We hope you will join this effort by supporting the LUNA!

*Brent Dibner
President*



A photo by the famed photographer Loren Graham of Swampscott, MA shows the LUNA in the 1930's in her original white hull and varnished deckhouse livery. (From the Tugboat Enthusiasts Society Collection)

TEA-21 Program

Since her rescue from dismantling in March 1995, LUNA has been in a state of semi-suspension, awaiting the authorization of the Federal and State government funds that were awarded to LUNA in 1995 and

formally announced by Mayor Menino in 1996. The unique nature of Luna's status – as an endangered National Historic Landmark – contributed to the complexity of resolving all of the programmatic issues. With the help of the City of Boston Landmarks Commission and the Massachusetts Historical Commission and Secretary William F. Galvin, Director Judy McDonough, and Assistant Director Elsa Fitzgerald, as well as representatives of Mass Highway Department, we have circumvented the stormy fiscal seas of the Big Dig!

Following a extensive selection process, LPS has retained an experienced master shipwright, David Short, principal of North American Shipbuilding and Repair of Freedom, ME. David has decades of experience building and repairing historic wooden ships and in 2000 he completed the extensive reconstruction of the oyster schooner CHRISTEENA at Oyster Bay, Long Island, NY.

TEA –21 Scope of Work

The Luna's scope of work is divided into more than 40 tasks within lower and upper work packages. Twelve shipyards and master shipwrights were invited to bid from bases in Maine, Massachusetts, and Rhode Island. The scope of work is entirely focused on the Luna's wooden structure. Among the key tasks include: replacing upper frames, replacing upper planking, planing and re-caulking the hull, replacing the keel shoe, rebolting the keel, rebuilding timbers at the deck edge/sheer line, rebuilding the bulwarks and caprails, repairing the tug's stem, rebuilding the stern rim, replacing the rubbing guards on the hull, repainting the hull, replacing outboard deck planking, and repairing deck beam ends.

Tow to the Shipyard

With a leaking hull that has been enclosed in a Sarnafil roofing membrane for five and half years, the movement of the LUNA to the winning shipyard in Boothbay Harbor, ME was a major undertaking that required careful preparations. The preparations included: installing and testing three main electric pumps, adding three more portable electric pumps, renting a four-inch gasoline pump and overhauling LPS's three-inch gasoline pump, renting two 10 kw gasoline generators, adding rubber roofing material to the main deck, installing two scuppers and freeing

ports to help the LUNA shed any water taken aboard on the main deck, adding bracing in the upper engine room to support the heavy funnel in rolling seas and adding four guy wires from the funnel top to the main deck beams, further locking the propeller shaft in place, rigging an audible bilge pump and general alarm system, taking on board more than 60 gallons



On a calm and sparkling day, the LUNA is seen under tow off Manchester, MA, heading for Boothbay Harbor. Volunteer Tom Sullivan can be seen on the foredeck, with the towline to the JAGUAR stretching out in front. Plywood guards were screwed into the forward hull to protect the Sarnafil membrane from floating debris. Black roofing material can be seen on the forward bulwarks. The discharge hoses from gasoline and electric pumps can be seen hanging over the side. (Brent Dibner photo)

of gasoline, renting a life raft and EPIRB, closing off fuel tank openings and the door from the forepeak scuttle to the engine room, and taking on board a wide range of safety equipment and supplies. Sea Tow services with boats and divers were retained on two-hour standby from bases at Newburyport, MA and Portland, ME. An anchor was lent to the LUNA by Boston Towing and Transportation.

After weeks of diligent preparation by volunteers, a sunny Thursday October 12th the LUNA backed away from Pier 5, South Boston at about 1100 hours. After a week of waiting for favorable weather, the 70-foot

700 hp tug JAGUAR arrived an hour earlier from New Bedford and set out a short hawser as the LUNA reached the main channel. By 11:45 the LUNA was towed past Castle Point, with many park visitors wondering what story was behind the graceful but strangely wrapped, elegant but battered tug being towed by another tug towards the sea. The seas were calm and the LUNA rocked and rolled gently during her 22-hour tow to Samples Shipyard.



A view of the LUNA off Manchester, MA. The Sarnafill hull wrap that kept her afloat for five and a half years is remarkably clean. A scupper can be seen cut through the aft bulwark. Two generators are located on the boat deck aft. A Zodiac raft is located on the stern deck and a skiff is located on the boat deck. The guy wires running from the top of the funnel can be seen.

Despite all of the preparations for major leaking, just one small electric bilge pump was all that was needed to handle the limited amount of water that penetrated the hull wrap, working a few minutes every half hour. The Luna's riding crew consisted of volunteers Rob Parrott of Needham, MA, Mike Saladyga of Somerville, and Tom Sullivan of Braintree, all three Coast Guard veterans. Volunteer Tom Vaughan had helped the boat prepare and cast off, working to the last minute on shore. By 0915 on a sunny Friday morning, October 13th, the LUNA once again proved her luck, arriving at the shipyard.

Samples Shipyard

The LUNA arrived at a yard that has worked on the LUNA in years past. We have strong evidence that Samples may have performed the last major wooden repairs to the tug in 1960, about 11 years before the tug was retired. As the Frank L. Sample Shipyard, the facility built wood-hulled rescue tugs for the US Navy in 1944. Today the yard repairs steel and wooden ships and boats, and repairs many large and fine yachts. The shipyard has a single 450-ton railway that will be Luna's home for about nine months. Recent major wooden ship projects have included the World War II T-boat ARGO, 111-foot ROSEWAY, 144-foot SHERMAN ZWICKER, and 132-foot VICTORY CHIMES.

Artifact Acquisition Started

With the help of a dollar-for-dollar National Maritime Historical Grant from the US Department of Interior, National Parks Service, LPS has begun an aggressive and sustained campaign to acquire topside artifacts that will complete her outfit. We initiated this campaign because such artifacts are in demand as decorative items and the supply of quality artifacts of the types LUNA requires is limited. This campaign has involved maritime artifacts dealers and even E-Bay auctions to locate original antique artifacts that are the same size, make, and whenever possible type as the original artifacts.

Thus far, the following artifacts have been acquired:

Original steering wheel	Port lights (13)
Brass whistle pulls (2)	Air horn of bronze
Engine controller (third unit)	Running lights (port and starboard)
Fire axe	Compass binnacle
Steering wheel stand (brass)	Searchlight for pilothouse
Megaphone	Clock (brass, 36 hour)
Ship's bell	Barometer (brass)
Clock (brass)	Fire hose nozzle (brass)
Orig. engine controllers (2)	

We continue to search for additional artifacts including an engine annunciator, towing lights, and wooden-cheek blocks for the lifeboat. We have used photographs of the LUNA, the original specifications, and interpretations of photographs to guide the process. In some cases, the artifacts have identifiable histories. For example the 36-hour clock came from the ocean-going tug BUTTERFIELD of 1917 and sailed aboard this tug for many years on the Great Lakes and the fire axe came from a docking tug that worked at an oil terminal in Freeport, Bahamas. These artifacts will be placed aboard the LUNA after the shipyarding, when a security alarm system is installed. We continue to search for a sound galvanized steel double-ended lifeboat, but are also taking measurements from the badly corroded original so that, if necessary, we can commission the construction of a replica.

As we complete the acquisition of these artifacts, our attention will turn to topside fabrication projects, including the skylight, lifeboat and supporting chocks, and pilothouse roof.

Major Grants Received

LPS was successful in a highly competitive round of National Maritime Historic Grants during 1999, winning \$12,500 to be matched dollar-for-dollar. These funds are being used to advance the topside rehabilitation of the LUNA. During 1999, LPS was fortunate to receive two significant new grants, one from the Abbot and Dorothy H. Stevens Foundation of North Andover, MA and the other from the Amelia Peabody Foundation of Boston, MA. The Adela & Valeda Lea Roy Foundation also provided a significant gift. Major support from the Dibner Fund of Wilton, CT also continued for the fifth year. Marsh & McLennan of New York, NY provided a grant for the fourth consecutive year, having increased its grants by nearly 100 percent. The Boston Globe gift for education continues to be applied to school projects such as McKinley Vocational in Boston.

McKinley High School Joins In Partnership

During 1999, LPS initiated a relationship with the City of Boston's McKinley Vocational (High) School's wood shop department, which is located near Fenway Park. With the assistance of School Administrator Mr. Tony Morrison, and wood shop teacher Mr. Rufino Espitia, students are completing the port and starboard running light boxes that will hold the running lights. A sample light box was fabricated out of pine and the final boxes are being crafted out of white oak. The boxes will be sealed and painted as the originals were -- red inside to port and green inside for starboard. Thanks to students Efrain Deletores, Daniel Edmonds, Wakeshia Andrews, Charles Martin, J.T. Williams, and Rene Cooper for their help. The students will next turn to the name boards for the bulwarks and pilothouse and will help install them for the Luna's return to Boston.



McKinley Vocational High School student Daniel Edmonds sands the white oak boards that later took form as the port and starboard running light boxes. Students will install these aboard the tug in 2001. Students are now turning to the large, ornate name boards for the tug's hull and pilothouse under the direction and direction of shop teacher, Rufino Espitia.

Supporting Members

In 1999, LPS structured its donation structure to create membership levels. The first \$500 donation came from Mr. William Hill of Martha's Vineyard, one of the nation's leading brokers of tugs and barges

Other Framer, Plankowner, and Captain contributions included gifts from Brent Dibner , David Dibner , William Hall , Howard Bruce, Lawson Levitz , Tom Sullivan , Davis Taylor , and Tom Vaughan . We thank our Friends and Deckhand donors including Barbara Clarke , J.A. Dexter , James Giammatteo , George P. Jordan , Adrian Lonsale , Steven Lang , Howard Levitz , L. Lonsale , Frank Menser , Cecil Nickerson , Robert Parrott , Michael Saladyga , and Hugh Ware.

On-Board Improvements

Pending the major shipyarding, the major thrust of on-board volunteer activity has been protecting LUNA from the elements, stabilizing her condition, and determining the condition of her machinery.

Protection of the elements was supported by washing all machinery to remove salt, and upgrading roof and siding protection. In 1999 LUNA volunteers applied a fresh coat of tarpaper and in 2000 the stern deck received similar treatment. The galley's restoration has been substantially completed, pending repair of the oil-fired stove and installation of the water-pump handle. The head has a period medicine cabinet and ceramic toilet installed (it is not functioning). In the pilothouse, temporary binnacle, wheel, radio, and compass have been fitted to help visitors imagine the layout. On the boat deck, a temporary skylight has also been erected to help outline the tug's silhouette. On the main deck, the rudder quadrant and upper stock have been scraped, primed and painted.

In the engine room, a cylinder head has been opened and efforts continue to free its piston from the corrosion suffered during immersion in Boston Harbor. Extraction of a piston will permit detail drawings of the cylinder and connecting rod to be prepared, as well as inspection of the cylinder liner. A workbench has been installed in the lower engine room portside, and a tilting drill press donated by volunteer Tom Vaughan of Quincy, MA has been installed in the forward starboard lower engine room. Two compressors were also donated by Tom for cleaning and painting purposes.

All of this work was performed by an extremely dedicated group of volunteers who have worked tirelessly on Luna's behalf. The core volunteer crew is comprised of: Rob Parrott , Mike Saladyga , Tom Sullivan , and Tom Vaughan , with additional

assistance from Bruce Lawson , Bruce Stewart , Mike Rauworth , and others.

LPS Official Website

Under the guidance of LPS administrator Howard Levitz , the official LPS website was activated in the Spring of 1999 at www.tugboatluna.org and was created by volunteer John Borelli of Tewksbury, MA. Readers should visit the site, which provides information on LPS, the LUNA's history and technical specifications, and history of Boston Harbor. On September 2, 2000 the site had its 1,000th "hit"!

Moving the Venus's Bitts

In one of the oddest trucking movements in Newton's history, Director and volunteer Tom Sullivan of Braintree, MA arranged for the return of fore and aft H-bitts of the sister tug VENUS from a warehouse in Newton, MA to a site in East Boston. Thanks to Vincent Tibbetts and Boston Towing and Transportation for assisting us with this project.

Luna's Location

Since the summer of 1998, LUNA was safely moored in South Boston at Pier 5, courtesy of the City of Boston's Boston Redevelopment Authority, who has been most supportive and helpful. The pier has come alive with the construction of concrete tunnel sections for the new Silver Line subway, and the LUNA has its own secured gate and fencing. Our neighbor was Modern Continental who provided us with assistance, including crane service to lift two large generators and pumps aboard in late September. In the Spring of 1999 the Harbor Lights tent was also relocated to Pier 5. On some Saturdays, our volunteer activity was livened by rock, pop, and even a Scottish military bagpipe tattoo.

For all intents and purposes the Luna's location is off limits to visitors, but this will happily change when the shipyarding is completed and LUNA returns to a public setting in the Boston Naval Shipyard. When we needed to shift the tug to accommodate a water line, Boston Towing & Transportation generously shifted the LUNA at no charge. Special thanks are due to Vincent Tibbetts , President of Boston Towing & Transportation and his crew. The LUNA sailed from its South Boston home on October 12.

Captain Paul Perkins' Oral History

During 1999, we have had the great privilege to meet with Captain Paul Perkins, a master of the LUNA from 1956 to 1970 and son of Captain Perkins, senior pilot of Boston Tow Boat Company prior to World War II. From him we have learned much about the LUNA, Boston Tow Boat, and with workings of the harbor – all of which has been written down and placed in LPS archives. Among the most important insights that we have learned are the following: 1) the LUNA and VENUS were designed for ship-docking and not for general barge work – they had no capstan's to tighten lines or kevels to help secure lines from barges; 2) the VENUS worked for several years for the Army Corps of Engineers at the Cape Cod Canal in the mid-1930's handling dump scows, and the LUNA relieved the VENUS occasionally; 3) the LUNA and VENUS had their own pier on Lewis Wharf so that they were away from the smoke of the steam tugs and able to move quickly off to assignments; 4) the tugs were frequently called to the Cape Cod Canal during World War II to free ships that had run aground; 5) the tugs were requisitioned by the War Shipping Administration for the duration of World War II to provide ship assistance to the government on a priority basis. The tugs however, were manned and controlled by Boston Tow Boat; 6) during the winter, the LUNA and VENUS had a steel ice plow installed at their stems to protect their stem and side planking; 7) the diesel-electric control of the LUNA and VENUS made them preferred ship docking tugs in Boston even when the more powerful (1,200 hp) diesel tugs appeared in the late 1940's; 8) Boston Tow Boat employed 89-foot long diesel direct-drive tugs built for the US Army, the JUPITER and SATURN for barge work in the harbor and on shoal draft rivers such as the Malden River. These tugs continued the company's ability to service all harbor activities.

A Boy's Memories

Former Medford resident Al Martell, now living in Florida, visited the LUNA and later sent copies of a large number of childhood photos of the LUNA and other Boston Tow Boat Company tugs at work in the harbor, docking ships and barges. As a boy, Al built a small rowboat and frequently rowed down the Mystic River to the main port. He also had an uncle who worked for Boston Tow Boat and took him aboard on many day trips. Al took photos with a small brownie

camera, capturing the fabric of the Port of Boston in the 1940's and 1950's.

LUNA Enrolled as Member of the Historic Naval Ships Association

The LUNA has been enrolled as an Historic Naval Ship by the Historic Naval Ships Association (HSNA). Although the LUNA was never commissioned in the US Armed forces, the tug began to serve the US Navy and US Army Engineers almost immediately upon delivery. Throughout her working life, the tug worked at the Charlestown Navy Yard, the Annex in South Boston, and Bethlehem's Fore River Shipyard in Quincy. During World War II, the tug was requisitioned by the War Shipping Administration for priority availability to the armed forces for the duration of the war. On many occasions the LUNA and her sister VENUS were dispatched to free grounded convoy ships in the Cape Cod Canal approaches. LPS is a member of the HSNA and the LUNA is listed on page 53 of its directory of Historic Naval Ships.

Attending the USS MASSACHUSETTS Launching

Through the generosity of the Battleship Cove, Fall River, MA a video copy of the news movie covering launching and fit-out of the USS MASSACHUSETTS has been provided to LPS. It clearly shows the LUNA and her sister VENUS attending the launch of the ship in 1940, working with several US Navy and Boston Tow Boat steam tugs.

Amongst America's Oldest Towing Companies

Boston Tow Boat traces its history back to 1857 when it was founded as the T-Wharf Towing. In 1860, Moran Towing was founded in New York Harbor and in 1864 McAllister Brothers was founded also in New York Harbor. Both Moran and McAllister remain in business today, while Boston Tow Boat ceased operations in December 1985. The first US-built propeller tug was introduced in Boston in 1844 by Captain Robert Bennett Forbes and the Boston shipping community as the R.B. FORBES. It was lost in combat during the Civil War. This innovative tug

had twin propellers and an iron hull. The first wooden harbor propeller tugs with steam engines were built in Philadelphia, PA in the late 1840's.

Help Support the LUNA!

LPS has created a series of membership levels. Your financial support is essential to us – we cannot survive without the support of you, our friends! Please support LPS – thank you!

Please Support the Luna!

Your Donations Help to Save and Rehabilitate the Luna

\$5000	Pays for approximately two sets of 6-inch by 4-inch planking along the hull of the tug.
1000	Provides funds to match \$9000 of Federal and State TEA-21 funds for Luna's restoration.
500	Pays the insurance for the LUNA for one month.
350	Provides funds to match \$350 of National Park Service Maritime Grant funds for Luna's restoration.
250	Pays for the annual publication of our newsletter.
100	Buys 30 board-feet of white oak – the Luna's restoration requires about 40,000 board-feet.
50	Pays the phone bill each month.
35	Pays the Luna's electricity bill each month.

YES, I WANT TO HELP SAVE THE LUNA!

Here is my check for \$_____ payable to the Luna Preservation Society.

Name

Street Address

City, State, Postal Code

(____)_____
Telephone

E-Mail

Membership Levels: \$5000 Framer, \$1000 Plankowner, \$500 Captain, \$250 Mate, \$100 Deckhand, \$50 Friend

Thank You!

Luna Preservation Society

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