

# A Re-examination of the Hull of the *Henrietta Marie*

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The *Henrietta Marie*, looking aft.  
Dylan Kibler/MFMHS, 2001

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## **Project Participants**

### **Mel Fisher Maritime Heritage Society**

- Corey Malcom – Project Director
- Dylan Kibler – Photographer
- Brian Blanco – Archaeological Assistant / Videographer
- Gina Ferris – Student Intern

### **RPM Nautical Foundation**

- George E. Robb, Jr. – President
- Dan Davis – Operations Manager
- Cristian Swanson – Captain, R/V *Robo* / Videographer
- Bruce Darby – Captain, R/V *Lakota*
- Craig Jones – Mate / Archaeological Assistant
- Paul Major – Diving Safety Officer
- Sara Hoskins – Student Intern
- Ashley Porter – Student Intern

### **National Geographic Society**

- Michael Cottman – Writer
- Courtney Platt – Photographer

### **Volunteer**

- David Moore – Archaeologist

## History

The *Henrietta Marie* was an English merchant slave ship of approximately 120 tons. Her travels had taken her from London to the West African coast, and then to Jamaica to sell a cargo of African people. She was returning to London in the summer of 1700 when she wrecked in unknown circumstances on New Ground Reef (Tattersfield, 1994).

The modern history of the *Henrietta Marie* spans nearly thirty years (see Malcom and Moore, 2000). The wreck was first discovered in the summer of 1972 by Armada Research, Inc., a wholly-owned subsidiary of Treasure Salvors, Inc. Their vessel *Holly's Folly* was conducting a magnetometer survey of New Ground Reef in pursuit of the 1622 galleon *Nuestra Señora de Atocha*, when it located two anchors and a cannon from the *Henrietta Marie*. Shortly after this discovery, a portion of the ship's hull was uncovered. Notes on its location, and rough features were recorded. A small number of photographs were taken. The site was revisited in 1973, but little progress was made in understanding the wooden remains. In 1983, working with a Treasure Salvors sub-contractor, Mr. Henry Taylor of Neptune Explorations, Inc., David Moore began a definitive study of the wreck (Moore, 1997). With a more focused and refined excavation, they began a process of systematically recording the remaining hull components of the *Henrietta Marie*. This work continued through 1984, and was concluded in March of 1985. Additional excavation and survey continued at the site, but the wooden remains were not seen since.

## Objectives

Because the hull of the *Henrietta Marie* had not been seen in over 16 years, questions lingered regarding its condition. The basic intention of this present project was to assess the status of the structure. Assuming it was in good condition, the remainder of the work was to be geared toward uncovering it, and building upon the survey started in 1983. Portions of the wreck had never been uncovered, and measurements from these areas were needed to assist in accurate reconstructions of the vessel, both as it is wrecked, and as it was originally constructed. Another important objective was to complete a photographic and videographic study, with images that could fulfill both scientific and popular goals.

A traveling exhibition, organized by the MFMHS and focused on the wreck, has made the *Henrietta Marie* a significant element in the public's understanding and perception of the Trans-Atlantic Slave Trade. Additional public out-reach and educational resources are planned, and the results of this project are to be a large part of them. Toward this end, representatives of the National Geographic Society joined the project for an upcoming story in their magazine.

## Methodology

The hull lays buried in the sand at the southern end of the known wreckage. For reference and orientation, a concrete and bronze monument placed by the National Association of Black SCUBA Divers was used (latitude 24° 40.387' N, longitude 82°22.395' W). Earlier survey work had placed the monument at

approximately 72 feet northwest of the hull structure (a theoretical measurement because the monument was placed in 1993, and the two had never been seen together). Using this distance as a guide, it was relatively easy to relocate the area of the buried hull. After that, a large volume of sand, rubble, and silt had to be removed to first pinpoint it, and then expose it. The top of the structure was approximately 18 inches below the seabottom, and extended downward an additional 7 ½ feet. All excavation in this project was conducted with a pair of 4-inch, water-fed, venturi dredges powered by a 10 hp, portable diesel pump onboard *Lakota*. Only the interior and port sides of the hull were uncovered. The starboard side was left buried, cradled by the seafloor. Within four days these areas of the hull were completely uncovered.

A large number of loose structural components were found buried to the immediate south of the main part of the hull, and others to the west of it. These had been moved from their original locations, and placed there in “storage” in 1985. After they were uncovered, they were taken to an area away from the excavation for detailed recording.

Data on the loose structural elements was collected via hand measurements, 1:1 tracings, photo mosaics, and video images. The various faces of each component were recorded, as were fastener patterns. All of this information will be distilled into representations of each piece that will, be schematically incorporated into the rest of the hull.

Features of the main part of the structure were recorded by hand, along with photo-mosaics, and videotape. Details such as fastener patterns, frame curvatures, scarphs, and other

construction features were documented to supplement earlier work.

At the conclusion of the excavation, all loose parts of the hull were collected and buried next to the main section, in a trench on its south (port) side. The dredges were turned around, and the spoil from the excavation was used to backfill, and fully bury the remains of the *Henrietta Marie* once again. After this, four stakes of ½ inch steel rebar were placed around the perimeter of the hull for easier relocation.

## Results

In general, this excavation followed and revealed the “best case” scenario. The remains of the *Henrietta Marie* were located, and found to be in an excellent state of preservation. Portions of the hull that had never been seen before were uncovered, most notably the entire keel, and all of the sternpost. A 3<sup>rd</sup> rudder gudgeon was uncovered near the lowest part of the sternpost. An additional group of at least three structural components was found approximately 25 feet to the south of the intact hull. Unfortunately there was not enough time to investigate and define these pieces. With the exception of one loose hanging-knee, all the previously noted loose structural elements were relocated. The bearing/distance relationship of the hull to the monument was found to be exactly as anticipated, measuring 72 feet 6 inches from the center of the monument to the top of the existing sternpost.

Many artifacts relating to the various travels and functions of the ship were encountered during these excavations. An elephant’s tusk, iron shackle loop, glass beads, logs of “Purpleheart” dye-wood, wooden bucket staves, lead shot,

a wooden truck or parrel, and glass bottle bases were all discovered while removing the overburden covering the hull. For the most part, these objects had already been excavated, but not recovered, during earlier efforts at the site. During this project they were recorded, photographed, and again buried together on the site.

With a large, experienced crew focused solely on the structure, a tremendous amount of detailed information was recorded. Scattered, loose, components were recorded individually. The overall dimensions of

the entire hull, and construction details such as fastener patterns were measured. Additionally, the curvature of the frames of the intact structure was recorded, which will allow for more accurate lines to be calculated. Approximately five-hundred 35mm photographs, and six hours of 8mm videotape were recorded by MFMHS photographers. With all of this new information, and its proper analysis, the ability to convey the circumstances and situation of the *Henrietta Marie* will be much easier.



Stern view of the *Henrietta Marie* looking forward.  
Dylan Kibler/MFMHS, 2001

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