



Name of Property: SS *Badger* (Car Ferry)
City, State: Ludington, Michigan
Period of Significance: 1952-53
NHL Criteria: 1 and 4
NPS Theme: V. Developing the American Economy
2. Distribution and Consumption
3. Transportation and Communication
VII. Expanding Science and Technology
2. Technological Applications
Previous Recognition: 2009 National Register of Historic Places
National Historic Context: XVI. Transportation
B. Ships, Boats, Lighthouses, and Other Structures
XVIII. Technology (Engineering and Invention)
B. Transportation

NHL Significance:

- *Badger* is the last example of a Great Lakes rail/car ferry design, a type that influenced design around the world. The first open-water crossing on which railcars were carried onboard occurred on Lake Michigan, the rail/car ferry design of which influenced other such ships.
- It is the last vessel in operation powered by Skinner Unaflo compound engines. The Unaflo engine represents the final stage in the development of the reciprocating steam engine in the United States. In an age when steam turbine and diesel propulsion were beginning to dominate the shipping scene, the more-efficient Unaflo, and similar |



designs, made the reciprocating steam technology used by other ships, less desirable.

- It is the last Great Lakes car ferry to remain in operation. For about a century, railroad car ferries extended rail lines across three of the Great Lakes, especially Lake Michigan. During that period, competing railroad interests on Lake Michigan, the difficulty of arranging track-age rights on other roads, the distance around the southern end of the lake, and congestion in the rail yards at Chicago, all made the transport of railcars across the lake both efficient and economic.

Integrity:

- *Badger* has had few changes; most alterations were for its adaptive reuse as a vehicle and passenger ferry.
- In 1960, while it was still in railroad service, *Badger's* boat deck was extended aft to provide more space for passenger's automobiles, extending her viability as a car ferry.
- In 1964, *Badger* was sliced horizontally just above its main (car) deck and the superstructure was raised eighteen inches to accommodate newer high-cube railcars, allowing the continued function of transporting railcars.
- When *Badger* was reactivated in 1992 as a car ferry, its new use meant that it could accommodate many more passengers than it had as a railroad ferry. Additional seating and more efficient food service were needed, thus the lounges were refurnished with food service counters and increased seating. Her open afterdeck, formerly used for automobiles, was also enclosed to provide additional sheltered seating.
- The success of *Badger's* new role as a car ferry was such that additional vehicle space was desirable. In 1996, a half-deck with ramps was fitted in the forward portion of her car deck, thus double-decking the automobile space. This addition did not alter the original fabric and is completely reversible.

Owner of Property: Lake Michigan Trans-Lake Shortcut, Inc.

Acreege of Property: Less than an acre.

Origins of Nomination: The owner hired a maritime historian as a consultant to prepare the National Historic Landmark nomination.

Potential for Positive Public Response or Reflection on NHL Program:

- Designation as an NHL will increase public awareness of Great Lakes car ferries and the *Badger* as its final representative, as well as the importance of *Badger's* Unaflow propulsion system.
- *Badger's* role in heritage tourism will be greatly enhanced.

Potential for Negative Public Response or Reflection on NHL Program:

- The National Park Service understands that a concern has been raised regarding the environmental impact with respect to the dumping of coal ash from the *Badger* directly into Lake Michigan. The NPS further understands that an Environmental Protection

Agency (EPA) permit that allows this practice is currently set to expire in 2012, that there is opposition to a further extension by the EPA of the current permit, and a concern that designation of the *Badger* as a NHL will require EPA to grant such an extension.

Public Comments Favoring Designation (received as of 11/18/2011):

Robert Manglitz, President, CEO/Partner; Don Clingan, Executive VP/Partner; and James Anderson, Retired/Partner (owner), SS *Badger*, Michigan
Norma Bishop, Chief Executive Officer, Wisconsin Maritime Museum at Manitowoc, Wisconsin
The Honorable Bill Huizenga, U.S. Congress, 2nd District, Michigan
The Honorable Tom Petri, U.S. Congress, 1st District, Michigan
The Honorable, Dan Benishek, U.S. Congress, 6th District, Wisconsin
Brian D. Conway, State Historic Preservation Officer, State of Michigan
The Honorable Debbie Stabenow, United States Senator, Michigan

Public Comments Requesting Tabling of Designation (received as of 11/08/2011):

George Meyer, Executive Director, Wisconsin Wildlife Federation
Kim Wright, Executive Director, Midwest Environmental Advocates
Mark Redsten, Executive Director, Clean Wisconsin
Cyndi Roper, Michigan Director, Clean Water Action
Andy Bucjsbaum, Director, Great Lakes Office, National Wildlife Federation
Shala Werner, Director, John Muir Chapter, Sierra Club
Lyman Welch, Water Quality Program Manager, Alliance for the Great Lakes
Michael Vickerman, Executive Director, RENEW Wisconsin
Denny Caneff, Executive Director, River Alliance of Wisconsin
Peter McAvoy, Vice President, Sixteenth Street Health Center
Steve Schmuki, President, Waukesha County Environmental Action League
Cheryl Mendoza, Associate Director, Freshwater Future
Thomas Cmar, Midwest Program Attorney, Natural Resource Defense Council
Lisa Conley, President, Town and Country Resource, Conservation and Development

Public Comments Not Favoring Designation (received as of 11/18/2011):

Bruce (no last name provided)
Curt Anderson, Green Bay, Wisconsin

Landmarks Committee Comments:

Landmarks Committee Recommendation: Designation. Dr. Clark Hines moved, Professor Hoyos seconded; 7 yeas, 1 abstention.

Advisory Board Recommendation: Unanimous approval to designate the property as an NHL.