



Maritime  
Archaeology  
Sea Trust

PROTECTING OUR FUTURE

# MAST

2016 NEWSLETTER



## MAST receives £2 million LIBOR grant

Doing good things with bad people's money

One of the Royal Navy's most historically significant ships, sunk in 1758 in the Solent, is to be rescued thanks to a £2 million LIBOR grant, received on the last day of the Cameron government. Built in 1744 and captured

in 1747, HMS *Invincible* became the blueprint for the Royal Navy 74 gun ships of the line until the end of the Age of Sail and the beginning of the Age of Steam, marked in the United Kingdom by the launch of HMS *Warrior* in 1860.

4

### Oman: the Esmeralda

MAST along with partners, Bournemouth University, were part of a team of maritime archaeologists assembled to survey and excavate a 16<sup>th</sup> wreck off Oman.

Page 2

### Contact MAST

For more details of any projects please visit [www.thisismast.org](http://www.thisismast.org) or email [mast@thisismast.org](mailto:mast@thisismast.org)



### HLF NE shipwrecks

MAST won a £20,000 from HLF North East to run a pilot project to train divers and researchers to allow them to investigate and record WWI and WWII wrecksites.

Page 5

# Oman: the Esmeralda Project

The archaeology team, led by Associate Professor at Bournemouth University, Dave Parham, was supported partly by MAST, which co-funded the first expedition in 2013. A multi-disciplinary team of maritime archaeologists, geophysicists and other scientists, was assembled by David Mearns, director of Blue Water Recoveries, to conduct a reconnaissance of the site, 14 years after its initial discovery.

The site is located in the north eastern bay of Al Hallaniyah island, the largest of the Al Hallaniyat Island Group, Oman, on the north eastern coast of the Arabian Sea. Al Hallaniyah is the only inhabited island of the group.

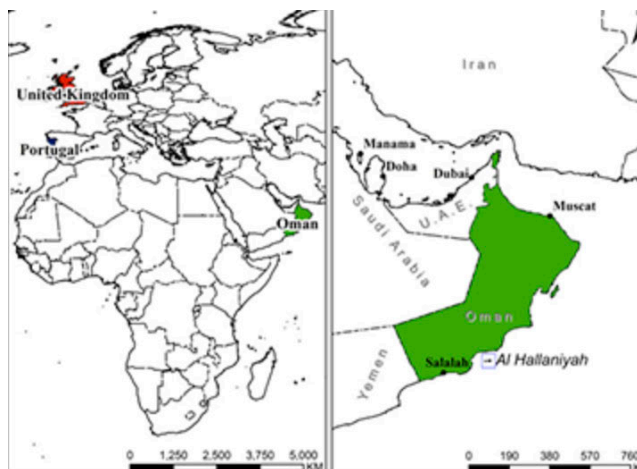
Following the discovery of the ship's bell that year, confirming the presence and potential of the site and recovering 64 artefacts, a full scale excavation began in 2014 raising a further 1,894 artefacts including several diagnostic pieces such as gold coins, 19 copper alloy breech blocks and items marked with the Portuguese royal coat of arms. A second excavation season took place in November 2015 when a further 812 artefacts were recovered.

It is currently considered to be a European vessel of late 15<sup>th</sup> to early 16<sup>th</sup> century and is most likely the wreck of the Portuguese Nau *Esmeralda*, commanded by Vicente Sodré, part of Vasco da Gama's



Indian Ocean patrol (a component of the 4<sup>th</sup> Portuguese Armada to India), wrecked in this location on 30<sup>th</sup> April, 1503. Sodré was an uncle of the Portuguese explorer. The purpose of the project has been to better understand the Portuguese 4<sup>th</sup> Armada to the Indies and the nature of Portuguese seafaring exploration in the late 15<sup>th</sup> and early 16<sup>th</sup> century.

A report on the archaeological expedition has been published by the International Journal of Nautical Archaeology (IJNA).



# Pistil Meadow: to be revealed



## National Trust invites MAST and Bournemouth University to establish veracity of war graves from the Royal Anne Galley sunk off Pistil Meadow in 1721

Contemporary sources suggest the presence of a mass grave of crew and passengers from the wreck of an 18th century Royal Navy warship on Lizard Point in Cornwall. Secondary sources of the time suggest that approximately 200 bodies were buried in Pistil Meadow, victims of the wrecking of the *Royal Anne Galley*.

MAST, in partnership with Bournemouth University's Senior Lecturer, Paul Cheetham and Associate Professor Dave Parham and Kevin Camidge of CISMAS, have conducted multi-method geophysical surveys of the meadow. These have included EM conductivity, GPR and earth resistivity as well as magnetometry. The first survey was conducted in November 2012 with the aim of establishing whether any geophysical anomalies detected can be related to the reports on a number of mass graves of the wreck. Owing to

waterlogged ground conditions only magnetic and electromagnetic techniques were used. In October 2014 the team returned and conducted EM, earth resistivity and GPR. The results suggest a number of clear disturbances that have the potential to result from sub-surface features that could be large graves which may relate to the burial pits reported by the historical sources. The potential for further work to confirm such an interpretation is now under discussion with the National Trust. You can now read the report of our finds on our website.

The team is returning to the site in September to establish test pits and finally if there is any truth beyond the rumours that date back hundreds of years.

# HMS Invincible 1744

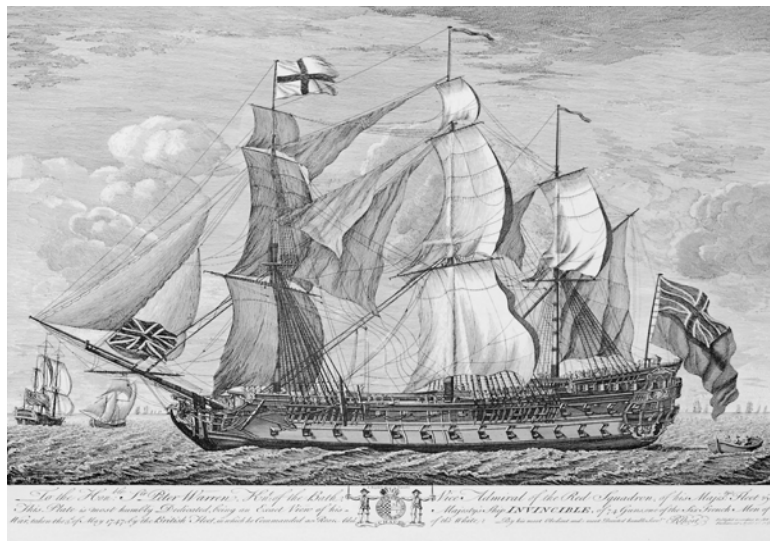
By the Battle of Trafalgar in 1805 over three-quarters of the Royal Navy's ships-of-the-line were 74-gun vessels. The French had invested new technologies in her: whereas most ships of the period were constructed of wood, *Invincible* was built with 200 iron knees.

Later, under the British, she was the first ship to be fitted with an iron hearth to replace the centuries old brick galley and flintlock the United Kingdom.

HMS *Invincible's* remains represent the most complete and best preserved of a warship from the mid 18<sup>th</sup> century and the site holds invaluable clues to both French and British ship design, technologies and shipboard life. Uniquely, unlike HMS *Victory* (1765), she contains material culture of shipboard life and warfare at sea and not just of the ship herself. *Invincible's* heritage also fills an important gap chronologically between The *Mary Rose* and HMS *Victory* in representing over 200 years of the development of the Royal Navy.

Irreversible damage is already occurring to the site. Investigation has revealed that large areas are uncovering at an alarming rate, caused by the shifting sands. This exposure of the wreck is due to the natural migration of the sand bank, Horse Tail Sands. Since the wrecking of *Invincible* in 1758, Horse Tail Sands has moved southwards by 700m, leaving the site on the very edge of the sand bank. The movement of this mobile topographic feature has a

significant impact on the burial environment surrounding the site; as the sand bank continues to track southwards the area of interest will continue to be uncovered. The long term prognosis for the site is poor, as further exposure of the wreck and its location in shallow water



means it is extremely vulnerable to high energy storm events occurring over the winter months. These storms have been more numerous and sustained over the last three years and have resulted in a rapid loss of seabed sediments within and around the wreck site, revealing large areas of previously unrecorded parts of the ship and also fragile artefacts.

Work will begin next year. MAST will manage the project with its partners, site licensee Dan Pascoe, Bournemouth University and the National Museum of the Royal Navy in

Portsmouth where the archaeological material will be displayed. Volunteers will also have the opportunity to be trained and learn post-excavation skills which will include the cleaning, recording and cataloguing of artefacts. MAST will involve a number of Serving and ex-Service personnel during the lifetime of the project which will be modelled on the lines of

Operation Nightingale, a unique military initiative to employ the social and technical aspects of terrestrial archaeology to aid in the recovery process of serving and ex-Service personnel involved in the Afghanistan conflict.

The site was first found in 1979 by John Bingeman who led excavations between 1980-90. Dan Pascoe took the reins in 2010, monitoring the increasingly vulnerable site, raising artefacts at risk from destruction. MAST, along with its partners, will be able to continue the work where Bingeman left off.

## Remembrance Wrecks of WWI and WW2

Of the most popular 100 dive sites off the United Kingdom, over half were sunk during the two World Wars. The UK has the largest and most significant collection of World War wrecks of anywhere in the world. The sheer number of vessels lost during the two conflicts and their survival as wrecks means that there are more wrecks from these periods than any other and, as such, approximately half of all dives in the UK are undertaken on a wreck from one of the two Wars.

There are over two million qualified divers in the UK. Should each one dive just once per year within the UK (the number is likely higher) over one million dives occur on World War wrecks from which little or no information is being disseminated. The number of divers visiting these sites is in huge disproportion to any archaeological or historical research dives that have been undertaken on the same wrecks.

Now, thanks to a generous donation from the Heritage Lottery Fund of £20,600 MAST has been able to train volunteers from the local research and diving communities in the North East to investigate a number of these very sites.

The grant enables local people to discover and explore the local history of the First World War and Second World War along with some of the hundreds of ships and people lost off of the North East coast. 11 divers completed MAST's Basic Archaeological Diver (B.A.D) course, learning to master skills in underwater survey, and gained a PADI Distinctive Specialty. Ten researchers will be guided in carrying out the above-water historical research.

The wrecks of North Tyneside, where this pilot heritage project is focused, as in many other locations around the UK have a high percentage of vessels lost during or as a result of the world conflicts at the start of the 20<sup>th</sup> century. The number of wrecks from this period is likely in the hundreds if not thousands. However for the purpose of this study a selected few have been presented as possible sites that will be investigated by the group. They include both merchant ships and warships including submarines. The sites include: UC 32 (sunk 1917), SS *Kamma* (sunk 1917), MV *Olsoford* (sunk 1940), SS *Eston* (sunk 1940), SS *Coryton*, (sunk 1941) and SS *Mars* (sunk in 1939).



## Valentine Tanks: Poole's D-Day

Few have heard of the key role played by the Duplex Drive (DD) tanks in the Normandy Landings in June 1944. Yet without these amphibious vehicles it is likely that WWII would have endured significantly longer, and very likely allowed the Soviet drive to have reached far further west. Poole in Dorset was an important training ground for the D-Day Landings, particularly for the crews of these amphibious vehicles. During these exercises seven of these tanks were lost and six men died.

MAST is in partnership with Bournemouth University which is leading a project to investigate the nature, survival and state of preservation of these historic monuments. The MoD Salvage & Marine is another project partner alongside Historic England. BU students have played a key role in the diving and research operations. The project is designed to contribute to the development of a methodology for understanding historic steel shipwrecks and transfer the knowledge gained into the student

community and aid their employability. Such sites bring management challenges. Whilst the management of modern submerged steel infrastructure is a developed subject, little is known about similar historic structures. Research into this subject has been limited and is still being developed, some of which is being undertaken by BU.

The heritage community is not alone in this management. The UK government is responsible for the management of wrecks, such as these vehicles, that are also potential ocean pollutants ('legacy wrecks'). The MoD is currently conducting research to better understand the physical state and corrosion of these wrecks and hence risk assess their ability to contain these pollutants.

Further details are on MAST's website.

## Alderney Elizabethan wreck



*Removing the mobile sand on the site*

In partnership with Bournemouth University, MAST is working on what is believed to be the remains of an Elizabethan shipwreck off Alderney, one of the Channel Islands. The wreck found in 1977 by local fisherman Bertie Cosheril, off the coast of Alderney 900 metres north of Alderney lighthouse and 300 metres west by north of a reef called The Ledge in approximately 27-30 metres of water (tide dependent), is thought

by investigators the remains of a late 16th century vessel, possibly of English origin, operating in the English Channel, where it may have played a part in the religious wars of the time.

The site was investigated, surveyed and excavated at intervals in the 1990s, of which the material was analysed and published, and into the early 2000s, the material of which was not assessed/analysed but instead stored, until 2015 when a Bournemouth University Masters student undertook the task as part of their dissertation.

BU was brought in to the project in 2013 in order to re-establish operations and spearhead the project into the next phases. MAST joined the team in 2015 to undertake work in the field, the aim of which was to dredge a test pit in order to ascertain the depth of the archaeological material on the site and primarily to establish the existence of any remaining structure.

## MFV Sanu

The National Trust commissioned MAST to conduct a basic archaeological survey of the MFV *Sanu*, a purpose-built Royal Navy supply tender. The former Admiralty carvel-built vessel inspired Cornish author Denys Val Baker, one of the boat's subsequent owners, to pen a number of famous stories.

The *Sanu*, formerly MFV 29 of the MFV 1 class, was built by Frank Curtis in Looe in August 1942 for the Admiralty and remained in service until 1955. The MFV construction was the last major phase of wooden boat construction in the UK. The *Sanu* had two previous owners before its most illustrious one. They were Dorrien D. Saqui of Buckinghamshire and then in 1960 Roger Pirie D.S.C from Hampshire. Baker bought the vessel in 1964.



The result of this work is available on MAST's website, contributing to the knowledge of the site and its significance. The vessel's importance hinges on the fact that it represents the last major phase of wooden boat construction in the UK.

Before the *Sanu* was broken up on October 17, 2013, sections of the vessel were removed by Kevin McCloud's Channel 4 programme, *Man Made Home* to build a beach hut. This was aired in September 2013. The vessel has now been removed in pieces from the beach at Newquay on the Gannel in Cornwall.

Bournemouth University masters students have now studied these sections closely and recorded them as part of their study programme. They compared the results to the generic plans for this type of ship, 50 of which were built during a period when many materials, including timber, were scarce.

## With SSI and want to be BAD?

Now, regardless of whether you are PADI, SSI or BSAC you can qualify as a BAD - Basic Archaeological Diver, a two-day Distinctive Specialty course - a no frills, no fuss introduction to the basics of archaeology underwater with simple recording techniques using little more than a camera and tape measures. The introduction to the basics will also include a lecture on the laws governing divers and underwater archaeology in the UK. Students will hear exciting talks from well known figures in the underwater



archaeology world (please contact us for details). For SSI only, please contact Mulberry Divers at [info@mulberrydivers.co.uk](mailto:info@mulberrydivers.co.uk).

See our website for further details.

### Charlestown Shipwreck Centre

**A deal to purchase Charlestown Shipwreck Centre in Cornwall earlier this year fell through as the vendor, John Kneale, removed the carpark, the Centre's main income source, from the deal at the last minute, making the centre financially unviable.**