

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Registration Form**

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Arthur Foss, ex-Wallowa

other names/site number Tugboat Arthur Foss

2. Location

street & number Central Waterfront at Moss Bay not for publication

city, town Kirkland vicinity

state Washington code 53 county King code 033 zip code _____

3. Classification

Ownership of Property

- private
- public-local
- public-State
- public-Federal

Category of Property

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

Contributing	Noncontributing
_____	_____ buildings
_____	_____ sites
<u>1</u>	_____ structures
_____	_____ objects
_____	_____ Total

Name of related multiple property listing: _____

Number of contributing resources previously listed in the National Register _____

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Signature of certifying official _____
Date

State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Signature of commenting or other official _____
Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

- entered in the National Register.
 See continuation sheet.
- determined eligible for the National Register. See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain:) _____

Signature of the Keeper

Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)
Transportation/Water Related

Current Functions (enter categories from instructions)
Museum

7. Description

Architectural Classification
(enter categories from instructions)

Materials (enter categories from instructions)

foundation _____ N/A
walls _____ N/A

roof _____ N/A
other _____ N/A

Describe present and historic physical appearance.

The 1889 tug Arthur Foss, ex-Wallowa, is a preserved historic vessel owned and maintained by Northwest Seaport Museum, Inc. of Seattle, Washington. Arthur Foss is moored at Kirkland, Washington on Lake Washington at the Moss Bay Marina.

Arthur Foss as Wallowa and as Rebuilt and Maintained

As built in 1889 and launched as Wallowa, the vessel was 111.6 feet in length with a 23.9-foot beam, a 11.6-foot depth of hold, and a 15-foot draft. Wallowa was registered at 225 gross tonnage and 127 net tonnage. [1] Built of Douglas fir, the tug's wooden hull was heavily built with 8- x 7-inch double-sawn frames, wooden knees, 4-inch thick outer hull and ceiling planking, treenail-fastened. The 15-inch thick keel was built with a 2-1/2-inch thick ironbark shoe, and the hull above the turn of the bilge is sheathed with 1-inch thick ironbark. The tug's form then, as now, was of a "typical" form for this type of craft prior to the Second World War. In 1927, one author explained that while there were slight differences in design and powering,

...there is a broad similarity between all American sea and harbor towboats, irrespective of their duty, which distinguishes them...and leaves no possible doubt as to the country of their origin. This similarity manifests itself in the long deckhouse, extending for practically two-thirds of the length of the hull, rounded forward, square or round at the aft end....The top of this house has a slightly greater length and beam than the house itself and has a tall wheelhouse, rounded in the front and square in the back....Aft this is the stack....The deckhouse is mounted on a strong bluff hull of internationally conventional tug form, having a big block coefficient, and propelled by a large diameter, big pitch, slow running wheel.
[2]

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D NHL CRITERIA 1, 4

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)

Maritime
Architecture (Naval)
Industry
Military (1941-1942)

Period of Significance

1889-1947
1889-1934
1889-1970

Significant Dates

1889, 1896
1889

NHL XII-L
Business: Transportation & Shipping

Cultural Affiliation

Significant Person

Architect/Builder

Oregon Railway & Navigation Co.

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The 1889 tugboat Arthur Foss, ex-Wallowa, owned and maintained by Northwest Seaport, Inc. as an operating preserved historic vessel, is an excellent example of a typical late 19th-early 20th century American tugboat. Well-maintained, retaining her integrity of design and construction and restored in an accurate fashion, Arthur Foss is the only known wooden-hulled 19th century tugboat left afloat and in operating condition in the United States. Built in Portland, Oregon for a seemingly local use, Arthur Foss's career, nonetheless, was associated with trading and events of significance to the nation. Foss towed lumber and grain laden square-rigged ships across the treacherous Columbia River Bar and hence was a key participant in the nationally significant Pacific coast lumber trade and the internationally significant grain trade. Foss played an important role in the transportation of people and goods to Alaska during the Klondike gold rush. Foss served as the set for filming the MGM classic motion picture "Tugboat Annie" (1933), a film that epitomized tugboats and tugboating for a generation of Americans. Foss, while under charter to the United States Navy, was the last vessel to successfully escape Wake Island in January 1942 before Imperial Japanese forces attacked and captured that Pacific outpost. Serving on Puget Sound for the regionally-significant Foss Launch and Tug Co. for much of her 20th century career, Arthur Foss, while of national significance, also is indelibly linked to the important maritime traditions of the Pacific Northwest.

The preceding statement of significance is based on the more detailed statements which follow.

9. Major Bibliographical References

SEE FOOTNOTES IN TEXT

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings
Survey # _____
- recorded by Historic American Engineering
Record # _____

See continuation sheet

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository:

Northwest Seaport, Seattle

10. Geographical Data

Acreage of property less than one acre

UTM References

A

1	1	0
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5	5	9	5	2	0
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5	2	8	1	0	2	5	1	0
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Zone Easting Northing

B

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Zone Easting Northing

C

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D

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See continuation sheet

Verbal Boundary Description

All that area encompassed by the extreme length and beam of the vessel.

See continuation sheet

Boundary Justification

The boundary encompasses the entire area of the vessel as she floats at her berth.

See continuation sheet

11. Form Prepared By

name/title James P. Delgado, Maritime Historian
organization National Park Service (418) date July 9, 1988
street & number P.O. Box 37127 telephone (202) 343-4104
city or town Washington state D.C. zip code 20013

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The description could practically be the same for Wallowa then and now.

The original engine was a 122-h.p. double-cylinder compound marine steam engine manufactured in 1887 by the Union Iron Works of San Francisco for Oregon Railway and Navigation Co. for the tug Donald. The engines drove the tug's single 8-foot diameter screw. Wooden-hulled tugs were said to be stout and hence "likely to be in operation for many years to come....[and] will often outlive several sets of machinery and there is more than one such vessel which has outlived the change from coal burning to oil burning and from steam to diesel." [3] Such was the case for Wallowa. In 1904 her 17-year-old engines were replaced with new compound engines. This new machinery was again replaced in 1927 when a fire destroyed the deckhouse and engine room. The deckhouse, reportedly built with timber cut for never-built World War I emergency fleet wooden steamers, was reconstructed along the original lines. [4]

The shift from steam to diesel took place in 1934 after the tug had been renamed Arthur Foss. A direct-reversing Washington Estep Engine manufactured by the Washington Iron Works of Seattle was installed in April 1934. This air-started 6-cylinder, 700-h.p. direct-lubricating engine is the engine currently in the vessel, and has been restored to pristine operating condition, driving the tug along at a respectable 13 knots. All original (1934) engine room machinery remains in the vessel, including riveted steel air and fuel (80,000-gal. capacity) tanks, 120-v. D.C. generators, switchboards, telegraphs and gauges.

Arthur Foss Today

The hull retains the original lines and form and is in good condition below the waterline, though the bulwarks are dryrotted. The fir decks are tight and mount Arthur Foss' wooden deckhouse, towing winch, windlass, and the quadrant-cable steering system. The steering cables run aft on the deck, covered by wooden shoes, from the deckhouse to the counter. The quadrant rests on deck beneath an elevated poop. The tow winch, driven by a 120-v. generator, has no manufacturer's plate but seems to date to circa 1930; it may have been installed when the new engines were put into Foss in 1934. Arthur Foss carries two unrigged masts; the foremast carries the ship's bell, horn, and running lights and the mainmast mounts a craneboom for the boat carried on the Texas deck.

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Below decks the hull is divided between the large chain locker forward and the engine room. The deckhouse is a two-level structure, with the lower portion housing over and providing access to the engine room below deck. Forward of this space is the galley, with a diesel-fired range with attached hot-water tanks and a wooden reefer. Forward of the galley and on the port side is the wardroom with a single wooden table; opposite the wardroom are crew's quarters with two bunks. Occupying the entire forward space of the first level of the deck house are two quarters for four crew members, each with two bunks.

The next level, reached by stairs running inside abaft the galley, covers only half the area of the deckhouse. The second level includes the Texas deck, now fiberglassed to stop leaks. The Texas deck is an open space which carries the tug's boat and the single riveted-steel stack, which mounts the porcelainized steel emblem of Foss Launch and Tug-- "Foss 'Always Ready' Tugs--Bergen." The second level holds a single head, three cabins (in order running aft) the captain, mate, and engineer's--each with original diagonal tongue-in-groove planking, individual running water, and fittings. The pilothouse, the highest point in the tug, has all original equipment, including the large wooden manual wheel and a smaller brass power wheel, telegraph, binnacle, and steam radiators.

Ninety-nine years of operation resulted in minor changes but, beside the engines, no major modifications to Arthur Foss. All repairs and replacements to the hull and superstructure followed original lines and used in-kind materials, retaining the vessel's pre-Second World War "typical" tugboat appearance. Essentially maintaining her unique 19th century feeling, Arthur Foss is a well-preserved, operating wooden tugboat with necessary alterations made during her career for continued use in the 20th century.

NOTES

1

Thirty-Eighth Annual List of Merchant Vessels of the United States (Washington, D.C.: Government Printing Office, 1906) p. 318.

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2

A.C. Hardy, American Ship Types: A Review of the Work, Characteristics, and Construction of Ship Types Peculiar to the Waters of the North American Continent (New York: D. Van Nostrand Co., Inc., 1927) p. 146.

3

Ibid., p. 153.

4

Mary Stiles Kline, "Arthur's Alive and Well at 92," Nor'Westing, November 1981, p. 15.

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CAREER OF WALLOWA AND ARTHUR FOSS

The tug Wallowa was built by the Oregon Railway and Navigation Co. at Portland, Oregon in 1889 to replace the company's tug Donald. Wallowa entered into a rough trade, towing a variety of ships, usually square-riggers laden with Oregon grain bound to Europe or schooners filled with Pacific coast lumber bound across the treacherous Columbia River Bar. The Columbia River, which provides access into Oregon's interior to the practice head of navigation at Portland, is one of the most dangerous rivers to enter on the Pacific coast. Sudden, unpredictable current changes result in breakers and surging seas. The fast-running currents shoaling areas, shifting sand bars, and free floating logs and deadheads from mills up river combined with human error and storms to earn the bar the sobriquet of "Graveyard of the Pacific." Wallowa worked on the bar for nine years.

The discovery of gold in Alaska on the Klondike in 1896 resulted in a new gold rush on the Pacific coast. Fortune-seekers flocked from around the nation and from other nations, many congregating at the ports of San Francisco, Portland, and Seattle and then booking regular passage to Alaska. One of the vessels caught up in the Klondike rush was Wallowa. Purchased by the White Star Line of Alaska, Wallowa towed the steamer Yosemite from Puget Sound to St. Michael on the Yukon River, the jumping off point for the Klondike and later towed barges to Alaska. By 1900 Wallowa was advertised as carrying mail between Juneau, Haines, and Skagway for the Pacific Clipper Line, and in 1903 the tug returned from Alaska. [1]

Sold in 1904 to the Puget Sound Mill and Timber Co. of Port Townsend, Washington, Wallowa was re-engined and worked for the next 25 years for the company towing log rafts around Puget Sound and along the Washington coast. Leased and then sold to the Merrill and Ring Logging Co. of Seattle, Wallowa was then sold, in 1929, to the Foss Launch & Tug Co. of Seattle. [2] The purchase of Wallowa, boosted the Foss fleet to 36 tugs and 80 scows (barges) ranging from 100 to 1,200 tons, making it the largest fleet of tugs and scows on the Pacific Coast at that time, with offices in Tacoma, Seattle, and Port Angeles. [3]

A major change of routine for the tug came in 1933 when Metro-Goldwyn-Mayer leased her to film the motion picture "Tugboat Annie." Inspired by the popular serial in the Saturday Evening Post by Norman Reilly Raine, the film starred Marie Dressler with

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Wallace Beery playing her rival and competitor, Capt. Bullwinkle. The film co-starred Robert Young and Maureen O'Sullivan. Cosmetically "dirtied" to play the role of Annie's tug Narcissus, Wallowa shared center stage with Dressler and Beery. In a climatic scene in which Narcissus rammed a ship, the unfortunate tug actually did so, seriously damaging the bow and incurring an emergency two-day repair by MGM. [4] The release of the film, along with the Raine serial, did much to provide an image of tugboats and tugboating to a generation of Americans.

Following the filming of "Tugboat Annie," the worn-out engines of the vessel were replaced in 1934 and Wallowa was renamed Arthur Foss. Continuing in service for the Foss Co. for the next seven years, Arthur Foss was chartered to the U.S. Navy's Pacific Fleet, towing barges in the Hawaiian Islands. Foss was 12 hours out of Wake Island, headed for Oahu when the Japanese attacked Pearl Harbor. The tug, maintaining radio silence and repainted war-time gray by her crew while still at sea, reached Oahu safely. Foss was the last American vessel to escape safely from Wake prior to the Japanese attack and capturing of the island in January 1942. Arthur Foss continued to operate for the U.S. Navy at Oahu under a bareboat charter until 1947, when she was returned to the Foss Co. and made her way back to Seattle. [5]

From 1947 to 1970 the tug continued to work at her pre-war activities for the Foss Co. The arrival of a new, more powerful tug in 1963 saw the transfer of the name Arthur Foss to the new vessel; Arthur Foss, ex-Wallowa was renamed Theodore Foss. In 1970 the vessel was decommissioned by the Foss Co. and transferred to Save Our Ships, Inc., an organization that became the present day Northwest Seaport, Inc. [6] After a short period of operation by the museum, the historic tug, again rechristened Arthur Foss, was laid up and deteriorated. Restored to operating condition in 1981 by a dedicated group of volunteers, Arthur Foss draws close to the end of her first century in good shape, operating on Puget Sound, ranging north again to Alaska and to British Columbia as a goodwill ambassador for the State of Washington, and keeping the wooden tugboat tradition alive. [7]

NOTES

1

Mary Stiles Kline, "Arthur's Alive and Well at 92," Nor`Westing, November 1981, pp. 14-15.

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2
Ibid., p. 15 and Certificate of Registry, Permanent No. 526, Port of Seattle, May 29, 1917, and Bill of Sale of Registered Vessel, Wallowa, Tacoma, Washington, June 5, 1934, manuscripts on file at Northwest Seaport, Inc., Seattle, Washington.

3
The Marine Digest, September 7, 1929, p. 1.

4
Kline, "Arthur's Alive and Well," p. 16.

5
Ibid., p. 17 and Report of Load Line Inspection No. 949, Port of Honolulu, January 2, 1942.

6
Kline, pp. 19-20; Consolidated Certificate of Enrollment and Yacht License Permanent Certificate No. 02-14, June 10, 1970, manuscript on file at Northwest Seaport, Inc., Seattle.

7
Dick Stokke, "The Arthur Foss Chugs Again," Puget Sound/Enetai August 24-September 6, 1984, p. 14.