

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 Fireboat No. 1
other names/site number _____

2. Location

street & number Marine Park on Ruston Way not for publication
city, town Tacoma vicinity
state Washington code 53 county Pierce code 053 zip code _____

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input checked="" type="checkbox"/> public-local	<input type="checkbox"/> district	_____	_____ buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	_____	_____ sites
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	<u>1</u>	_____ structures
	<input type="checkbox"/> object	_____	_____ objects
		_____	_____ Total

Name of related multiple property listing: _____
Number of contributing resources previously listed in the National Register 1

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)

Government

Current Functions (enter categories from instructions)

Museum

7. Description

Architectural Classification

(enter categories from instructions)

N/A

Materials (enter categories from instructions)

foundation N/A

walls N/A

roof N/A

other N/A

Describe present and historic physical appearance.

The 1929 fireboat Fireboat No. 1 is displayed in a permanent dry-berth designed to resemble a graving dock off Ruston Way in Marine Park in Tacoma, Washington. Displayed on the shoreline of Puget Sound, Fireboat No. 1 is owned by the City of Tacoma and is currently awaiting final restoration prior to opening as a public museum and exhibit.

Fireboat No. 1 as Built, Modified, and Displayed

As built in 1929, Fireboat No. 1 is a riveted steel-hulled vessel 96.6 feet in length, with a 21.6-foot beam and a 6-foot depth of hold. Registered at 105 gross tonnage and 103 net tonnage, the vessel additionally has a displacement tonnage of 88 tons. [1] The vessel has a single, flush deck, which is riveted "checker plate" steel, and a riveted steel pilothouse. Pipe rails drilled to create a water spray around the fireboat originally lined the decks. A long, low and narrow vessel, Fireboat No. 1 has fine lines and could cut through the water at speeds up to 14 to 15 knots.

Fireboat No. 1 is a triple-screw vessel propelled by Sterling-Viking gasoline engines; as designed and constructed in 1929, they were all 425-h.p., eight- by nine-inch, six-cylinder, gasoline-powered engines, two of which were used for pumping, one for propulsion, and the other two for either pumping or propulsion:

It is proposed that the three engines will be used to propel the vessel to the vicinity of the fire. Then, should more water be required than the two forward pumps can furnish, the wing engines may be disconnected from the propeller shafts by means of the jaw clutches

6. Function or Use

Historic Functions (enter categories from instructions)

Government

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Architectural Classification
(enter categories from instructions)

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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)

Period of Significance

Significant Dates

Government

1929-1982

1929

Architecture (Naval)

1929

Technology

1929

Cultural Affiliation

NHL XII-L

Business: Shipping & Transportation

Significant Person

Architect/Builder

T.M. Rowlands

Coast Line Shipbuilding Co.

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

The 1929 fireboat Fireboat No. 1, owned and maintained by the City of Tacoma, Washington, as a historic monument and museum, is an excellent example of a typical, specifically-designed fireboat as could be found in any major American port city through much of the 20th century. While built and operated only on Puget Sound, this well-preserved vessel is representative of most fireboats built prior to the Second World War throughout the United States. While earlier tugboats modified for fireboat use, or employed as auxiliary fireboats do exist, Fireboat No. 1 is one of ten fireboats greater than 50 years of age left in the United States. Fireboat No. 1, one of five 1920s fireboats, is the least modified and has not undergone extensive modernization. Fireboats known to exist in other major American cities date to the 1940s, 1950s, and 1960s. Possessing a high degree of integrity and being of exceptional national significance, Fireboat No. 1 is one of the last preserved, largely unchanged examples of the historic American fireboat type.

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:

Dr. Allen Ratcliffe, Tacoma

10. Geographical Data

Acreage of property less than one acre

UTM References

A

1	0	5	3	8	6	1	0	5	2	3	7	1	6	5
Zone				Easting				Northing						

B

Zone				Easting				Northing						

C

Zone				Easting				Northing						

D

Zone				Easting				Northing						

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 sits in her dry 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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and connected to the pumps, this change taking only a few seconds.... The vessel will then be handled by the center marine engine which is of sufficient power to give her easy maneuvering.

[2]

Three of the original engines were replaced in 1946-47 with Sterling-Viking II 600-h.p. engines. These three engines, which are the primary engines used for propulsion, have reversing gears. Each of the five engines has an individual instrument board with ignition switch, ammeter, starting switch, oil pressure gauge, and tachometer. One engine, that being the one farthest aft on the starboard side, threw a crankshaft in 1976 and due to lack of parts was not repaired; it remains broken. [3]

The engines drive four DeLaval three-stage centrifugal pumps, each with a rated pumping capacity of 2,500 g.p.m. at 180 p.s.i. for a total pumping capacity for the fireboat of 10,000 g.p.m. The pumps charge a system which included seven deck monitors and manifolds which feed into 12 outlets, six on each side of the vessel, for attaching 2-1/2-inch, 3-inch, and 5-inch hose. The boat carried 500-foot lengths of 1-1/2-inch, 2-1/2-inch, and 3-inch hose, as well as 200 feet of booster line, which allowed firefighters to go ashore in remote areas of the waterfront where hydrants were not located or where road access for pumpers was impossible.

As built, the deck monitors were mounted with three forward at the bow, one midships on an elevated platform, and three aft at the stern. Two monitors were relocated from the forecandle area in the 1930s and relocated atop the pilothouse; this was the only major change to the original layout of the firefighting system. The primary monitor, at the bow, discharges 6,500 g.p.m. and reaches 475 feet. This monitor, designed and cast by the Tacoma Fire Department, was and is known as "Big Bertha." Two monitors are capable of 2,000 g.p.m. each, and the remaining monitors discharge 1,000 g.p.m. An additional firefighting feature, introduced in the 1960s, consists of two ports in the forecandle. A manifold installed in the forecandle allowed the attachment of hose and special nozzles which fit into the ports, allowing access to fires below docks or wharves which could not be reached by the monitors. [4]

The vessel's superstructure includes a deckhouse, atop which the vessel's stack, and a craneboom for slinging the lifeboat.

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Forward, and built atop the deckhouse is the pilothouse, which retains all original equipment, including the wheel and telegraphs to the engineroom. Aft of the pilothouse are quarters for the pilot and engineer, with a watercloset, and a hatch leading below into the engineroom. Aft of the pilothouse is a riveted steel tower, atop which sits one of the deck monitors. A searchlight atop the pilothouse is located forward of the tower, and attached to the tower is the fireboat's whistle. Deck features include a hose reel at the stern, and the Allan-Cunningham windlass, with the vessel's original Danforth-style anchor.

The small brass artifacts, including the fireboat's bell, nameplate, telegraphs, and other easily portable features have been removed for safe-keeping and are curated at Tacoma Fire Station #18 with the exception of the bell, which is in the office of the City's Deputy Harbor Master awaiting final restoration. The only modification to the vessel is a door cut into the hull on the port forward quarter which allows access into the engineroom. The door is actually plate steel, set flush with the exterior hull plates, and is not very noticeable externally. The fireboat's red hull, trim and ship-shape condition, and seemingly temporarily "dry-docked" appearance convey the high degree of integrity this historic vessel possesses.

NOTES

1
"Tacoma's New Fireboat," Railway and Marine News, June 1929, p. 25 and National Park Service, Evaluative Inventory of Preserved Historic Vessels in the United States (Washington, D.C.: National Park Service, 1987) n.p.

2
"Tacoma's New Fireboat."

3
Ronald Fields and Lisa Soderberg, "National Register of Historic Places Inventory/Nomination Form, Fireboat #1, Tacoma, Washington," manuscript, October 14, 1983, Washington Office of Historic Preservation, Olympia, Washington.

4
Ibid. and interview with Stanley Mork, Stanley Phaut, and George Thornhill, Tacoma, Washington, April 26, 1988.

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THE ORIGIN AND DEVELOPMENT OF THE FIREBOAT

The concept of using vessels to fight fires on other vessels and along a port's waterfront dates to the mid-19th century as well as the development of large-volume marine steam pumps to generate sufficient pressure for effective fire-fighting. Harbor tugs and towboats, the most common steam-powered vessel type in any given harbor, became the optimum fire-fighting vessels. Very few vessels were actually designed and built as fireboats; rather many tugs were fitted with pumps and monitors for auxiliary fireboat use. The need for full-time fireboats and for maximum capability for combating serious blazes on wooden ships and wooden waterfronts of the late 19th and early 20th century compelled many fire departments in port cities to design and construct their own fireboats.

The origins of fireboats are reflected in the general form and design that distinguishes American fireboats through the present day. In 1927, typical fireboats in the United States were described as having the same general dimensions and hull lines of those of a harbor towboat. "The fireboat is a self-propelling hull of towboat form containing powerful pumps drawing from surrounding water and discharging streams of water through strategically mounted monitors." It was also noted that diesel engines had practically replaced steam by 1927 for both propulsion and pumping, with "diesel electric drive being particularly suitable for the work." [1]

The typical fireboat type described in detail in 1927 differs little from Fireboat No. 1:

The vessel...is powered by seven 300-h.p. and two 25-h.p. gasoline engines. Three of the seven units drive a centerline and two wing propellers, the two wing engines driving also pumps and being so arranged that they can rotate the propellers when the vessel is proceeding to a fire and the pumps when the scene of a fire has been reached. The remaining four engines are direct connected to pumps. The center engine is available for maneuvering when the vessel is operating her pumps. The six pumps each have a capacity of 1,700 gallons per minute at 200 lbs. discharge pressure, giving a total

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delivery of 10,200 gallons per minute. The fireboat...has a length between perpendiculars of 93 feet 4 inches [and] has a service speed of 17 miles per hour. [2]

While various communities designed their fireboats individually and without any known nationally accepted plan, the dictates of function determined the form so closely that a national type, as represented by Fireboat No. 1, was developed. The basic form remains unchanged with few exceptions save more modern pumping and delivery systems.

CONSTRUCTION AND CAREER OF FIREBOAT NO. 1

Between 1902 and 1929, the 38-mile waterfront of Tacoma, a busy port lined with sawmills and lumber yards, was protected from fire by an auxiliary vessel, the Tacoma Tug and Barge Co.'s tugboat Fearless. Designed locally by T.M. Rowlands, a professor of naval engineering at the University of Washington, Fireboat No. 1, as her name implies, was Tacoma's first fireboat when launched in 1929. [3]

Fireboat No. 1's powerful discharge of water was actively employed throughout the vessel's 53-year career on the Tacoma waterfront and along the shores of Puget Sound. The fireboat responded to every major waterfront fire, as well as emergencies ranging from pumping sinking vessels to rescuing persons in the water. It was estimated that 80 percent of life-saving calls received in Tacoma were responded to by the fireboat rather than the Coast Guard. Fireboat No. 1 also served a special role in waterfront and marine events ranging from welcoming naval vessels to pumping displays for parades and patriotic celebrations.

Fireboat No. 1 was retired from service in 1982 following the acquisition of two Vosper Hovermarine Ltd. surface-effect ships (S.E.S.) as fireboats in 1981. In order to preserve the vessel, a non-profit group, the Tacoma Fireboat Marine Museum Foundation, Inc., was formed in 1982. The fireboat was hauled, painted, and moved ashore to her present location in March 1986. [4]

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NOTES

1

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. 166.

2

Hardy, pp. 166-167.

3

"Tacoma's New Fireboat," Railway and Marine News, July 1929, p. 25.

4

Tacoma News-Tribune, August 23, 1970; May 2, 1982; and March 6, 1986.