

**MARITIME HERITAGE OF THE UNITED STATES NHL THEME STUDY--LARGE VESSELS**

NPS Form 10-900

USDI/NPS NRHP Registration Form (Rev. 8-86)

OMB No. 1024-0018

**FIR (Lighthouse Tender)**

**Page 1**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

**1. NAME OF PROPERTY**

Historic Name: Fir

Other Name/Site Number: U.S. Coast Guard Cutter Fir (WLM 212)

**2. LOCATION**

Street & Number: 1519 Alaskan Way, South Not for publication:       

City/Town: Seattle Vicinity:       

State: WA County: King Code: 033 Zip Code: 98134-1192

**3. CLASSIFICATION**

Ownership of Property

Private:         
Public-local:         
Public-State:         
Public-Federal: X

Category of Property

Building(s):         
District:         
Site:         
Structure: X  
Object:       

Number of Resources within Property  
Contributing

        
  1    
        
  1  

Noncontributing  
       buildings  
       sites  
       structures  
       objects  
  0   Total

Number of Contributing Resources Previously Listed in the National Register:   0  

Name of related multiple property listing: N/A



**FIR (Lighthouse Tender)****Page 3**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

**6. FUNCTION OR USE**

Historic: Transportation

Sub: Water-related

Current: Transportation

Sub: Water-related

**7. DESCRIPTION**Architectural Classification:  
N/A

Materials:

Foundation:

Steel

Walls:

Steel

Roof:

Steel

Other Description: Many fittings are  
wood and brass**Describe Present and Historic Physical Appearance.**

The lighthouse tender Fir is currently used as an active U.S. Coast Guard buoy tender serving Washington and Oregon. Currently moored on the Seattle waterfront on Lake Union, the vessel serves buoys, lighthouses, and other navigation aids in the Pacific Northwest. Fir also periodically engages in search and rescue, marine environmental protection, and in law enforcement. The vessel is scheduled for decommissioning in October 1991. The Coast Guard is currently working with the nonprofit group, Friends of Fir, to create a plan for the vessel's preservation.

[Note: The Coast Guard reported on December 4, 1991, that Fir had been decommissioned in October, moved to the downtown Seattle waterfront, secured, and placed in storage. Legislation is currently being written to transfer Fir to the Friends of Fir, who will maintain the vessel as a floating exhibit on the downtown Seattle waterfront in connection with a proposed maritime museum.]

**FIR AS BUILT AND MODIFIED**

Fir is a twin propeller, steel lighthouse tender. She displaces 989 tons, and has a length of 175 feet and a beam of 34 feet. She draws 12 feet of water. Her hull is riveted steel and is 163 feet long at the waterline. The hull is reinforced with a protective steel "rub rail" above the waterline which guards against damage when working with buoys.

Fir was built as a coastwise lighthouse tender by the U.S. Lighthouse Service. She was designed to serve the West Coast, replacing an earlier tender, Heather. Her keel was laid by Moore Drydock Company in Oakland, California, in April 1936, and she was launched by the Lighthouse Service, March 22, 1939. The Lighthouse Service was absorbed by the U.S. Coast Guard in July 1939. Fir was commissioned into the U.S. Coast Guard, October 1,

**FIR (Lighthouse Tender)****Page 4**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

1940. Fir was one of three 175-foot tenders, the others being Walnut and Hollyhock.<sup>1</sup> Both of Fir's sister ships were decommissioned in 1982. Walnut was subsequently transferred to the country of Honduras and Hollyhock's fate is unknown. She was most likely scrapped.

The fleet of Lighthouse Service tenders once numbered dozens of vessels. In 1925, the Lighthouse Service operated more than 50 tenders in addition to numerous smaller boats used to service lighthouses and lightships.<sup>2</sup> Fir is the last of these vessels to remain in active service. Former Coast Guard commandant, Adm. James Gracey called her "the last of a breed," and a "classic" vessel.<sup>3</sup> Accented with oak and brass, and carrying many of her original furnishings, Fir remains "a classic and hardworking ship."<sup>4</sup>

When built, Fir's power plant consisted of two oil burning triple expansion steam engines and two Babcock & Wilcox watertube boilers. In 1951 these were replaced with twin Fairbanks Morris diesel engines which continue in use today. Fir was the last American steam-powered lighthouse tender to be dieselized.<sup>5</sup> The only other modification to Fir occurred in 1982 when the ship's hydraulic main boom hoist was replaced by an electrically-powered A-frame one. This change did not alter Fir's overall appearance.

As has been the custom for more than a century in the Lighthouse Service and Coast Guard, Fir is painted in the traditional lighthouse tender scheme, with a black hull and white superstructure.<sup>6</sup> In recent years the characteristic Coast Guard diagonal stripe and logo have been painted on her sides just aft of the bow.

As a classic American lighthouse tender, Fir's exterior has a raised foredeck, buoy well with a large boom, rounded wheelhouse, rub rails for protecting her sides against buoys, and an ample superstructure. Her interior is unique in its intact Lighthouse

---

<sup>1</sup>Robert Scheina, U.S. Coast Guard Cutters and Craft of World War II (Annapolis: Naval Institute Press), pp. 110-111.

<sup>2</sup>George Weiss, The Lighthouse Service (New York: AMS Press, 1974, 2nd printing) p. 100-101.

<sup>3</sup>Admiral James Gracey, Commandant, U.S. Coast Guard. Personal communication with the author.

<sup>4</sup>Official U.S. Coast Guard public information announcement, 13th Coast Guard District, Seattle, Washington, n.d.

<sup>5</sup>James Gibbs, Sentinels of the North Pacific (Portland, Oregon: Binfords & Mort, 1955), p. 112.

<sup>6</sup>Robert E. Johnson, Guardians of the Sea (Annapolis, Maryland: Naval Institute Press, 1987), p. 166.

**FIR (Lighthouse Tender)**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Service district superintendent's quarters, complete with original sofa and wooden frame screen door. Her bridge is amply fitted with wood and brass, and in her wardroom, her builder's plate proclaims she is a U.S. Lighthouse Service vessel. The wardroom overlooks the buoy deck in Lighthouse Service fashion. It is an attractive, well-appointed room, virtually unchanged from the Lighthouse Service era. Elsewhere on the ship, the enclosed main deck passageways are designed in the classic Lighthouse Service style. These and other features distinguish Fir from her buoy tender descendants.

**8. STATEMENT OF SIGNIFICANCE**

Certifying official has considered the significance of this property in relation to other properties: Nationally: X Statewide:      Locally:     

Applicable National Register Criteria:       A X   B        C X   D     

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

NHL Criteria:   1, 4

NHL Theme(s):   XII. Business  
                  L.   Shipping & Transportation  
  
                  XIV. Transportation  
                  B.   Ships, Boats, Lighthouses & Other Structures

Areas of Significance:	Period(s) of Significance	Significant Dates
Architecture (Naval)		1939
Maritime History		1939
Transportation		1939

Significant Person(s):   N/A

Cultural Affiliation:    N/A

Architect/Builder:   U.S. Lighthouse Service/Moore Dry Dock Company, Oakland, California

**FIR (Lighthouse Tender)****Page 6**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

**State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.**

The tradition of aids to navigation in the United States dates to colonial times. One of the first actions of the new federal government was the establishment of lighthouses. Often built on isolated and rugged shores, lighthouses required a special type of vessel to service and maintain them. These vessels were lighthouse tenders, which, with lightships were the only seagoing aspects of the Lighthouse Service. Lighthouse tenders in the United States date to 1840, and scores of these hardy and distinctive vessels were built by the United States government's agencies in charge of aids to navigation. The U.S. Lighthouse Service built dozens; the 1920 edition of Merchant Vessels of the United States lists 55 tenders. Laid down at the end of the tenure of the Lighthouse Service, Fir was transferred to the newly formed Coast Guard in 1939 when launched. Essentially unmodified, with the exception of re-engining, Fir is the last surviving unaltered American lighthouse tender, and the last working member of the U.S. Lighthouse Service fleet. Fir represents a largely unheralded workaday aspect of the Lighthouse Service, as well as the seafaring foundation from which the modern Coast Guard's buoy tender fleet evolved.

The preceding statement of significance is based on the more detailed discussion below.

**ORIGINS OF LIGHTHOUSE TENDERS**

Man has built lighthouses since 300 B.C.<sup>7</sup> Both in building lighthouses and subsequently supplying and manning them, it soon became apparent that ships would be needed to aid in lighthouse operation. A variety of vessels were purchased or chartered for lighthouse work over the centuries. The first recorded mention of a lighthouse tender was a British vessel noted in 1745.<sup>8</sup> Subsequently, other vessels are mentioned as engaged in lighthouse and buoy work. The earliest vessels were sailing ships, often fairly small sloops or yachts.

Eventually specialized sailing craft were built to serve Great Britain's lighthouses and buoys. These vessels' design was derived from three very different sources. First, the sleek yachts of the royalty inspired graceful lines. Second, sturdy construction ships and workboats of the period inspired heavy-duty building techniques so that tenders could endure the hardships of their line of work. Third, the vessels were

---

<sup>7</sup>D. Alan Stevenson, The World's Lighthouses Before 1820 (London: Oxford University Press, 1959), p. 5.

<sup>8</sup>Richard Woodman, Keepers of the Sea: A History of the Yachts and Tenders of Trinity House (Lavenham, England: Terrence Dalton, Limited, 1983), pp. 13-16.

**FIR (Lighthouse Tender)****Page 7**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

designed to adapt to local sea conditions, often with inspiration from local fishing fleets.

American lighthouse tenders were similarly descended, but with a major difference. Many American tenders were influenced in design by the cutters of the U.S. Revenue Cutter Service (later made part of the U.S. Coast Guard). Thus, American tenders came to have a different appearance than their European counterparts. British and Irish tenders retain a yacht-like or cargo ship-like appearance, even to this day, and the term yacht is still occasionally attached to English and Irish tenders.

American lighthouse tenders generally bore more resemblance to either sleek revenue cutters or, in some cases, to large seagoing tugs. In fact, the first American tender of the Lighthouse Service was the former revenue cutter, Rush, which was acquired in 1840.<sup>9</sup> An example of the revenue cutter-influenced American tender, Fir is the last of this line of "pure" old time U.S.-style lighthouse tenders.

The first American tenders built specifically to service lighthouses and buoys were constructed in the mid-19th century. In 1857 the sidewheeler Shubrick, the first steam-powered American lighthouse tender, was built. Later that year she proceeded to her first assignment serving California, Oregon, and Washington.<sup>10</sup> By 1887, steam had become the standard method of propulsion and all American lighthouse tenders using sail had been retired or sunk. Steam-powered tenders gradually grew in size, propellers replaced sidewheels for propulsion beginning in 1868. Vessels were also fitted with large freshwater tanks for supplying offshore light stations and lightships, and their cargo-carrying capacity was expanded. Over time, the ships also grew in size, the largest reaching 175 to 200 feet in length. All these changes allowed tenders to serve more facilities in a single run and to provide supplies which would last for longer periods. This was especially important on the West Coast where such vast distances between ports were involved. Fir was designed specifically for long runs to lighthouse and lightship stations in lonely Pacific Coast waters. Lighthouse tenders such as Fir were the supply line for almost all our manned lighthouses and lightships into the 1930s and in a few cases as late as the 1970s.

The ships which ultimately replaced Fir and her earlier sisters were the 180-foot class buoy tenders built by the U.S. Coast Guard in the 1940s. These ships marked the beginning of a new ship type. Buoy tenders were built to service buoys rather than

---

<sup>9</sup>George R. Putnam, Lighthouses and Lightships of the United States (Boston: Houghton Mifflin, 1917), p. 211.

<sup>10</sup>Ralph Shanks, Guardians of the Golden Gate: Lighthouses and Lifeboat Stations of San Francisco Bay (Petaluma, California: Costano Books, 1991).

**FIR (Lighthouse Tender)**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Page 8

lighthouses, which were declining in importance even by the 1940s. The 180-foot buoy tenders were heavily influenced by icebreaker designs and had the capability of acting as icebreakers. While buoy tenders retained buoy well decks and booms, they were designed with broad blocky bridges and no longer retained distinct Lighthouse Service features such as a superintendent's room, a compact rounded wheelhouse, a wardroom placed at the forward end of the ship's superstructure, wooden screen doors, and the like.

Since the Lighthouse Service tenders were a well-built collection of ships, one or more of them continued in active duty for the 52 years after the merger of the Lighthouse Service into the Coast Guard. The October 1991 decommissioning of Fir signals the end of an era.

**THE HISTORY AND CAREER OF FIR**

As the last active American lighthouse tender, Fir was to have an unusually long and varied career. From 1940 through 1991 Fir was stationed at Seattle, Washington, except for the period of July 1982 through September 1983, when she assumed the tender Walnut's duties out of Los Angeles Harbor, serving southern California from Point Arguello to the Mexican border. From her homeport of Seattle, Fir served both Washington and Oregon.

**Duties of the Vessel**

Fir's best known and most important duty was, of course, servicing aids to navigation. She regularly transported lighthouse keepers and brought them their supplies, mail, fuel, and sometimes water. Lighthouse inspectors (now Coast Guard officers) also sometimes rode her on inspection tours.

Transferring personnel at remote offshore light stations was often a dangerous and time-consuming task for both ship and crew. At Cape Flattery, Washington, for instance, keepers had to be hoisted by derrick onto the island in an open box dangling from a hook. A small boat had to be worked in under the box as personnel were transferred, sometimes under rough sea conditions. Fir, like other tenders, had to routinely go into dangerous waters where no other type of ship dared venture. "The navigational skill of the officers of the tenders and the boatwork of their crews is of the very highest order, as indeed it has to be, for they are forever maneuvering around dangerous rocks and sandbars."<sup>11</sup> Fir was a ship which routinely dared to enter waters where no other vessel was supposed to go.

Fir also served lightships, bringing them fuel, water, and relief personnel. There were three lightship stations in the Pacific

---

<sup>11</sup>T. G. Wilson, The Irish Lighthouse Service (Dublin: Allen Figgis, 1968), p. 89.

**FIR (Lighthouse Tender)**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Northwest which needed supplying: Swiftsure Bank at the entrance to the Strait of Juan de Fuca in Washington; Umatilla Reef off La Push, Washington; and at the mouth of the Columbia River on the Oregon-Washington border. Tenders generally tied up astern of the moored light vessel and put over small boats to ferry supplies and personnel and to connect hoses to pump fuel and fresh water. Mail was also often delivered at such times and inspections might occur.

As Pacific Northwest lightships were replaced by large buoys and lighthouses were automated between 1950 and 1980, Fir became the last tender to serve numerous West Coast light stations, adding to her historic importance. In 1991, she still conducted aids to navigation work at or near such important light stations as Cape Flattery, New Dungeness, and Destruction Island in Washington state.

"Working buoys," that is picking up old buoys and setting out newly reconditioned ones, was Fir's most frequent task. This responsibility, more than any other, required that Fir regularly enter dangerous waters. Crewmen hoisted huge buoys weighing tons on and off the rolling ship's deck. This was hard and dangerous work; often the deck was slick with Pacific Northwest rain and sea slime and on rare occasions seas were reported to wash across the deck while work was going on. Lighthouse tenders generally had smaller buoy decks than did buoy tenders and were less stable platforms. The risk of being crushed by a wildly swinging buoy, being snagged by a moving anchor chain, or suffering a nasty fall faced tender crews almost daily. Placing buoys was not only potentially dangerous, but also required precise navigation. The buoys had to be positioned with extreme accuracy, otherwise numerous vessels would be misguided in their courses. Responsibility hung heavily on the tender's officers and crew.

Search and rescue work also involved Fir throughout her career. Usually this work occurred because Fir, so often at sea, happened to be near the scene of a disaster and was the best qualified vessel to help. Some examples include saving 19 persons from the motor vessel Andalucia off Neah Bay, Washington, on November 4, 1949; assisting the freighter Beloit Victory off Destruction Island in 1954; escorting a Navy tug, Yuma, and her tow USS Tinian to safety after engine trouble developed off the "Swiftsure Bank" lightship in 1958; salvaging a sunken Coast Guard helicopter in 1962; engaging in a major search effort for a crashed Navy plane the following year; and fighting a Todd shipyard fire at Seattle in 1968.<sup>12</sup> On July 5, 1990, Fir saved the life of a mariner trapped on the bow of a rapidly burning pleasure boat on Shilsole Bay, Washington, extinguishing the fire and saving the boat.

---

<sup>12</sup>Robert Scheina, U.S. Coast Guard Cutters & Craft: 1946-1990 (Annapolis, Maryland: Naval Institute Press, 1990), p. 163.

**FIR (Lighthouse Tender)****Page 10**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

Other duties included coastal defense during World War II when Fir was temporarily armed with a three-inch deck gun; law enforcement activities; and marine environmental protection. During her career, Fir has truly been a multi-mission ship whose accomplishments mirror the changing American maritime scene for more than half a century.

Thus, Fir is the last of a long, honorable line of ships.<sup>13</sup> As Commissioner of Lighthouses George Putnam wrote, tenders are "a fleet of vessels whose duty [was] to go where no other vessel was allowed to go, and who, through storm, darkness and sunshine [did] their work for humanity."<sup>14</sup>

**ACKNOWLEDGEMENTS**

The author wishes to express special appreciation to Lt. Cdr. Bob Nutting, captain of Fir, for invaluable assistance and repeated encouragement in this project. He also wishes to thank Capt. Gene Davis of the Coast Guard Museum of the Northwest in Seattle, and Ben Tobias of the 13th District Aids to Navigation Office for information and photographs. Finally thanks to Coast Guard Group Port Angeles, Washington, for helicopter transportation to Destruction Island and Cape Flattery light stations.

---

<sup>13</sup>Ralph Shanks, "Tenders: Unsung Heroes," The Keepers Log (Winter 1987), p. 15.

<sup>14</sup>Putnam, Sentinels of the Coast (New York: W.W. Norton, 1937), p. 258.

**FIR (Lighthouse Tender)**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

**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: # \_\_\_\_\_

Primary Location of Additional Data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other: Specify Repository: U.S. Coast Guard 13th District Headquarters, Seattle, Washington

**10. GEOGRAPHICAL DATA**

Acreage of Property: Less than one (1) acre.

UTM References: Zone Easting Northing

10/549720/5270770

Verbal Boundary Description:

All that area encompassed within the extreme length and breadth of the vessel.

Boundary Justification:

The boundary incorporates all that area of the vessel as she lays at her berth.

**FIR (Lighthouse Tender)****Page 12**

United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

**11. FORM PREPARED BY**

Name/Title: Ralph Shanks, Maritime Historian

Organization: Costana Books

Date: August 19, 1991

Street &amp; Number: 229 Tahola Lane

Telephone: (707) 762-4848

City or Town: Petaluma

State: CA

ZIP: 94954