

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR FEDERAL PROPERTIES

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

1 NAME

HISTORIC Ferryboat Eureka (formerly Ukiah)

AND/OR COMMON Eureka

2 LOCATION

STREET & NUMBER Historic Ships Unit, Hyde Street Pier, National Maritime Museum

___ NOT FOR PUBLICATION

CITY, TOWN

San Francisco

___ VICINITY OF

CONGRESSIONAL DISTRICT

Fifth

STATE

California

CODE

06

COUNTY

San Francisco

CODE

075

2 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 checked="" 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 checked="" 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, Box 36063

CITY, TOWN

San Francisco

___ VICINITY OF

STATE

California 94102

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC Golden Gate National Recreation Area

STREET & NUMBER

Building 201, Fort Mason

CITY, TOWN

San Francisco, California

STATE

94123

6 REPRESENTATION IN EXISTING SURVEYS

TITLE National Register of Historic Places

DATE

February 28, 1973

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 type="checkbox"/> UNALTERED | <input type="checkbox"/> ORIGINAL SITE |
| <input checked="" type="checkbox"/> GOOD | <input type="checkbox"/> RUINS | <input checked="" 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 historic ferry Eureka (formerly known as Ukiah) is moored in an early 20th Century ferry slip at Hyde Street Pier, a unit of the National Maritime Museum, San Francisco. As she exists today Eureka represents a now vanished class of wooden-hulled ferryboats and incorporates design elements from her original construction in 1890 and alterations in 1922.

UKIAH

Built in 1890 the ferry steamer Ukiah had the following dimensions: 291' length (overall), beam 42' (at waterline) and 78' (at guardrails). With a 14' 2" depth of hold, she drew 6' 6" of water. Her displacement was 2564 gross tons or 2019 net tons. She was propelled by two side paddlewheels located amidships. These radial paddlewheels, still mounted, are 27' in diameter with 24 buckets that are 22" wide x 12'-9" long. The wheels were covered by a housing that arched above the level of the top (hurricane) deck. Built to carry 10 railroad freight cars and 500 passengers, Ukiah had two sets of standard gauge tracks that ran the length of the main deck, which were set flush with the deck level. Passenger accommodations were on the upper deck, of which the layout and design features are not documented.

Ukiah was fitted with a walking beam engine manufactured by Fulton Iron Works at San Francisco--an engine which remains unaltered to this day with the exception of a life-time of in-kind repairs. The particulars of the engine are: cylinder bore, 65"; piston stroke, 12'; horsepower, 2200; revolutions per minute, 24. This type of engine dates to early 19th Century. The crosshead from the cylinder and the connecting rod to the paddle crank are linked by a cast iron walking beam of a flat diamond-shape with a wrought iron strap shrunk over it for strength. As the steam from boilers entered the cylinder it drove the piston vertically up and down. The walking beam transferred this motion to the connecting rod, which drove a crank around in a circle. This crank was directly linked to the paddlewheel shaft, and thus supplied the propulsion for the vessel. The walking beam was visible above the top deck of the vessel, supported at the top of a large two-sided A-frame, made of oak tensioned with turnbuckles and fastened to the keelsons of the vessel. Steam was originally supplied by four direct flue return tube boilers burning coal. Due to the cost of maintenance they were replaced in 1914 by Freeman Dryback Boilers. In these boilers an oil flame was forced through a burner into the combustion chamber. Brickwork protected the chamber and rear of the boiler from the resulting hot gasses. These gasses reached their maximum temperature at the rear of the boiler, and passed through fire tubes in the water reservoir. The intense heat in these tubes acted on the surrounding water to create steam. This steam was piped through a superheater and to the engine at a pressure of 30 lbs per sq. in. Because of the change in boilers the original jet condenser was replaced by a surface condenser.

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 checked="" 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 type="checkbox"/> INDUSTRY | <input type="checkbox"/> POLITICS/GOVERNMENT | <input type="checkbox"/> OTHER (SPECIFY) | |
| | | <input type="checkbox"/> INVENTION | | | |

SPECIFIC DATES 1890-1922 BUILDER/ARCHITECT P. Tiernan

STATEMENT OF SIGNIFICANCE

Eureka is of National significance both because of the type of vessel she is, and because of her association with an extremely wide range of transportation systems as they developed across the United States during the span of a century from the early 1800's to the mid-1950's.

"The paddlewheel steamboat powered by a walking beam engine was a distinctly American development...it was a practical answer to the shipbuilding and navigation conditions that existed in the nineteenth century."¹ Eureka is the last intact wooden hulled side-wheel steamer afloat in the continental United States, and is thus nationally significant as an example of the type of wooden paddle steamers that led this country's inland waterborne commerce into the industrial era.²

Eureka's walking beam engine remains intact and basically unaltered since its manufacture in 1890 and is thus of National significance in the field of Industry, Technology and Engineering, as it is the only³ example of such a marine engine left operable and afloat in North America.

The Eureka is also Nationally significant in the field of Transportation since during her lifetime she was associated with a range of travel from horses, steam trains, interurban electric railways and automobiles. As Ukiah, she carried railroad cars across San Francisco Bay for SF&NPRR, a steam railroad. She later was converted to connect with passengers from the NWPRR's interurban electric commuter railway. "This railway was a pioneer in the advancement of railway technology, making modern subways and electrical commuter railways possible. Some historians correctly see electric railways as the major factor in shaping urbanized areas early in the twentieth century."⁴ Eureka is representative of a fleet of vessels which completed the crucial trans-bay link of this important transportation system; and thus significantly altered the Bay Area's demography. These changes in the San Francisco Bay Area were mirrored in the similar growth and effects of urban mass transit systems across the nation.

As times changed so did the ferry. Rebuilt as Eureka after 1922 she catered to the increased automobile traffic that drastically altered transportation economics across the country. Those economics found their local expression in the building of the Golden Gate Bridge, which forced Marin County

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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DATE ENTERED

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

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 2

EUREKA

During the First World War, Ukiah was used to ferry heavy loads of railroad cars across the bay for the United States Railroad Administration. The strain was too much for the old boat, and the Northwestern Pacific Railroad obtained federal funds to renovate the sagging hull. Ukiah was rebuilt at the Southern Pacific yards in Oakland between 1920-1922, and emerged as the auto/passenger ferry Eureka.

Eureka was 97% new, as Ukiah was completely rebuilt from the waterline up of indigenous woods. Douglas Fir was used for the hull repairs and cedar was used in the superstructure. Her original engine remained intact and unaltered with the exception of the wooden A-frame, which was replaced by one of riveted steel to better withstand engine vibration. The main deck was lengthened from 291' to 299'-6" to accommodate up to 120 automobiles. The second (passenger) deck was greatly expanded to accommodate 2300 passengers. Seating was of the double bench variety, and most of the original steam-bent plywood seats are still extant. Underneath each bench is a storage area covered by a leather flap for life preservers. The quality of all joiner work is evident with cedar tongue-and-groove ceiling, wooden columns with corbelled caps, carved corner brackets with fan designs, decorative mouldings, etched glass windows, and fluted bell-shaped milk-glass and brass electric light fixtures. Eureka is equipped with a magazine/smoke stand on the passenger deck aft. Forward was a galley/restaurant area where passengers were fed quick meals. The passenger deck arrangement remains exactly as it was during Eureka's years of service, with the exception of the replacement of the restaurant lunch counter with a wooden partition enclosing period (but not original) nickelodions. The restaurant galley area is now used as a storeroom. Restroom facilities were supplied on the passenger deck for male and female passengers. These rooms remain essentially unaltered from her service years with the plumbing fixtures, wooden stalls, and a partially tiled deck.

The enclosed passenger compartment is entered by pairs of double doors set approximately 30 feet back from either end of the second deck. This open boat deck carries two steel lifeboats at either end, with exterior stairs leading below to provide access to the car deck.

Built as a double-ender, Eureka is identical at either end above the passenger deck level, with a square wooden wheelhouse backed by two separate cabins for officers and crew bunks. Originally Eureka was steered by wheel. A later overhaul added a steam-piston driven steering gear which was controlled by a tiller in the wheelhouse. Later museum restoration has replaced the tiller in one wheelhouse with a wheel more like the original, while the other wheelhouse was stripped and converted to a museum office.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 3

Eureka's auto deck remains as it was during her working career with the exception of a wooden railing added to protect a collection of period automobiles which recreate the flavor of her years of service.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 2

ferryboat service out of existence in 1941. The last chapter of Eureka's life was to connect with Southern Pacific's transcontinental railroad trains at the Oakland Station, and take passengers and baggage to San Francisco--an association with the end of a transportation era which began with the completion of the transcontinental railroad in 1869.

This statement of significance is based on a more detailed history, which follows.

The story of steamboats on San Francisco Bay predates the gold rush. In 1847 Alexander Leidsdorff, a prominent local businessman, brought a tiny steamboat to San Francisco on the deck of a Russian cargo ship. She was called Sitka (for her building place) and went into ludicrously slow service across the bay and upriver to Sacramento. It was said that one disgusted passenger left the vessel and beat it on foot to its destination!

The dynamics of an increased population brought by the Gold Rush increased the need for reliable trans-bay service. The first steamboat to make regular crossings of San Francisco bay was Kangaroo which began to run from San Antonio Creek (now Oakland Estuary) to San Francisco in 1850. By 1863 there were four steam ferries and two fiercely competing companies serving a local railroad on this route.¹ An event of national significance occurred when the first transcontinental railroad train to reach the west coast arrived at Alameda on September 6, 1869, and was met by the ferry steamer Alameda.

On the north part of San Francisco bay regular ferry service was established in 1868, running the ferry Princess from Sausalito to Melggs Wharf in San Francisco, which was located near the present mooring of Eureka at the National Maritime Museum, San Francisco. Service quickly became an adjunct of the railways operating in the area--the North Pacific Coast Railroad, the Southern and Northern Pacific, and the North Shore Railroad.

The San Francisco and North Pacific Coast Railroad was acquired in 1869 by a colorful man named Peter Donohue--well known for founding Union Iron Works and the San Francisco Gas Works. It was this railroad which had Mr. P. Tiernan design and supervise construction of the Ukiah, built in 1890 to connect with its lines running from Tiburon thru San Rafael and north through the Redwood Empire to Cloverdale, Ukiah, and (eventually) Eureka. Ukiah was laid down in the SF&NPRR's yards at Tiburon, California. "The new freight and passenger ferryboat Ukiah is lying at Tiburon and is receiving the finishing touches in the way of adornment. She will go on duty in a couple of weeks and will make quick time between Tiburon and San Francisco."² Around December 4, 1890, Ukiah began her career,

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 3

ferrying railroad cars and passengers from Tiburon to San Francisco. "The Ukiah is serving on the Tiburon ferry run. She is not a passenger boat,³ but some patrons find her very pleasant, while others find objections."

Objections arose since Ukiah did not have a fully enclosed deck for passengers. However, on beautiful days, Ukiah would be rented to carry parties of picnickers to the excursion spots at Paradise Cove and El Campo. So popular were these excursions that one deckhand recorded that after casting off the bowlines in San Francisco, it was everything he could do to shoulder his way through the dense crowd and get to the other end of the vessel in time to receive the mooring lines.⁴

In 1907 the San Francisco and Northern Pacific Railroad, by then reorganized as the California Northwestern Railway, was taken over and merged with the North Shore Railway to become the Northwestern Pacific Railroad. The new company soon consolidated its services so that interurban trains operated only from Sausalito. By April 1, 1909 the direct ferry line from Tiburon to San Francisco was eliminated and Ukiah began to run from Sausalito.⁵

Ukiah was kept busy: "This vessel is in continuous service, making about 4,000 miles a month. She handles about 18,000 freight cars and 96,000 automobiles per year, besides many tons of express.⁶ During the First World War, the United States Railroad Administration operated the line to such great capacity that Ukiah was seriously damaged. The railroad administration therefore provided funds after the war to rebuild the ferry.

Ukiah was taken to the Southern Pacific yards in Oakland where she would remain for almost two years while her entire structure above the waterline was removed with the exception of the towering walking beam engine. Even the wooden A-frame for the engine was rebuilt. In 1922 Ukiah emerged 97% new as Eureka, named after the northern terminus of the railroad line. "But the Ukiah's soul remained alive, because as is often the case with such major reconstruction, the Eureka carried the Ukiah's official number on U.S. Department of Commerce records."⁷

Eureka had been built to carry 120 automobiles and 2300 passengers with a spacious enclosed second deck. Placed in service between the Ferry Building in San Francisco and the Northwestern Pacific railroad station in Sausalito Eureka became an integral link in a modern transportation network. Passengers transferred to electric interurban trams which whisked them quickly to their destinations in the Marin County suburbs of San Rafael, San Anselmo, and Fairfax. The upstart automobile was not encouraged at first on NWP ferries.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 8

PAGE 4

In contrast to the rapidly encroaching manifestation of modernity, the story is told how not long after Eureka was put in service, "a load of cattle was driven on board in Sausalito, destined for the stockyards of San Francisco. The deck crew had forgotten the precautions required to sustain the bovine passengers and the single rope intended for this purpose was no match for the animals. When the boat got out into the middle of the bay, the cattle got loose, ventured on the upper deck where they scattered the female passengers, stylishly dressed for San Francisco shopping and theatre going. There were many anxious moments before the cattle drovers and the cowpunchers, dressed in mariners blue, restored the beasts to order."⁸

Most of the stampede during those years were from human passengers as 40 million people crossed the bay on various ferry lines, with the Ferry Building said to be second only to London's Charing Cross Station as the busiest passenger terminal in the world. However, the increasing demand for passenger service and the explosive popularity of the automobile combined to create the demand that culminated in the construction of the Bay and Golden Gate Bridges in the late 1930's. Ironically, "the ferries wrote [their] own finis--they built commuter communities large enough to support bridges."⁹

By 1940, curtailed schedules had failed to save the Marin ferries. The last day of Marin County ferry service was Feb. 28, 1941, and Eureka had the distinction of making the very last run. What a run it was! "The Eureka left the city at 11:30 PM on her last trip to Sausalito. A singing, laughing, jostling crowd of a thousand or more were aboard. The crowd consisted mostly of young people who had come aboard with loaded glasses. Some braved the wind and the rain and stood on the open deck. They watched the harbor lights slide by. Others, inside, drank innumerable toasts to the Eureka and her skipper, the other ferries and the other skippers and to a whole lot of other things. Generally, they raised hell. They drank, sang and milled around or unscrewed a good number of metal plates and signs commuters had missed on previous runs. There was a four piece orchestra aboard. Few heard it over the noise. Then, in mid-Bay, a celebrant pulled the emergency cord. The Eureka stopped. After the master was assured that all was well, the voyage continued. Finally, Capt. Victor L. Verdellet jangled the engine room telegraph to a stop and eased the paddlewheeler into the Sausalito slip. The ferry was 30 minutes late. On the dock stood the local [Southern Pacific] police, who relieved the passengers of souvenirs. The Sausalito Lions Club had planned a dinner-dance aboard after the ferry had tied-up, but it was cancelled, so heavy was the damage."¹⁰

These were years of turmoil for the commuter transportation industry in the San Francisco Bay Area. Marin County ferry and commuter railroad service

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 5

had ended. The Southern Pacific interurban electric railways went over the Bay Bridge as of Jan. 14, 1939, and connected to the new Trans-Bay Passenger Terminal. The Ferry Building began a slow decline which was offset temporarily by the business of taking passengers to see the Golden Gate International Exposition on man-made Treasure Island.

Eureka was then repainted and taken over by NWP's parent company Southern Pacific Co., which continued to operate her between the Ferry Building and the Oakland Mole where she connected with mainline railroad trains. Passengers and baggage were taken on board Eureka for the final leg to San Francisco. "With only the mainline trains to meet, and with American railroads steadily losing ground to the airlines, the business of these ferries was not overwhelming. Tourists, sightseers and nostalgic Bay Area residents sometimes went on the boats just for the ride....Use of the remaining ferryboats declined as rapidly as did the use of railroads for mass transportation."¹¹ Therefore, when Eureka's crankpin snapped on Feb. 10, 1957, she was towed to dock and not put back into service. The ferry San Leandro brought an era to a close when she made the final trans-bay ferry run on July 10, 1958.

Eureka's story did not end, however, for even as ferry service ended, "the tradition will survive. Southern Pacific has given its side-wheel walking-beam boat Eureka to the San Francisco Maritime Museum, and the one-time queen of the bay ferryboats will take her place beside the windjammers in the Museum's planned Aquatic Park display, a piece of living history preserved for our grandchildren's children."¹²

After a three-year restoration Eureka was deeded to the California State Park system which opened her for display in 1963 as part of the San Francisco Maritime State Historic Park. A collection of antique automobiles from her years of service graced her lower deck. Visitors could walk her decks, visit her engine room, and see her in the millieu of a ferry pier, for she was moored with a collection of historic vessels as a pier that was once operated as a Sausalito ferry terminal by Golden Gate Ferries, Ltd.

In 1977 Eureka and the rest of the historic ships were transferred to the National Park Service, where they remain on display as part of the important resources of ships, artifacts, and library collections known as the National Maritime Museum, San Francisco.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 6

FOOTNOTES

Statement of Significance

1. Bob Whittier, Paddle Wheel Steamers and their Giant Engines. (Duxbury, Massachusetts: Seamaster Boats, Inc. 1983) p. 3
2. Conversation with Norman R. Brouwer, Historian, South Street Seaport, New York, New York. August 9 1984.
3. Conversation with Robert M. Vogel, Head, Engineering and Technology, National Museum of American History, Smithsonian Institution, Washington, D.C. January 3, 1984
4. Harre W. Demoro, Electric Railway Pioneer: Commuting on the Northwestern Pacific, 1903-1941. (Glendale, California: Interurban Press, 1983) p. 1

History

1. Southern Pacific Railroad Bulletin, November, 1908.
2. Marin Journal, November 28, 1890.
3. Marin Journal, January 15, 1891.
4. George H. Harlan, San Francisco Bay Ferryboats. (Berkeley, California: Howell-North Books, 1967) p. 137
5. Northwestern Pacific Railroad Headlight, July, 1920, p. 8
6. Demoro, p. 53
7. Harlan p. 49
8. San Rafael Independent Journal, n.d. [clipping in the files of the National Maritime Museum, San Francisco]
9. Demoro p. 63
11. Harlan p. 119

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

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

CONTINUATION SHEET

ITEM NUMBER

8

PAGE

7

12. Southern Pacific Railroad Bulletin November, 1908

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 9 PAGE 2

Demoro, Harre W., Electric Railway Pioneer: Commuting on the Northwestern Pacific, 1903-1941. Glendale, California: Interurban Press, 1983.

Harlan, George H., San Francisco Bay Ferryboats. Berkeley, California: Howell-North Books, 1967.

Milster, Conrad, "Giant American 'Walking' Beam Engines, Marine Propulsion, March, 1981.

Northwestern Pacific Railroad Headlight, July, 1920.

Osbourne, Alan, Modern Marine Engineer's Manual, Volume I. New York: Cornell Maritime Press, 1944.

Southern Pacific Railroad Bulletin, November 1938.

Whittier, Bob, Paddle Wheel Steamers and their Giant Engines. Duxbury, Massachusetts, 1983.

Manuscripts

Logbooks for the ferryboat Eureka, National Maritime Museum, San Francisco.

Plans for the ferryboat Eureka, 1920-1923, National Maritime Museum, San Francisco.