

COMPARISON, ANALYSIS, AND RECOMMENDATIONS FOR STEAM SHIP POMONA ESTABLISHMENT AS AN UNDERWATER HISTORIC SHIPWRECK PARK

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ABSTRACT

Archaeological survey and underwater park assessment of the *Steam Ship Pomona (SS Pomona)* demonstrates the shipwreck's suitability as a sanctioned Underwater Shipwreck Park. The *SS Pomona* is a unique example of California's diverse 19th century maritime history, and is among the best remaining representatives of steam driven propeller shipwrecks in the United States. Today the *SS Pomona* offers a unique opportunity for California State Parks to interpret and protect the site, while providing enhanced access for recreational divers.

INTRODUCTION

In August 1998, Indiana University (IU), in cooperation with California State Parks, conducted underwater investigations of the *SS Pomona*, located approximately 300 yards offshore of Fort Ross State Historic Park, Sonoma County, California. Participants included faculty and students from IU, San Jose State, San Diego State, Sonoma State, Cal State Northridge, rangers from Fort Ross and Salt Point State Parks, and a lifeguard from Sonoma Coast State Park.

The purpose of the investigation was to assess the *SS Pomona* for potential establishment as an underwater historic state park to be managed by California State Parks, gather and review relevant archival records, produce a site plan of the shipwreck, and determine the *Pomona's* eligibility for listing on the National Register of Historic Places. Additionally, IU wanted to promote the project to the public by updating daily an active Internet log of research activities. Ultimately, this investigation provided an opportunity for IU students, as well as a diverse group of California university students, to participate in a meaningful underwater resource management project.

HISTORY OF THE SS POMONA

The *SS Pomona* was built by Union Iron Works, San Francisco, in 1888. The ship's dimensions were 225 ft. by 33.5 ft., with a depth of 16 ft., and a displacement of 1,264 tons. The *SS Pomona* was utilized for transport between San Francisco and Vancouver until striking a rock and ultimately sinking in Fort Ross Cove on March 17, 1908.

In 1888, the Oregon Improvement Co. acquired the vessel from Union Iron Works. Built to ply the passenger line for northern California, the vessel sported a revolutionary and economical triple expansion steam engine and a single brass propeller. At the time, both of these items represented a new approach to ship propulsion on the west coast.

Most steam ships of the period used walking beam engines and side paddle wheels, similar to the *Orizaba* on the San Diego-L.A. line. For extra strength, the vessel was built with a strong steel hull, a feat which Union Iron Works, as the foremost shipbuilding company in the Bay Area, was only recently equipped to produce.

From 1891 to 1895, a businessman by the name of Knowles operated the ship under his name. In 1897, the vessel was sold to the Pacific Steamship Co. to work the San Francisco to Vancouver route. It is probable that the ship was reconditioned at this time. The vessel's rear superstructure was shortened, and a steam driven electric generator is also thought to have been added at this time.

The side cargo door was utilized in the *SS Pomona* now more than ever, as the ship now carried more cargo than passengers. Even the upper bow hatch was used for the purpose of cargo: mail was loaded through it, and a car could be parked on top of it, to save space and protect the hold's contents. Besides mail and the occasional automobile, the *Pomona* shipped items such as expensive rugs and imported goods.

On March 17, 1908, the *Pomona* was steaming slowly north towards Eureka. First class passengers were in the superstructure, while the general class passengers stayed below. A new truck was strapped over the forward hatch awaiting delivery in Eureka.

The ship was traveling abnormally close to the shore and at a slower than usual pace when she struck a reef and was forced into Fort Ross Cove. According to the numerous *San Francisco Chronicle* articles on the subject, the ship was close to the shore because Captain Swansen was concerned that the rough weather would make passengers uncomfortable. Other sources speculate that the boilers were malfunctioning and could not hold enough pressure to give the engine the horsepower it needed to plow the ship through the swells and winds in the open waters. For whatever reason, Swansen decided to follow the shore where the swells were not as pronounced. The ship struck Monterey Rock, so named for the *Monterey*, that had met disaster upon that rock years before. Captain Swansen headed the ship towards Fort Ross Cove in hopes of grounding her and saving the cargo.

Upon entering the cove, a large, uncharted washrock caused the ship to stop dead in its tracks. It was apparent the ship was fast aground on the rock; she began taking on water and listing to her starboard side. The order was given to

abandon ship and by most accounts, all passengers and crew made it to shore safely. Though the mail the ship was transporting was ruined by sea water, most of the cargo was saved.

COMPARISON TO SIMILAR VESSELS

Certainly today the *SS Pomona* is not unique as an example of late 19th century steam powered single screw passenger vessels. IU has conducted surveys of shipwrecks of similar design and function in other regions of the United States. However, I am aware of only two other vessels which retain the attributes and archaeological integrity also associated with the *SS Pomona*.

The best example of this era of steam ship passenger transportation is undoubtedly the *SS America*, built in 1898 and utilized in the Great Lakes to carry similar cargoes as the *SS Pomona*. Wrecking in 1928, today the *SS America* lies in 3-95 ft of water off Isle Royale National Park, Lake Superior. The *SS America* is among ten shipwrecks accepted as a regional nomination to the National Register of Historic Places. IU surveyed the vessel in 1984, documenting the intact three decks of the ship and significant artifacts preserved in the frigid Great Lakes waters.

Another excellent example of a steam ship passenger ferry, but more typical of salt water environments, is the *City of Washington*. Built in 1877 by John Roach and Sons of Chester, Pennsylvania, the steam ship was utilized for transport between New York City and Havana, Cuba. In 1898, while anchored in Havana's harbor, the crew was awakened when the United States battleship *Maine* exploded next to them. The *City of Washington* picked up survivors of the *Maine* and sent the telegram to Washington, DC describing the event, which initiated the start of the Spanish American War.

Wrecking on July 10, 1917, today the *City of Washington* lies in 25 ft. of water in the Key Largo National Marine Sanctuary. Indiana University's 1996 survey of the *City of Washington* will culminate with its inclusion along with nine other vessels in the "Historic Shipwreck Trail of the Florida Keys," dedicated by National Oceanic and Atmospheric Administration (NOAA) Florida Keys National Marine Sanctuary.

Under respective federal jurisdictions, both the *SS America* and *City of Washington* are highly utilized recreational dive sites that have been enhanced to facilitate diver visitation while being actively monitored by resource managers. These vessels and the *SS Pomona* represent the best remaining shipwreck examples of this bygone era of steam propulsion.

SS Pomona, *SS America* and *City of Washington* were all steel hulled, single screw passenger ferries, propelled by state-of-the-art triple expansion steam engines, with on board steam driven electric generators and telegraphs. Archival records indicate all were "the pride of the fleet" for their respective companies. Each ship is credited with speed records for their routes, with the *SS Pomona* steaming from Eureka to San Francisco in a record 15 1/4 hours during a race with the *SS Humboldt*.

SURVEY RESULTS

IU field survey participants totaled 54 diver hours underwater over a five-day period, to gather sufficient information to produce a site plan of the *SS Pomona* and complete documentation of significant features.

Beginning from the stern post and rudder, the survey included 148 feet of relatively intact lower hull forward of the midship, with depths ranging from 30 to 24 feet. As indicated in archival records and historic photographs, the bow of the *SS Pomona* became wedged on the wash rocks (12 foot depth to full exposure depending on the conditions). Survey of the forward section of the ship's hull shows evidence of the multiple iron keels twisting and breaking, with the majority of the hull landward of the wash rocks, and the bow deposited on the deeper seaward side.

Significant archaeological features documented include the rudder and stern post, steering assembly, prominent drive shaft with lead lined pillow mounts, boilers (one in appropriate position, with the second boiler documented off the vessel's stern), engine pistons (two still attached to the crank), and a steam driven electric generator.

Seaward of the high energy wash rock is a 35-foot section of the bow in depths of 40 feet. The bow section lists hard to the starboard, as evidenced by the hawsers and other bow components which have collapsed onto each other. Also noted were the starboard gunnel porthole section and cargo hatch.

The site of the *SS Pomona* has a diverse assemblage of sea life indigenous to northern California including harbor seals, sea lions, abalone, bull kelp, star fish, anemones, and ling cod.

CONCLUSIONS

Passage of the 1988 Abandoned Shipwreck Act, and subsequent 1990 National Park Service guidelines, have assisted state and federal agencies in promoting shipwreck park development. Education and interpretation assists in changing the public's attitude toward the value of shipwrecks, as submerged cultural resources, rather than "wrecks" to be plundered for personal gain. Establishing a shipwreck as an underwater park provides a higher level of site protection. Perhaps through these efforts, the underwater looters of the 1960s will be replaced by a well-informed shipwreck park visitor in the new millennium.

Investigation by IU indicates the *SS Pomona* has the basic administrative elements required to be a successful shipwreck park. These include demonstrated archaeological value and site integrity, recreational value with significant features that can be interpreted for the public, nearby beach access, and necessary proximity to an existing management area with visitor center.

The *SS Pomona* provides California State Parks a unique opportunity to incorporate an underwater shipwreck into a State Historic Preserve. The *SS Pomona* warrants recognition as California's best example of 19th-century steam ferry transportation along the Pacific Coast, and is deserving of listing in the National Register of Historic Places. Based on our investigations, the site has all the attributes to become an underwater shipwreck park, that can be successfully managed

by California State Parks. Through our efforts we can hope that in the future the *SS Pomona* will represent an era gone but not forgotten.

RECOMMENDATIONS

Prior to establishment of the *SS Pomona* as a managed California State Historic Park the following recommendations are suggested:

(1) **Existing Fort Ross State Historic Park boundaries should be expanded.** The current 18-foot depth contour should be extended to the 120-foot contour, incorporating the *SS Pomona* into the Fort Ross Underwater Preserve.

(2) **There are three main components for physical enhancement of the site.** A spar marker buoy should be placed midship to identify location from both water and land vantage points. The marker should have *SS Pomona's* name, date of wrecking, and California State Park logo indicating management jurisdiction.

Mooring buoys should be located midship to stern section adequate for use by recreational divers and diving charter boats. Buoys should be identified with "Diver's Only" decal.

An underwater plaque should be placed adjacent to the site with a simple message including the shipwreck's name, wrecking date, ship's silhouette, dedication date, state logo, and acknowledgment of park sponsors.

(3) **Water resistant printed guides should be made available to the diving public.** Guides would include a detailed site plan, an illustration of the wrecking process, significant archaeological features, interesting biological components, safety information, and the diver etiquette message, "Take only photos, leave only bubbles."

(4) **Brochures should be produced to contain detailed historical and**

archaeological information relevant to the *SS Pomona* and adjacent Fort Ross State Park. Included would be historic photos, artifacts, and sources for additional information.

(5) **Build a land based observation point.** An interpretive kiosk on the bluffs overlooking Fort Ross Cove would provide a vantage point for non-divers. A possible location would be near the existing parking lot so as not to distract from the aesthetics of Fort Ross bluffs or conflict with the park's primary mission of interpretation of early 19th-century Russian settlement.

(6) **Addition of a museum exhibit to Fort Ross Visitor Center which would facilitate non-diver access to the shipwreck.** Utilize previously recovered artifacts, archival photographs, and current archaeological data to produce an exhibit interpreting the *SS Pomona*.

(7) **Dedication ceremony.** Organize a social event for the first opening of the shipwreck park site, and/or National Register of Historic Places acceptance. Prepare for 100-year anniversary for March 17, 2008.

(8) **Encourage public involvement.** Solicit local dive clubs, dive shops, historical societies, and the general public to become involved in the *Pomona* Shipwreck Park through an "Adopt a Shipwreck" program.

(9) **Publicize the site and activities.** Invite local TV and newspapers to dedication ceremonies. Provide articles to dive industry journals and magazines. During dedication ceremonies provide underwater communication and video during unveiling of the plaque etc.

(10) **Encourage utilization of the site.** Organize archaeology and marine biology workshops, photo contest, and other uses for the site. Encourage student research projects. Empower local dive clubs or dive shops to provide maintenance of buoys and assist in monitoring the site.

REFERENCES CITED

- Beeker, Charles D., and John W. Foster
1997 Florida Keys National Marine Sanctuary Shipwreck Trail Project: The Upper Keys. On file: National Oceanic and Atmospheric Administration, Sanctuaries and Reserves Division, Silver Spring, Maryland.
- Foster, John W.
1984 Schooners, Steamers, and Spilled Cargo: Preliminary Underwater Survey of Fort Ross Cove, California *Proceedings of the 13th Conference on Underwater Archaeology*. Fathom Eight Special Publication Number 5, San Marino, CA.
1981 Diving in Dogholes: The Prospect for Investigating Submerged Cultural Resources in Fort Ross Cove. Paper delivered to Society for California Archaeology, Bakersfield, CA.
- Hunter, Jack
1987 *SS Pomona, A Shipwreck Mapping and Management Plan Response to DPR Request for Proposal of February 1987*. Hunter Underwater Archaeology, San Pedro, CA.
- Lenihan, Daniel J. et al.
1987 *Shipwrecks of Isle Royale National Park: The Archaeological Survey*. Lake Superior Port Cities, Inc. Paul L. Hayden, editor. Duluth, MN.
- Kemble, John H.
1959 Letter to John McKenzie dated July 23.
- McKenzie, John
n.d. Handwritten list of vessels and recovered artifacts obtained through various conversations in the 1960s with Carlos Call.
- Schwemmer, Robert and Fred Gamble
1999 U.S. Pacific Coast Shipwreck Database.
- Simoulin, Marianne
1999 Interim Report on the *SS Pomona*. Submitted to the Cultural Heritage Division, California Department of Parks and Recreation.

DISCUSSION

Sheli Smith

The wreck of the *Pomona* is another exciting excerpt in the history of the rugged California coast. However, it is a story that could easily be ignored or forgotten. After all, you can't see the site and the wrecking did not dramatically change

the history of California. Even without being on the top-ten event list, the wrecking of the *Pomona* enriched the textural history of the Fort Ross area and needs to be woven into the matrix of the local and regional history.

The history as presented by John Foster revealed that although the wrecking of the ship may have only taken hours, the subsequent salvage and survey represents work and interest that spans almost a hundred years. Since 1959, when the wreck was re-discovered, survey of the remains has been attempted no less than four times with the latest in 1998. Documentation of the wrecking is rich with personal stories in both the visual and written archives. The use of the visual with the personal accounts will enable interpreters to build a strong, rich story. The historical data along with the information from the survey data that Marianne Simoulin described will enable interpreters to draw history and technology together into an educational and informative exhibit.

It is important to display and interpret the change of technique over time that eventually made possible a successful survey of the vessel. The survey and the technical data regarding the *Pomona* delivered in Brent Rudman's paper are integral to the guided underwater tour. Guiding scuba divers around the wreck and helping make sense of the twisted and often incomplete hull portions adds another dimension or layer to the overall interpretation and exhibit.

Finally, as Charles Beeker pointed out, it is important to note what is the value of this site in context with other sites around the United States and even the world. By placing context and comparative data at the fingertips of the visitor, the process of engendering stewardship is made easier. Exploring the site through the multiple facets (underwater tour, exhibition and educational programs) the wreck of the *Pomona* will assist Californians and visitors who tour Fort Ross in understanding the long, rich multi-faceted maritime history of the area. This fully integrated approach will help enfranchise the community regarding cultural resources and will promote a philosophy of preservation that extends beyond what can be easily seen to that which is masked by the elements.