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·NATIONAL REGISTER· BULLETIN

Technical information on comprehensive planning, survey of cultural resources, and registration in the National Register of Historic Places.

U.S. Department of the Interior
National Park Service
Interagency Resources Division

Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places

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INTRODUCTION

For over two hundred years, the United States relied on ships as connective links of a nation. Vessels crossing the Atlantic, Caribbean, and Pacific Oceans, and our inland waters made fundamental contributions to colonial settlement, development of trade, exploration, national defense, and territorial expansion. Unfortunately, we have lost much of this maritime tradition, and most historic vessels have gone to watery graves or have been scrapped by shipbreakers. Many vessels, once renowned or common, now can only be appreciated in print, on film, on canvas, or in museums.

To recognize those cultural resources important in America's past and to encourage their preservation, Congress expanded the National Register of Historic Places in 1966. Among the ranks of properties listed in the National Register are vessels, as well as buildings and structures, such as canals, drydocks, shipyards, and lighthouses that survive to document the Nation's maritime heritage. Yet to date, the National Register has not been fully utilized for listing maritime resources, particularly historic vessels.

The National Register of Historic Places is an important tool for maritime preservation. Utilizing

FIGURE 1: *Star of India*, built in 1863, is now berthed at the San Diego Maritime Museum. (Photo credit: Roscoe Smith, courtesy of Maritime Museum Association of San Diego)

uniform National Register criteria to evaluate significance and integrity is an important first step in planning for the preservation of historic vessels. The National Register is the best means of defining categories and establishing priorities for significance of historic vessels in the United States. Listing provides an incentive for maritime preservation by recognizing resources as worthy of preservation. Finally listing affords a measure of protection from Federal undertakings and can be a source of funding when monies are available.

This bulletin is intended to guide Federal Preservation Officers, State Historic Preservation Officers, certified local governments, maritime preservation professionals, and concerned citizens in identifying, evaluating, and nominating historic vessels and shipwrecks to the National Register of Historic Places. General instructions for preparation of nominations are available in National Register Bulletin 16, "Guidelines for Completing National Register of Historic Places Forms." Particular emphasis has been placed here on the preparation of National Register nomination forms for vessels. For the purposes of the National Register, a historic vessel is any craft built to navigate a waterway (oceans, lakes, rivers, canals), regardless of type of construction or motive of power employed, which meets the National Register criteria for evaluation. Because of the special nature of nominations for shipwreck sites, this bulletin is divided into two sections. Section 1 discusses the evaluation and nomination of maritime resources emphasizing historic vessels. Section 2 exclusively focuses on the specialized documentation requirements for shipwreck nominations.

SECTION ONE: NOMINATING HISTORIC VESSELS

TYPES OF HISTORIC VESSELS

There are five basic types of historic vessels which may be eligible for listing in the National Register. These types are:

1. **Floating historic vessels.** Large vessels (usually greater than 40 feet in length or weighing over twenty tons) that are maintained in and on the water, including artificial mooring basins. (*U.S.S. Constitution* in Boston, *Star of India* at San Diego, and *Queen Mary* at Long Beach.)
2. **Dry-berthed historic vessels.** Vessels that are preserved out of the water and are located in a drydock or setting close to or part of a waterfront. (*S.S. Ticonderoga* at Burlington, Vermont)
3. **Small craft.** Floating or displayed vessels generally less than forty feet in length and twenty tons in weight. (Chesapeake Bay log canoes are examples of historic small craft.)
4. **Hulks.** Substantially intact vessels that are not afloat, such as abandoned or laid up craft that are on a mudflat, beach, or other shoreline. (Schooners *Hesper* and

FIGURE 2: *U.S.S. North Carolina*, **a World War II battleship now preserved as a floating historic vessel, is moored in an artificial basin dredged into the Cape Fear River's banks at Wilmington, North Carolina. (Photo credit: courtesy U.S.S. NORTH CAROLINA Battleship Commission)**

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Luther Little at Wiscasset, Maine)

5. **Shipwrecks.** A submerged or buried vessel that has foundered, stranded, or wrecked. This includes vessels that exist as intact or scattered components on or in the sea bed, lake bed, river bed, mud flats, beaches, or other shorelines, excepting hulks. (*U.S.S. Monitor*, which lies 16 miles off North Carolina in 230 feet of water, or *Peter Iredale*, whose steel remains lie on the beach near Astoria, Oregon)

Qualifications for Evaluating Historic Shipwrecks and Vessels for the National Register of Historic Places

Individuals recommended to prepare nominations for historic vessels and shipwrecks should be knowledgeable in maritime studies. Usually, such persons have academic backgrounds or experience in such fields and disciplines as marine survey, maritime history, archeology, historic preservation, and American studies. Individuals competent to conduct work described in this bulletin should be familiar with the terminology used to describe wooden and iron vessel construction, hull types, rigging, marine steam, and other machinery. They should also be familiar with the development, trends, and chronology of vessel types and maritime trades in North America.

Evaluating Historic Vessels for the National Register of Historic Places

To qualify for the National Register, a historic vessel must have significance as one of the vessel types listed above and retain integrity of location, design, setting, materials, workmanship, feeling, and association, and meet one or more of the National Register criteria A, B, C, and D.

Determining the significance of a historic vessel depends on establishing whether the vessel is 1) the sole, best, or a good representative of a specific vessel type; 2) is associated with a significant designer or builder; or 3) was involved in important maritime trade, naval, recreational, government, or commercial activities. The significance of a historic vessel can only be determined through a systematic investigation of the vessel's qualities, associations, and characteristics. A typical investigation for a historic vessel nomination should include:

FIGURE 3: *C. A. Thayer*, **an 1895 three-masted schooner, is a floating historic vessel moored at the National Maritime Museum, San Francisco. (Photo credit: Richard Frear, NPS)**

1. Identification of the specific type of vessel and documentation of her individual characteristics based on a physical inspection of the vessel and a documentation of her history.
2. Identification of the historic context(s) associated with the vessel based on a documentation of her history.
3. Determination that the characteristics of the vessel make her either the best, or, a good representative of her type.
4. Evaluation of the significance of the vessel based on the National

FIGURE 4: *S.S. Ticonderoga*, **a sidewheel steamer, is now a dry-berthed exhibit displayed on the land at the Shelburne Museum. (Photo credit: courtesy, Shelburne Museum, Vermont)**

Register criteria.
5. Evaluation of the vessel's integrity and a listing of features that the vessel should retain to continue to possess integrity.
6. Evaluation of a vessel's special characteristics that might qualify her for National Register listing even though she might be less than 50 years old or some aspect of her present condition generally would not qualify her for listing.

Type and Characteristics

The evaluation should begin with the compilation of a narrative description of the vessel. This description should commence with a discussion of type, dimensions, materials, method of construction, layout, rig, and date of construction. "Type of vessel" can mean many things; for example, a vessel could be described by her rig (bark, barkentine, schooner, ship) or by hull form (clipper, "downeaster") and materials used in the hull's construction (steel, iron, wood). Vessels are also typed by their trade or occupation (cargo ship, container ship, hospital ship, freighter). A description of vessel type should attempt to incorporate all of these aspects. For example, "As built in 1856, *King Philip* was a wooden-hulled medium clipper; her three masts were bark-rigged."

The description should also include a vessel's registered dimensions and tonnage. The citation of registry information should be as follows:

> *Balclutha* is 256.0 feet long with a beam of 38.6 feet, and a depth of hold of 22.7 feet. *Balclutha* is registered at 1835 gross tons and 1583 net tons.

The description should include some discussion of the vessel's method of construction. For example, "*Balclutha* is of single hull construction with riveted steel plates laid as inner and outer strakes over steel frames." A discussion of the layout of the deck, including houses, should be included:

> *Tennessee's* elevated forecastle deck mounted a pump-break windlass. A capstan was located aft. Two hatches, fore and aft of the main deckhouse, opened into the cargo holds. Amidships, the main deckhouse supported a small pilot house. Aft, two small deckhouses provided access via circular stairways to the grand saloon below. The sponson decks were set well above the water; built on them and into the wheelhouses were the heads.

The discussion of rig should include the number of masts, the materials from which the masts are fashioned, the material used in the standing rigging (such as wire or hemp), and a discussion of any missing spars, if, for example, a ship is missing her topgallant yards. The description of the vessel should include a narrative discussion of the vessel's setting and location. For example:

> *Charles W. Morgan* is moored in the Mystic River at Chubb's Wharf, a stone and earth modern structure built in the style of a 19th century New England wharf, at Mystic Seaport Museum, a large complex of historic and reproduction buildings and structures which interpret life in a seafaring New England town of the mid-nineteenth century.

FIGURE 5: The deteriorating hulks of the four-masted schooners *Hesper*, and *Luther Little* lie off Wiscasset, Maine. (Photo credit: James P. Delgado, NPS)

Vessels may be located in a variety of situations; some may be afloat or beached on a shoreline; others may be located in drydock, artificial mooring basin, or be displayed on dry land, either in the open or under cover.

There are special considerations when evaluating a hulk. Descriptions of hulks, which as a general rule lack much of their rigging (many are dismasted), and have deteriorated to a point where structural integrity of the vessel no longer remains, should concentrate on a discussion of surviving construction and its potential to yield information about the materials and methods used in the vessel's construction.

Historic Contexts

A vessel's significance is based on her representation of vessel type and her association with significant themes in American history and comparison with similar vessels. The World Ship Trust, in an effort led by historian Norman Brouwer of New York's South Street Seaport Museum, has published the **International Register of Historic Ships** an inventory of known historic vessels in the world. A con-

siderable portion of the book is dedicated to vessels in the United States. This inventory should be consulted early in the evaluative process.

The evaluation of a vessel must include thorough historical research into a vessel's construction, owners, and career. Rather than offering a chronological discussion of a vessel's career, the historical narrative should be organized into specific context statements which specify a vessel's place in the development of American maritime trade, naval power, recreation, government use, commerce, or various designs of waterborne craft.

Specific historic contexts may include a vessel's involvement in the Pacific Coast lumber trade, a vessel's role in the packet trade, or how a particular vessel's design fit into the development of Great Lakes bulk ore carriers. The significance statement should be concise and well-developed. The amount of information presented in the nomination will vary according to the vessel's significance to the local community, State, or the Nation. It is not necessary to discuss the development of local steamboats, for example, when discussing a steamer significant in the national development of marine steam technology. If the steamer has no demonstrated or outstanding importance in the national or statewide development of marine steam technology, however, then a discussion of local steamboating would be essential.

The State Historic Preservation Officer should be consulted before beginning work to determine if the State has information which will assist in the evaluation of the vessel. Local and regional maritime museums, the Council of American Maritime Museums, the Department of Maritime Preservation at the National Trust for Historic Preservation, the National Maritime Historical Society, the Steamship Historical Society of America, the North American Society for Oceanic History, Great Lakes Association for Maritime History, American Canal Society, the World Ship Trust, and other maritime historical and/or preservation organizations and professionals also should be consulted because one of these organizations may have already researched a vessel's career or evaluated her significance. A directory listing, including address and telephone number, of these and hundreds of such groups is available from the Maritime Preservation Department of the National Trust for Historic Preservation.

Representative of a Type

A vessel must possess certain features to be a good representative of her type, period, or method of construction. These features vary. In analyzing a 19th century Pacific Coast schooner, a researcher would look for an emphasis on Douglas fir timbering, heavily-fastened "overbuilt" construction, lumber loading ports in the stern, a beamy, shallow hull form, and a fore-and-aft rig. A vessel largely rebuilt through the years without attention to preserving the original design features (such as hull form, original materials, method of construction, and, to a lesser degree of importance, rig) that is not readily identifiable would not be a good representative of her type. For example, the best representatives of World War II naval vessels would be warships unaltered in hull form, layout, equipment, and armament.

Significance

To be eligible for the National Register of Historic Places, a vessel must be significant in American history, architecture, archeology, engineering, or culture, and possess integrity of location, design, setting, materials, workmanship, feeling, and association. To be considered significant the vessel must meet one or more of the four National Register criteria:

A. be associated with events that have made a significant contribution to the broad patterns of our history; or
B. be associated with the lives of persons significant in our past; or
C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

FIGURE 6: The wreck of the 1856 ship *King Philip* lies on the beach at San Francisco, California. Periodically exposed by winter storms, her remains are being documented by National Park Service archeologists. (Photo credit: Richard Frear, NPS)

or

D. have yielded, or may be likely to yield, information important in prehistory or history.

Under Criterion A, association with "events that have made a significant contribution to the broad patterns of history," a vessel may qualify for listing in the National Register through her association with historic themes. Applicable areas of significance (listed in Bulletin 16) would include the obvious "maritime" theme and several other "catch-all" categories. Therefore, historical information must be provided to explain the significance of the vessel. Common areas of significance to consider are:

1. AGRICULTURE: Vessels engaged in agricultural trade and commerce, such as vessels which transported produce to market.

2. COMMERCE: Merchant vessels which were involved in maritime trade and commercial activities; vessels which also carried passengers could possess significance in the area of Transportation.

3. COMMUNICATIONS: Vessels engaged in telegraph and telephone cable laying operations, and pioneer ship-to-shore, or ship-to-ship wireless transmissions.

4. ENGINEERING: Vessels important for technological developments in hull form, propulsion systems, and shipboard equipment.

5. EXPLORATION/SETTLEMENT: Vessels involved in exploration and the expansion of the Nation, such as river steamers which carried supplies to frontier settlements on rivers in the Midwest, Old Northwest, Great Lakes region, and Alaska, or vessels used in Arctic or Antarctic exploration.

FIGURE 7: The wreck of the passenger/package freighter *Monarch*, built in 1890 and wrecked in 1906, lies on the bottom of Lake Superior inside Isle Royale National Park. A National Park Service diver is shown inspecting the wreck as part of a project to document Isle Royale submerged wrecks by the National Park Service's Submerged Cultural Resources Unit. (Photo credit: Larry Murphy, NPS)

6. GOVERNMENT: Lightships, dredges, snagboats, survey boats, and similar vessels of a non-military nature.

7. INDUSTRY: Vessels associated with industrial enterprises, such as Great Lakes ore-carrying freighters and Alaskan fishing boats.

8. INVENTION: Vessels which were the result of a scientific process of experimentation, such as John Ericsson's "hot-air" propelled Caloric Ship *Ericcson* of 1854.

9. LAW: Vessels involved in landmark legal cases which established tenets of admiralty law or seamen's right.

10. LITERATURE: Vessels associated with noted authors or poets, such as *Equator*, which was chartered for a South Seas cruise by Robert Louis Stevenson.

11. MILITARY: Naval warships and other vessels, military transports, and support craft.

12. RECREATION/ENTERTAINMENT: Yachts, racing boats, or house boats used for the practice of leisure activities, diversion, amusement, or sport.

13. SCIENCE: Vessels on which significant scientific experimentation or other research was conducted, such as the barkentine *Galilee's* use as a magnetic charting vessel by the Carnegie Institute in 1901.

14. SOCIAL/HUMANITARIAN: Hospital ships, vessels involved in rescuing life and property from maritime disasters and life-saving craft such as a Francis lifeboat or a United States Life-Saving Service surfboat.

15. THEATER: Showboats, movie

ships, and vessels used in or modified for the filming of motion pictures.

16. TRANSPORTATION: Ferry boats and vessels engaged in the transportation of passengers; vessels which carried cargo could also possess significance in the area of Commerce.

Under Criterion B, association with "persons significant in our past," a vessel will possess significance if a historically significant person's importance is tied directly to the vessel, such as Admiral Dewey's association with *U.S.S. Olympia*. Applicable themes under criterion B may include numbers 5, 8, 9, 10, 11, 13, and 14 above.

Under Criterion C, a vessel possesses significance if she embodies "the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, possesses high artistic values, or represents a signficant and distinguishable entity whose components may lack individual distinction." Vessels are usually found to be eligible for the National Register listing within the following categories:

1. ARCHITECTURE: A vessel that is a good representative of a specific type of naval architecture such as Pacific Coast lumber schooner like the *C.A. Thayer* or is the only representative of the type, such as the Great Lakes whaleback *Meteor*. A vessel may also possess significance if she is a good example of a naval architect's work, "representing the work of a master." Naval architects of national signficance in the 19th century include Isaac Webb, Donald McKay, William H. Webb, and John W. Griffiths. Naval architects of national note in the 20th century include Francis Herreshoff and William Francis Gibbs. Examples of the work of any of these men, as well as other nationally, regionally, or locally important naval architects and shipwrights may be eligible for the National Register.

2. ART: Many sail and steam vessels had distinguished accommodations, sometimes executed in luxurious taste, which set them apart from the utilitarian "working" areas of the vessel. These design features, ship-board decorations, figureheads, joiner's work, cabin interiors, and saloons, particularly on river steamers, ferries, and certain oceanic passenger steamers, could qualify the vessel for inclusion in the National Register.

3. ENGINEERING: Vessels may be significant because of their design, propulsion systems, specific types of marine engines, and modes of propulsion (such as paddlewheels and all types of propellers) as representatives of their type. The 1891 ferryboat *Eureka*, at the National Maritime Museum in San Francisco, is nationally significant because she has the only operable, 19th century walking beam marine steam engine afloat. The engine and boiler work of renowned marine engineering firms, such as New York's Novelty Iron Works, Maine's Bath Iron Works, and San Francisco's Union Iron Works may impart significance to a vessel.

Under Criterion D, a vessel is significant if she has yielded or is likely to yield information important to history, i.e., the physical characteristics (or remains) of the vessel provide important information about her use, method of construction, and operation. A vessel need not be wrecked or an ar-

FIGURE 8: The yacht *Doris* sails on the Massachusetts coast, circa 1905. (Photo credit: Hart Nautical Collections, MIT Museum)

cheological site to qualify under criterion D, but this is its most common application.

Section 8 of the nomination must address the period of significance of which a vessel achieved her importance and meets National Register criteria. There are blanks on the forms where the dates for the period of time the vessel achieved significance are entered. Enter the most specific dates known. If a vessel's significance occurred in one year, as for a shipwreck associated with an important sea battle, enter that single year. If a vessel achieved significance for several distinct periods of time, enter each period on a separate line in the order of importance. Avoid including dates of less than 50 years, unless these events and associations can be justified as having exceptional historical importance. Continuous function does not indicate the continuation of the period of significance. The nomination must discuss significant events or associations that occurred during each period of significance in the narrative.

Integrity

The National Register traditionally recognizes a property's integrity through seven aspects, or qualities: location, design, setting, materials, workmanship, feeling, and association.

Location

The National Register consideration of "integrity of location" should be construed to mean that a vessel is located in a port or other location with which the vessel historically had some association, such as a port of construction, or a port of call. Location should not be confused with integrity of setting, which generally means that a vessel is maintained in the water. However, it is recognized that preservation of a vessel's original fabric may compel the removal of the vessel from the water. This issue will be examined in the discussion of integrity of setting.

Design

A vessel, like any other structure, changes with time. Vessels may be lengthened, deckhouses added or removed, and interior spaces modified for new uses. Changes which occur over time, particularly those associated with a shift to different owners or trades, if those owners or trades are historically significant, acquire significance in their own right.

FIGURE 9: The Jersey Schooner-Oyster Dredge Boat *Katheryn M. Lee* continues to work actively in her historic trade at Liepsic, Delaware. (Photo credit: Stephen Del Sordo)

When changes to a vessel are in the form of renewal and replacement, either to continue operation historically or to perform a restoration, the structure will remain eligible if renewed features are replaced with materials, which in their composition, design, color, texture, and workmanship retain the historic character of the vessel. These changes do not affect a vessel's integrity.

The noted maritime historian, Allan Villiers, once observed that historic vessels maintained and/or operated in the water ultimately become reconstructions or wrecks. While historic structures and buildings on land also deteriorate and require maintenance and replacement of original fabric, the corrosive nature of the marine environment greatly accelerates the process. Any historic vessel maintained in the water will ultimately lose all of her original fabric. *U.S.S. Constitution*, now berthed at Charlestown Navy Yard in Boston, retains as little as 10 to 23 percent of the wood that was in the frigate when launched in 1797 or when she earned her reputation as "Old Ironsides." Yet this is largely indistinguishable because of attention to maintaining historic materials and workmanship during her many restorations. These increasingly restored historic vessels retain their integrity in those cases when integrity as evidenced by hull form, rig, use of materials, or craftsmanship is maintained. It is important to retain original fabric though, for the greater the amount of historic fabric, the greater the quality of integrity for the vessel.

Setting

Integrity of setting usually means that a vessel is maintained in the water. National Register guidelines generally rule that vessels out of water, particularly if in an enclosed structure, were ineligible for National Register listing unless they were in a "natural" waterfront setting, such as in a drydock. Yet limiting the National Register only to vessels maintained afloat or in the open air ultimately dooms original fabric. In some

FIGURE 10: An in-kind historic restoration of the whaler *Charles W. Morgan* at Mystic Seaport Museum. Here shipwrights are driving a drift into a breasthook. (Photo credit: Mary Anne Stets, courtesy Mystic Seaport Museum)

cases, the preservation of that fabric may be essential. Craftsmanship cannot be replaced, nor archeologically recovered. Fragile intact vessels can only be preserved "under glass." To preserve historic fabric in rare vessels, integrity of setting will be maintained if the craft is associated with the water by means of a waterfront location. This setting must not detract from appreciating the vessel as a waterborne craft or present her as a museum object.

Materials

Integrity of materials means that the physical elements that were combined in the vessel's historic design and construction have been maintained. For example, integrity of materials would be retained when a vessel's steel plates are replaced in-kind with steel plates, oak planks are replaced in-kind with oak planks, copper sheathing is replaced in-kind with copper sheathing, and tarred hemp standing rigging is replaced in-kind with tarred hemp standing rigging. This is not to suggest that failure to follow strict in-kind replacement could keep a vessel from being listed on the National Register. Modern materials for patching and repair, such as epoxies and fiberglass, may be necessary to preserve a vessel.

Workmanship

Integrity of workmanship is maintained when materials are renewed in-kind. When original but deteriorated riveted iron hull plates are replaced, integrity of workmanship is maintained when the new iron plates are also riveted. Double sawn timber frames should be replaced with double sawn timber frames to maintain integrity of workmanship.

Feeling

Integrity of feeling means that the vessel evokes an aesthetic or historic sense of the past. Usually this depends on the presence of the vessel's significant physical characteristics to convey her historic qualities. However, it must be recognized that extreme deterioration of a vessel, such as major rot and inherent structural collapse, would not interfere with the ability of the vessel to yield important information through analysis of her construction and career, and she would possess archeological integrity and be eligible under Criterion D.

Association

A period or accurate waterfront setting for a historic vessel is desirable and adds to the integrity of setting for the vessel. A vessel loses her integrity of association if she is removed from the water and displayed out of sight of the water, such as a 19th century schooner placed on a lawn, surrounded by a chain-link fence, in front of a factory.

The Need for Special Justification

Certain types of historic vessels as a general rule do not qualify for the National Register. These would be 1) vessels less than 50 years of age, 2) vessels owned by religious institutions and used for religious purposes, 3) replica vessels, and 4) collections of vessels. However, these properties may qualify for National Register listing if they meet the criteria and meet the following exceptions:

1. A vessel achieving significance within the past fifty years if she is of exceptional significance. (A vessel must be compared with other vessels of her type that have similar associations and qualities to establish exceptional significance, or be associated with important but recent themes or developments which scholarly or professional research has recognized as significant to the maritime trades or naval architecture and engineering. Vessels considered eligible under these circumstances include *N.S. Savannah*, (1950) the first nuclear-powered merchant ship built in the United States, and the nuclear submarine *U.S.S. Nautilus*, the first submarine to navigate the seas under the ice pack of the North Pole. Other vessels less than fifty years of age that the National Register currently accepts as being eligible are vessels which played an important role in World War II).
2. A vessel owned by religious institutions and used for religious purposes may be eligible if her primary significance is derived from naval architecture (Criterion C and/or D) or historical importance (Criterion A).
3. In rare instances, replica vessels can be a contributing component of a National Register property if: 1) the replication is based on scholarly analysis of graphic, written, and archeological sources; 2) the vessel's construction is accurately executed, using appropriate period materials and construction techniques; 3) the replica vessel is presented in a historically appropriate manner as a part of a restoration master plan; 4) no other vessel with the same associations has suvived. (Being part of a restoration plan means that the replica is an essential component in a group of historic properties which together constitute a historic district. The replica must be part of an overall restoration plan for the entire resource. For example, a replica craft may be eligible as part of a restoration master plan for a 19th century ferry landing historic district, which includes authentic historic properties, such as landings, docks, and associated commercial buildings. In this case, the replicated craft may be essential to convey the transportation significance of the district).
Individual replica vessels are not eligible for the National Register of Historic Places because they are not authentic historic resources. A replica vessel is a modern vessel which recreates either a specific vessel or a class or type of vessels. After the passage of fifty years, a replica vessel may attain significance in her own right as a product of one generation's perception of its maritime history. In this case it may be possible for a replica to qualify on that basis under Criterion A, B, C or D. If a replica vessel has achieved significance within the last fifty years, she will be required to meet the special justification discussed above.
4. Small craft and larger vessels in collections may be individually eligible if they retain integrity of setting. Collections of vessels are not eligible for the National Register. (In exceptional cases, vessels may have collective historic significance when they are exhibited in an appropriate setting, such as the vessels at the Mystic Seaport Museum. This museum collection, founded in 1929, has historic significance for its associations with the development of the American historic preservation movement and represents a landmark in early twentieth century maritime preservation.)

Preparing the National Register Nomination

While basic instructions for completing nominations are found in National Register Bulletin 16, "Guidelines for Completing National Register of Historic Places Forms," several sections of the form will require the specialized information provided in the following

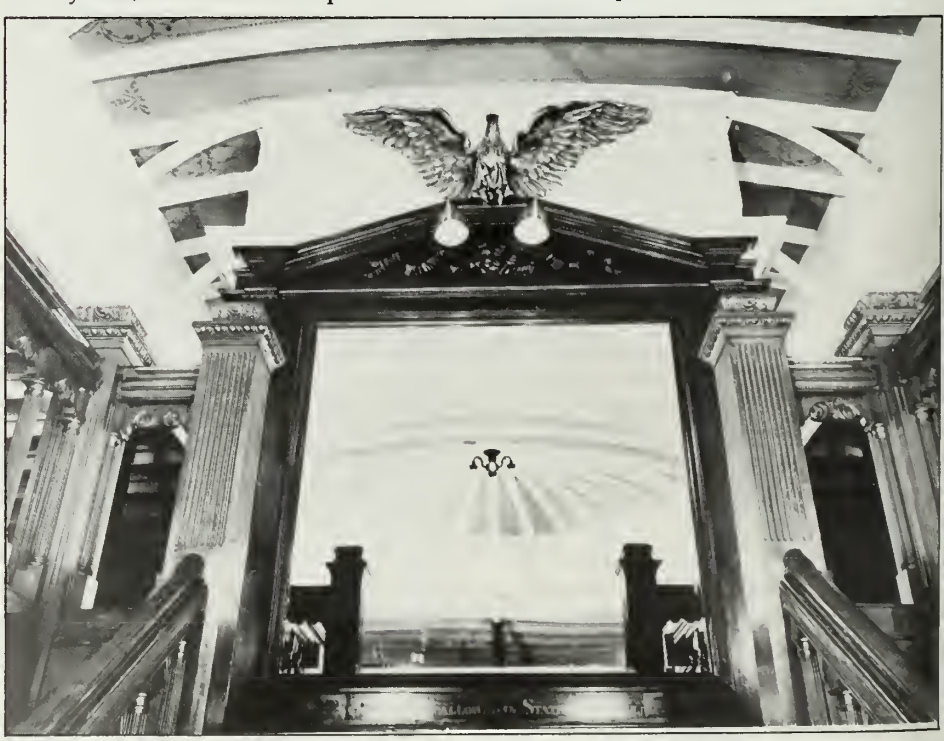


FIGURE 11: Stairway and stateroom hall on board the *S.S. Ticonderoga*. (Photo credit: courtesy, Shelburne Museum, Vermont)

guidelines. For the purposes of the National Register, vessels are classified as "structures" because they are made up of interdependent and interrelated parts in a definite pattern of organization. In the past, the National Register has accepted vessels categorized as objects, but during the preparation of this bulletin, it was determined that a vessel better fits the National Register definition of "structure."

The number and combination of characteristic features required for National Register eligibility will vary from property to property. In some cases, a vessel need only possess a single quality or characteristic to be eligible. If a vessel is not individually eligible for the National Register, she may still be eligible as a contributing component of a historic district. For example, historic life boats may not be individually eligible, but they could contribute to a Coast Guard station historic district.

When she is registered, the legal description of a vessel can be her merchant or naval registry. For active vessels still registered by the United States Coast Guard, citation of the current Consolidated Enrollment and License, with the office address of the applicable Coast Guard District, will suffice. For merchant vessels no longer registered, the former enrollments and registries will be found in the National Archives. They can be obtained by supplying the name of the vessel, the date of construction, and the port of construction to the Judicial, Fiscal, and Social Branch of the National Archives in Washington, D.C. National Archives staff will locate all registry and enrollment documents for the vessel and will provide photocopies for a fee. Citation of the last document issued to the vessel will suffice for the vessel's legal description. For naval vessels, the registration data are at the Ships History Division. The annual publication listing **Vessels of the United States (1869 to the present), Lloyd's Register**, and other classification society registers also provide a legal description. Nearly every floating, preserved historic vessel in the United States has been surveyed by

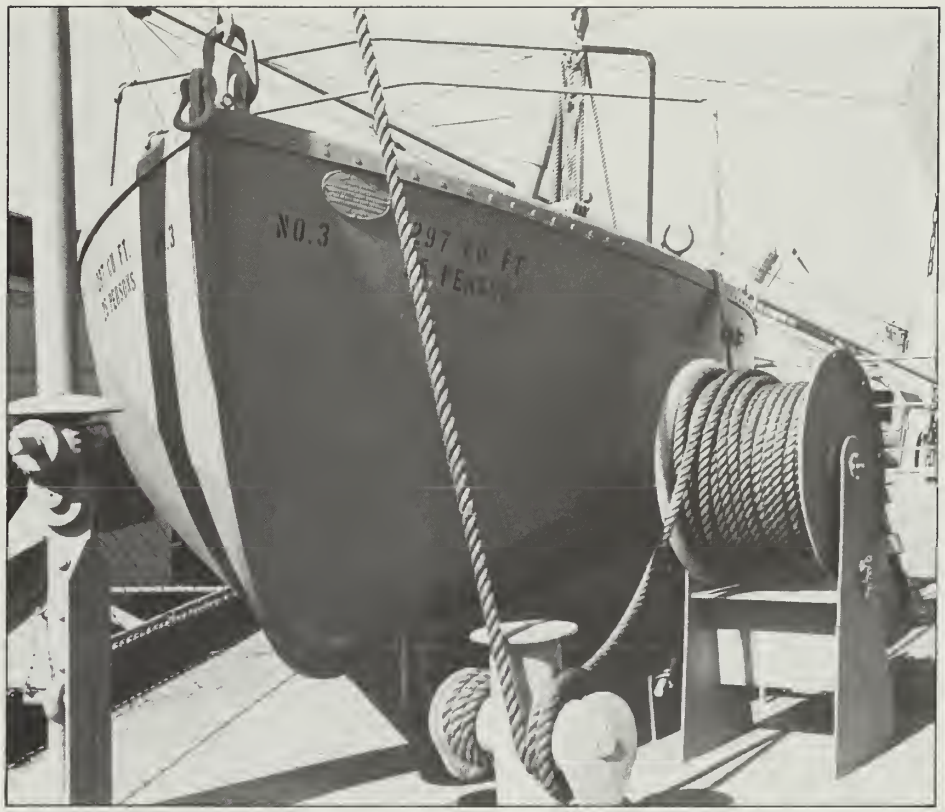


FIGURE 12: Lifeboat on board the *S.S. Jeremiah O'Brien.* **(Photo credit: Joanie Morgan)**

Norman Brouwer and his associates for the World Ship Trust. Brouwer's **International Register of Historic Ships** is a good place to start the research. The book is constantly being updated and revisions may be obtained from the National Maritime Historical Society. **The Historic Ship Register of the International Congress of Maritime Museums** (ICMM) is another logical place to look. Some vessels may have been surveyed during local or statewide heritage inventories. Shipwrecks may be listed in State archeological inventories.

In the narrative Description and Significance portions of the nomination form, it is important to develop fully the information and analyses conducted in the evaluation process. It is important to be concise. In the Description section, the integrity of the vessel needs to be thoroughly documented, discussing original form, materials, workmanship, and any changes. The National Register currently requires a detailed architectural description for nominated buildings and structures. A comparable level of detail is required for vessels.

The International Congress of Maritime Museums Historic Ship Evaluation Progam assesses vessel structure along with historic significance and preservation considerations. The ICMM evaluation seeks descriptions of primary structural material members. Not all structural members listed by ICMM require discussion in a National Register nomination; essential features such as the keel, keelson, frames, reinforcing members, hull planking or plating, fastenings, decking, masts, rigging, deck furniture, interior spaces, including joinery, deck machinery, armament, decorations, coating and sheathings, boats, and tackle—all of these need to be described and assessed with comments in each case on original material, deterioration, adherence to original configuration, and impacts by previous restoration, repair, or alteration.

Alterations need to be discussed and assessed in relation to a historically significant context. If a vessel was built for a specific use—the grain trade, for example—and then altered for another historic purpose—such as fishing—these

FIGURE 13: Builder's plate in the engine room of the 1908 steam screw tugboat *Hercules*. (Photo credit: Stephen A. Haller, NPS)

changes would be significant and would not have an adverse effect on the integrity of a vessel. On the other hand, if a vessel has been changed for a later non-significant career, then those changes represent a loss of integrity. It is important to remember that integrity is not always construed as "as built."

In discussing significance, it is essential to link the vessel to international, national, regional, or local historic contexts. It is also important to convey the vessel's participation in specific historical events and to discuss the vessel's important changes in design, such as alterations to the hull or propulsion systems and to use this information in the evaluation of historic integrity. If applicable, a vessel's association with significant individuals, including builders, masters, officers, crew, owners, or passengers should be discussed. An assessment of the vessel's relation to similar properties is needed. Is she a sole survivor? Is she representative of a type? Is she the best example of a type? Statements of significance should be derived from primary sources and scholarly secondary historical assessments. Thorough historical research is recommended in preparing a National Register form so that the best available information is analyzed and presented. Footnotes for citations of source materials is desirable but not required.

To aid in the National Register assessment of significance and integrity, good illustrative views of the vessel, her rig, her characteristic and significant design features, and alterations need to be documented with individual photographs. Instead of a site map, as is the case with land-base properties, deck plans, inboard profiles, lines, and rigging plan should be included, if available. A USGS map locating the vessel in a city or other geographical unit, with Universal Transverse Mercator coordinates marked, must be included. If a vessel is engaged in active sailing, her regular mooring at the home

FIGURE 14: The assembly of instruments in the pilothouse of the *S.S. Clipper* represent th various navigational technologies used on the vessel during her career. Documentation of vessel for the National Register should include views which interpret changes or alterations. (Photo credit: Harry Weese and Associates)

port should be the location cited and marked.

Major bibliographic references should include sources referred to in the evaluation process as well as sources cited. The reference should be organized alphabetically, in categories such as manuscripts, published works, plans, and historic photographs and other graphics. The boundary of the vessel should be all of that area enclosed within her extreme dimensions. It is the vessel that is being nominated, not the water or land that surrounds her. A boundary description for a vessel usually refers to the area enclosed by the vessel's extreme dimensions, for example: "The *Showboat Jimmy* 80′ × 40′ at permanent berth at Pier 56." Acreage should be given as less than one.

FIGURE 15: Significant historical events that occur on board a vessel should be documented. In this view, sailors on board the *U.S.S. Intrepid* battle a shipboard fire on the flight deck off Luzon, the Philippines, on November 25, 1944. (Photo credit: National Archives)

Field Work, Research, and Documentation Techniques

Field Work

Adequate field examination of a vessel may involve more than one visit to acquire a thorough understanding of the vessel's construction, layout, rig, and machinery. If evaluating a property for the first time, it is essential that a guided tour of the vessel, with discussions emphasizing condition, restoration or maintenance work, and the vessel's history, be provided by knowledgeable individuals intimately associated with the vessel. Tours of engine rooms and other machinery spaces should be discussed with a marine engineer. The method of construction should be derived from discussions with a naval architect. The field examination of the vessel should be a slow, meticulous process which leaves the evaluator with as complete an understanding as possible of how the vessel was built, operated, modified, and maintained through time.

Research

Historical research should include the examination of any extant drawings or plans of the vessel, such as lines, profiles, deck plans, sail plans, scantlings, engine, boiler, and machinery plans. Half-models and builder's models should be consulted. If extant, builder's models may aid in identifying original features no longer present or modified. Historic photographs, lithographs, and drawings of the vessel, particularly including views of the vessel under construction, deck views, and overall views, may be helpful in assessing method of construction and features of the vessel. Local newspapers may have references to a vessel's launch and discuss her particulars. Various vessel types, machinery, and some specific vessels may also be discussed and described in various professional journals such as that of the Society of Naval Architects and Marine Engineers.

The registry and enrollment papers provide the dimensions of the vessel, tonnage, the number of masts, and the type of bow and stern decoration for American vessels. A run of these documents may provide evidence of alteration or change. Summaries of this information can be found in the annual **List of American Merchant Vessels of the United States.** Lists of vessels registered or enrolled at various American ports were compiled by the Works Progress Administration and the National Archives. Consultation of these lists, particularly for the port of New York, will provide a necessary lead in beginning to research these vessel "titles." Lloyd's of London possesses detailed descriptions of vessels surveyed by Lloyd's for certification, and the National Maritime Museum, Greenwich, England, is also a vital source for English vessels lost in American waters.

Logbooks, journals, and letters written on board the vessel may provide physical descriptions and document details of her career. Local newspapers may include discussions of sailings, accidents, and marine disasters. Contemporary accounts of a vessel's career also can be found in the annual reports of the United States Life-Saving Service (published between 1878 and 1915). Insights into a vessel's history also can be gained through researching owners' names listed in the registries and enrollments. A variety of secondary source works which assess local, regional, and national maritime history may discuss a vessel and her career. Especially valuable are articles that are found in historical

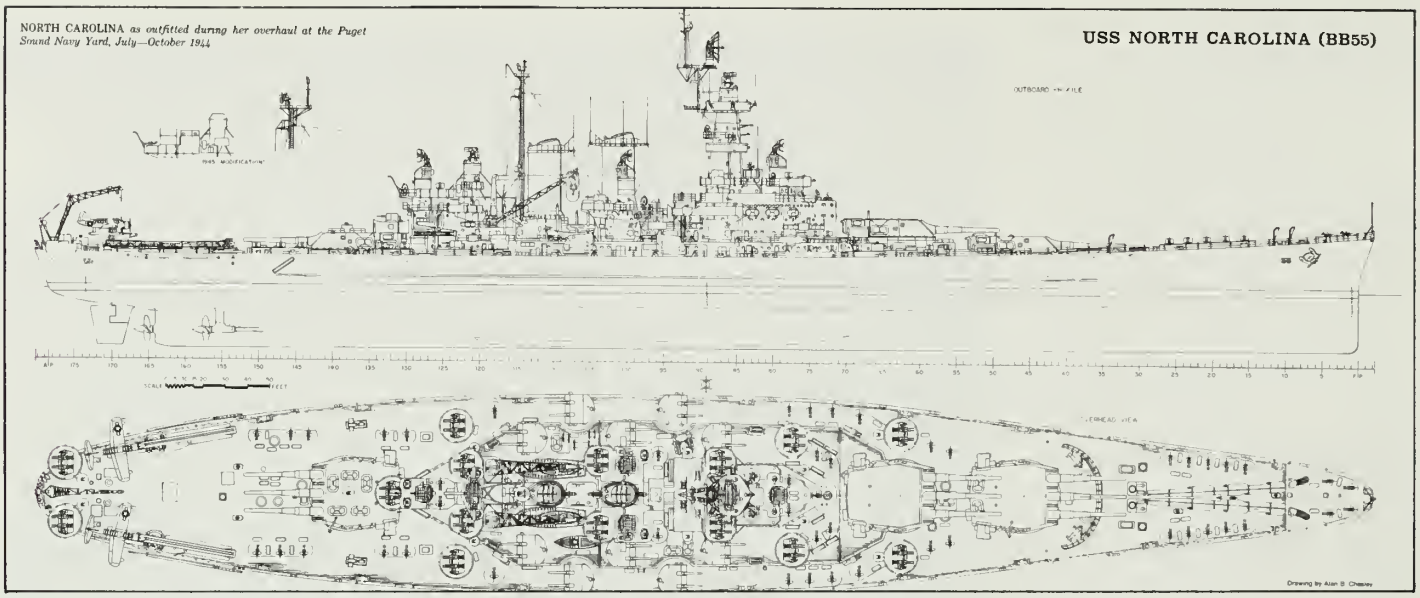


FIGURE 16: Documentation of a vessel should include a plan, if available. This is the outboard profile and deck plan of *U.S.S. North Carolina* as outfitted. (Photo credit: U.S.S. NORTH CAROLINA Battleship Commission, drawing by Alan B. Chesley)

society and maritime museum quarterlies, such as the **American Neptune, Steamboat Bill, Sea History, Inland Seas, Waterways Journal,** or the **Mariner's Mirror.** A recommended bibliography can be found at the end of the bulletin.

Documentation

As the field work and research progresses, files of notes, sketches, reproduced reference materials, and photographs should be compiled. If a vessel has changed over time, a chronologically arranged series of plans or photographs may aid in understanding these alterations. Color slides of the vessel may aid later when the nomination is being prepared and a site visit is not possible.

Numerous black and white photographs of the vessel and her features should be taken. The quality of the photographs actually included in the nomination form will benefit from as wide a selection as possible. Exemplary historic photographs and other graphics should be reproduced for inclusion with the nomination. Historic plans should be included to aid in documenting the vessel. If historic plans do not exist, modern plans of the vessel might be prepared. This is highly desired but is not required for nominations.

SECTION TWO: DOCUMENTATION OF SHIPWRECK NOMINATIONS

This section of the bulletin addresses the evaluation and nomination of shipwrecks. A shipwreck is any vessel that has foundered, stranded, or wrecked. This includes vessels that exist as intact or scattered components on or in the sea bed, lake bed, river bed, mud flats, beaches, or other shorelines.

The unique nature of shipwrecks has resulted in uneven and contradictory treatment of this class of resource by historians and archeologists. The National Register categorizes all submerged cultural resources as either sites or structures; shipwrecks may fit either of these categories. Vessels may appear in the material record as mostly intact hulls. In this instance they are historic structures. Vessels may also appear as broken or scattered sections of a structure with localized deposition of apparel, armament, cargo, and other artifacts, or other remains, widely separated with little or no continuity, or as a single representative item. In this instance, they compare most closely to archeological sites. Vessels may also appear as discrete elements of hull, machinery, artifacts, or other remains, widely separated with little or no continuity, or as a single representative item. In this instance, they compare most closely to objects or artifacts.

It should be noted, however, that for review purposes the National Register views each of the above site manifestations as archeological sites. Further, if these remains have been purposefully moved to another location (e.g., museum display or wharfside interpretive site), they are no longer considered archeological sites by the National Register. The documentation and evaluation of significance for each of the above examples (i.e., an archeological site or a structure) requires a different research approach. Clearly the research orientation, methods, and types of data collected may differ based on the degree of wreck preservation or dispersal. While the individual historian or archeologist may have a clear understanding of the research questions and data gathering technologies necessary to document these sites, the application of the National Register criteria to shipwrecks has not been well-defined or understood.

The study of shipwrecks may pose difficulties not encountered in the study of land-based sites. These difficulties result from environmental conditions (e.g., currents, cold, depth, turbidity), research time

constraints, and the degree to which remains may be encrusted or buried. Further, simply because many shipwreck sites are underwater, they are unavailable to other interested, but non-diving researchers.

Because of the above difficulties, nomination of shipwreck sites requires particular attention to detail and approach. Clarity and specificity throughout the nomination are essential. Lack of clarity and specificity are at the crux of the past problems with shipwreck nominations.

Several factors must be addressed during the preparation of shipwreck nominations. Archeologists, historians, and interested individuals may be unfamiliar with the application of National Register conceptual and technical concerns critical for determinations of significance for this class of resource. These concerns fall in the general areas of description, significance, and geographical data. Specifically, they are: a) description including historic and present site description, natural and cultural post-depositional impacts, and description of loss or wreck event; b) significance including the direct application of National Register criteria, context, and integrity; and c) geographical data, including boundary justification and verbal description. Each of the above can be addressed in the entry categories of the National Register form.

The following discussion of environmental categories and concerns is a guideline for the preparation of National Register nominations of shipwrecks.

FIGURE 17: Features particularly significant to a vessel should be documented in the National Register nomination. The filter cover had been removed by the crew of the German U-boat U-505 when they scuttled their ship to prevent its capture. An American boarding party bravely risked their lives to close this cover on June 4, 1944. U-505 was the only German U-boat captured by the United States during World War II and is now on display at the Chicago Museum of Science and Industry. (Photo credit: courtesy, Museum of Science and Industry, Chicago)

1. DESCRIPTION

Shipwrecks exist in environmental conditions that at times make various forms of documentation difficult. Nonetheless, nominations should draw from all available descriptive information and should be as explicit as possible.

The description section should open with a summary paragraph which includes brief background information about the vessel, her general characteristics, present location, and condition. For example:

George M. Cox was built in 1901 in Toledo, Ohio, at the Craig Shipbuilding Company. Hull number 82 was originally consigned to the Holland and Chicago Steamship Company. However, the vessel was purchased by Graham and Morton Transportation Company, named *Puritan,* and given US registry number 150898. Based out of Chicago and used primarily in the excursion trade on Lake Michigan, the vessel was 233 feet long, 40 feet wide, and 21.9 feet deep. She now lies broken and scattered in a shallow, gravel lined gully and on an adjacent slope, separated by a reef southwest of Rock of Ages at the western end of Isle Royale.

The description discussion should consist of two parts: an original (historical) description and a present (archeological) site description. The historical descrip-

tion should discuss the vessel prior to her loss or what is known as the wreck event (primary deposition). If the vessel identity is known, the description should include the characteristics of the vessel as a floating entity including, but not limited to, as-built and modified characteristics. If the vessel identity is not known, the type, period, general characteristics, nationality, and function should be described.

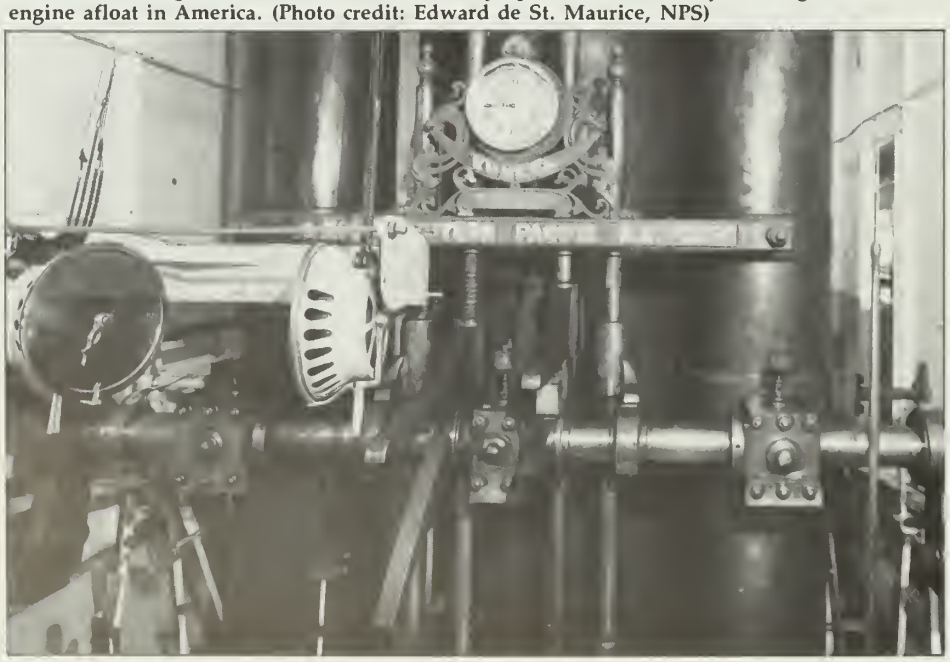
The archeological site description must include a discussion of all exposed and identifiable features, artifacts, machinery, and architectural components. These should be explicitly documented and described. The description should also consider buried features and artifacts. If buried materials are to be addressed in the nomination, they should be documented through testing or remote sensing and the data that were generated should be discussed. When exposed material remains allow for reasonable inference concerning the nature of buried features, the information or data used to determine the nature, extent, and potential significance of the buried remains must be clearly presented.

Environmental and human impacts will affect a shipwreck site during and after archeological deposition. Environmental impacts may include erosion, slumping, silt deposition, storm activity, encrustation, and deterioration of the vessel, her fabric, or other material remains. Human impacts may include contemporary or recent salvage, dredging, looting, or vandalism, as well as archeological investigations and collections. The effect of these post-depositional impacts must be described and discussed.

A narrative of the events leading up to and including the loss of the vessel or the wreck event will also be helpful. The discussion may be used to explain partially the nature of site deposition and the extent of human impacts to the vessel while in a transition period, prior to human abandonment and up to its equilibration with the environment. If the events surrounding the loss of the vessel contribute to the significance of the site, they should appear in that section.

Graphic documentation is an essential element of a well-prepared nomination. Nominations must include a plan view site map. Other graphic documentation could include: contoured magnetometer data, side-scan sonar images, photographs and/or drawings of diagnostic or significant features and artifacts, stratigraphic profiles, and historic views or plans of the vessel. In those situations where photography is not possible, i.e., extremely turbid water, the National Register will still accept nominations. However, a complete explanation of the circumstances and water conditions preventing photography must accompany the documentation.

FIGURE 18: Operator's flat in the engine room of S.S. *Eureka*. The 1891 walking beam steam marine engine on board *Eureka* is the only operable 19th century walking beam engine afloat in America. (Photo credit: Edward de St. Maurice, NPS)



2. SIGNIFICANCE

The significance section should open with a summary paragraph clearly stating the areas of vessel significance, the National Register criteria used for evaluation, and how these criteria apply to the vessel. The summary should be a concise statement of facts, or supportable hypotheses, which address anthropological research issues, followed by documentation that addresses each of the areas of significance and demonstrates the applicability of the criteria selected.

Shipwrecks may be nominated using any or all of the National Register criteria as discussed in Section 1 of this bulletin. The application of National Register criteria determines the significance of a shipwreck, which is partially derived from an understanding of the overall cultural context and the specific role of the vessel and her component elements within that context. The context statement normally addresses two aspects of vessel significance. The first is the historical overview of that class of vessel, her function, role, and contribution to national, regional, or local maritime history, technology, commerce, or similar topics. This information is to be used in conjunction with the second aspect of context: an assessment of the nominated vessel's specific role in history. The nominated vessel's role and function can be documented using categories, such as:

1) naval architecture
2) marine technology
3) engineering
4) commerce
5) transportation
6) exploration/settlement or
7) military

FIGURE 19: A number of historic vessels remain in operation around the United States. The last unaltered World War II Liberty Ship, *Jermiah O'Brien*, makes an annual memorial cruise on San Francisco Bay. (Photo credit: Donald Kearns)

If the vessel identity is known, and this information is used to establish context and/or role, her identification must be documented beyond reasonable doubt.

Context statements may also address anthropological and archeological perspectives. These can include: patterns of activity; contemporary cultural milieu and its effect on the role, function, or physical manifestation of the vessel as a floating entity; the range of variability within a class of vessel; or similar topics, if they can be clearly demonstrated to contribute to context.

Most importantly context statements must be confined to salient points relating to historic and archeological contexts. They should not become an indiscriminate listing of facts.

Shipwreck integrity is not limited to the survival of intact hulls. Integrity may also extend to a structure that exists in sufficient form to address architectural, technological, and other concerns. It may also be applied to scattered or broken remains, if data can be generated that will permit the development of anthropological inferences and/or the formulation of testable research questions. Artifacts, soil stains, or casts of material remains (resulting from encrustation and later deterioration of the artifact) may also contribute to integrity.

Intensive salvage, looting, or the collection of artifacts, does not necessarily compromise integrity. Instead, these activities may change either the focus of research or the National Register criteria to be applied. In the event of salvage, looting, or vandalism, the site's remaining research value must be demonstrated. If artifact association with the site can be authenticated, collections from the site may be used to aid in establishing the remaining research potential of the shipwreck.

Isolated structural components, or other widely dispersed remains scattered on a coast line or sea bed, may also possess integrity. Sufficient diagnostic attributes must be present to permit identification of the vessel type and historical context or discussion of significant construction details, marine engineering, or other technological aspects; or discussion of the spatial relationship with similar significant remains; and a discussion of eligibility or significance.

3. GEOGRAPHICAL DATA

General guidelines for verbal boundary descriptions are provided in National Register Bulletins 12 and 16; those guidelines should be applied to shipwreck sites. The purpose of a verbal boundary description is to describe both the location and the physical extent of the nominated site. The open ocean or lake, however, can present a problem in the description of a shipwreck site location because there may be no readily identifiable landmarks or reference points. As a result a somewhat different approach from that normally used for locating a terrestrial site is needed for the description of a shipwreck location. Relocation of the vessel either on a nautical chart, USGS map, or on-the-water should be possible from the information provided.

Four elements can be combined to create an accurate verbal boundary description for National Register forms. They are: 1) a general verbal description of the

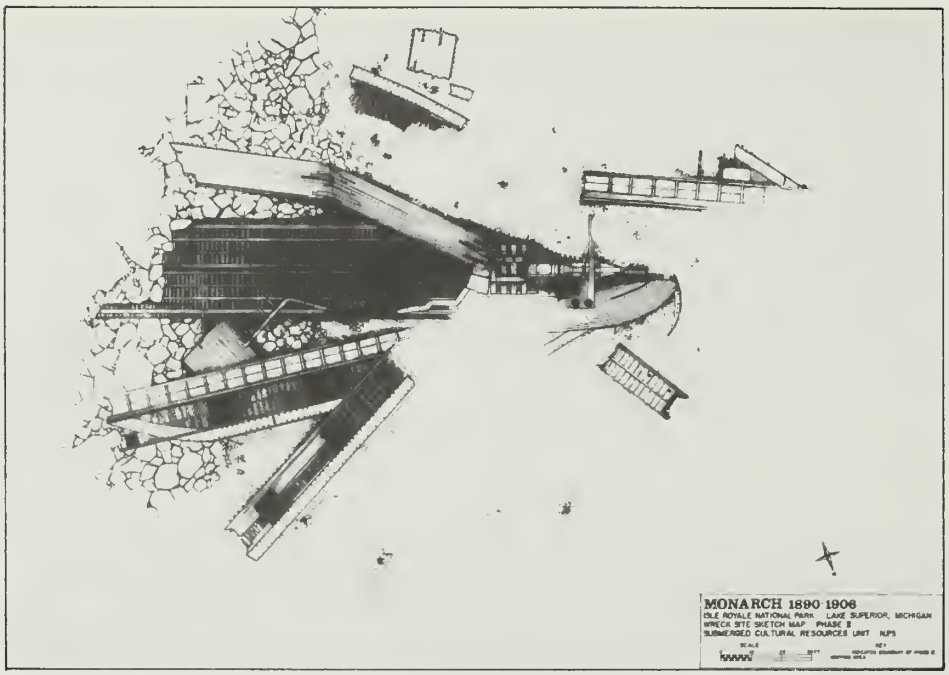


FIGURE 20: Site plan for the wreck of the *Monarch*, Isle Royale National Park, Michigan. (Photo credit: Submerged Cultural Resources Unit, NPS)

location, 2) a chart description, 3) UTM coordinates, Latitude and Longitude, or Loran C, and 4) the area definition. An example of each is provided below.

Verbal location: This should be the starting point for the section, for example:

> *America* is located in the channel between Thompson Island and the main island, locally known as North Gap, out of Washington Harbor at the western end of Isle Royale.

Chart description: Bearings must be accurate. The chart magnetic variation should be indicated and bearings referenced as true or magnetic. This information should be computed from current nautical charts and be complete enough to allow accurate field location, for example:

> The vessel is 0.7 statute miles from the northeast tip of Grace Island on a true bearing of 331.5 degrees and 20 degrees true from the port-hand can buoy (C5) between Barnum and Booth Islands. The vessel is marked by a privately maintained port-hand navigation buoy in North Gap channel. *America* can be located in the channel by rounding the tip of Thompson Island, entering Washington Harbor, using the white beacon on Thompson as a point of reference on a true bearing of 119 degrees and traveling a distance of 0.2 statute miles.

UTM coordinates should enclose all sites following standard National Register guidelines outlined in Bulletins 12 and 16. If UTMs are not available, longitude and latitude or Loran C coordinates are acceptable.

Area Definition: This describes the site and shape of the nominated area. When combined wth the general verbal description, chart description, latitude/longitude, Loran C, or UTMs, this should provide an accurate location of the vessel and the area to be included in the nomination, for example:

> The area included in the site is a square 2,000 feet on a side; the geographical center is the charted vessel position; UTMs, latitude/longitude, or Loran C coordinates.

A detailed boundary justification is a required part of the

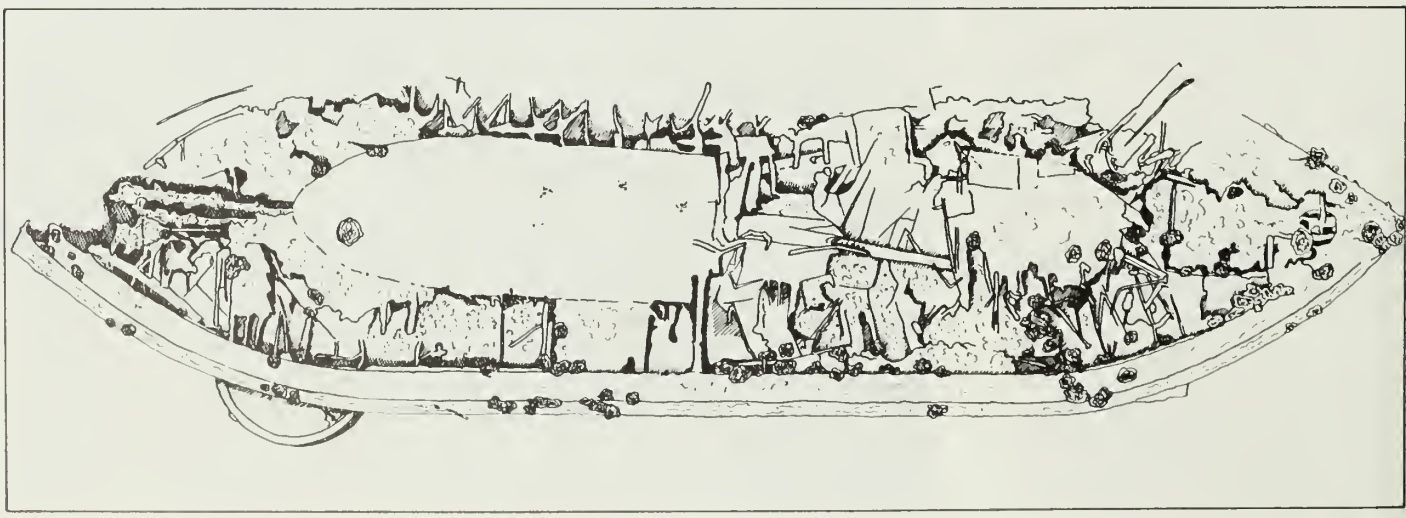
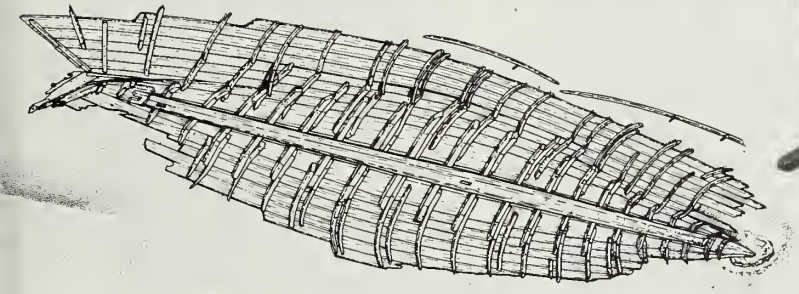


FIGURE 21: Plan of the substantially intact wreck of the Civil War ironclad warship *U.S.S. Monitor* (Photo credit: courtesy, National Oceanic and Atmospheric Administration)



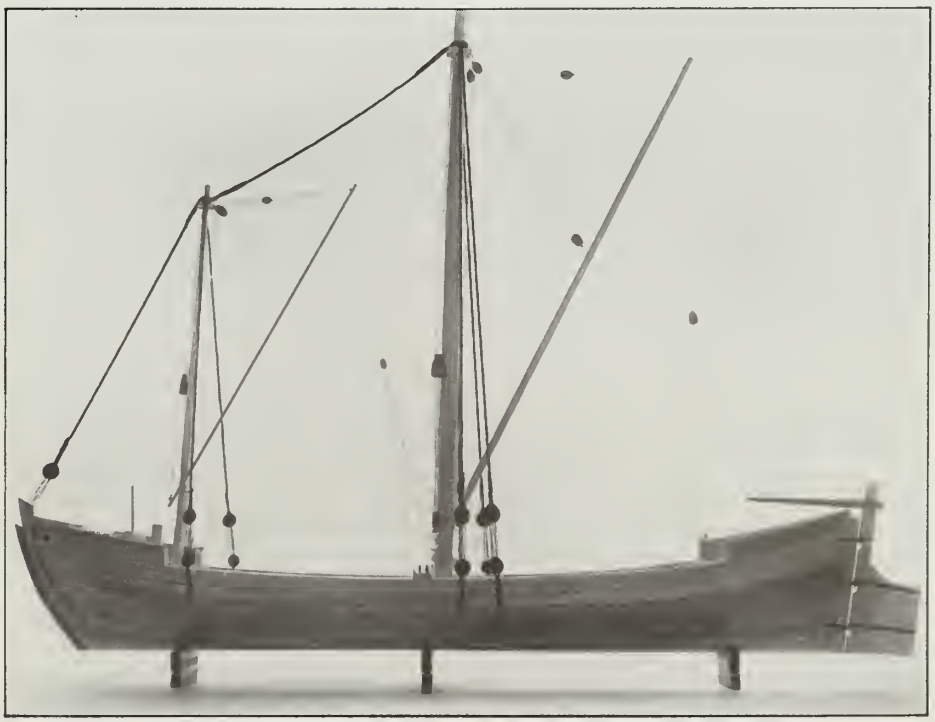


FIGURE 22: The documentation for the 18th century Brown's Ferry Wreck in South Carolina included a site plan, a photograph of the vessel remains, a significant diagnostic artifact recovered from the wreck, an Improved Davis Quadrant, and a model of what the vessel is presumed to have looked like when afloat. (Photo credit: Gordon Brown, photographer and Darby Erd, illustrator, courtesy of Institute of Archeology and Anthropology, University of South Carolina)

FIGURE 23: Documentation of the wrecked steel screw steamer *Emperor* at Isle Royale National Park included a view of surviving deck equipment such as this bow anchor winch. (Photo credit: Larry Muphy, NPS)

geographical documentation for the National Register. General guidelines for boundary delineation of archeological resources are provided in Bulletin 12 from the National Register. The approaches advocated by the National Register in that bulletin should be fully applied.

Adequate determination of boundaries and site limits may be difficult for shipwreck sites. The site may be partially buried or coral encrusted; water turbidity or extreme depth may hamper site delineation; or, as a result of both natural and human impacts, remains may be broken into discontiguous scattered features. The latter situation presents the most difficult problem for boundary determination and justification. If material remains from a shipwreck have been widely dispersed, anything other than a discontiguous site boundary must be justified by empirical data such as site testing, magnetometry supported by ground-truthing, or similar activities.

In all cases, a concise statement justifying the site boundary location, the delineation of the area, and all factors considered in the boundary determination, must be provided along with supporting documentation in the boundary justification. An example of a justification for an intact vessel, resting on the bottom, is:

> *America* is an intact vessel with little structural damage. The boundary for this site is based upon visual examination of the bottom, accomplished by: 1) swimmer survey of the immediate area, and 2) swimmer survey on compass transects of the surrounding area out 300 yards from the vessel. The ship's physical remains and geologic formation in the area are stable; little deterioration of the vessel, erosion, or slumping at the site has occurred.

An example of a justification for a partially buried shipwreck with scattered remains, is:

> *La Fontaine* is a broken and scattered vessel that is partially buried. The boundary for the site is based upon: 1) contoured magnetometer data in a plus or minus 4 gamma range; 2) site testing through the long and short axis of the site as determined by magnetometry; 3) artifact density on the surface and in the test locations diminishing to sterile soil; and 4) the location of an isolated feature (rudder) approximately ½ mile from the main concentration of wreckage. The rudder is treated as a discontiguous element with a separate boundary. Magnetic contour maps, test excavation, and artifact location maps are attached.

4. CONCLUSION

Many concerns encountered in nominating a historic shipwreck are similar to those addressed in nominations for other types of historic vessels. Preparers of National Register nominations for shipwrecks should consult Section 1 of this bulletin. A final word about documentation concerns the potential of a historic vessel to be a National Historic Landmark. If the vessel has national significance, this should be documented in the nomination. Designation as a National Historic Landmark will require that the property be studied by the National Park Service. Usually this occurs as part of a major theme study. A well-documented National Register nomination for a potential National-Historic-Landmark quality vessel will facilitate its review by National Park Service professionals. Further information concerning the National Historic Landmark Program may be obtained by writing:

NATIONAL HISTORIC LANDMARK PROGRAM
NATIONAL PARK SERVICE (418)
U.S. DEPARTMENT OF THE INTERIOR
P.O. BOX 37127
WASHINGTON, D.C., 20013-7127.

Recommended Bibliography and Sources

NATIONAL PARK SERVICE PUBLICATIONS

NATIONAL REGISTER BULLETINS

2 Nomination of Deteriorated Properties
9 Improvement of Documentation for Properties Nominated to the National Register
12 Definition of Boundaries for Archeological Properties
14 Guidelines for Counting Contributing and Non-Contributing Resources
15 How to Apply the National Register Criteria for Evaluation (Draft 1982)
16 Guidelines for Completing National Register of Historic Places Forms
19 National Park Service Procedures and Policies for Processing Nominations
21 How to Establish Boundaries for National Register Properties
22 How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years
23 How to Improve Quality of Photos for National Register Nominations
25 Directory of Technical Assistance
28 Using the UTM Grid System to Record Historic Sites

The above publications may be obtained by writing to the National Register of Historic Places, U.S. Department of Interior, National Park Service, P.O. Box 37127, Washington, D.C. 20013-7127.

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These are provided as an indication of the variety of source materials available as well as certain highly recommended works which will aid researchers. This listing is not intended to be a comprehensive bibliography.

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American Neptune
Inland Seas
International Journal of Nautical Archaeology
The Log of Mystic Seaport
Sea History
Seaport
Steamboat Bill
Waterways Journal

COLLECTIONS

This is a representative sampling of major maritime collections in the United States with a general indication of source materials available.

Maine Maritime Museum, Bath, Maine—Library, reference files, ship plans, manuscripts, photographs.

Mariners Museum, Newport News, Virginia—Library, reference files, manuscripts, photographs.

Mystic Seaport Museum, Mystic, Connecticut—Library, manuscripts, photographs.

National Archives, Washington, D.C.—Manuscripts including registry enrollment and licensing documents, crew lists, reports of maritime disasters, inspections, Naval records.

National Maritime Historical Society, Croton-on-Hudson, New York—updates Brouwer, **International Register of Ships,** publishes in **Sea History.**

National Maritime Museum, San Francisco—Library, reference files, manuscripts, ship plans, photographs.

Navy Historical Center, Washington, D.C.—Library, biographical files on Naval officers, ship histories, photographs, ship plans.

Peabody Museum, Salem, Massachussets—Library, reference files, manuscripts, ship plans, photographs.

Riverboat Photograph Collection, Murphy Library, University of Wisconsin, La Crosse, Wisconsin.

South Street Seaport, New York—Library, reference files, photographs.

Steamship Historical Society, Baltimore, Maryland—Library, reference files, ship plans, photographs.

THE COUNCIL OF AMERICAN MARITIME MUSEUMS

CALVERT MARINE MUSEUM
P.O. Box 97
Solomons, Maryland 20688

THE CANAL MUSEUM
318 Erie Blvd., East
Syracuse, New York 13202

CHESAPEAKE BAY MARITIME MUSEUM
St. Michaels, Maryland 21663

COLUMBIA RIVER MARITIME MUSEUM
Astoria, Oregon 97103

EAST HAMPTON TOWN MARINE MUSEUM
Bluff Road, P.O. Box 858
Amagansett, New York 11930

FLAGSHIP NIAGARA
P.O. Box 1026
Harrisburg, Pennsylvania 17108

THE GREAT LAKES HISTORICAL SOCIETY
480 Main Street
Vermilion, Ohio 44089

HUDSON RIVER MARITIME CENTER
One Roundout Landing
Kingston, New York 12401

THE KENDALL WHALING MUSEUM
P.O. Box 297
Sharon, Massachusetts 02067

MAINE MARITIME MUSEUM
963 Washington Street
Bath, Maine 04530

MANITOWOC MARITIME MUSEUM
809 South 8th Street
Manitowoc, Wisconsin 54220

THE MARINERS' MUSEUM
Newport News, Virginia 23606

M.I.T. MUSEUM AND HISTORICAL COLLECTION
Hart Nautical Collection
265 Massachusetts Avenue
Cambridge, Massachusetts 02139

MARITIME MUSEUM ASSOCIATION OF SAN DIEGO
1306 North Harbor Drive
San Diego, California 92101

MARITIME MUSEUM OF THE ATLANTIC
1675 Lower Water Street
Halifax, Nova Scotia B3J 1S3
CANADA

MYSTIC SEAPORT MUSEUM
Mystic, Connecticut 06355

NANTUCKET HISTORICAL ASSOCIATION
P.O. Box 1016
Nantucket, Massachusetts 02554

NATIONAL MARITIME MUSEUM, SAN FRANCISCO
San Francisco Maritime National Historical Park
National Park Service
Ft. Mason, Bldg. 201
San Francisco, California 94123

NORTH CAROLINA MARITIME MUSEUM
315 Front Street
Beaufort, North Carolina 28516

OLD DARTMOUTH HISTORICAL SOCIETY WHALING MUSEUM
18 Johnny Cake Hill
New Bedford, Massachusetts 02740

PEABODY MUSEUM OF SALEM
East India Marine Hall
Salem, Massachusetts 01970

PENOBSCOT MARINE MUSEUM
Searsport, Maine 04974

PHILADELPHIA MARITIME MUSEUM
321 Chestnut Street
Philadelphia, Pennsylvania 19106

RADCLIFFE MARITIME MUSEUM
The Maryland Historical Society
210 West Monument Street
Baltimore, Maryland 21201

SAG HARBOR WHALING AND HISTORICAL MUSEUM
P.O. Box 1327
Sag Harbor, New York 11796

THE SMITHSONIAN INSTITUTION
Curator of Naval History
National Museum of American History
Washington, D.C. 20560

THE SMITHSONIAN INSTITUTION
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National Museum of American History
Washington, D.C. 20560

SOUTH STREET SEAPORT MUSEUM
207 Front Street
New York, New York 10038

SUFFOLK MARINE MUSEUM
Montauk Highway
West Sayville, New York 11796

THOUSAND ISLANDS SHIPYARD MUSEUM
750 Mary Street
Clayton, New York 13624

U.S. COAST GUARD MUSEUM
U.S. Coast Guard Academy
New London, Connecticut 06320

U.S. FRIGATE CONSTELLATION
Constellation Dock
Baltimore, Maryland 21202

U.S. NAVAL ACADEMY MUSEUM
Annapolis, Maryland 21402

U.S. NAVY MEMORIAL MUSEUM
Bldg. 76, Washington Navy Yard
Washington, D.C. 20390

U.S.S. CONSTITUTION MUSEUM FOUNDATION
Boston Naval Shipyard
Boston, Massachusetts 02129

VANCOUVER MARITIME MUSEUM
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WHALING MUSEUM SOCIETY
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