

## Web Page

### **The Skerki Bank Deep Water Archaeological Project, 1989,1997** Anna Marguerite McCann

The site of Skerki Bank was discovered in 1988 by Robert D. Ballard in international waters about 80 km NW of Sicily. It was identified on the basis of scattered ancient amphoras documenting an ancient trade route and the remains of a separate ancient shipwreck nicknamed the "Isis". The following year, Ballard returned to the site for the first JASON Project with a collaborative team including Anna Marguerite McCann, archaeology director, and Mary-Lou E. Florian, conservator. The JASON projects were conceived and directed by Ballard in response to America's need to interest and encourage children to pursue careers in the sciences, technology and archaeology. The project was designed to show how archaeologists might make use of the new technologies and to bring attention to the international problem of illicit excavation. Working at depths of over 750 meters with a remotely operated vehicle (ROV) named *Jason* (that gave its name to the project) and a smaller, towed, unmanned sled, named *Medea*, a team of dedicated professionals made a breakthrough for underwater archaeology. Robotic technology opened up the deep sea to the archaeologist.

The technology was developed by Ballard and his team of engineers at the Deep Submergence Laboratory (DSL) at the Woods Hole Oceanographic Institution. Where SCUBA divers cannot go, we can now search with the eye of the camera and with sonar and we can share our discoveries with audiences thousands of miles away. This first JASON Project was also the first time that a live television broadcast had been attempted from the sea floor. These broadcasts reached over 225,000 children in 13 downlink sites in America and Canada. Children could see what we were seeing on their TV monitors in North America in less than one half second. The success of the first 1989 JASON Project has been recognized by a number of national awards. Among them are the 1990 American Association for the Advancement of Science/Westinghouse Award for the public understanding of science and technology and the 1990 Computerworld Smithsonian Award for "pioneering a system that allows students to view and interact with underseas exploration projects in real time". The JASON Projects continue today on an annual basis and reach about one and one half million children and 33,000 teachers.

In 1997 Drs. Ballard and McCann returned with a larger team, more sophisticated technology and the US Navy's nuclear research submarine, the NR-1. Other archaeologists were: John P. Oleson, University of Victoria, Jon Adams, University of Southampton and Brendan Foley, MIT. Conservators were: Dennis Piechota, Arlington, MA, and Cathy Giangrande, London. Dana Yoerger headed the team of engineers from Woods Hole and MIT. While the NR-1 surveyed the area for new wreck sites, ROV *Jason* was deployed from a mother ship and was used to survey, record, and recover a sample of artifacts from several of the Roman wrecks. 8 shipwrecks were found in all at Skerki Bank: 5 Roman merchantmen dating from the late Republic (*Wreck D*) and early Empire (*Wreck B*, *Wreck F*, *Wreck G*) to the late Empire (*Isis*), one medieval fishing vessel (*Wreck A*), and two nineteenth-century wooden sailing ships (*Wreck C*, *Wreck E*). We also documented the debris fields of Roman ships that were dumping cargo to stay

a float or spilling cargo as they sank. *Jason*, the most versatile ROV ever used for archaeological research, documented the sites with digital and video photography and using sonar with precise navigation made microbathymetric maps of the wreck sites. The ability to create both photomosaics and topographic maps of the wreck sites while on shipboard is a tremendous contribution for archaeological research.

The Roman wrecks show a fascinating mix of cargoes from both the eastern and western Mediterranean, including quarry-rough blocks of granite, a wide variety of amphoras, whole sets of kitchenware and fine ware, and bronze vessels. The expedition was widely reported in international print and television media. The artifacts from Skerki Bank are at the Mystic Aquarium in Mystic, Conn.

**The final report of the project has been published: A.M. McCann and J.P. Oleson, *Deep-Water Shipwrecks off Skerki Bank: The 1997 Survey*, Journal of Roman Archaeology, Suppl. 58, Portsmouth, R.I.: JRA, 2004, Pp. 224, 228 illus., 42 color pls..**

Ballard, R. D., "High-Tech Search for Roman Shipwrecks," *National Geographic* 193.4 (April 1998) 32-41.

Ballard, R. D., A. M. McCann, D. Yoerger, *et al.*, "The discovery of ancient history in the deep sea using advanced deep submergence technology," *Deep-Sea Research* I.47 (2000) 1591-1620.

Ballard, R. D., R. Archbold, and A. M. McCann, *The Lost Wreck of the Isis*, (Madison Press, Toronto 1990).

Bowen, M. "Jason's Med Adventure," *Oceanus* 33.1 (1990) 61-69.

Brody, J. and A. M. McCann, "Cargoes from the Deep," *Archaeology Odyssey*, 2003, Jan.Feb., 30-39.

McCann, A. M., "Diving Into Our Past", World Ocean Floors: Atlantic Ocean, *National Geographic* (Jan. 1990).

McCann, A. M., "ROV's for Archaeology," *Intervention/ROV'91 Conference Proceedings, Marine Technology Society* (1991) 13.

McCann, A. M. and J. Freed, *Deep Water Archaeology* (Journal of Roman Archaeology, Suppl. Ser. 13, 1994).

McCann, A. M., "Isis", in J. P. Delgado (ed.), *Encyclopedia of Underwater and Maritime Archaeology* (British Museum, London 1997) 207,208, 214.

McCann, A. M., "The Roman Port and Fishery of Cosa and a New Trade Route in the Deep Sea," *III Jornadas de Arqueologia Subacuatica, Pueros antiguos y Comercio Maritimo, Valencia, Nov. 1997*, (Valencia 1998) 39-49.

- McCann, A. M., "Deep Water Archaeology and Hi-Technology," Chair of Session, Society for Historical Archaeology, Conference on Historical and Underwater Archeology, 31<sup>st</sup> Annual Meeting, Atlanta, GA., Jan. 6-10, 1998, Programs and Abstracts, p.13; *ibid.*, "Skerki Bank: A New Trade Route in the Deep Sea," pp. 84-85.
- McCann, A. M., "Roman Shipwrecks from the Deep Sea: New Trade Route off Skerki Bank in the Mediterranean," *Context*, (Boston University 1999) 14.2, pp. 1-6.
- McCann, A. M., "Amphoras from the Deep Sea: Ancient Shipwrecks between Carthage and Rome," *Rei Cretariae Romanae Fautorum Acta* 36 (2000) 443-448.
- McCann, A. M. "Lamps and the dating of Roman Shipwrecks," in N. Goldman (ed.), *New Light from Ancient Cosa: Classical Mediterranean Studies in Honor of Cleo Rickman Fitch*, (Peter Lang, Hermeneutics of Art Series, New York 2001) 39-49.
- McCann, A. M., "An Early Imperial Shipwreck in the Deep Sea off Skerki Bank," *Rei Cretariae Romanae Fautorum Acta* 37 (2001) 257-264.
- McCann, A. M., "Roman Shipwrecks from the Wine Dark Sea," John C. Rouman Lecture Series in Classical and Hellenic Cultures, University of New Hampshire, Oct. 17, 2001 (Durham 2002).
- McCann, A. M., "The Isis shipwreck, Skerki Bank," in S. Kingsley (ed.) *Encyclopedia of Underwater Archaeology*, vol.4, *Barbarian Seas, Late Roman to Islam* (Periplus, London 2004) 54-57.
- Oleson, J. P. "The Extraordinary Skerki Bank Project," *Discovery: Newsletter of the Royal B.C. Museum* 25.5 (January 1998) 4-5.
- Singh, H., J. Adams, D. Mindell and B. Foley, "Imaging Underwater for Archaeology," *JFA* 27.3 (2000) 319-328.
- Stewart, W. K., "High Resolution optical and Acoustic Remote Sensing for Underwater Exploration," *Oceanus* 34 (1991) 10-22.
- Yoerger, D. "Robotic Undersea Technology," *Oceanus* 34 (1991) 32-37.