

Filling the Gap: A 19th Century Shipwreck in Tanapag Lagoon, Saipan

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Abstract

Over the past 4000 years several cultural groups have utilized the island of Saipan in the archipelago now known as the Commonwealth of the Northern Mariana Islands (CNMI) for a variety of purposes including settlement, trade, provisioning and as a strategic position for wartime activities. Maritime heritage sites ranging from ancient coastal settlements to those of wrecked ships, planes and other World War II era sites have been identified on the island and in the surrounding waters. Over the past five years the CNMI Historic Preservation Office has endeavored to better understand and protect the submerged heritage of the island through remote sensing surveys, site inventories and site inspections.

Recently the remains of a previously undocumented site were located along the island's fringing reef in Tanapag Lagoon. A multi-agency investigation of this site determined it to be the partial remains of a mid- to late-nineteenth century sailing vessel. This investigation represents the first archaeological study of an early colonial shipwreck in the CNMI and helps to fill a gap in the archaeological record of pre-World War II period maritime sites.

This paper examines the historic maritime activities in the CNMI during the mid-nineteenth to early-twentieth century and discusses the significance of this site to them. Though data pertaining to Saipan during this period is sparse, historical documents suggest that five wooden sailing vessels are known to have wrecked there during that time. The historical and archaeological analysis of these remains contributes to a broader understanding of colonial interaction and trade in the CNMI and the Pacific region in the nineteenth century.

Introduction

Since the time of first colonization around 3500 years ago (Rainbird 2004:81), several cultural groups have utilized the island of Saipan in the Commonwealth of the Northern Mariana Islands (CNMI) for settlement, trade, provisioning and as a strategic position for wartime activities. While archaeological investigations on the island have revealed many sites of ancient coastal settlements and World War II (WWII) era ship and airplane wrecks, until recently a nearly four hundred year gap in the submerged heritage record of its colonial period has existed. The discovery of an artefact scatter associated with the wreck of a 19th or 20th century sailing vessel presented an opportunity to begin filling that gap. Historical and archaeological investigations of this site have produced a list of possible candidates for the identity of this wreck and provided the groundwork for a colonial shipwreck survey for the CNMI.

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Saipan Maritime Historical Context

Since the late 15th century the Pacific Ocean has served as a trading highway for European nations by aiding in the movement of people and the colonization of new areas. Ferdinand Magellan arrived in the Mariana Islands in 1521 and named them “Islas de Ladrones”, or Thieves’ Islands, after a misunderstanding in trade practices with the Chamorro people (Marche 1889:3). Regardless, their geographic location offered a perfect refuge for vessels caught in storms and a reprovisioning point during the lengthy Pacific crossing (Olive y García 2006:7). For the next three centuries, continual exchange existed between Spain’s colonies in the New World and those in the Far East and the Marianas operated as an entrepôt for the galleon trade (see Junco this volume; see McKinnon and Raupp this volume).

By the late 17th century Spanish efforts to Christianize the Indigenous population resulted in their subjugation. To colonize the entire archipelago, the native Chamorro were forcibly removed from all of the northern islands and resettled into church-centred villages on Guam (Hezel 1983; Carrell 1991). Until the end of the 19th century, the islands to the north of Guam served mainly as ranches or infirmaries; as a result only sparse records of the activities that occurred there exist. In the early 1800s, Spanish authorities granted a request from a group of voyagers from the central Caroline Islands to establish a settlement on Saipan (Russell 1984:2). By the middle of the 19th century, whale ships and trading vessels commonly visited the island to obtain supplies.

Subsequent to Spain’s loss in the Spanish-American War in 1898 all Spanish Micronesian possessions except Guam were sold to Germany, thus beginning what is known as the German Colonial Period (Spennemann 2007:7). The settlement of Garapan on the west coast of Saipan served as the administrative seat of the Marianas District. Between 1898 and 1907 German colonists constructed an administration building that was visible to approaching ships, a landing pier and shelters along the waterfront, and roads linking villages on the island (Fritz 1901:34-46). An important aspect contributing to the growth of Garapan was its proximity to Tanapag Harbor, considered by most shipmasters as the second best anchorage in the Marianas (Russell 1984:46).

Though Germany held claim to the Northern Mariana Islands throughout this period, the Japanese controlled trade and economic life, primarily through large-scale sugar cane production (Peattie 1988:22). Shortly after Japan declared war on Germany in World War I, German officials in Saipan abandoned their post and Japan quickly seized several Pacific islands including the Northern Marianas (for an example of warship activity here see Arnold this volume; see Ishimura this volume). From that time through the 1930s, the Japanese government increased maritime works, including the building of a lighthouse and channel markers to guide ships coming into and out of Saipan. Also during this period, Japanese military infrastructure construction was clandestinely increased in preparation for war.

Upon the entry of the United States (US) into WWII, the islands of the Pacific basin were subjected to events beyond their control and eventually Saipan would play a pivotal role in the war. “Operation Forager” was the

codename for the Allied plan to seize control of the Northern Mariana Islands from Japan. The 1944 invasion and capture of the islands by US forces caused devastation on both sides and left military vehicles and debris scattered on land and in the water surrounding the island. From 1945 to 1947 the islands continued under US military occupation (Carrell 2009:348). In 1947 the Northern Mariana Islands came under US Trust Territory status and in 1978 the constitutional government of the Commonwealth of the Northern Mariana Islands took office.

Previous Investigations of Saipan's Submerged Sites

The submerged cultural resources of the island of Saipan have been the subject of both public and private archaeological surveys, as well as commercial salvage over the past thirty years. Beginning in 1979, the first literature search and diver visual surveys were conducted, which resulted in the location of objects from the Japanese, WWII and American periods (Thomas and Price 1980). In the 1980s the US National Park Service (NPS) and private archaeological consulting firms assessed the submerged WWII remains in Saipan (Miculka and Manibusan 1983; Miculka, *et al.* 1984; Pacific Basin Environmental Consultants 1985). In 1986 and 1987, a treasure hunting company, Pacific Sea Resources, commercially salvaged the 1638 wreck of *Nuestra Señora de la Concepción* off the south coast of Saipan (Mathers, *et al.* 1990; see Junco this volume). Upon completion of the salvage project the artefacts were divided between the treasure hunting company and the CNMI government.

In 1990 the NPS again documented the WWII sites in the lagoons on Saipan (Miculka, *et al.* 1990), and in 1991 published a comprehensive submerged cultural resources summary for all of Micronesia which included details of more than 50 shipwrecks and abandoned vessels in Saipan (Carrell 1991). Little research or fieldwork was conducted on Saipan until 2001, when the National Oceanic and Atmospheric Administration (NOAA) initiated an abandoned vessel inventory for the CNMI (Lord and Plank 2003). This survey identified 28 historic resources, most of which were WWII-era pontoons/barges and freighters (Lord and Plank 2003).

Beginning in 2008, interest in Saipan's underwater cultural heritage was reignited. That year Southeastern Archaeological Research, Inc. conducted extensive remote sensing and diver identification surveys of Saipan's western lagoons, which identified over 1500 magnetic targets; of these only 142 were identified through diver investigation, side scan sonar or were previously known (Burns 2008a; Burns 2008b). Using this survey data, a research project to document the submerged remains of the WWII Battle of Saipan was initiated in 2009 by researchers from Ships of Exploration and Discovery Research, Inc. and Flinders University. This project has resulted in the creation of an underwater heritage trail based on these sites (McKinnon, *et al.* 2011).

Archaeological Investigation of the “Japanese Channel Light Wreck”

In February 2010, a marine biologist from Saipan's Coastal Resources Management Office (CRM) notified maritime archaeologists from Flinders University of a possible wooden shipwreck site in Tanapag Lagoon. Initial investigations found several shards of green bottle glass, iron and copper-alloy fasteners and a piece of burnt wood buried in the sand and encrusted in the coral reef. The site was assessed as the remains of a wooden shipwreck or anchorage debris field. As there is little archaeological documentation of pre-WWII historic maritime-related artefacts within Saipan, the uniqueness of the site justified further investigations. In April 2011 a team of archaeologists joined staff from the CNMI Department of Environmental Quality (DEQ) and CRM Offices to record the extent of the artefact scatter. The site is located approximately one kilometre (km) from shore, along the edge of the lagoon's shipping channel and was archaeologically investigated over a two-day period.

The site is scattered over approximately 90 metres (m) in sandy pockets of the fringing reef adjacent to the shipping channel. It was recorded using baseline offsets, trilateration and triangulation to collect data on site dimensions, major site features and artefact locations. This data was then used to produce detailed scale drawings and a two-dimensional site plan. Photographic surveys of the artefact scatter were completed before and during the investigation in order to document the site and to aid in the completion of the site plan. Most features and artefacts were documented *in situ*; however, a limited number of portable artefacts were recovered for more detailed drawing, photography, and measurement onboard the diving vessel, then returned to their original locations (Gould and Conlin 1999:208).

Artefacts

A total of 114 artefacts were recorded on this site and overall the assemblage indicates an association with a wooden sailing vessel. Artefacts noted during this investigation included ship construction and rigging materials, as well as shipboard items and some likely intrusive objects.

Artefacts associated with the vessel's hull consisted mainly of ballast stones, sheathing and fasteners of various sizes, forms, and material. Small, oval-shaped, granite ballast stones were found scattered around the site and a dense concentration was identified directly adjacent to the shipping channel. Fastener types included heavily concreted iron drift pins or bolts, copper bolts and copper nails and tacks. Four copper sheathing pieces were identified around the site; these would have been placed on the outer hull planking of a vessel protecting the vessel from marine borers (Bathe 1978:3.10; Burns 2003:61-62; McCarthy 2005:101-102). One peculiar piece of identified ship's hardware was a lead object in the shape of an Arabic number “4”. Research has concluded that this is a draft mark, which would have been attached to the stem and sternpost to indicate the depth at which each end of the hull is immersed (Steffy 1994:270).

Many elements of standing rigging were found on the site. The most dominate and diagnostic of these were portions of broken wire rigging. By the

early 1850s most large British ships had wire standing rigging and by the 1860s wire rigging was in use by US shipbuilders (Macgregor 1984:151; Stone 1993:69). Several of the noted sections were end pieces, as indicated by the tear shape created by back splicing them to situate a thimble. Other components of standing rigging included a chainplate and deadeye contained within an iron strop. Chain plates were solidly bolted to the ship's side to which the shrouds are secured by a system of deadeyes and screws and were used to steady the masts (Bathe 1978:4.08; Stone 1993:72).

A heavily concreted metal oarlock was found on the site. Also known as a crutch or rowlock, these were u-shaped metal swivels that mounted on a boat's gunwales for an oar (Bathe 1978:9.02). The oarlock has a ribbed horn-style opening and is most likely off a gig or lifeboat (Bathe 1978:9.01).

A number of artefacts related to shipboard life were also located. Whole glass bottles, bottle fragments and ceramic sherds scattered across the site represent a wide date range. Many of these are thought to be associated with the wreck, and others are likely intrusive artefacts deposited by cultural or natural means. The most diagnostic of these artefacts are the bottles; types include dark green, three-piece mould or "Ricketts mould" bottles which date between the 1820s and 1920s and a two-piece mould or "turn-mould" bottle which was most common from the 1870s through around 1920 (Toulouse 1969:532).

Several artefacts of questionable provenance were found scattered around the site. These included glass bottles embossed with characters that indicated Japanese origin and dated from the 1870s through around 1920 (Toulouse 1969:532); two fragments of an unidentifiable ceramic vessel; a stoneware body and rim shard of indeterminate date; and a shard of blue on white porcelain. Though the manufacture dates for these could be contemporary with this wreck, it is likely that they are intrusive artefacts deposited through cultural or natural means after the time of loss.

Wood Samples

An unidentified conglomeration of wood, iron and copper-alloy metal was the only piece of wood found on the site. Though no part of the object was identifiable, a timber sample was obtained from the object for possible specie identification. Timber analysis showed the sample as birch (*Betula* sp.) and the structure of the wood is most likely yellow birch after comparison with other samples (J. Illic, email, May 2011).

Site interpretation

Through archaeological recording and historical research it has been determined that this site is the remains of a ship dating to the mid-19th or early- 20th century. The presence of ballast stones, copper sheathing and tacks, as well as iron drift pins and bolts, indicate that it was a wooden vessel, and the hemp core wire rope, wooden deadeye and chain plate specify that it was a sailing vessel. The small collection of glass and ceramic fragments further signify a mid-19th to early-20th century use and illustrate an aspect of shipboard life at this time. The oarlock

found on the site is most likely from the vessel's gig or could be an extra oarlock to be used in case one was lost. Timber analysis indicates yellow birch, a species found in North-eastern North America and commonly used in shipbuilding.

The close proximity of the ballast area to the channel suggests that the vessel hit the reef and wrecked while entering or exiting the lagoon through the channel. The shallow nature of the site, the length of the scatter and fact that no major features of the ship were found is a good indication of post depositional salvage. The discovery of burnt wood during the February 2010 fieldwork and the overall lack of timber on the site could be evidence of salvage. Often wrecked wooden vessels were burned to their waterline so that below deck cargo could be salvaged or metal fasteners could be removed for recycling. However it is important to note that the abundance of marine wood-boring organisms in the tropical water would have aided in the degradation of any wood left on the site whether the vessel was salvaged or not.

Possible Candidates

Forty-one documented ship losses have occurred in and around Saipan between 1552 and 1941 (Carrell 1991: 280). Though data pertaining to the island during this period is sparse, historical documents suggest that seven wooden sailing vessels are known to have wrecked in Saipan's water between the mid 19th and turn of the 20th century. Though little historical information pertaining to any of these was located, comparison between them and the archaeological evidence recovered indicates four of them as possible candidates for the identity of the "Japanese Channel Light Wreck."

The barque *William T. Sayward* was built in Rockland, Maine in 1853 (Fairburn 1946(5):3421). Accounts state that the barque was sailing from San Francisco to Shanghai with a cargo of flour and \$164,000 in specie⁴, when it sprang a leak off the "Ladrone Islands" and was abandoned on December 21, 1854 (*Daily National Intelligencer 1855, Plain Dealer 1855, Salem Register 1855*). Unfortunately details about the exact location where *William T. Sayward* came to rest are vague and therefore its association with the wreck in Tanapag Lagoon is unknown.

The next sailing vessel reported to have wrecked around Saipan is the US ship *Lizzie Jarvis*. Historical sources present some discrepancies about the fate and identity of this vessel. One source reports that the whaler *Lizzie Jarvis* was lost in the "Ladrone Islands" while travelling from Hong Kong to San Francisco in 1855. The ship was previously known as *Lady Pierce* and was owned by Mr. Silas E. Burrows, who at one time intended to present the vessel to the Emperor of Japan (Ward 1967(4):187). A later report states that the ship was actually *John N. Gossler*, another vessel of the same owner which traded between the US and China and which wrecked in 1855, 150 miles Northeast of Saipan (Lévesque 2002(20):73; Ward 1967(4):187-188). Though the loss location of

⁴ The ship was carrying \$164K in coin, or specie.

John N. Gossler would exclude it, the confusion surrounding the loss of *Lizzie Jarvis* make it a possible candidate for the identity of the “Japanese Channel Light Wreck.”

An unknown barque was lost in 1876 in Saipan (Carrell 1991:280). Current historical research was unable to ascertain further information about this wreck. Until further information pertaining to this vessel and its loss are obtained, it is impossible to determine an association between it and the wreck in Tanapag Lagoon.

The 103-ton American schooner *Iolanthe* was wrecked at Saipan in 1896. All hands survived and were transported to Guam on the Japanese schooner *Chomey-Maru* (Lévesque 2002 (20):512). Little information was found about this vessel aside from the fact that it was built in Essex, Massachusetts in 1883 (Record of American and Foreign Shipping 1896). Again the limited data relating to this vessel or the circumstances and location preclude any direct association with the “Japanese Channel Light Wreck.”

Discussion

Though the identity of the shipwreck recently located in Tanapag Lagoon was not absolutely determined, this investigation is considered significant for its contribution to increasing knowledge of a little explored period in Saipan’s history. As stated previously, until the “Japanese Channel Light Wreck” was identified, a nearly 400-year gap existed in the archaeological record pertaining to shipwrecks that had occurred around the island. The study of this 19th or early 20th century sailing vessel has produced archaeological data that will be added to the growing database of sites in the waters surrounding Saipan, as well as providing the impetus for building a comprehensive understanding of archival information relating to colonial ship losses in the CNMI. Thus the compilation and analysis of this data has begun to fill the gaps, and in doing so provides insight into colonial interaction and trade in the Pacific region around the turn of the century.

The investigation of the “Japanese Channel Light Wreck” also represents the first multi-agency archaeological investigation of a submerged non-military shipwreck in Saipan. This approach allowed multiple local government agencies to collaborate with archaeologists from Australia and the US to assess and record this important piece of CNMI heritage. Due to the site’s location along the fringing reef, it also allowed agencies concerned with reef health and environmental quality an opportunity to monitor and protect the reef that has grown around this site. Ultimately this kind of collaboration offered all groups involved the opportunity to better understand and appreciate each other’s work and can be seen as best practice for the protection and management of Saipan’s marine resources.

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