

# Underwater Archaeology in the Aeolian Islands: the “Panarea 1” shipwreck

Roberto La Rocca\* - Timmy Gambin\*\* – Cristina Bazzano\*\*\*



\* Soprintendenza del Mare, Regione Siciliana, Palermo, rlarocca@regione.sicilia.it

\*\*University of Malta, Msida, timmy.gambin@um.edu.mt

\*\*\* External collaborator, Soprintendenza del Mare, cristinabazzano@gmail.com



## The ArchEolie project

In July 2010, the first survey in the waters of Panarea held by *Soprintendenza del Mare* of Palermo in collaboration with the *AURORA Trust Foundation*, gave back evidences for four shipwrecks of Greek and Roman periods, within a representative record of cargoes. The "ArchEolie 2010" project included the extensive survey of the aeolian seabeds by remote sensing systems.

The identified shipwrecks, that lie on the seabed approximately between -85 and -135 metres in depth, were designated as Panarea 1, 2, 3 and 4 (Fig. 2).

The Panarea 1 wreck was thoroughly explored in 2014 by *Soprintendenza del Mare della Regione Siciliana*, in cooperation with Global Underwater Explorers. In 2015, Aurora Trust Foundation realized detailed 2D and 3D models of the site (Fig. 4 and Fig. 5).

A large number of amphorae was deposited over an area with a drawn-out oval shape, corresponding precisely to the contours of the ship. The wooden hull characters cannot be fully identified, because it lies hidden under the hundreds of amphorae that constituted its cargo.

Due to the use of the Side Scan Sonar (SSS), the characteristics of the shipwreck were clearly understood from the previous investigations (Fig. 3). Indeed, the cargo has been analysed systematically both by Triton submersible and by deep-water divers.

The main objectives of the ArchEolie project were:

- to survey seabeds around the Aeolian Islands between -70 and -150 metres
- to create a geo-referenced map of the surveyed areas
- to survey the sonar targets using a remote operate vehicle (ROV)

The side scan sonar survey led to create a mosaic map of the survey area with details of seabed topography and geology (Fig.3).



Fig. 1 - Map of Aeolian Islands



Fig. 2 - The identified shipwrecks

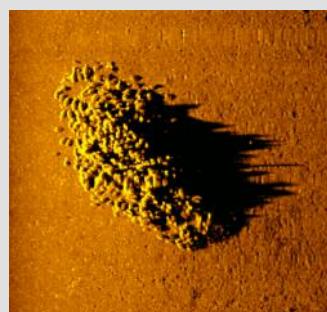


Fig. 3 - Side Scan Sonar Report

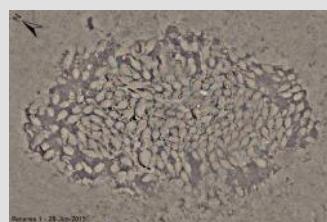


Fig. 4 - 2D model



Fig. 5 - 3D model

## The vessel

The aim of the present contribution is a preliminary comprehension of the first of the mentioned shipwrecks- Panarea 1- and its chronological and cultural identification.

The cargo surface has the following characteristics: 13 metres of length; 4 metres of width; about 3 metres of height from the seabed; the assemblage of transport amphorae is homogeneous and it is composed of Late Republic - first Imperial age amphorae- Lamboglia 2\ Dressel 6A, Dressel 1C, Dressel 2-4. The deposition of the cargo shows probably the original position and the direction of the ship. Indeed, it shows that the condition of the sea played a key role in both the sinking of the ship and the disposition of the cargo, marking the course of the ship. The position in fact makes it plausible that the ship sank in such a way that it came to rest on its left side. This can be inferred from the position of the amphorae that tilted and thrown outside the area where the cargo was scattered.

## The cargo

The site is very well preserved and intact and the shipwreck contains an heterogenous cargo.

The main cargo is composed by Italic wine amphorae from the late first century BCE and many of the objects are still stacked in their original position. The majority of the amphorae turned out to be of first Imperial age, used to transport food stuffs and high-quality wine.

Preliminary investigations revealed the identification with Lamboglia 2-Dressel 6A, Dressel 1, Dressel 2-4 types. The forms of the amphorae in this group exhibit a wide variety but it is traditionally known that they evolve from Greco-Italic types.

Based on the archaeological data, we can assume that the ship was on its way from southern Italy to Sicily.

The typology of the artefacts indicates that the ship sank around the first Imperial age.

