THE ROLE OF DEEP SUBMERGENCE IN NAVAL WARFARE — PAST, PRESENT AND FUTURE: DR. ROBERT D. BALLARD’S 53-YEAR HISTORY WITH ONR

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IN THE JUNKER CENTER

Sponsored by ONR Code 32, POCs: Dr. Reggie Beach, reginald.beach@navy.mil Dr. Tom Drake, tom.drake@navy.mil Ocean Battlespace and Expeditionary Access Department

Presented by: Dr. Robert D. Ballard

President of the Ocean Exploration Trust; Emeritus Scholar, Woods Hole Oceanographic Institute; Explorer-at-Large, National Geographic Society; Principle Investigator, Ocean Exploration Cooperative Institute, Graduate School of Oceanography, University of Rhode Island

Office of Naval Research 875 N. Randolph St., Arlington, Virginia Bobby Junker Executive Conference Center, 14th Floor
Among the most accomplished and well known of the world's deep-sea explorers, Dr. Robert Ballard is acclaimed for his historic discoveries of hydrothermal vents, the sunken R.M.S. *Titanic*, the German battleship *Bismarck* and numerous other contemporary and ancient shipwrecks around the world. During his long career, he has conducted more than 150 deep-sea expeditions using the latest in exploration technology.

Ballard has been a pioneer in the development of advanced deep-submergence and telepresence technology. Although his Ph.D. is in marine geology and geophysics, his scientific interests run the gamut from the volcanic, tectonic and hydrothermal processes of the Mid-Ocean Ridge to deep-sea archaeology and maritime history. Dr. Ballard also spends a great deal of his time involved in various educational outreach programs. In 2008, Ballard secured the E/V *Nautilus*, which has become his flagship for exploration, operated by the Ocean Exploration Trust and funded in part by NOAA's Office of Ocean Exploration. *Nautilus* is connected by way of a high-bandwidth satellite link to the University of Rhode Island's Inner Space Center and from there to the world.

Ballard has received prestigious awards from the Explorers Club and the National Geographic Society—the Explorers Medal and the Hubbard Medal, respectively—as well as the Lindbergh Award. In 2003, President George W. Bush presented him with the National Endowment for the Humanities Medal in the Oval Office of the White House. He is currently a National Geographic Explorer-in-Residence.

Prior to serving in the U.S. Navy for 30 years, Ballard was trained as a combat infantry officer in the U.S. Army during the Vietnam War. This dual military background, coupled with his academic training in marine geology, has given him a unique perspective on the future of underwater warfare.

**ABOUT**

**Dr. Robert D. Ballard**

Ballard first focused on the development and use of deep submersibles. But in 1991, with funding from ONR, he shifted his focus to the development of tele-operated, unmanned vehicle systems to explore the complex terrain of the Mid-Ocean Ridge—where he made a series of major scientific breakthroughs that altered our understanding of the geology, biology and chemistry of the world's oceans, followed by the discovery of numerous chapters of human history lost in the deep sea. Just last year, as the PI of a consortium of marine institutions, he was selected to join the Ocean Exploration Cooperative Institute to map and characterize America's Exclusive Economic Zone.