

Breakthroughs in modern deep sea treasure hunting

[Science](#), [Archaeology](#)



Modern deep sea treasure hunting and/or modern marine archaeology have benefited greatly from two technical breakthroughs: (1) side scanning sonar and; (2) remotely operated vehicles (ROVs). These two breakthroughs have made the largest financial impact on the profession than any other modern breakthroughs in the same field. Before side scanning sonar and ROVs were developed for practical use, deep sea treasure hunting professionals and marine archaeologists have to contend with human limitations on the vast three-dimensions of the sea.

Two dimensions involve covering the length and width of the water surface or coastline (Smith). The third involves exploring the depths. The first two dimensions challenge the luxury of time. Unlike sunken cities ("Port Royal"), shipwrecks have occurred in random places over a very wide area. Tracking the exact location of sunken ships could take years through the investigation of historical records (Handwerk), (Australian Broadcasting Corporation [ABC]), sample dives and other traditional methods. Moreover, since shipwrecks have occurred at random periods in history (Burke), pinpoint accuracy is an issue ("Outer Continental").

Deep sea explorers need to choose one shipwreck from a choice of many (Barrett). UNESCO estimates that there are more than 3 million shipwrecks in the world (Raja). Exploration costs a lot of money too. Bills fetch as much as €500 Thousand ("Italy") or even US \$6.25 Million (Reuters) for one shipwreck alone. Hence, most deep sea explorers try to get financial backing from investors (Dennis) and concentrate their resources on just one

shipwreck. With side scanning sonar, deep sea exploration companies can now cover larger areas at shorter periods of time.

OdysseyMarine Exploration for instance covered 3, 700 square miles and detected 2, 100 possible shipwrecks in a period of less than four months (“Outer Continental”). Compare this with Mel Fisher’s 16-year search of Nuestra Senora de Atocha, a 1622 Spanish galleon wreck off the Florida Straits (Illingworth). Maybe even with Howard Collingwood’s use of archival research and a translator of historical texts as preliminaries to his cesium magnetometer scan of his target coverage (“Interview”). The third dimension challenges the forces of nature.

Divers have to contend with these:

- great water pressures;
- strong undersea currents;
- murky and sometimes polluted waters;
- hostile sea creatures like sharks, eels, and crabs;
- razor-sharp corals and other hard, pointed objects under the sea; and
- moving heavy debris under water (“Port Royal”).

In this dimension, ROVs have already accomplished many great things. The deepest deep sea treasure recovery has been made by ROVs at a depth of 170 meters (Reuters). ZEUS, a ROV, visually inspected 400 possible shipwrecks in a record-time of four months (“Outer Continental”).

Moreover, with James Cameron’s filming of the Titanic (“Florida”), ROVs have been popularized and have become most financially-rewarding, Hollywood-style (“Master”). ROVs did not only address the forces of nature

and provided safety to divers, ROVs also provided a new kind of treasure to deep sea professionals—royalty income from films.

Works Cited

- Australian Broadcasting Corporation (ABC). "Australia." ABC Regional Online - Australia 14 July 2005. . Jordan 2. 7: 17. Barrett, Helen. "Australia." 24 Hour Museum - UK 17 July 2005. . Jordan 2. 7: 17.
- Burke, Alan. "Massachusetts." Gloucester Daily Times - USA 26 July 2005. (article no longer available). Jordan 2. 7: 9.
- Dennis, Jan. "Dreams of Sunken Treasure Lure Ex-Hostage Back to South America." Associated Press 26 Sep. 2004. . "Underwater." "Florida." Jacksonville Business Journal - Florida, USA 27 Sep. 2005. . Jordan 2. 7: 9. Handwerk, Brian. "North Carolina." National Geographic News - USA 12 July 2005. .
- Jordan 2. 9: 10. Illingworth, Montieth M. "The Treasure Hunters: Before You Invest in a Search for Sunken Treasure, Find Out What You are Diving Into." Cigar Aficionado Online. 1995. 6 Jan. 2006. .
- "Interview with Treasure Hunter." CNN. com - Transcripts. Video transcript aired on 20 June 2004. CNN. 6 Jan. 2006. "Italy." ANSA - Rome, Italy 27 Sep. 2005. .
- Jordan 2. 9: 14. Jordan, Brian, MAC. Marine Cultural and Historic Newsletter 2. 7, Silver Spring, MD: National Marine Protected Area Center, July 2005. ---. Marine Cultural and Historic Newsletter 2. 9, Silver Spring, MD: National Marine Protected Area Center, Sep. 2005.
- "Master of the Deep." New Scientist - Interview. . "Underwater." "Outer Continental Shelf and International Waters." Tampa Bay

Business Journal 26 Sep. 2005. . Jordan 2. 9: 12. " Port Royal - The Sunken City. " Book Review. 6 Jan. 2006. UK: AquaPress . Raja M. " Shipwreck Salvors See Treasure for the Taking.

- " Asia Times Online 17 Sep. 2004. . " Underwater. " Reuters. " Norway. " MSNBC - USA 20 Sep. 2005. . Jordan 2. 9: 15. Smith, Helena. " Greece. " The Boston Globe 11 Sep. 2005. . Jordan 2. 9: 13.