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ALLEN EXPLORATION
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Expedition
Background

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BAHAMAS
MARITIME
MUSEUM

Allen Exploration & the Maravillas in the Northern Bahamas. Expedition Background

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Allen Exploration's maritime investigations in the northern Bahamas since 2018 are focused on re-assessing the Spanish wreck of the *Maravillas* (1656) and conducting underwater reconnaissance to search for additional sections of wreckage. The holistic project includes a variety of investigative and supportive branches, including maritime historical research, archaeological and scientific fieldwork, and philanthropic and educational endeavors. Where former expeditions were motivated exclusively by the hunt for treasure, AllenX is science led, with the aim of contributing to an enhanced understanding of and respect for the maritime legacy of The Bahamas and training a new generation of Bahamian divers. The discoveries are conserved, studied and displayed in The Bahamas Maritime Museum, founded by Carl and Gigi Allen on Grand Bahama Island.

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1. Introduction

In 2018 Allen Exploration (AllenX) (Fig. 1) was granted a license by the Antiquities, Monuments & Museums Corporation (AMMC) of The Bahamas to survey and excavate surviving sections of the wreck of the *Nuestra Señora de las Maravillas* (Fig. 2), a Spanish ship of the Tierra Firme fleet lost off the western Little Bahama Bank in 1656. The license included

permission to investigate additional shipwrecks encountered within a restricted area of the northern Bahamas, extending roughly from Memory Rock in the south to Walker's Cay in the north (as well as a non-consecutive small annex off Gorda Cay, the Abaco Islands, and small areas south of Grand Bahama).

In addition to identifying debris fields of cultural remains linked to the *Maravillas*, the project has so far discovered 23 further sites. The approximately 300-square-mile research zone is defined by the major maritime feature of the Little Bahama Bank.

Allen Exploration is a private company founded by Carl and Gigi Allen that builds on their life-long passion for The Bahamas. The organization has initiated and overseen a range of activities from capacity building in The Bahamas to the scientific and educational:

- **Philanthropic:** Carl and Gigi Allen have donated nearly 1,000 tablets to local school children to support their libraries and education. After Hurricane Dorian devastated part of the northeastern Bahamas Islands in September 2019, AllenX diverted its research ships and person-



Fig. 1. AllenX fleet vessels preparing to survey off the Little Bahama Bank. Photo: © Allen Exploration.

nel to assist the relief effort (Fig. 3).

- Historical: AllenX initiated, and continues to conduct, historical research into the maritime, commercial and economic history of the *Maravillas* and other losses in the survey zone. In 2022 AllenX partnered with James Jenney of In Search of Shipwrecks (ISOS) to initiate The Bahamas Lost Ships Project that has examined archival sources to identify all historically attested ships that sank in the survey area since the 16th century. A total of 176 vessels were documented.¹
- Archaeological & Scientific: offshore exploration began in 2019, committed to a scientific methodology harnessing modern survey methods (Figs. 5-6). All finds, provided with inventory numbers, are immediately accessioned into the conservation laboratory of The Bahamas Maritime Museum (Fig. 10). Once conservation is completed, artifacts not on public display are stored in a temperature and humidity-controlled storage area.
- Educational: in August 2022, AllenX opened The Bahamas Maritime Museum, the first of its type

Fig. 3. Gigi Allen oversees AllenX's relief effort during Hurricane Dorian. Photo: Allen Exploration.



Fig. 2. Model of the galleon the *Maravillas* in The Bahamas Maritime Museum. Photo: Allen Exploration.

dedicated to the islands' maritime history and archaeology. (Figs. 4, 7, 8, 12). The museum includes a dedicated conservation laboratory and recording studio, including 3D photogrammetry equipment, the first installed in The Bahamas. Around 90% of AllenX's dive team and museum staff are Bahamian. Sharing knowledge

and skill sets with a young generation of Bahamian citizens – from on-site experience of shipwreck recording to conservation techniques – is a core component of AllenX's vision.

2. Project Protocols

Expeditions led by Robert Marx for Seafinders in the 1970s and Herbert Humphries of MAREX in the late 1980s and early 1990s discovered the core section of the *Maravillas* and proceeded to heavily salvage high-value 'treasure' (silver coins and ingots and jewelry) and small finds. No inventory of this material or record of an archaeological nature have been published. Further, part of the material derived from multiple wreck sites. Other than

Fig. 4. Carl Allen joins Bahamian school children learning how to handle and treat underwater finds in The Bahamas Maritime Museum. Photo: Allen Exploration.





Fig. 5. AllenX divers preparing to survey the northern Bahamas. Photo: Allen Exploration.



Fig. 6. AllenX divers record an historical iron anchor underwater. Photo: Allen Exploration.

gold- and silver-alloy ingots on the Tumbaga wreck off the western Little Bahama Bank, dated to between *c.* 1526 and 1536, made from Aztec loot melted down by Spanish conquistadors,² distinguishing which finds came from which site cannot always be determined. Most of the Marx and Humphreys finds were sold in auctions.

In a clear and deliberate departure from previous expeditions that sought to salvage the *Maravillas*, Allen Exploration is committed to a project of an archaeological and scientific nature designed to maximize understanding of the values of this heavily impacted wreck site. The project uses recognized industry technology to detect wreckage. Surveys follow pre-established search lanes towing a Geometrics 882 Cesium Vapor magnetometer and Edgetech 4125 600/900 kHz side-scan sonar. The seabed profile is recorded and reconstructed using single beam bathymetry; the data are collected using Simrad

NSS 16 Evo 2 down view equipment. To date, around 8,800 magnetometer anomalies have been identified (and a tiny proportion investigated to date). Core environmental data are captured during the surveys.

Shallow sediments are examined by hand fanning. Ground-truthing and recording cultural remains often requires areas of deep sediment to be uncovered by the propwash deflection method, which is very carefully monitored and controlled in the same manner as how mechanical equipment removes topsoil in terrestrial excavation sites. Every Sounding Unit (SU) is numbered, tracked and entered into AllenX's mapping software. Any finds discovered are recorded underwater and, where appropriate, recovered.

AllenX records the precise position of every Sounding Unit explored and every artifact identified from a silver coin and bar to ship fittings (iron and cupreous spikes, rigging) and potsherds. A policy of selective artifacts' recovery is followed to minimize the

Fig. 7. The Bahamas Maritime Museum, opened by Carl and Gigi Allen in August 2022. Photo: Allen Exploration.



Fig. 8. A display about the transatlantic slave trade in The Bahamas Maritime Museum. Photo: Allen Exploration.



recovery of finds whose importance and interpretative potential are limited. Rare, unique and scientifically significant finds are photographed underwater and recovered. These include all diagnostic ceramics.

After data are acquired and post-processed, they are merged into AllenX's custom-designed GIS program formulated using AutoCAD Map 3D. The database also holds maps compiled between the 1600s and modern day and information drawn upon former projects, including interviews with previous investigators. The database holds AllenX's dive notes and photographs of underwater remains and finds, which can be accessed at their relevant geographical point.

Merging the collected remote-sensing survey data and archaeological discoveries into the master CAD file allows the team to reconstruct how the *Maravillas* and other ships broke up, were impacted and scattered, to interpret site formations and develop predictive models for forward-looking offshore investigations. The database allows distributions of all classes of finds to be generated in map form by medium (ferrous, cupreous, lead, silver etc) or archaeological character (ceramics, rigging, coins, jewelry etc). All fieldwork and finds are comprehensively georeferenced (Fig. 9).

3. Oversight & Outreach

All fieldwork conducted within the offshore search area is overseen by members of the Royal Bahamas Defense Force acting as onboard representatives of the Government of The Bahamas. A member of The Bahamas' Antiquities, Monuments and Museums Corporation (AMMC) is retained as a full-time inspector and observer in The Bahamas Maritime Museum.

AllenX submits monthly reports to the AMMC on activities specific to each month of operation conducted under license. These include descriptions of fieldwork, discoveries and a full inventory of finds, complemented by photographs and maps. In addition, under its own volition, AllenX submits a year-end summary report to the AMMC.

The Bahamas Maritime Museum on Grand Bahama features not just the story and finds from the *Maravillas*, but wider insights into the islands' maritime history and archaeology, including:³

- Geologic Formation
- Lucayan Migration

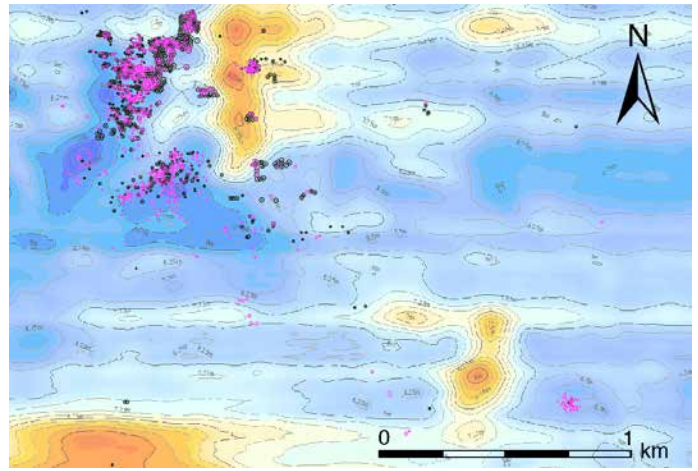


Fig. 9. A distribution map of stone ballast and iron ship's fasteners from the scattered wreck of the *Maravillas*. Photo: Allen Exploration.

- European Arrival (Columbus)
- Eleutheran Adventurers (the first Europeans to settle in The Bahamas)
- Wrecking of the *Maravillas* (1656)
- Piracy
- Wrecking Salvors
- Transatlantic Slavery
- American Loyalists
- Fishing
- Sailing Culture

The museum houses the most extensive library of a maritime nature, comprising around 5,000 volumes. The Bahamas Maritime Museum has also developed and runs an educational program for ages five and upwards, intended to build museum literacy and to increase awareness of the historic and cultural value of the marine environment.⁴

Fig. 10. Recording a silver bar from the *Maravillas*, newly accessioned into The Bahamas Maritime Museum. Photo: Allen Exploration.



Fig. 11. Cover of *Ocean Marvels of the Bahamas*, published in June 2023.

AllenX's work on the *Maravillas* and the maritime Bahamas has featured in the national and international press and television and as a special issue of *Wreckwatch Magazine* in August 2022. A dedicated book, *Ocean Marvels of the Bahamas* (Fig. 11),⁵ has been published and a scientific reports' series launched.

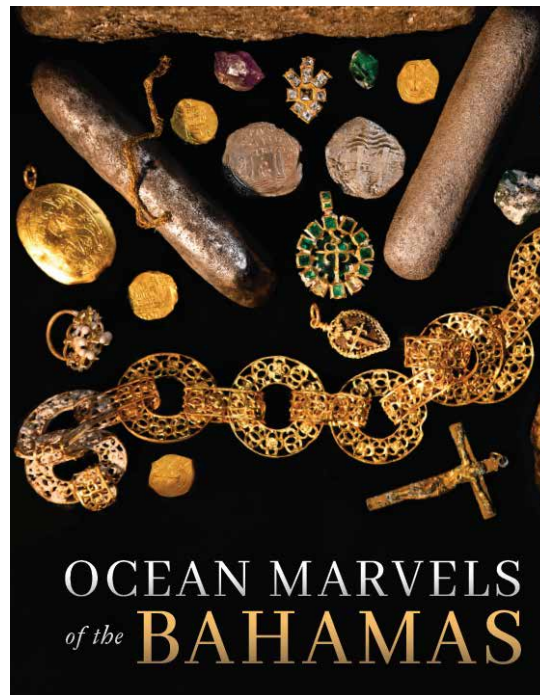
4. The Future

All fieldwork conducted within the offshore Allen Exploration hopes to continue exploring and interpreting shipwrecks in the northern Bahamas to promote greater awareness and understanding of the islands' maritime traditions and legacy. Education and working with Bahamian students and citizens will remain a key part of the project.

As well as continuing to track down lost sections of the *Maravillas*, numerous other wrecks await future documentation. They include unravelling the enigmas of former expeditions to the Little Bahama Bank, such as the true character of the so-called 17th-century 'Mystery Wreck' and whether the ingots from the Tumbaga site are isolated cargo or part of a larger cultural deposit?⁶

A leading aim of AllenX is to begin to remedy the absence of baseline data about shipwrecks in its licensed search area within the northern Bahamas,

Fig. 12. School children touring the conservation lab in The Bahamas Maritime Museum. Photo: Allen Exploration.



so that future resource managers can make decisions based on facts. Ultimately, the project aspires to promote appreciation of the islands' extraordinarily rich maritime history and sunken archaeological remains.

Notes

1. Jenney, J., Allen, C., Kingsley, S.A., Pateman, M.P., Sinclair, J., Porter, D. and Dickerson, K., 'The Bahamas Lost Ships Project: Maritime History & Archaeology off the Little Bahama Bank,' *Allen Exploration Reports* 2 (June, 2023).

2. Craig, A.K. and Richards, E.J., *Spanish Treasure Bars from New World Shipwrecks* (West Palm Beach, 2003), 19, 22; Armstrong, D.R., *Tumbaga Silver for Emperor Charles V of the Holy Roman Empire* (Merritt Island, FL, 2014).

3. Pateman, M.P., 'Bahamas Maritime Museum. Grand Opening,' *Wreckwatch Magazine* 12 (2022), 116-21.

4. Parker, J., 'Education at The Bahamas Maritime Museum,' *Wreckwatch Magazine* 12 (2022), 122-25.

5. Allen, C., Pateman, M.P., Sinclair, J., Porter, D. & Kingsley, S., *Ocean Marvels of the Bahamas* (Grand Bahama, 2023).

6. 'The Mystery Wreck?': <https://divingthemaravillas.wordpress.com/the-mystery-wreck>. Accessed April 30, 2023; Armstrong, D.R., *A Bronze Saker for King Henry VIII* (1993).

Fig. 13. Bahamian diver Alex Barrett recovers an emerald from the *Maravillas*. Photo: Allen Exploration.

