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.

onn to sood). Type an ontries.			
. Name of Property			
storic name Nenana			
her names/site number			
Location			20.
eet & number Alaskaland Par	·b	***************************************	not for publication
y, town Fairbanks			vicinity
	K county Fairbanks	code ()9()	
ATASKA COUC	county Fair Danks	5 000 (190)	zip code
Classification			
nership of Property	Cotogony of Bronorty	Number of Bose	roos within Bronarty
	Category of Property		urces within Property
private	building(s)	Contributing	Noncontributing
public-local	district		buildings
public-State	site		sit e s
public-Federal	x structure	_1	structures
V ₂	object		objects
•			Total
me of related multiple property listing	a:	Number of contri	buting resources previously
,,,,,,,,,,,,,,	9		onal Register 1
-			
State/Federal Agency Certifica	tion		
Signature of certifying official			Date
State or Federal agency and bureau			
In my opinion, the property I meets	s does not meet the National R	egister criteria. See o	continuation sheet.
Signature of commenting or other official			Date
State or Federal agency and bureau			
National Park Service Certifica	tion		
ereby, 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.			
unanated from the National Design			
removed from the National Register.			
other, (explain:)			
		1 Ab - 1/2	
	Signature o	of the Keeper	Date of Action

6. Function or Use	
Historic Functions (enter categories from instructions) Transportation-Water Related	Current Functions (enter categories from instructions) Museum
7. Description	
Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)
N/A	foundation <u>N/A</u>
	wallsN/A
	N/A
	roof N/A
	other N/A
	N/A

Describe present and historic physical appearance.

SS Nenana is a five-deck (main or cargo, saloon, boat or hurricane, Texas, and pilothouse), western river, sternwheel steamboat. Two-hundred and thirty-seven feet in overall length, with a 42-foot beam, she was rated at 1,000 gross tons register. Nenana was built at Nenana, Alaska, and launched in May 1933. Fully laden, she drew three feet, six inches of water.

During Nenana's first year in operation, her 210-foot wooden hull was found to be too flexible. In the winter of 1934 the hull was strengthened. To lighten the stern, a smaller wheel shaft was installed and the 28-foot sternwheel rebuilt. Hydraulic steering gear was added at this time. [1]

Marine architect W.C. Nickum of Seattle designed the sternwheeler, which was prefabricated in Seattle and put together at Nenana, Alaska, by Berg Shipbuilding Company. Nenana was built to serve as a packet. She could carry both passengers and freight. Nenana had accommodations for 48 passengers on her saloon deck. Up to 300 tons of freight, including two tons in cold storage, could be carried on her main deck. A Texas, topped by a pilothouse mounted forward in poolboat style, provided staterooms for a portion of the crew of 32. Nenana could push five or six barges on the Yukon River; but, because of sharp bends, only one on the Tanana River.

The Washington Iron Works in Seattle built two horizontal compound, noncondensing steam engines and shipped them to Alaska for Nenana. Tandem, compound engines, each with a 28-inch diameter low pressure cylinder and a 17-inch high pressure cylinder and six-foot stroke, the engines could develop 600 horse-power each. McGintie & McDonald handled installation of the machinery and equipment. At first, powered by a wood-fired boiler, Nenana was converted to an oil-burner in 1948 when 8,700-capacity oil storage tanks were installed below her foredeck.

8. Statement of Significance		
Certifying official has considered the significance of this property and inationally	perty in relation to other properties: statewide locally	
Applicable National Register Criteria A B C	□D NHL CRITERI	A 1,4
Criteria Considerations (Exceptions)	□D □E □F □G	
Areas of Significance (enter categories from instructions) Architecture (Naval) Maritime History	Period of Significance	Significant Dates 1933
NHL XII-L: Business: Shipping and Transportation	Cultural Affiliation N/A	
Significant Person N/A	Architect/Builder Seattle Shipbuilding C	· · · · · · · · · · · · · · · · · · ·

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

The exploration, settlement, and growth of America has been intimately concerned with the waterways which opened this vast continent to Europeans. Transportation by water was the first means employed as new lands were settled. In the territory of Alaska, just as in other territories settled earlier, rivers offered a route to the interior long before roads could be built.

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

9. Major Bibliographical References	
SEE FOOTNOIES 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: Fairbanks Historical Preservation Foundation, Fairbanks, AK
10. Geographical Data	rodudation, rail banks, Ak
Zone Easting Northing	B
Verbal Boundary Description	
All that area encompassed within the extreme 1	ength and beam of the vessel.
Boundary Justification	
The boundary incorporates the entire area of the	ne vessel. See continuation sheet
11. Form Prepared By	
name/title Kevin J. Foster, Historian and William	S. Hanable
organization National Park Service (418)	date <u>July 29, 1988</u>
street & number P.O. Box 37127	telephone (202) 343-9550
city or town Washington	state D.C. zip code 20013

National Register of Historic Places Continuation Sheet

Section number ___7 Page __2___

SETTING

As she exists today, Nenana is in a protected setting which maintains a relationship to one of the Yukon tributaries on which she steamed, i.e., the Chena River. Nenana is permanently supported on a concrete and timber grid system placed on the bottom of a canal leading from, but not presently connected to, the Chena River. The canal was constructed ca. 1966, when it was decided to place Nenana as the center piece of an historical park celebrating the Alaska Purchase Centennial of 1967. The park is now known as Alaskaland. The canal is presently drained, but is to be refilled when restoration work on Nenana is completed. An automatic pump can fill the canal with river water to a level just below the boat's hull.

Nenana's bow points north and is approximately 350 feet from the Chena River. The end of the now-blocked canal in which the boat sits is approximately 150 feet from the river.

VIEWS

From Nenana's bow, an asphalted road, frame building, narrow gauge amusement park railroad, cyclone fence, and bike path screened with riverbank alder interrupt the main deck view of the river. Saloon deck, boat deck, Texas deck, and pilothouse deck views of the river are possible. From Nenana's starboard side, the view is of a number of small log and frame buildings relocated to Alaskaland from the Fairbanks riverfront. From Nenana's port side, the view is over a large asphalted open area to a convention center and over a wide asphalted trail to a grassy, treed area occupied by a childrens' play area and to a few more buildings relocated from the Fairbanks downtown waterfront. From Nenana's stern, the view is of a large asphalted area leading toward the Alaskaland entrance. Looking out from the bow or either side, Nenana gives the sense of being alongside a typical well-kept riverbank at a small Alaskan village.

The view of Nenana's bow is over the length of the canal.

Nenana's port side is unobstructed except for a wooden rail fence that keeps visitors away from the canal bank. The view of Nenana's port side is obscured by a wood staircase required by

National Register of Historic Places Continuation Sheet

Section	number	7	Page	3
COULDII	11411100			

local fire regulations which is placed on the canal bank just aft of the port cargo doors. Rising from the canal bank, the staircase joins Nenana on the saloon deck where it is temporarily attached to the vessel by a metal plate. The view of Nenana's stern is unobstructed except for the wooden fence mentioned above.

Exterior

Restoration work is currently underway on Nenana. A temporary roofing structure, erected in 1980, shelters her exposed decks. Vertical beams support the roofing and rest on hull grid supports below the hull. This grid system for supporting hulls out of the water has been in use for more than one hundred years in Alaska.

At present, exposed decks consist of original redwood planking that has been covered with plywood and painted with Hypalon, a paint-like roofing compound. This was applied ca. 1975, when the original painted deck canvas was removed. Restoration plans call for the redwood decking to be exposed, laid over with marine plywood, and re-covered with the original finish of painted canvas.

Other than decking, Nenana's exterior remains intact. A layer of white latex paint was applied to outside bulkheads ca. 1977, when the exterior was scraped and dry rot repaired. It is to be removed and replaced with non-latex paint.

Exterior fixtures also remain intact for the most part. With a few exceptions, original brass hardware remains on doors and windows. Although some exterior light fixtures have been added, some original light fixtures remain in place. A sprinkler system, required by local fire codes for public use of the vessel, is visible along exterior bulkheads but appears compatible with other piping. Original brass fire mains, auxillary hand fire pumps, cleats, and bitts remain in place.

The foredeck, lying between the main deckhouse and the stem, is currently being rehabilitated. The decking, extensively rotted, has been removed and is to be replaced with wood that is an exact match in size and nature to the original. Major features on the foredeck include towing bitts on either side of

National Register of Historic Places Continuation Sheet

Section n	umber	7	Page	4
-----------	-------	---	-------------	---

the stem; a stage or gangplank, which remains intact; a steam winch, which has been removed during rehabilitation and is to be reinstalled; vent pipes, originally placed just aft of the steam winch on either side of the deck but removed and to be reinstalled; a mast supporting three cargo booms. Two additional booms called spuds, used to lift the steamer's bow when grounded, are carried vertically port and starboard. The booms have been removed during rehabilitation and are to be reinstalled. Also on the foredeck just outside the forward bulkhead are water mains inboard of the starboard forward cargo door and a hand-operated auxillary pump inboard of the port forward cargo door. A pipe and wire guard rail protects the deck edge from the stem to the forward bulkhead.

Narrow guards, without guard rails, run aft outside the main deckhouse to the stern, ending at the monkey rudders. The sternwheel is seated between the two monkey rudders and the four main rudders mounted at the end of the hull. On port and starboard guards, two cleats are located forward of the midship cargo doors and three cleats are located aft of the midship cargo doors. Six wooden bumpers, shown in 1944 and 1949 photographs, were placed port and starboard outside the guards. These were apparently removed at some point and not replaced.

Enclosed exterior stairs, port and starboard, lead to the saloon deck. Aft, interior stairs lead from the starboard side of the engineroom to the saloon deck, coming out in an enclosed stairwell just behind the after bulkhead of the saloon deckhouse. The exterior saloon deck runs port and starboard from the bow to the stern, where it is terminates at the sternwheel splashboard. Although the space between the stairwell and the splashboard is shown covered with a roof in a 1944 photo, it is shown uncovered in 1949 photo and is presently uncovered. Wooden guard rails supported by pipes connected with wire fencing enclose the exterior saloon deck.

Access to the boat deck forward is by way of port and starboard, exterior unenclosed stairs. Four hog posts, two port and two starboard, pierce the boat deck aft. Port and starboard davits on the boatdeck outboard of the after bulkhead of the Texas held lifeboats, which have been removed during rehabilitation work. Photographs made in 1944 and 1957 show a stove pipe rising from

National Register of Historic Places Continuation Sheet

Section	number	7	Page _	5

the saloon deck on the port side at approximately frame 61. It had been removed by the time <u>Nenana</u> was being prepared for relocation to Alaskaland in 1965.

Access to the Texas deck is by short, fore and aft, port and starboard stairs from the boatdeck. It sits atop the skylights of the saloon deckhouse and is elevated from the boat deck only by the height of those skylights. Although a 1939 photograph shows the forward bulkhead of the Texas to be squared off, by 1949 it had been changed to the rounded configuration which exists today. The Texas deck is pierced by a kitchen stove pipe just forward of the after end of the deck. This was not shown in photographs up to 1965, when the boat was placed at her present location. A few feet forward of the present stove pipe is a cast iron atmosphere exhaust, which is shown in a 1944 photograph. Between the exhaust and the base of the pilothouse are three ventilation hatches that have been adapted to hold blower fans.

Between the forward-most hatch and the base of the pilothouse, the Texas deck is pierced by the center or king post that is the central feature of the boat's "hogging" or bracing system of posts, trusses, and turnbuckles. This hogging system is necessary on western river steamboats to strengthen the lightly built hull. It provides a strengthening girder to the entire hull structure. [2]

Access to the pilothouse deck, provided by the Texas roof, is by portside exterior unenclosed stairs. A 1944 photograph shows that there was once also a set of starboard stairs. The pilothouse deck is currently enclosed by a pipe and wire fence, although this is not shown in the 1944 photograph. The deck is pierced by the main stack, which rises behind the pilothouse. Unenclosed stairs rise from the port side of the pilothouse deck to a door at the back of the pilothouse.

A searchlight shown in a 1944 photograph is no longer atop the pilothouse. The ship's bell, once mounted on the outside of the forward bulkhead of the pilothouse has been removed. It is reported to be in a bar in Anchorage. The ship's whistle, once mounted on the forward part of the main stack above pilothouse level, has also been removed. It is reported to be somewhere in Fairbanks. Staffs rising from the forward mast, kingpost, and

National Register of Historic Places Continuation Sheet

Section r	number	7	Page	6
-----------	--------	---	------	---

from the saloon deck just forward of the splashboard are shown in photographs taken prior to 1957. They are not present at this time.

Interior

Interior spaces include the hold, main deckhouse, saloon deckhouse, Texas deckhouse or Texas, and pilothouse.

Access to the hold is by hatches on the foredeck and in the engineroom. The hold, 42' by 210', is interrupted only by partial bulkheads from stem to stern. Frames numbered 0 (at the stern) to 155 (at the bow) brace the hull as do a number of horizontal and vertical beams. Supports for the steam winch are found in the hold at frame 150. Between frames 146 and 150 were the oil tanks, now removed, installed in 1948. In this area the hull timbers are blackened from oil spillage. A partial bulkhead is in place at frame 146. The forward mast rises over frames 132 and 133. Between frames 117 and 124 are the remains of the bed for the boiler and firebox which were removed, ca. 1965. Another partial bulkhead is in place at frame 100. The king post rises over frames 77 and 78. Between frames 0 and 36 are the hot well, lower portions of shifting and reversing levers, and rudder stock connections.

The main deckhouse, 37' by 130' 6", runs from frame 0 to frame 133. Vertical clearance ranges from 8' to 10' 3". Access to the main deckhouse from the foredeck is by port and starboard cargo doors or amidships by port and starboard cargo doors. As originally configured, the main deckhouse housed a multi-flue boiler (built at the Washington Iron Works in Seattle in 1932) forward between frames 100 to 120; a crew mess, galley, and bakery just aft of the midships cargo door on the port side; and a filtering plant and walk-in refrigerator just aft of the midships door on the starboard side. A full bulkhead at frame 32 closed off engineroom spaces (from frames 18 to 32), crew quarters in an inner cabin (from frames 4 to 16), and crew toilet (from frames 0 to 4).

The boiler and the main steam line which ran overhead to the engineroom were cut and removed in 1965. The hole in the decking through which the boiler rose from the bilges was decked over. The steel beams and trusses surrounding the boiler were sheathed with 1×6 " boards.

National Register of Historic Places Continuation Sheet

Section number	r <u>7 </u>	Page	
----------------	--	------	--

At the time the boiler was taken out, the crew mess, galley, and bakery, filtering plant, and walk-in refrigerator were removed to create more usable space in the main deckhouse. No permanent modifications have replaced these features, although the space formerly occupied by the boiler is being used as a workshop during rehabilitation and the space aft to the engineroom is being used for temporary exhibits. Some additional lighting fixtures and overhead ducting for heating spaces on the saloon deck have been added. These are to be removed during the current restoration.

Access to the engineroom is by port and starboard interior doors leading from the forward main deckhouse, port and starboard, exterior doors leading from the guards, and by interior stairs leading from the after saloon deck. The engineroom is substantially intact. The stub end of the main steam line is still overhead. Pumps, feedwater tanks, condensers, throttle, engineroom telegraph, and port and starboard engines remain in place. The engines were disconnected from the sternwheel, ca. 1975, to permit an electric motor to turn the wheel, but can easily be reconnected. Some engineroom gauges have been removed, but a few remain.

Unlike the engineroom, the after crew quarters and toilet are not substantially intact. They were apparently gutted at some point after 1965 to provide storage room.

The saloon deck, 28' 6" x 130' 6", runs from frame 6 to frame 127. Vertical clearances range from 7' 5" to 9'. As originally configured, the saloon deckhouse was divided into an observation room (frames 101 to 127), a dining saloon (frames 29 to 100), and a smoking room (frames 6 to 8). Photographs taken in 1957 show the observation room and dining saloon with simple furniture. The dining saloon's unadorned walls were relieved by a series of overhead arches located at the junctions of skylights. radiators were located on the bulkheads at the ends and in the middle of the dining saloon. A series of seven or eight globe lights ran along the center of the overhead. At the forward end of the dining saloon was a partial bulkhead in front of which stood a small bar or sideboard. Aft, another partial bulkhead screened the passageway leading to the smoking room. A pantry, located portside aft, opened into the dining saloon. reportedly was served by a dumbwaiter which ascended from the galley on the main deck. On the portside, outboard of the dining saloon, a ladies room occupied the first compartment and a men's room occupied the last compartment; between was a series of small staterooms. On the starboard side, the purser's office headed the line of staterooms.

National Register of Historic Places Continuation Sheet

Section number	7	Page	8
----------------	---	------	---

At the time the boiler was taken out, the crew mess, galley, and bakery, filtering plant, and walk-in refrigerator were removed to create more usable space in the main deckhouse. No permanent modifications have replaced these features, although the space formerly occupied by the boiler is being used as a workshop during rehabilitation and the space aft to the engineroom is being used for temporary exhibits. Some additional lighting fixtures and overhead ducting for heating spaces on the saloon deck have been added. These are to be removed during the current restoration.

Access to the engineroom is by port and starboard interior doors leading from the forward main deckhouse, port and starboard, exterior doors leading from the guards, and by interior stairs leading from the after saloon deck. The engineroom is substantially intact. The stub end of the main steam line is still overhead. Pumps, feedwater tanks, condensers, throttle, engineroom telegraph, and port and starboard engines remain in place. The engines were disconnected from the sternwheel, ca. 1975, to permit an electric motor to turn the wheel, but can easily be reconnected. Some engineroom gauges have been removed, but a few remain.

Unlike the engineroom, the after crew quarters and toilet are not substantially intact. They were apparently gutted at some point after 1965 to provide storage room.

The saloon deck, 28' 6" x 130' 6", runs from frame 6 to frame 127. Vertical clearances range from 7' 5" to 9'. As originally configured, the saloon deckhouse was divided into an observation room (frames 101 to 127), a dining saloon (frames 29 to 100), and a smoking room (frames 6 to 8). Photographs taken in 1957 show the observation room and dining saloon with simple furniture. The dining saloon's unadorned walls were relieved by a series of overhead arches located at the junctions of skylights. radiators were located on the bulkheads at the ends and in the middle of the dining saloon. A series of seven or eight globe lights ran along the center of the overhead. At the forward end of the dining saloon was a partial bulkhead in front of which stood a small bar or sideboard. Aft, another partial bulkhead screened the passageway leading to the smoking room. A pantry, located portside aft, opened into the dining saloon. The pantry reportedly was served by a dumbwaiter which ascended from the galley on the main deck. On the portside, outboard of the dining saloon, a ladies room occupied the first compartment and a

National Register of Historic Places Continuation Sheet

Section number	r <u> </u>	Page	9
----------------	------------	------	---

men's room occupied the last compartment; between was a series of small staterooms. On the starboard side, the purser's office headed the line of staterooms.

The saloon deckhouse was substantially altered, ca. 1965, as Nenana was prepared to be a feature attraction at the Alaska Purchase Centennial of 1967. A bar and dance floor were installed in the observation room. Bulkheads between staterooms and those between the end staterooms and the dining saloon were removed, as were stateroom fixtures. The smoking room was converted into a kitchen. In 1978, this alteration was amended, with restrooms being installed in space taken from the port side of the kitchen area.

The Texas, 14' 6" x 50", runs from frame 79 to frame 122. Vertical clearance is seven feet. As originally configured, the Texas was divided into eight staterooms for deck and engineer officers. Reversing the traditional placing on other western rivers, the captain's cabin was to port and pilot's cabin to starboard forward. A watercloset and bath were located at the center of the Texas. The 1965 alterations included gutting the Texas. A large meeting room was created forward, with a service kitchen aft served by a dumbwaiter served by the newly installed bar below.

The pilothouse, 11' x 12', runs from frame 104 to frame 115. Vertical clearance is seven feet. As originally configured, the pilothouse included a large pilot's chair placed on a two-drawer base in the after starboard corner, engineroom telegraph, steering lever for the hydraulic system installed in 1934, and pilot wheel. A large brass radiator was mounted on the forward bulkheads. The pilot's chair, steering lever, and engineroom telegraph are no longer in place. The chair base, steering lever column, pilot wheel, and radiator remain.

Summary

SS Nenana is located in an appropriate setting. Approximately 70 to 90 percent of the original fabric remains. From the exterior, the boat appears much as she did during her operating life. Although the interior, particularly the forward main deckhouse, saloon deckhouse, and Texas deckhouse, has been substantially altered, important features such as the engineroom remain intact.

National Register of Historic Places Continuation Sheet

Section number ____7 Page __10 ___

NOTES

William S. Hanable, "Inspection Report, SS <u>Nenana</u>, Alaskaland, Fairbanks, Alaska, June 28, 1988." Copy in National Historic Landmark files, History division, National Park Service. The majority of this section is based on this report.

Alan Bates, <u>The Western Rivers Steamboat Cyclopedium</u>, (Leonia, New Jersey: Hustle Press, 1968) pp. 1-40.

National Register of Historic Places Continuation Sheet

Section number rage _=	Section	number	8	Page _2	
------------------------	---------	--------	---	---------	--

STEAMBOATS ON WESTERN RIVERS

The first successful steamboats were built to navigate on the rivers of America. Starting with Robert Fulton's historic trip up the Hudson River in 1807, steamboats provided convenient, inexpensive transportation and ultimately opened up the continent to settlement.

The early steamboats on eastern rivers were powered versions of canal boat hulls. New Orleans, the first steamboat on the Mississippi, also employed the long, narrow, deep hull of early eastern steamboats but the shallow Mississippi required a different sort of boat. [1]

Several design problems had to be solved before steamboats could operate successfully on shallow western rivers. Primarily, the hull and machinery had to be made as light as possible. lightweight powerplant first appeared in 1813 on a small boat named Comet which employed a high-pressure engine. powerplant was further refined in 1816 when Henry Shreve built a horizontal, high-pressure, direct-acting steam engine and placed the boilers on deck to distribute machinery weights evenly on the hull. The final requirement, a broad, shallow-draft hull, developed over time. All of the essential elements that made up the western river steamboat as a type were present by 1825. Broad, shallow-draft vessels with boiler and engines on deck, side or sternwheels for propulsion, and cabins built on lightweight decks above the freight and machinery-laden main deck soon appeared on nearly every tributary of the Mississippi. ease and economy of this service caused the value of goods reaching New Orleans to double every ten years from 1820 to 1860. [2]

The first steamboat on the west coast was the sidewheeler <u>Beaver</u>, which navigated the Columbia River in 1835. Western river type steamboats spread to California with the gold rush in 1849 to carry fortuneseekers and supplies up the Sacremento River to the goldfields. Steamboats spread over the west coast and by the 1850s and 1860s could be found in every major river.

SEE CONTINUATION SHEET

National Register of Historic Places Continuation Sheet

Section	number	8	Page	_3
---------	--------	---	------	----

STEAMBOATS IN ALASKA

Steamboat operation in Alaska began in 1862 when Flying Dutchman began service to fur traders on the Stikine river. [3] More boats followed on other rivers in later years to supply trading posts and carry passengers. Alaskan steamboats and navigation practices differed little from western river boats and many men from the Mississippi, Missouri, and Columbia Rivers came to work in the new frontier. The first steamboat on the largest river in Alaska, Yukon, began operation there in 1869. Several companies operated steamers on the Yukon after Yukon showed the way.

The river steamers are of stern-wheel type, many years' experience having demonstrated the superiority of vessels of this class for overcoming the difficulties of swift currents, shallow water and shifting sand bars. Necessarily they are of varied size and structure to meet the variety of conditions encountered... [4]

The Klondike goldrush in 1897 created an enormous need for river steamboat service in Alaska and a number of new private steamboat lines were soon in operation on the Yukon River to supply the goldfields. By 1898, 30 steamboat companies had been formed and 60 new boats and barges operated on the Yukon river. Steamboats were the sole source of supply to isolated mining and trading communities in the interior and though the boom slowly died off, steamboats continued to run in numbers on the Yukon. As in the rest of the nation, new highways and railroads slowly strangled river transportation. When steamboat lines abandoned unprofitable routes the government-owned Alaska Railroad, run by the Interior Department, was forced to maintain minimal services. [5]

In May 1923, the Interior Department, authorized by an act of Congress, established a steamboat freight, passenger and mail service for the Yukon. Run by the Alaska Railroad, a 642-mile route was established to run between Nenana and Holy Cross and extended in 1925 an additional 132 miles to Marshall. The Army Corps of Engineers, which also built and employed steamboats to maintain the rivers and supply Army installations, transfered two steamboats, Gen. J. W. Jacobs and Gen. Jeff C. Davis to the Alaska Railroad to perform this service. [6] In 1927 the railroad bought and refurbished the Canadian steamboat Alice to augment

National Register of Historic Piaces Continuation Sheet

Section number 8 Page 4

the two aging boats aquired from the Army. Though these boats lost money every year, economic conditions prevented a rate hike. Service had to be maintained to allow continued growth in the strategically important interior. To cut operating costs the railroad contracted for a single large boat to replace <u>Gen. J. W.</u> Jacobs and Gen. Jeff C. Davis. [7]

NENANA AS BUILT AND MODIFIED

The boat the Alaska railroad contracted for was traditional and conservative, though larger than any previous Yukon River steamer. The design called for the new boat to be a steamer rather than a diesel or diesel-electric boat which might have unknown problems in the harsh conditions of the Yukon. The new boat was built by the Seatle shipbuilding company at Nenana and named Nenana at her launch in 1933. [8]

The steam engines fitted to <u>Nenana</u> were the most efficient type that could be applied to a sternwheeler. They were compound engines which expanded steam twice to extract more work from a given amount of steam. Unlike most western rivers steamboats <u>Nenana</u> was built to use a condenser. This, like the compounded engines, made the powerplant more efficient and had the added advantage of quiet operation.

Nenana could carry up to 100 tons of cargo on her maindeck. The boat was licensed to carry 16 passengers, but as government travellers did not count against this total, a total of 52 passengers could be carried in spacious staterooms equipped with hot and cold running water and electricity. Airplanes began to take most of the passengers after the First World War and tourists were sought from beyond the local region to augment low passenger revenues. The American Express Travel Department organized tours that included a riverboat excursion. Tours were offered every year until 1941. Passenger views of this passage varied considerably. One described steaming on the shallow Tenana River with a crewman sounding out the water depths:

When they were sounding, as they often did on the Tanana, with a soft guitar melody for a background, the whole scene took on a sort of timelessness, and I felt content to sit for hours just watching. [9]

National Register of Historic Places Continuation Sheet

Section num	ber <u>8</u>	_ Page	_5
-------------	--------------	--------	----

Another passenger saw the trip as:

...hundreds of miles of insipid Yukon River flats where scraggly spruce trees provide the scenery and mosquitos supplied the principal diversion. No wonder that tourists who came down river from Dawson were ... ready to fight at the least provocation. [10]

Like other western rivers packets, Nenana often pushed or "towed" up to six barges. Turbulent conditions and sharp bends in the Tenana River on part of her route limited Nenana to a single barge on that section of her route. River steamboats were designed to flex rather than remain rigid when meeting rough water but Nenana was found to be too flexible and was strengthened after her first season. The hull strengthening members were augmented and weight at the stern decreased by fitting a lighter paddlewheel shaft. [11]

The new wood-burning sternwheel-propelled steamboat was expected to retire the older steamboats but Nenana's cargo capacity promoted a growth in cargo revenues that kept the older boats running.

Nenana made a 1600 mile round trip to Marshall every two weeks from the middle of May to October 1 except for occasional trips beyond the Arctic circle to Fort Yukon. The rest of the year was spent on specially constructed grids high on riverbanks free of damaging ice floes. [12]

World War II brought a military buildup in Alaska and kept Nenana busy. Nenana supplied Galena Air Base from which fighter aircraft were supplied to the Soviet Union as well as transported supplies to a number of military establishments in the advance defense system in Alaska. After the war ended, the decline in passenger revenues that had been arrested by the war continued. Alaska Railroad suspended all river passenger services after the 1949 season. At the close of the 1952 navigation season, Nenana was reconditioned at Whitehorse at a cost of \$164,409.20. She only made one more trip north for the Alaska Railroad before being laid up until a newly formed company, Yutana Barge Lines, leased the entire Alaska Railroad fleet in 1954. Yutana Barge Lines operated Nenana to haul freight on rivers for one season but discontinued her lease at that time as unprofitable. [13]

National Register of Historic Places Continuation Sheet

	Section	number	8	Page	6
--	---------	--------	---	------	---

The General Services Administration called for bids on Nenana December 10, 1955. All bids were rejected as too low until a group associated with the Chamber of Commerce formed to bring Nenana to Fairbanks. This group, Greater Fairbanks Opportunities, Inc., purchased the steamboat, steamed her up the Tanana and Chena rivers to Fairbanks and opened her as a museum ship in 1957. For a time during a severe shortage of rooms, Nenana also operated as a hotel.

Weather, neglect, and souvenir hunters damaged Nenana at her berth on the river, and to protect, preserve, and interpret her, the vessel was moved to a permanent protected dry berth in 1965.

Nenana became the centerpiece of "Alaskaland," a historical park in Fairbanks. An extensive restoration program was begun to return her to her former glory. The latest phase of this work has rebuilt the bow and renewed Nenana's decks. [14]

Nenana, the only United States steamboat preserved in Alaska and one of only five surviving western river steamboats, is now a a potent symbol and remnant of America's maritime past.

NOTES

- Jean Baptiste Marestier, Memoir on Steamboats of the United States of America, (Mystic, Connecticut: The Marine Historical Association, Inc. 1957), pp. 1-19, 54-57.
- John H. Morrison, <u>History of American Steam Navigation</u> (New York: Stephen Daye Press, 1958), pp. 207-209.
- K. Jack Bauer, A Maritime History of the United States, The Role of America's seas and waterways Columbia, South Carolina:
 University of South Carolina Press, 1988), pp.158-170.
- Joan M. Antonson and William S. Hanable, <u>Alaska's Heritage</u> (Fairbanks, Alaska: The Alaska Historical Commission, 1985), pp. 336.

National Register of Historic Places Continuation Sheet

Section number 8 Page 7

```
Melody Webb, "Steamboats on the Yukon River," The Alaska Journal
 (Vol. 15, No.3, Summer 1985), pp. 21-22.
6
 Ibid, pp. 25-26.
 "Justification of River Transportation Operated by The Alaska
 Railroad on Yukon River and Tributaries" (Anchorage, Alaska,
 January 8, 1948), p. 1.
William H. William, Railroad in the Clouds: The Alaska Railroad
in the Age of Steam, 1914-1945 (Boulder, Colorado: Pruet
 Publishing Company, N.D.), p. 237.
 Ruth E. Anderson, "Sternwheelers on the Big River," Alaska
 Sportsman (January, 1948), p. 31.
10
 Columbia-Sentinel Engineers, "Final Report Sternwheeler Nenana
 Restoration Project (Phase IV), Historical Research," (Seattle,
Washington), p. 11.
11
William S. Hanable, "Yukon Steamboat," S & D Reflector
 (Marrietta, Ohio, Vol. 8, No. 4, December, 1971), p. 35.
 Melody Webb, "Steamboats on the Yukon," p. 28.
 "Justification of River Transport," p. 1.
Barry C. Anderson, Lifeline to the Yukon: A History of Yukon
 River Navigation, (Superior, Wisconsin: Superior Publishing
 Company, 1982), p. 98. Columbia-Sentinel Engineers, "Final
 Report, " pp. 19-21.
```