

Second campaign of excavation on the *Saintes Bay Wreck*, Guadeloupe, FW

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This paper presents results from the July 2016 excavation of the Saintes Bay Wreck, Guadeloupe, French West Indies (FWI). The wreck was hypothesized to be the Anémone, an 1823 French schooner built in Bayonne and used as a customs ship in Guadeloupe thanks to archival research (Guibert 2013). The 2015 campaign provided initial evidence confirming it (Guibert 2016). The 2016 excavation re-surveyed the site and excavated discreet trenches to understand the site's layout, evaluate the ship's structure, and to identify remaining material culture. Our goal was to definitively confirm or reject the Saintes Bay Wreck's identity as the Anémone.

Introduction

In 2015, an initial archaeological campaign tentatively identified the *Saintes Bay Wreck* as the *Anémone*, a French schooner built in 1823 in Bayonne. The *Anémone* was used as a customs ship in Guadeloupe before it was lost in Saintes Bay in September 1824 during a hurricane (Guibert 2013). We returned in July 2016 as part of the French West Indies University research program. Our goal was to gain a thorough understanding of the site in hope of confirming the wreck's identity. The project involved fourteen professional and scientific divers, and nearly 170 hours of diving. Test trenches were opened with the intention of exposing the wreck structure to enable a more precise recording of the timbers and gain a better interpretation of shipbuilding techniques. Schooners were built following a specific type plan in 1823, thus we sought to determine if the *Saintes Bay Wreck* structure matched this plan. The work also sought to evaluate material cultural remains on the wreck and determine if they fit the context of items used aboard a 19th century, French West Indies customs ship. Both archival and archaeological records were used to provide insight on the ship's history, crew, and everyday life onboard.

Site location

The *Saintes Bay Wreck* is located in the middle of Saintes Bay, in line with and near the entrance of the Terre de Haut mooring. It is submerged in 24m of water. The site has been known to local divers since the 1990s, and has been partially looted. It wasn't until 2002 that scientific research was first conducted on site by the Département des Recherches Archéologiques Subaquatiques et Sous-Marines (DRASSM) (L'Hour and Massy 2002). The site appears as a mound or sand tumulus, with visible but unidentified metal structural elements.

Fragments of copper sheathing and probable pig iron are scattered around the site.

The 2015 and 2016 Campaigns

The *Anémone* is well documented through archives and bibliographies; however, until 2015, researchers had no theories as to its final whereabouts (ANOM SG/GUA/CORR/68 25/3/1825; Lacour 1855; Boudriot 1989). Our findings in the 2015 campaign led us to believe the *Saintes Bay Wreck* site was the *Anémone*. We reached this hypothesis through the discovery of an 1818-type 12 pounder carronade, 19th century ceramic and glass artifacts, and structural features matching the *Anémone's* 1823 plan type (Guibert et al. 2015; Guibert 2016). However, our findings were nonconclusive. Thus, the 2016 project was carried out to gather more evidence.

The 2016 campaign brought us a better understanding of the site layout, and we were able to locate the stern and bow (Figure 1). Both the material culture and the frame structure analysis supported the identification hypothesis. Items found on the sea bottom in close proximity to the wreck site have been identified as a cooking oven and marmites.

Survey and excavation methods consisted of probing the seafloor in the area of the wreck, in situ observation, test trench dredging, artifact and structure sampling, and structure marking and mapping. At the end of the campaign, both trench tests were back filled. Project personnel also took the opportunity to contact the discoverer of the site to study artifacts he plundered in the 1990s.

Building on historical research undertaken in 2015, our 2016 efforts focused on the chronology and history of the *Anémone*, as well as the crew. We also reviewed Bayonne's shipbuilding techniques, examining the records of the five other schooners built according to the

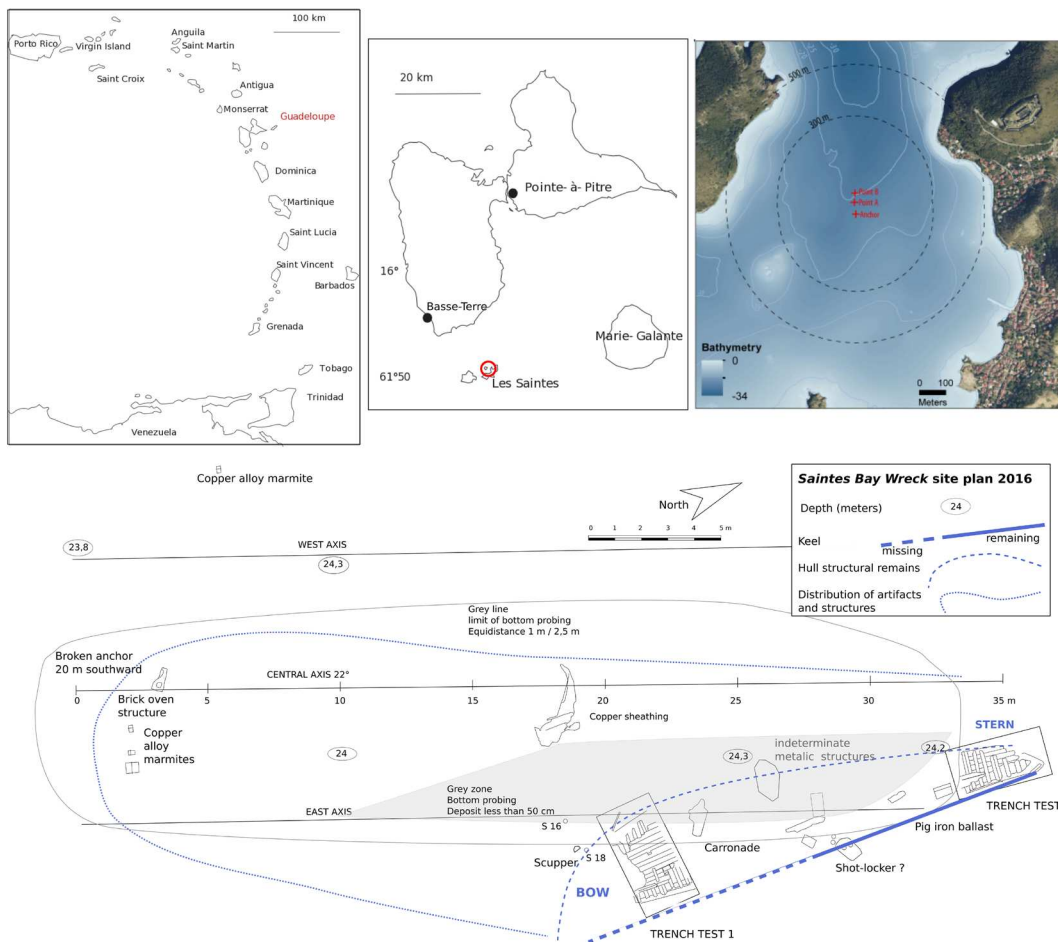


Figure 1. Site localization and plan, collective work realized from photos, in situ observations and measures, digitized by author / site localization by Émilie Lagahé.

same plan type. Through our research, we developed a comprehensive overview of the history of the *Anémone*. She participated in the Spain war in 1823 before being sent to the West Indies, where she was involved in customs missions such as fighting against the illegal slave trade. She was lost in Saintes Bay in September 1824 during a hurricane (Guibert 2015).

Anémone and its sister ship, *Rose*, were built within five months in Bayonne. The archives give us *Anémone's* characteristics: she was copper sheathed, had filling frames, and was built with 24 frames (type plans mention 20 frames) (SHD Rochefort 2G21/71). Archival data on others schooners built to the same plan type (mainly *Émeraude* and *Topaze*, built in Cherbourg and *Jacinthe* and *Jonquille* in Toulon) show that they were built to uniform size specifications (21m long × 5.8m in beam × 2.36m depth-of-hold) (Figure 2). Records also corroborate the precise internal layout of the ship, the presence of a Kersaint's galley, the use of 13 tons of pig iron ballast, as well as the ship's general layout and ordnance: 2 carronades, 2 swivel-guns and 2

blunderbusses (SHD Cherbourg 2G5 214).

Studying the muster roll found in the archives cast light on the *Anémone's* crew. It was composed of 29 members: two officers, Captain Louis Guillotin and Surgeon Jean-Sébastien Peychaud; six noncommissioned officer; 17 seamen; three apprentice sailors (all from France - mainly the South-West region); and one pilot from Saint-Martin (FWI). Seven additional seamen had disembarked or had deserted during the ongoing campaign (SHD Rochefort 3E2 1224). The 29 members of the crew died during the loss of the ship. Most of their corpses were discovered the day after the wreck, drowned and floating in the vicinity of Cabrit Islet, by a Saintes fisherman (ANOM État civil Guadeloupe Terre-de-haut 1824 20-48).

Site Layout

Structures at the sea bottom

A broken anchor located 20m south of the site (and 45m from the hull remains) has been studied to determine if it belonged to the *Saintes Bay Wreck*. It is

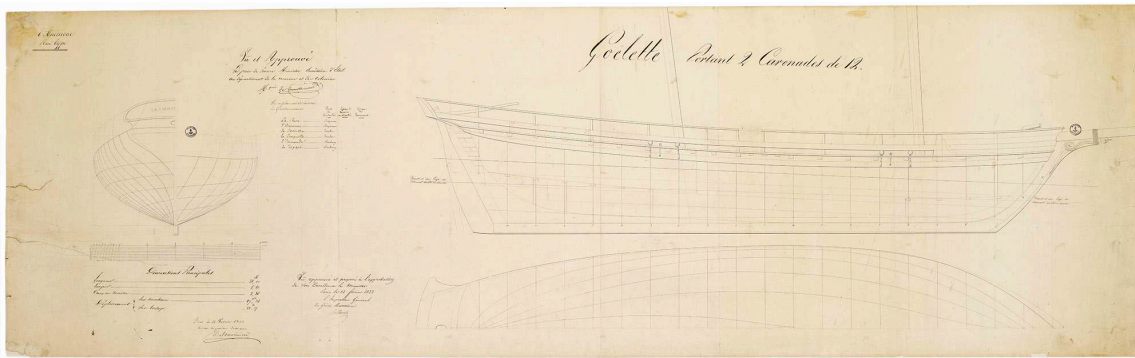


Figure 2. Schooner Anémone plan type, 1823, (SHD Vincennes 8 DD1 97).

broken on its shaft and measures 3.1m long × 2.6m wide. The estimated weight of it could be more than 1,000 pounds (452 Kg) according to late 18th century proportions. This is larger than the schooner anchors mentioned in archival data (Sadania 2015).

A bread oven has been identified 15m south-west of the hull remains (Figure 1 and 3). The structure is 1m long × 0.5m wide. The hearth comprises half the structure, and it includes a vault built with bricks and mortar; the floor is built with tiles. The oven is located nearby four brass galley elements, which were identified as marmites and were surely attached to a Kersaint's galley. Kersaint's galleys were in use in the beginning of 19th century (Figures 1 and 3). Three marmite sizes have been identified that could match with this kind of Kersaint Galley structure. The marmite studied in 2016 is 335 mm (L) × 265 mm (W) × 491 mm (H), with an estimated capacity of 40L. The one studied in

2015 is 210 mm (L) × 144 (W) × 310 mm (H), with an estimated capacity of 9L. It is possible the marmites were linked with the oven structure.

Unfortunately, it is difficult to assess if all these structures are linked with the wreck for two reasons. First, they are located in a secondary position far from the hull structure. Secondly, the archives mention that the *Anémone* had a Kersaint's galley, which is usually built with metal, but do not mention a bread oven. However, given their proximity, it is difficult to explain these structures' presence in any way other than belonging to the *Saintes Bay Wreck*. It is possible that mooring ships in the area may have dragged those elements away from the primary wreck structure with their anchors.

Several copper alloy sheets have also been found (some still attached to the hull, some unattached) and have been studied either while still attached to the hull, or when dismantled from it (Figure 1). This discovery

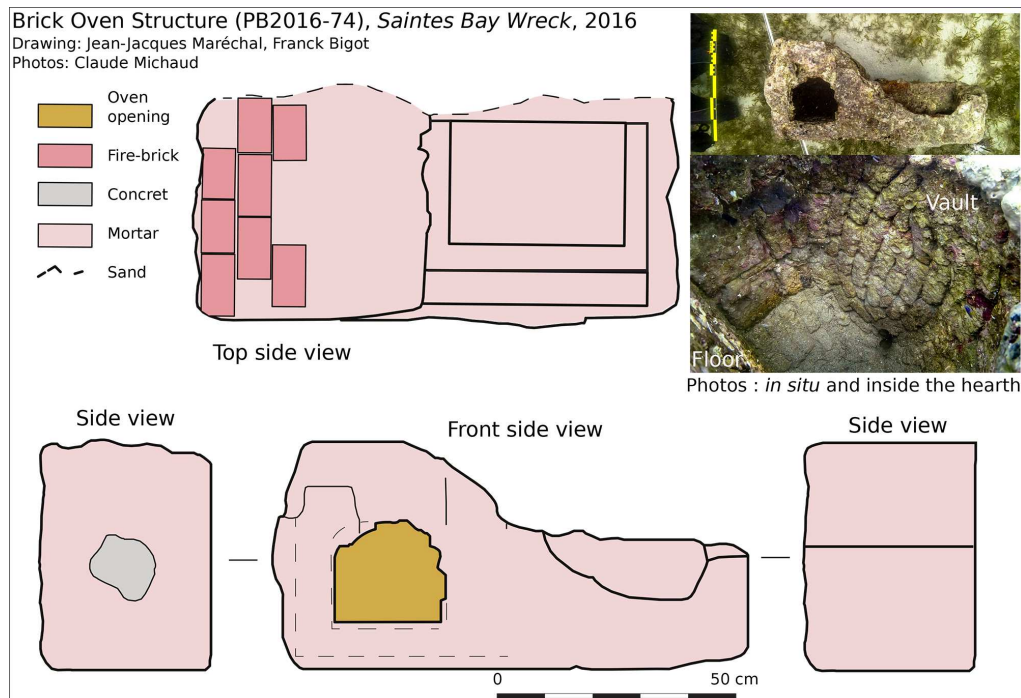


Figure 3. Brick oven structure, Drawing by Jean-Jacques Maréchal, digitized by Franck Bigot, Photos by Claude Michaud.

is consistent with archival records describing the *Anémone's* hull as plated with copper sheathing.

Understanding of the site's layout

Trench Test 1 and Trench Test 2 were excavated in 2016. The first one was located very close to the 2015 trench test (where a carronade has been studied) in order to observe structural continuity. The second one was located in the area comprising the aft section of the ship according to the results of the Trench Test 1. Each trench was 3m x 2m and were excavated to between 30 and 45cm depths. Trench Test 1 exposed the forward starboard side of the *Saintes Bay Wreck*, while Trench Test 2 uncovered the ship's aft starboard side (Figure 1). In Trench Test 1, a deck-clamp with a notch for a lower deck beam was discovered and studied in situ. The portion of the wreck uncovered in Trench Test 1 would have been below the waterline while the ship was still afloat, and includes structural elements such as sheathing, planking, frames and ceiling. In 2015, we had hypothesized that the keel and keelson were located under the carronade. In 2016 we abandoned this hypothesis and suspected these structures would have been situated along the eastern limit of Trench Test 1 (Figure 4). However, our team was unable to locate or identify these structures, leading us to believe that they no longer exist.

In Trench Test 2, we identified copper sheathing, planking, and frames, and the sternpost knee as well as the keelson and keel. We believe these represent structural elements of the stern, according to their characteristics and the site's layout.

Our trench tests provided ample information leading to a better understanding of the site's layout. We were able to identify and interpret many of the ship's lower hull structures. The galley elements we were able to locate match with the front part of the ship; the shot lockers location and pig-iron ballast match with the middle holds of the hull.

Cultural material and artifacts found in both trench tests match the location of the fore and aft starboard side: In Trench Test 1 (the fore starboard side test trench), nails, glass bottles, ceramics, sheave axes, and two lead rolls were found, which may be associated with keelhauling (Veyrat 2016). Lead rolls are called such as they are formed by rolling lead sheets onto themselves for compact storage (Diderot 1777). The lead rolls were part of the ship's original equipment store, and were used to create lead patches or to replace or repair the ship's equipment (i.e., aprons, lamps, sounding leads, weights, ammunition). Cutting marks are visible on one of the lead rolls, supporting the hypothesis that it functioned

as raw material. Only three faunal remains were found in 2016. The position of those remains confirms the hypothesis of the discovery of a barrel of salted meat in 2015.

In Trench Test 2 (aft starboard side test trench), ceramic, glass wine bottles, weaponry (lead bullets, flint stones and the sheath of an officer's saber), and a draught water mark were found. These artifacts may be linked with the aft section of the ship.

The artifacts found are in poor condition and sparse in number, however, and this may be explained by the looting the site has suffered. It seems likely that collectors had already removed many of the diagnostic or better-preserve artifacts. One of site's discoverers let us have a glance at his collection from the site. It included an 1812 carronade firing lock, forged in a Bringol workshop (Paris) that was active from 1800 to 1816; thus the firing lock fits well within the chronological range to support our hypothesis (Buigné and Jarlier 2001); coins dating from 1788 to 1818; and gudgeons. The looted coin collection included an 1818 five francs' silver coin representing Louis the 18th, making it a post quem artefact. This coin is an interesting find on account of this post quem date, despite it having been removed from its context.

All of these artifacts corroborate a chronology that supports the identification of the *Saintes Bay Wreck* as the *Anémone*. Ceramic samples collected during the 2016 campaign originated from France (Biot, Vallauris, Beauvais and Creil workshops) (Moussette 1981) and date from the beginning of 19th century. The two glass wine bottles found in Trench Test 2 are Bordelaise bottles with typical 1820s forms (Serra 2011; Losier 2012). The saber sheath found in Test Trench 2 dates from 1802 based on its typology (Pétard 2006).

The overall artifact chronology is consistent with the 2015 discovery of a 12 pounder carronade manufactured in 1818, based on the typology of Jean Boudriot and Hubert Berti (Boudriot and Berti 1992 ; Guibert 2015).

Shipbuilding

Though the examination of the vessel's construction is still in its beginning stages, our findings on frame structure have been interesting so far and prove promising. The hull structure observations made in 2015 and expanded upon in 2016 indicate the *Saintes Bay Wreck* had a lightly-built hull. Double frames and single (filling) frames, along with chocks placed consistent with the 1823 type pattern, are present in both trench tests. The pattern is as follows: Double frame; chock; single frame; chock; single frame; chock; double frame.

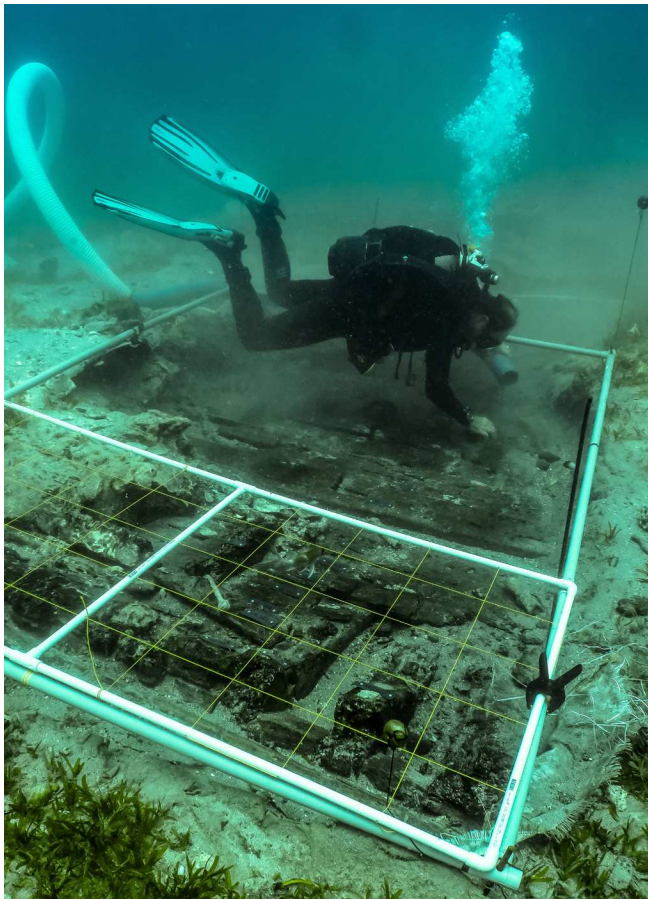


Figure 4. Diver working in test trench 1, Photo by author.

In Trench Test 1, the chocks are located on the sides of the central axis. In Trench Test 2, they are located on the keel axis. Double frames are 24cm wide, with chocks that are 17cm wide and 11cm wide single frames.

Measurements of each double frame observed on site match with the distance of each double frame observed on plan. The sternpost knee, stern, keelson, and keel were also located in Trench Test 2. Because of the depth of the deposits in this area, however, the keel was unable to be studied thoroughly. The entire area needs to be reopened in order to accurately define all observations.

The above information matches the hull plan type of 1823. However, internal construction seems to differ from the hull plan. Archaeological observations have provided critical details regarding the vessel's constructions, including the use of chocks, frame sizes, and which types of wood were used. All wooden samples (keelson, planking, frame and ceiling samples) are oak, except a foot waling sample which is pine.

Perspectives

To date archaeological study matches with the identification of the *Saintes Bay Wreck* as the *Anémone*. Material culture chronology and typology, as structural element characteristics, represent a coherent whole that can be associated with a lightly-built French Navy ship dating from the end of the first quarter of the 19th century. Several archaeological evidences correspond with archival sources recording the *Anémone's* loss. Those first evidence reinforce the identification of the *Saintes Bay Wreck* to the *Anémone*. The site has been chosen for study to expand our knowledge on the naval construction and material culture of early 19th century French navy schooners. Future research will further focus on the ship's construction, and on its material culture (faunal and ceramic remains etc.) - that of a French naval ship engaged on a custom mission in the West Indies. To date it is the only identified and known site of such a ship type, and one on such a mission. The fact that it was engaged against the illegal slave trade gives the *Anémone* site a patrimonial element that is quite unusual and both historically and archaeologically significant.

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