MARITIME HERITAGE OF THE UNITED STATES NHL THEME STUDIES--LARGE VESSELS

NPS Form 10-900 (Rev. 8-96)
(Rev. 8-96)

### **United States Department of the Interior** National Park Service

# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidellnes* for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property				
historic name SS Clipper				
other names/site number SS Juniat	a, SS Milwaukee	Clipper		
2. Location				
street & number Navy Pier, Lak	e Michigan			not for publication
city, town Chicago				vicinity
state Illinois code	17 county	Cook County	<b>code</b> 31	zip code
3. Classification				
Ownership of Property	Category of Property			urces within Property
T private	building(s)		Contributing	Noncontributing
public-local	district			buildings
public-State	site			sites
public-Federal	X structure		1	structures
	object			objects
			<del></del>	Total
Name of related multiple property listing	:			buting resources previously
			listed in the Natio	onal Register0
4. State/Federal Agency Certificat	ion			
4. Otaten ederal Agency Certificat				
National Register of Historic Places a In my opinion, the property meets	<del></del>	•		
Signature of certifying official				Date
State or Federal agency and bureau				
In my opinion, the property meets	does not meet the	e National Registe	r criteria. 🗌 See d	ontinuation sh <del>ee</del> t.
Signature of commenting or other official				Date
State or Federal agency and bureau				
5. National Park Service Certificat	ion			
I, hereby, certify that this property is:				
entered in the National Register.				
See continuation sheet.				
determined eligible for the National				
Register. See continuation sheet.				
determined not eligible for the				
National Register.				
removed from the National Register.				
other, (explain:)				
		Signature of the K	eeper	Date of Action

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

Describe present and historic physical appearance.

The Great Lakes passenger and package freight steamboat, SS Clipper is preserved and open to the public at Navy Pier on the shoreline of Lake Michigan at Chicago, Illinois. Clipper has been only slightly changed since she was modified to her present Art Moderne appearance. Clipper is managed by Holiday Cruises for her owner the Illinois Steamship Company.

Clipper as Built and Modified

Clipper was built by the American Ship Building Company of Cleveland, Ohio, and launched on December 22, 1904, as Juniata for the Anchor Line, a subsidiary of the Pennsylvania Railroad. She was the second of three nearly identical sisterships each designed to be a "really modern combination freight and passenger ship."

Juniata, official number 201768, was 361 feet in length, 45 feet across the beam, and had a depth of hold of 28 feet. She had a riveted steel hull, a wooden superstructure, and was registered with a gross tonnage of 4333 and a net tonnage of 2619. Juniata was designed to carry both passengers and freight. Package freight was carried on the main deck and loaded through large double cargo doors on each side of the hull. Passenger cabins were located on the next three decks up; the berth deck, the salon deck, and the boat deck. Juniata carried 350 passengers and 3500 tons of cargo at a top speed of 18 knots. [2]

The propelling machinery was of the most efficient type available in 1904. Four cylindrical scotch boilers supplied steam to the massive quadruple-expansion engine. The engine is still in place and appears to be in good order. It uses a high pressure cylinder 22 inches in diameter, two intermediate cylinders of 31.5

8. Statement of Significance		
Certifying official has considered the significance of this prope nationally	rty in relation to other properties: statewide locally	
Applicable National Register Criteria A B C	□D NHL CRITERIA 1, 4	
Criteria Considerations (Exceptions)	□D □E □F □G	
Areas of Significance (enter categories from instructions) Architecture (Naval)	Period of Significance 1941-1970	Significant Dates
Transportation	1904-1970	
Engineering	1904	
Maritime History (1904-1970)		
NHL XII-L	Cultural Affiliation N/A	
Business: Shipping & Transportation		
Significant Person	Architect/Builder	
N/A	Unknown/American Ship	
	Cleveland,	Ohio

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

Built in 1905, and substantially rebuilt in 1940, the steamship Clipper is the oldest United States passenger steamship on the Great Lakes. Clipper was built as Juniata by the American Shipbuilding Company for the Anchor Line of the Erie and Western Transportation Company, a subsidiary of the Pennsylvania Railroad. In 1940 stringent new rules of the Bureau of Marine Inspection and Navigation caused her to be laid up or face substantial rebuilding. Juniata was sold and her new owners rebuilt her to not only surpass safety rules but standards of accomodation as well. The rebuilt Juniata took on the new name Milwaukee Clipper as well as a new appearance. Milwaukee Clipper was reconstructed in the "air-flow" streamlining of the Art Moderne style just as were many trains, planes, automobiles, and other manifestations of the "machine age." This reconstruction was complete to the interior design and aluminum furniture, all reflecting the new aesthetic. Many of the design elements introduced in Milwaukee Clipper are still being included in modern ocean-going passenger ships. The quadruple-expansion steam engines installed in 1905 though, are excedingly rare, particularly in such fine condition.

The preceding statement of significance is based on the more detailed statements which follow.

SEE FOOTNOTES IN TEXT.	
	See continuation sheet
Previous documentation on file (NPS):	
preliminary determination of individual listing (36 CFR 67) has been requested	Primary location of additional data:  State historic preservation office
previously listed in the National Register	Other State agency
previously determined eligible by the National Register	Federal agency
designated a National Historic Landmark recorded by Historic American Buildings	Local government University
Survey #	X Other
recorded by Historic American Engineering	Specify repository:
Record #	Illinois Steamship Company Records
10. Geographical Data	
Acreage of propertyLess than one acre	
UTM References A 1,6 44,96,30 4,63,76,2,5	B
Zone Easting Northing	Zone Easting Northing
c	
	See continuation sheet
Verbal Boundary Description	
All that area encompassed by the extreme	lenght and beam of the vessel.
	See continuation sheet
Boundary Justification	
Boundary Justinication	
The boundary encompasses the entire area of	the vessel as she floats at her berth.
	See continuation sheet
11. Form Prepared By	
name/title Kevin Foster, Historian	
organization National Park Service (418)	date August 10, 1988
street & number P.O. Box 37127 City or town Washington	telephone (202) 343-9550 state D.C. zip code 20013

9. Major Bibliographical References

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inches all with a stroke of 42 inches to expand the steam four times and develop 2500 indicated horsepower.
[3]

Over time changes were made to the passenger accomodations so that the lifeboats were moved up another deck and luxury cabins installed in the vacated space. Another change followed the <u>Titanic</u> disaster when safety regulations became stricter and additional lifeboats were carried. When additional changes were required following the fire on <u>Morro Castle</u> in 1934, the three sister ships were laid up rather than undergoing expensive modification. <u>Juniata</u> recieved a reprieve from the shipbreakers when she was bought by new owners and taken to Manitowoc, Wisconsin, where she was converted from a Great Lakes (coastal) passenger steamer to a cross-lake passenger and auto ferry. [4]

Juniata was extensivly modernized while in the yard of the Manitowoc Shipbuilding Company. The coal bunkers were converted to carry fuel oil, the old scotch boilers were changed for modern watertube types, most of the auxiliary machinery was updated and the wooden superstructure above the main deck was replaced with a new steel construction. This new superstructure is a striking Art Moderne style structure with streamlined planes and "air-flow" design. The curved front of the bridge sweeps back and fairs into the large streamlined false funnel which graces the middle of the upper deck. The real funnel is located quite far aft and leans toward the stern at a rakish angle. The sheerline, painted white for contrast, sweeps back from the bow and breaks downward just below the bridge on its way aft.

Interior arrangements were changed as well. The main deck was modified and a heavy-duty cargo lift installed to facilitate the loading and stowage of up to 120 automobiles. New 1-, 2-, and 3-berth cabins were fitted around the outside of the berth deck and the Simmons Mattress Company built Pullman-like dayberths in the midships section. Amenities were updated; a dance hall, bar, movie theater, soda fountain, children's play room, cafeteria and main lounge area were built into the new superstructure. Tile flooring decorated with the ship's silhouette welcomed passengers to the new main lounge which extends across the width of the deck. Tubular aluminum furniture of the same pattern as that designed for the premier American ocean liner SS America was custom built for the lounges and public spaces. The rebuilt ship was given the name Milwaukee Clipper and when remeasured for tonnage was listed at 4272 gross and 3137 net tons. [5]

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Milwaukee Clipper's Present Appearance

Milwaukee Clipper is in excellent condition and has changed only slightly since she was modified in 1941. Shortly after World War II, a surface search radar was fitted but otherwise Milwaukee Clipper has changed only in the kitchen where a new mixer and oven were installed and where liquor bars of a comparable style were built in two existing lounges. The stern docking winch was broken off at the deck by a 1985 storm that destroyed a number of pilings and smaller vessels. It has not been replaced.

#### Notes

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William F. Rapprich, "The Anchor Line, Tionesta, Juniata, and Octorara" Inland Seas vol. 30, no. 1, Spring, 1974, pp. 8-1.

Merchant Vessels of the United States (Washington, D.C.: Government Printing Office, 1906), p. 250. Rapprich, p. 8.

Charles H. Truscott, "Milwaukee Clipper," Telescope vol. 19, no. 5, September/October 1970, pp. 125-127. Rapprich, p. 17.

Truscott, pp. 126-127.

Merchant Vessels of the United States (Washington, D.C.: Government Printing Office, 1952), p. 369.
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#### PASSENGER STEAMSHIPS ON THE GREAT LAKES

The first steamboat on the Great Lakes was the passenger carrying Walk-In-The-Water built in 1818 to navigate Lake Erie. She was a success and more vessels like her followed. Steamboats on the lakes soon grew in size as well as in numbers, and additional decks were built on the superstructure to allow more capacity. This inexpensive method of adding capacity, adapted from river steamboats and applied to lake craft, was at first decried by deepwater men as unsafe but later proved worthwhile and was ultimately applied to ocean liners. [1]

The screw propeller was introduced to the Great Lakes by <u>Vandalia</u> in 1842 and allowed the building of a new class of combination passenger and freight carrier. The first of these "package and passenger freighters," <u>Hercules</u>, was built in Buffalo in 1843. <u>Hercules</u> displayed all the features that defined the type, a screw propelled the vessel, passengers were accomodated in staterooms on the upper deck, and package freight below on the large main deck and in the holds. [2]

Engines developed as well. Compound engines, in which steam was expanded twice for greater efficiency, were first used on the Great Lakes in 1869. Triple-expansion engines, for even greater efficiency, were introduced in 1887 and quadruple-expansion engines, the ultimate type of reciprocating engine for speed, power and efficiency, appeared on the lakes in 1894. [3]

Steamboat lines were established by railroads on the Great lakes to join railheads in the 1850s. This service carried goods and passengers from railroads in the East across the length of the lakes to railroads for the journey West. Railroads bought and built steamship lines to compliment railroad services. One such railroad-owned steamship line was formed by the Pennsylvania Railroad in 1865 to connect their terminals at Buffalo, New York, to those of the Great Northern Railroad at Duluth, Minnesota. This new line, owned by the Erie and Western Transportation Co., became the well known "Anchor Line." [4]

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Juniata as Built

The "Anchor Line" ordered three sister ships; <u>Tionesta</u> in 1903, <u>Juniata</u> in 1904, and <u>Octorara</u> in 1909, to replace three aging, smaller passenger freighters bought in 1871. The American Ship Building Co. of Cleveland, Ohio, launched <u>Juniata</u> on December 22, 1904, and delivered her in time for the start of the 1905 season.

The hull was constructed of steel up to the promenade deck over the berth deck. Seven watertight bulkheads divided <u>Juniata</u> into eight compartments, three designed as cargo holds, one for boilers, one for engines, two for peak tanks, and one for crew accomodation. Two cargo decks took up most of the space within the hull while the berth deck supported 92 staterooms and an open stern deck area. The next deck up, the promenade deck, was open above the bulwarks and held a music room, writing room, eight parlors, and the main dining room. <u>Juniata's superstructure was built of wood from the promenade deck upwards and supported the lifeboats, wheelhouse with an open bridge atop, captain's quarters, officers' quarters, chairman's suite, and chartroom. A pole foremast was sited behind the bridge, a pole mainmast stood amidships, and a massive, single, all-black smokestack dominated the upperworks aft. [5]</u>

Juniata continued to work for the Anchor Line until 1915 when the anti-monopoly, Panama Canal Act forbade railroads to own steamships. The Anchor Line was sold along with four other railroad-owned company fleets, to the newly formed Great Lakes Transit Corporation. The three sister ships continued carrying passengers and freight between Buffalo and Duluth until 1933 and 1934 when Juniata and Tionesta ran a special route between Buffalo and Chicago for the "Century of Progress" World's Fair. In 1936 new regulations for fire safety, required in the wake of the Morro Castle disaster, caused the ships to be laid up. Juniata was sold and in October 1940, steamed to Manitowoc, Wisconsin, where the Manitowoc Shipbuilding Co. converted her to a safer and more modern appearing vessel.

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#### Conversion

Juniata was rebuilt extensively to conform to the new regulations. The wooden superstructure was removed and the promenade deck forward of the pilothouse cut down to the level of the berth deck. The new superstructure is one deck lower than the old. The scotch boilers were replaced by modern three-drum water tube boilers and the coal bunkers rebuilt to carry fuel oil rather than coal. accomodations were built to reflect the shorter trip. Thirty-six cabins lined the hull beneath the bridge and 56 Pullman-type upper and lower berths for reserved seats and night trips were installed The convertable berths were a new venture for the Simmons Mattress Co. which hoped to obtain railroad car contracts by proving their ability in a similar contract. The measurements for the finished berth sections did not take deck camber into account and when they arrived at the ship they did not fit. Simmons corrected the work but did not carry on to do similar work for railcars, [6]

The most spectacular feature of the conversion was the Streamline Art Moderne styling of the interior and upperworks. Many transportation-related buildings and vehicles were designed in this style, including at least four steam vessels for service on protected waters. Sweeping curves and graceful fairings replaced flat planes not to reduce wind resistance but "to produce a design that embodied something different and daring which would appeal to the taste and attention of the travelling public, already quite familiar with the applications of artistic air-flow design in rail and motor transportation." [7]

Internal furnishings followed the same aesthetic as the exterior. The Warren and Mcarthur furniture company built tubular aluminum chairs, sofas, tables, and desks for the ship of the same pattern as those aboard SS America, flagship of the American merchant marine. Geometric patterned tile flooring was laid in several lounges and a two-deck-high wall mural of the routes served by the vessel was painted above the grand stairway. Glass panels, chrome, and mirrors reflected the bright light produced by "lumaline" incandescent lamps and indirect wall fixtures.

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A number of new services were offered to passengers. A casino, a 120-seat movie theater, "marine lounge," "harem lounge," and children's nursery were fitted. The main deck was reconfigured to allow easier handling of the larger automobiles of the day. Passengers could drive their car to the dock, steam across the lake and drive away. [8]

The rebuilt vessel was given the name <u>Milwaukee Clipper</u> and began service between Milwaukee, Wisconsin, and Muskegon, Michigan, June 4, 1941. The new service differed from the old in carrying only automobiles as cargo. Contracts with auto manufacturers allowed <u>Milwaukee Clipper</u> to operate at a profit without a full passenger load after most all-passenger vessels were forced into retirement.

Milwaukee Clipper continued in service until 1970, though reduced in later years to a three-month summer season. From 1970 to 1977 Milwaukee Clipper was laid up at Muskegon, Michigan. On June 3, 1977, she was sold to the Illinois Steamship Company, a subsidiary of the Great Lakes Transit Company, and towed to the Bay Shipbuilding Company of Sturgeon Bay, Wisconsin. A large number of rivets were replaced, some hull plates renewed and other work on the machinery completed. Financing for further hull and propulsion plant work could not be secured without Coast Guard certification to carry passengers and that certification could not be granted until all work was completed. Unable to carry passengers on cruises, Milwaukee Clipper was moved to Navy Pier on the Chicago, Illinois, waterfront where she serves as a restaurant and nightclub. The interior has been maintained in much the same condition as when the ship was converted in 1940. Two liquorserving bars have been added and some equipment in the galley has been updated with minimal effect to the interior and the exterior color scheme has been changed from mint green and white to white with a red sheerstrake. The name Clipper appears on the bow though it appears that Milwaukee Clipper is still the legal name of record. [9]

#### NOTES

John H. Morrison, <u>History of American Steam Navigation</u>, (New York: Stephen Daye Press, 1958), pp. 366, 369.

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Lakes Historical Society, 1974), pp. 3-19.
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