

07 11 7, 1975

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY	
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DATE ENTERED	

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC TUGBOAT HERCULES

AND/OR COMMON
HERCULES

2 LOCATION

MARITIME UNIT, HYDE STREET PIER
STREET & NUMBER NATIONAL MARITIME MUSEUM

CITY, TOWN N/A NOT FOR PUBLICATION
SAN FRANCISCO CONGRESSIONAL DISTRICT
STATE CALIFORNIA N/A VICINITY OF FIFTH
CODE 06 COUNTY SAN FRANCISCO CODE 075

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE <input checked="" type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK
<input type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS
<input checked="" type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input checked="" type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER

4 AGENCY

REGIONAL HEADQUARTERS: (If applicable)
NATIONAL PARK SERVICE, WESTERN REGIONAL OFFICE

STREET & NUMBER
450 GOLDEN GATE AVENUE
CITY, TOWN N/A VICINITY OF STATE CALIFORNIA 94102
SAN FRANCISCO

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC. GOLDEN GATE NATIONAL RECREATION AREA

STREET & NUMBER
FORT MASON, BUILDING 201
CITY, TOWN N/A VICINITY OF STATE CALIFORNIA 94123
SAN FRANCISCO

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
NATIONAL REGISTER OF HISTORIC PLACES

DATE
1/17/1975 FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR SURVEY RECORDS NATIONAL PARK SERVICE

CITY, TOWN WASHINGTON STATE D.C.

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input checked="" type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE <u>n/a</u>
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The tug Hercules presently is moored at the Hyde Street Pier, the center of the collection of turn-of-the-century historic ships administered by the National Maritime Museum, San Francisco. She is a large steel-hull, single-screw, steam tugboat built for long hauls in the open ocean. She is a rare surviving link with the era of steam power, and represents the finest of American maritime industrial technology as found in the first decade of the twentieth century. In the words of noted marine historian Howard I. Chapelle, written at the time of the campaign to acquire her as a museum ship, Hercules is, "an important artifact; once a common type of commercial steamer, I fear no replacement will be available, and (if she is not preserved) a valuable technical exhibit lost". (1)

Hercules was built in 1907 in the Camden, New Jersey, shipyard of John H. Dialogue & Son. Hercules and her sister tug Goliah were:

constructed of steel throughout, with complete steel decks, steel bulkheads for oil tanks (with necessary subdivisions), high coamings, and steel deckhouses. Both boats have, in addition to the transverse oil tight bulkheads, longitudinal bulkheads to prevent the movement of the oil, the stern as well as the after bitts being especially constructed for this particular service (i.e. towing). They are completed with railing all around the upper deck as well as around the roof of the pilothouse. The deck house is arranged so that it will be possible to go from one end of the boat to another without going outside. The crew's accommodations are, as usual, located in the forecastle, with a special dining room for their use, the senior officers being located in the forward end of the deck house, and the junior officers housed just behind the fireroom.

The fact that this statement from the Nautical Gazette of February 6, 1908, is still an accurate description of the vessel is powerful evidence of the tug's physical integrity. In fact, the only changes to her original appearance are the removal of the foremast she once carried just forward of the deckhouse, the heightening of the original wheelhouse in 1941, and alterations to the interior layout of the fo'c's'le. All of these changes occurred during the course of her historically functioning as a tug, and all are within the scope of her historical significance, and thus not a type of later alteration that would in any way impair her integrity. Otherwise Hercules remains as completed

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input checked="" type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input checked="" type="checkbox"/> OTHER (SPECIFY) Technology
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1907-1962

BUILDER/ARCHITECT JOHN H. DIALOGUE & SONS

STATEMENT OF SIGNIFICANCE

The 78-year old steel, steam-powered ocean-going Tugboat Hercules is of national significance under National Historic Landmark Theme 7b1b (commerce distribution), in terms of its long career in towing ships carrying cargoes, in towing cargoes themselves (rafts made of logs), and in towing ferry boats carrying railroad cars loaded with freight, including several record towing jobs (ranging from local to regional, national, and interoceanic/international commerce. Hercules also is nationally significant under Theme 7b2a (manufacturing in the specific form of the shipbuilding industry), as the sole surviving product of a nationally important shipbuilding firm. She is furthermore significant at the national level under Theme 7f2 (the engineering of transportation systems), with respect to her outstanding design, establishing in its day a new level of excellence in the marine architecture of ocean-going steam tugboats. She is also nationally significant under Theme 7d1b (water-borne transportation), as the outstanding, sole-surviving representative of that whole class of tugboats and their role in waterborne transportation.

In terms of National Register areas of significance, the tug Hercules is of national significance in the fields of commerce, transportation, industry, technology, and engineering. She is one of a handful of steam tugs in existence; she was considered the finest kind of tugboat at the time of building and she is the only large oceangoing tug in the United States in a good enough state of preservation to be able to steam again.

Furthermore, Hercules had an eventful career which reflects broad and changing patterns significant to the maritime commerce and trade of the United States as a whole. Constructed in the yard of a renowned shipbuilder who once was honored by being given the job of rebuilding "Old Ironsides" herself, Hercules is the sole surviving product of that yard. She broke more than one towing record throughout her service life, starting with her epic maiden voyage from East Coast to West, via the dangerous Straits of Magellan. She helped build the Panama Canal, and used that shortcut herself in service to the East Coast.

Hercules towed windjammers up the Pacific Coast in the waning

9 MAJOR BIBLIOGRAPHICAL REFERENCES

L. Lang & P. Spectre; On the Hawser: A Tugboat Album; Down East Publications, 1980.

Martin, Wallace, E. Comp.; Sail and Steam on the Northern California Coast, 1900 - 1950; National Maritime Museum Association; San Francisco, not yet published.

(continued on Continuation Sheet)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY N/A

UTM REFERENCES

A 1,0 55,096,0 4,18,47,2,0
ZONE EASTING NORTHING

B
ZONE EASTING NORTHING

VERBAL BOUNDARY DESCRIPTION

COMMENCING AT THE EXTREME BOW OF THE VESSEL AT THE WATERLINE, AND THENCE EXTENDING ENTIRELY AROUND THE HERCULES AT HER WATERLINE, ENCOMPASSING ALL OF THE SHIP OUTLINED BY HER MAXIMUM BEAM, LENGTH, AND DEPTH OF HOLD.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE N/A CODE N/A COUNTY N/A CODE N/A

STATE N/A CODE N/A COUNTY N/A CODE N/A

11 FORM PREPARED BY

NAME / TITLE

STEPHEN HALLER, ACTING PARK HISTORIAN

ORGANIZATION

NATIONAL PARK SERVICE, GOLDEN GATE NAT'L REC. AREA

DATE

11/27/84

STREET & NUMBER

FORT MASON, BUILDING 201

TELEPHONE

(415) 556-9504

CITY OR TOWN

SAN FRANCISCO

STATE

CALIFORNIA 94123

12 CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES NO NONE

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Historic Preservation Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The evaluated level of significance is National State Local.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR
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in 1908, with all of her principal propulsion equipment and its auxiliaries intact.

She is 150 feet long overall, 134 feet 9 inches at the waterline, with a breadth of 26 feet 1 inch, and a depth of hold of 15 feet 5 inches. Hercules has a gross tonnage of 409 and a net tonnage of 221. Drawing slightly over 16 feet of water, she was a steady towing platform in high seas, but with her low freeboard she was a wet one. The tugboat has a high bow and a marked sheer, but nevertheless "shipped it green" when the long ocean swells broke over her deck. This made it a necessity to provide a covered deckhouse, pierced by portholes, from the fo'c's'le in the bow to the towing bits at the stern. Deckhouse and hull are constructed of rivetted steel plates over steel beam framing. Now many welds exist where deckplates have been replaced over the years.

The deckhouse consists of a high pilothouse (altered for better visibility over railroad cars on the "car floats" she towed alongside) over a small cabin used by the master. Immediately below the wheel is the steam steering engine -- an interesting example of power assisted steering. Just aft is the tall funnel typical of a steam tug. The national ensign flies from a staff at the after end of the deckhouse, to be clear of the tow lines at the stern. The main deck level of the deckhouse retains the original detailing throughout the living quarters that testify to the quality of construction. Fine wood paneling is found throughout the officers' mess and cabins.

Still surviving are the old icebox, functional wood/coal burning cast-iron stove, and hand pump for bringing up drinking water from the tank in the hold.

With the exception of the mess and galley forward and five officers' cabins amidships, most of the remaining deckhouse space is taken up by machinery: the funnel, steam drum, overhead steam lines of copper, the upper part of the engine room, and the steam towing engine dead aft. This Chase towing engine was featured in technological manuals of the time as making practical the replacement of manila towlines by steel cable and mechanically compensating for steel's lack of stretch.

Fine wood panelling and brass handrails in the engine room are perhaps subtle indications of the respect given the tugboats' *raison d'etre* -- her engine. Hercules' engine is an impressive

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example of the best of America's steam technology in its heyday. This Dialogue-built engine is a triple expansion steam engine whose cylinders measure 17 inches, 24 inches and 41 inches in diameter by 30-inch stroke and deliver 1,000 horsepower. Steam was introduced into the small high pressure cylinder where it completed its cycle and was exhausted to the intermediate sized medium pressure cylinder, and there once again to the large sized low pressure cylinder. This powerful engine was able to propel Hercules at 13 knots and move heavy tows as large as 500 foot long log rafts. The engine may presently be turned over by built-in jacking gear, or with compressed air. It is in an excellent state of preservation, entirely intact as it was during her working life, and only needing steam to turn Hercules' screw again.

Separated from the engine by 105,000-gallon capacity fuel tanks, large enough for 35 days continual steaming, is the Hercules' single massive boiler. It is a scotch marine boiler, 12 feet long and 15 feet in diameter, with four oil-fired burners. Normal working pressure was 177 lbs per square inch of steam. The main steam line is made of copper, and 177 lbs was the maximum pressure the U.S. Steamboat Inspection Service allowed for lines of this type. The boiler shell is original and had a long hard service life in spite of constant attention and application of boiler compound. The boiler was thoroughly refurbished in 1920. In 1924, new tube sheets were installed, the boiler retubed, and pronounced fit for further service.

When Hercules failed to pass inspection in 1962, she was sold for conversion to diesel -- a near victim of changing technology. Fortunately, that never happened, so that her steam plant remains intact. The boiler is again undergoing re-tubing with in-like-kind materials and methods so that she will one day again be able to raise steam. The goal is for her to be slowly and carefully rehabilitated using professional and volunteer labor skilled in traditional methods, to restore her steam machinery to operating condition, and to strip, refinish, and restore all interior panelling and cabinet work.

One day it is expected that Hercules will steam again in a living demonstration of the best of the era of steam navigation. There are now no oceangoing steam tugs active in the United States. It is known that five small harbor tugs are still active or preserved in shipyards across the country. In museums in the United States there are approximately seven small tugs in various

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states of preservation. (3) Hercules is outstanding, even among this select company because she retains her historical and structural integrity as a floating and essentially steamable example of the best class of oceangoing tugboat which played a significant role in broad nationwide patterns of U.S. maritime history. Noted tugboat authority, Steven Lang has written that, "I do not know of another tug in the U.S.A. that is still afloat that is of the quality of the Hercules." (4)

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years of the era of sail, including famous vessels such as the Pearl Harbor survivor U.S.S. California, Hawaii's museum ship Falls of Clyde, and San Francisco's National Historic Landmark C. A. Thayer. She was owned by men such as San Francisco Bay launch and tugboat pioneer Tom Crowley and San Francisco Mayor James "Sunny Jim" Rolph, who are significant for the mark they made upon San Francisco and West Coast maritime history.

Hercules' career shows an intimate involvement in several nationally important aspects of maritime commerce, trade, and transportation, from the days of sailing ships rounding Cape Horn, to the construction of the Panama Canal, to the highpoint and decline of railroad traffic in one of the nation's greatest ports. Her retirement was one more symbol of the death of steam as a major factor in United States industry and transportation. Hercules is therefore nominated for consideration as a National Historic Landmark, based upon the immediately preceding summary statement, and on the more complete historical context that follows.

Around the turn of the twentieth century, San Francisco was a great center of international commerce and trade, and the busiest Pacific port of the United States. Steamers carried passengers and cargo from the far corners of the world into San Francisco Bay, while windjammers by the score still ploughed their stately way through the swells working in trades where time was not of the essence. Competition was fierce to tow sailing ships into and out of the bay, and many were the exciting races to be the first tug to pick up ships at sea. There were three major competitors in the towboat business in San Francisco at the time: Crowley Tug and Launch Company, founded by Tom Crowley who got his start meeting sailing ships in an oar-powered "Whitehall boat"; the "Blackstack" tugs of Spreckels Towboat Company; and the "Redstack" tugs of Shipowners and Merchants' Towboat Company.

In 1907, Shipowners' and Merchants' sent one of the outstanding towboat pioneers of the Pacific Coast, Captain William J. Gray to Camden, New Jersey, to supervise the construction of two powerful new oceangoing tugboats contracted to be built at the yards of John H. Dialogue & Son. Dialogue's business on the Delaware River dates back to 1858. This East Coast yard was selected because of its reputation of turning out high quality tugboats. In 1882, it was reported that, "This yard has been established for many years and has had its ups and downs; but it has now proved the superior excellence of iron hulls for tugs, and builds

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four or five of that class of boat every year. . ." Of special note is the fact that the frigate U.S.S. Constitution was there in 1876. No trace of the yard presently exists, and research has shown that it was destroyed by fire, presumably along with all company records, including those that relate to Hercules. Hercules may well be the last tangible trace of this historic business in existence. (5)

The story is told that:

Captain Gray got to worrying about Hercules and her sister the Goliah during their building. He went back to Dialogue's yard and had another look at them in the sleet and snow of wintertime. Hercules had been framed and plated, but the Goliah was still in frame. He said later that he stood looking at them and then went into the office. He said to Dialogue: "You know a vessel looks different in the drawings and the model than when you see the real thing starting to take shape. These tugs are a little too narrow too deep. I am going to be losing men off them when a sea comes aboard."

Well Dialogue apparently agreed and they talked it over. The builder said that he couldn't do anything about the Hercules because she was already plated, but he could widen the Goliah a bit by heating up the frames and bending them out. "That way it will give you a foot more beam at the deck, and a foot more molded depth amidships."

Captain Gray said afterward that the Hercules was hard on men, but she was always pulling. He often said that the positions of the two tugs on the Pacific Coast should have been reversed - that the Goliah should have been stationed in San Francisco for sailing ship work, short hauls, and the Hercules up on the (Puget) Sound for the longer hauls, worse weather, and log raft work. (6)

Hercules and Goliah were fitted out and readied for sea at the beginning of the new year of 1908. Since they were building so close to the area of the great Appalachian coalfields, it was considered unusual for the time that the sisters were oil burners; however, they were built for West Coast service and reflected western conditions. Coal was not nearly as abundant as in the east, while oil was the fuel of the future on the Pacific shore, and ultimately elsewhere.

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Hercules' maiden voyage was extraordinary. She towed her sister nonstop 14,000 miles, all the way around South America to San Francisco. Their route was through the Straits of Magellan. Each vessel was topped off with 105,000 gallons of oil. Goliah acted in the role of tanker for her sister.

In a harkening back to the earliest days of steam navigation, sails were rigged on fore and after masts of each vessel, and were used to take advantage of favorable winds on several occasions. As near as can be determined, this was the longest non-stop tow in history at the time, and occasioned much comment in nautical circles.

Knowing the distance to be travelled, it is considered a remarkable trip for these two boats to undertake the trip from here to San Francisco, without having to take additional fuel on the entire route, and will no doubt be watched with considerable interest by the entire shipping fraternity. (7)

The Hercules was commanded at the time by Dan Thomsen, a colorful captain highly thought of on the West Coast. The weather was so rough as they set out that the pilot was unable to get aboard, and they were forced to lay over one day in the lee of the Delaware breakwater. Captain Thomsen recalled that:

Two spells of foul weather hit us coming out. Crossing the Gulf shortly after leaving Delaware breakwater we ran into a heavy gale, and we had all we could do to keep the craft free. For eight days the storm lasted, but when it abated we had fair weather until we emerged from the Straits of Magellan on March 12. It shut in thick with hail and rain squalls. The Hercules stood up on end at times, and had it not been for the automatic towing machines on the whipping hawser we would have parted. Some of the hands thought we never would weather it. (8)

But weather it they did -- completing a non-stop tow of 13,460 miles in 68 1/2 days of steaming. The two tugs arrived in San Francisco and dropped anchor off Fisherman's Wharf on April 11, 1908. A short trip to the drydock, and Hercules began an eventful career in oceangoing towing.

Throughout the oceangoing portion of her career the Hercules

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generally carried a crew of three firemen, three oilers, a chief and two assistant engineers, deckhands, a cook, two mates, and a captain -- enough manpower to work three shifts while at sea, four hours on and eight off.

Life on an ocean-going tug could be quite uncomfortable for the crew because the deep, narrow hull rode so low in the water that the main deck was likely to be awash much of the time. There were, however, many offsetting advantages to the trade. Tugboat captains, for instance, were generally well-known, highly respected, and well paid, for it took considerable experience and judgement to operate both the tug and its powerful towing equipment in such a way as to safely pull heavy-loads through through heavy seas in bad weather, or get them in and out of the various West Coast ports many of which were characterized by shallow bars and narrow entrances. (9)

Along the Pacific Coast, where the prevailing winds blow from the northwest, it was common for sailing ships with a charter deadline to meet to hire a tug to tow them up the coast. Log rafts, barges, and an occasional disabled steamer were the mainstays of the southbound business. During the period from 1908 to 1924, Hercules came into contact with the widest spectrum imaginable of Pacific coast maritime trade.

In 1908 she towed the disabled steam schooner Aberdeen from Eureka to San Francisco. Aberdeen is notable because she was later wrecked off the Golden Gate in 1916. Another wrecked steam schooner, Santa Clara made the same tow behind Hercules entirely waterlogged and awash! (10)

In 1912, Hercules towed a caisson for the first drydock at Pearl Harbor from San Francisco to Hawaii. She made several subsequent voyages to the Hawaiian Islands, once with Lurline (one of a series of vessels carrying this famous name) in tow.

During the construction of the Panama Canal, Hercules towed a caisson for the Miraflores Locks to Balboa from Union Iron Works in San Francisco, where it was built. Upon completion of the canal, Hercules took advantage of the shortcut in her first coast-to-coast trip since her maiden voyage, at which time the "Big Ditch" was not built. She hauled the dredge San Diego to Jacksonville, Florida, from San Pedro, California, in 27 days -- approximately one-third of the time of her first voyage all the way around South America.

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Lumber was the premier coastal cargo of the Pacific Coast. Lumber schooners had been carrying timber cargo southward to the burgeoning cities under sail since the 1850s. In 1895 the first successful attempt was made to tow logs down the coast, chained together in huge rafts to take advantage of wood's natural buoyancy. As much as seven million board feet at a time could be delivered -- a dozen times the load of an average schooner. But it was slow and disagreeable work. Hercules' 1913 log raft tow from Astoria, Oregon, to San Diego, took 29 days -- longer than the voyage to Florida via the new canal.

Hercules made at least six more voyages with log rafts in tow. One of Hercules firemen recalled fond memories of such a voyage:

Out through the Golden Gate, the most beautiful harbor in the world. North, towing this barkentine to Port Washington in Canada. Thence south, empty to Astoria where we picked up six million feet of timber in a raft to tow south to San Diego. Long, slow lazy days, making no more than three knots, even the patent log would not work. We rigged a fishing line on it and caught beautiful king salmon on the way. Catch one at 11 o'clock, off with head and tail, clean and slice into steaks. Ready to eat at 11:30 and go on watch with full belly. The rest of us eat at 12 noon but there was always plenty of salmon. We had no refrigerator, just a cooler on top deck and the meat got pretty raunchy after a couple of weeks, so lovely salmon was a Godsend.

All good things come to an end however and eventually we arrived in San Diego. Quite a tricky channel there, but we made it and hit for home empty. Arrived in "Frisco" as the sailormen called it, we staggered ashore trying to find our land legs. The nearest speak-easy helped a lot and soon we were ready to ship out again.

In 1916, Hercules towed the schooners Espada and C.A. Thayer from San Francisco to Port Townsend, Washington. This was a routine towing job at the time, now of significance because C.A. Thayer survived wear and time to be preserved as a National Historic Landmark. Now moored at the National Maritime Museum, San Francisco's Hyde Street Pier across from Hercules, Thayer is one of two survivors of a West Coast type that once numbered in the hundreds.

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This was not Hercules' last association with historic vessels, for about the same time she towed Hawaii's museum ship Falls of Clyde to the San Francisco Bay port of Oleum to load a cargo of crude. Hercules, however, was not in her element docking a ship-- she was a deepwater tug. It is said that Falls' jibboom raked over the wharf and bent the dolphin striker, knocking off the little arrow at the end.

In 1918 the Shipowner's and Merchant's "Redstack" fleet was acquired by Crowley Tug and Launch Co. Crowley's maritime enterprises have since grown to worldwide significance in the tugboat, barge, launch, and harbor cruise fields. Not long after, Hercules was sold to the colorful Mayor of San Francisco, and future Governor of the State of California, James "Sunny Jim" Rolph, Jr. Rolph was then San Francisco's leading sailing ship owner. His Rolph Navigation and Coal Company took over Hercules, changed her plain red stack to black with a big white "R", but otherwise operated her in much the same service as before. During her tenure for Rolph, she made a particularly noteworthy voyage when:

The Rolph tug Hercules has just completed a record long-distance tow. This was the British motorship Laurel Whalen which the Hercules towed from Papeete, Tahiti Islands ... The tug Hercules left San Francisco and arriving at Papeete started with the crippled motorship for Vancouver on March 3 of this year. With her tow, the Hercules put in to Honolulu on March 21 for fuel, departing the following day.
(12)

Not long after, Hercules went to Mare Island Naval Shipyard in Vallejo, California, to tow the newly lanchd battleship U.S.S. California to Hunter's Point Naval Shipyard in San Francisco for further fitting out. A short tow, but significant because of California's role in U.S. naval history. On December 7, 1941, she was hit and sank to the bottom of Pearl Harbor during the surprise Japanese air raid that propelled the United States into World War II.

In 1923, Hercules passed briefly through the hands of Moore Drydock Company, and was sold again in 1924 to the Western Pacific Railroad Co. for \$62,500. Her career changed significantly at this time, for she was henceforth to cease serving as a deepwater towboat. Entries in her logbooks document her workaday life from the nineteen twenties through the nineteen

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fifties as she shuttled railroad car barges back and forth across San Francisco Bay between terminals in Alameda, Oakland, and San Francisco's northern waterfront.

In 1933 she rammed the coastal steamer Point San Pedro in a heavy fog -- a result of a signal mix-up. Hercules' bow was smashed for a length of 8 feet, but both vessels were repaired and resumed service. In 1941, her foremast was removed and the wheelhouse raised to improve visibility over the railroad cars on barges floating alongside. Hercules now operated around the clock, using two, twelve-hour watches daily, and changing crews early in the evening and morning. A schedule of three, eight-hour watches was instituted just before World War II. By the late 1940s Hercules began to be increasingly idle, working only one or two eight-hour shifts per day. Toward the end of her career, as railroad traffic declined, she was often laid up for days at a time. (13)

In 1962 she was retired by Western Pacific -- a victim of changing nationwide trends in rail transportation, and of the local introduction of the diesel powered self-propelled car float Las Plumas. She changed hands again, and passed into the hands of Oakland tugboat operator John Seaborn, who kept her from the scrapyard. She was, however, threatened with conversion to diesel power when a spirited fund raising drive led to her acquisition by the California State Park Foundation for the San Francisco Maritime State Historic Park.

Now a part of the National Park Service's National Maritime Museum, San Francisco -- where she is moored with other historic turn-of-the-century vessels -- she is undergoing careful in-kind rehabilitation of her boiler, interior woodwork, and deckhouse in order to restore her to original operating condition. Hercules is a floating demonstration of significant broad and changing patterns in United States maritime history during the first half of the Twentieth Century. Her association with noteworthy vessels, shipowners, industries and patterns of trade, combined with her excellent physical integrity, serve to make her an historic vessel worthy of status as a National Historic Landmark. Veteran sea captain Fred Klebingat, who was once Chief Mate of the Falls of Clyde, said of the venerable tug, "The tug Hercules, she was the best we had!" -- and he should know.

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FOOTNOTES

1. Chappelle H.I.; quoted in Johnson & Joseph Co. Clipper Vol. 1, No. 38, April 1973.
2. Nautical Gazette Vol. LXXIV, No. 6, February 6, 1908, "Two New Dialogue-Built Tubs for Service on the Pacific Coast", p. 2.
3. Sea History, Summer 1977, p. 14.
4. The Johnson & Joseph Company Clipper, Vol. 1, No. 38, April 1975.
5. Henry Hall; Report on the Shipbuilding Industry of the United States; U.S. Bureau of the Census, Washington, D.C.; 1882; and a conversation with H. Leigh Newcomb, museum technician, National Maritime Museum, San Francisco; 11/15/84.
6. Transcript of conversation between Karl Kortum, Chief Curator of the National Maritime Museum, and Jim Cary, son of George Cary of Cary-Davies Towboats; 3/19/1965; on file at the National Maritime Museum, San Francisco.
7. The Nautical Gazette, Vol. LXXIV, No. 6, February 6, 1908.
8. As quoted in Pacific Motor Boat, December 1950, p. 15 "In Those Days There Were Sixteen Men in the Foc'sle" by Alberly Y. Websthoff.
9. San Francisco Historic Ships, published for the California State Park Foundation, c. 1967, reprinted for the National Park Service, 1978, p. 41, author unknown.
10. Humboldt Standard of April 4, 1910; compiled by Wallace C. Martin for publication in Sail and Steam on the Northern California Coast, 1900 - 1950, National Maritime Museum, San Francisco, to be published.
11. Interview with Albert J. Hooy by Stephen W. Hastings of the National Maritime Museum, San Francisco, N.D., p. 3, transcript on file at the J. Porter Shaw Library.
12. Humboldt Standard; April 14, 1920; cited by Martin; op. cit.
13. Catalog File GOGA 11805-20; of August 2, 1983; by H. Leigh Newcomb, on file at National Maritime Museum, San Francisco.

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Files of the National Maritime Museum, San Francisco specifically:
Transcripts of Interviews, Catalog files, San Francisco Marine
Exchange Index Cards

Personal Conversations with: Karl Kortum, Chief Curator, National
Maritime Museum, San Francisco;
Nov. 23, Dec. 14, 1984,
Christopher Hoskins, Tugboat
Restoration Volunteer, National Park
Service, Dec. 15, 1984,
Charles Hopkins, Tugboat Restoration
Volunteer, National Park Service,
Dec. 15, 1984,
H. Leigh Newcomb, Museum Technician,
National Maritime Museum, San
Francisco; Nov. 19, 21, 1984.
Theodore Miles, Assistant to the
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San Francisco, Dec. 19, 1984.

United States Department of the Interior
National Park Service

National Register of Historic Places

Continuation Sheet

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Nomination Update

**Acting under authority of Public Law 100-348-100th Congress,
San Francisco Maritime National Historical Park Act of 1988.**

The National Historic Landmark, STEAM TUGBOAT HERCULES was transferred from the Golden Gate National Recreation Area to the newly formed San Francisco Maritime National Historical Park on June 27, 1988.

National Historic Landmark # 75000025

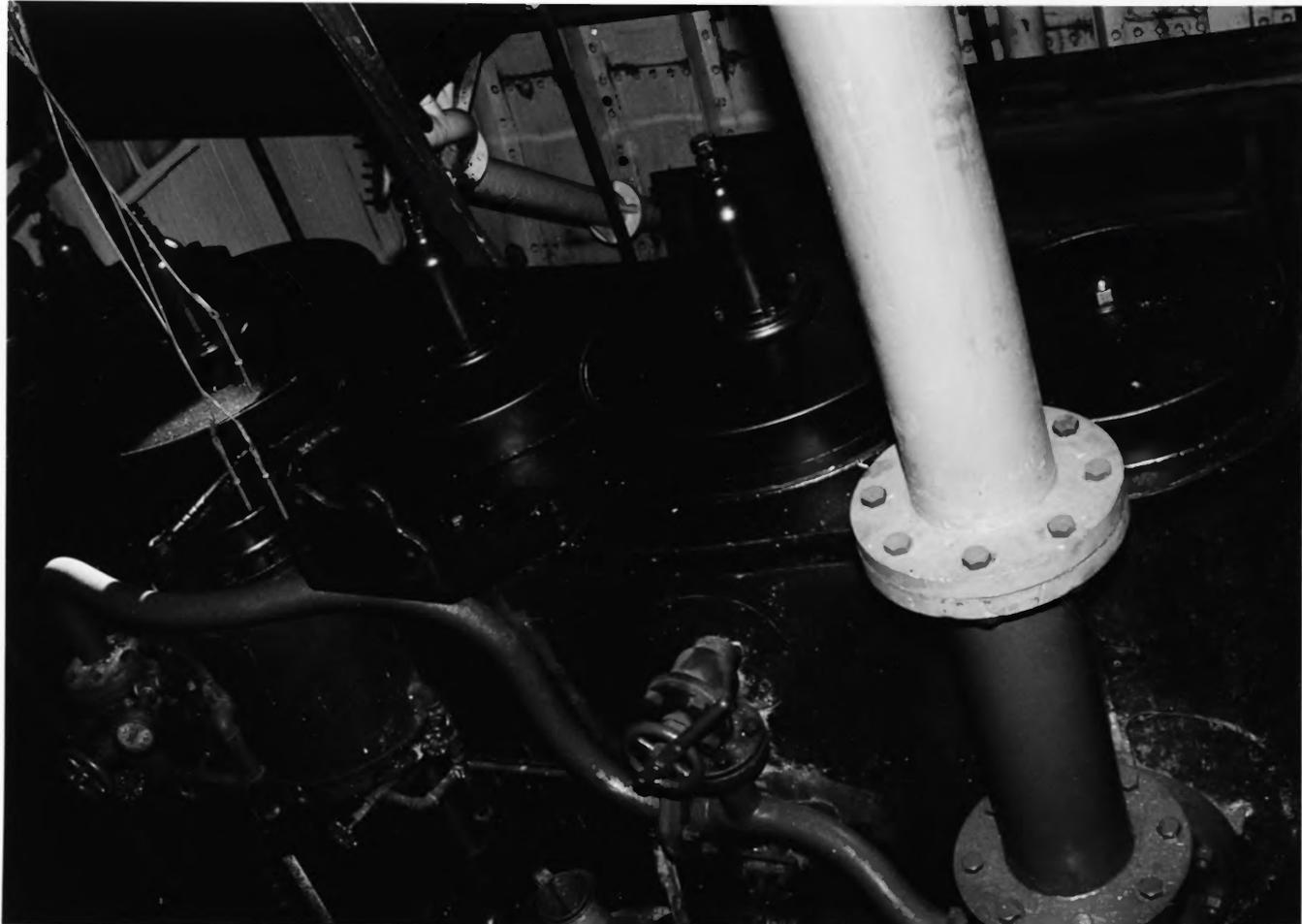
in addition, the location of the vessel was changed, US Army Corps of Engineers, Sausalito, CA, to the Hyde Street Pier, on September 14, 1996



Tugboat Hercules at John H. Dialogue's shipyard in Camden, New Jersey,
January, 1908
Negative on file at National Maritime Museum, San Francisco



Tugboat Hercules, Golden Gate National Recreation Area, San Francisco, California, February, 1985
National Park Service photograph by Stephen Haller



Tugboat Hercules, Golden Gate National Recreation Area, San Francisco, California,
view of triple-expansion steam engine with low-, medium-, and high-pressure
cylinder heads, February, 1985

National Park Service photograph by Stephen Haller



TUGBOAT MERCURIES, SAN FRANCISCO, CA

VIEW FACING NORTHWEST, TAKEN FROM NATIONAL HISTORIC LANDMARK
FERRY BOAT EUREKA.

FEBRUARY 1985

N. P. S. PHOTO BY STEPHEN A. HALLER.

NEGATIVE ON FILE AT GOLDEN GATE N. P. S.



TUGBOAT HERCULES, SAN FRANCISCO, CA.

TOWING A RAILROAD CAR FLOAT IN SAN FRANCISCO BAY,
CA. 1941-1962

NEGATIVE ON FILE AT NATIONAL MARITIME MUSEUM, SAN FRANCISCO

MAKERS OF STEEL
LUKENS
IRON & STEEL CO.
COATESVILLE PA.



T.S. 50000

BUILDERS
JOHN McDIALOGUE & SON
CAMDEN N.J.
1908

TUGBOAT HERCULES, SAN FRANCISCO, CA

BUILDER'S PLATE

FEBRUARY 1985

N. P. S. PHOTO BY STEPHEN A HALLER.

NEGATIVE ON FILE AT GOLDEN GATE N. R. A.



TUGBOAT MERCURIES, SAN FRANCISCO, CA

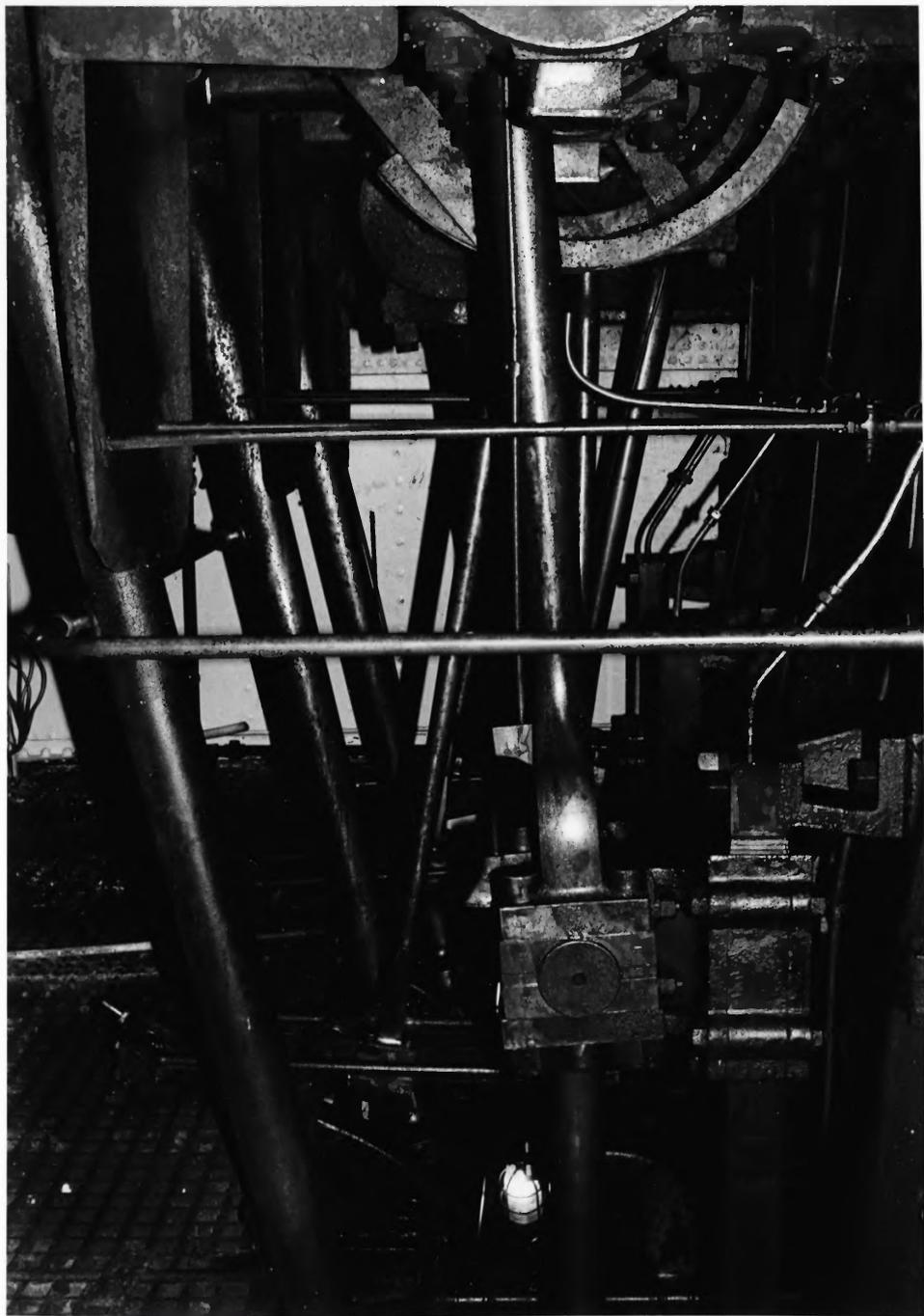
VIEW FACING WEST, LIBERTY SHIP. S.S. JEREMIAH O'BRIEN

IN BACKGROUND

FEBRUARY 1985

N. P. S. PHOTO BY STEPHEN H. HALLER

NEGATIVE ON FILE AT GOLDEN GATE N. R. A.



TUGBOAT MERCULES, SAN FRANCISCO, CA

VIEW OF HER TRIPLE-EXPANSION STEAM ENGINE,

SHOWING CRANKSHAFT, PISTON RODS, AND CAMSHAFTS

FEBRUARY 1985

N. P. S. PHOTO BY STEPHEN A HALLER

NEGATIVE ON FILE AT GOLDEN GATE N. R. A.



TUG BOAT HERCULES, SAN FRANCISCO, CA

TOWING THE NEWLY LAUNCHED BATTLESHIP U.S.S. CALIFORNIA

NOV. 19, 1920

NEGATIVE ON FILE AT NATIONAL MARITIME MUSEUM, SAN FRANCISCO