ADDITIONAL RESOURCES

Scientists Return to the Titanic

A Press Release from the National Geographic Society

	A consortium backed by the National Oceanic and Atmospheric Administration, the National Geographic Society, the University of Rhode Island, and private foundations has announced a June 2004 mission to the Titanic shipwreck in the depths of the North Atlantic Ocean. This press release issued by the consortium describes the expedition.
A new mission to the legendary	Explorer Dr. Robert Ballard Returns to Titanic in
shipwreck will assess the	June to Assess State of the Wreck
deterioration of the hulk with a	National Geographic Channel to Originate Tele- vision Event from Expedition
view toward preservation.	(Narragansett, R.I.—April 15, 2004)—Nearly 20 years after first finding the sunken remains of the R.M.S. <i>Titanic</i> , marine explorer Dr. Robert Ballard will return in June to help the National Oceanic and Atmospheric Administration (NOAA) study the ship's rapid deterioration. Dr. Ballard and his partners announced the expedition today, the 92nd anniversary of the ship's sinking.
	A professor of oceanography at the University of Rhode Island (URI) and director of its Institute for Archaeological Oceanography, Dr. Ballard and scientists from NOAA, Mystic Aquarium & Institute for Exploration (MAIFE) and other institutions will

spend 11 days at the site, mapping the ship and conducting scientific analyses of its deterioration.

"We know *Titanic* has been naturally deteriorating over time, but I'm convinced that the deterioration is being accelerated by manmade impacts as well," said Dr. Ballard, president of the Institute for Exploration at Mystic Aquarium and Explorer-in-Residence at the National Geographic Society. "The 1986 photo mosaic of the ship that we published in National Geographic magazine will serve as a baseline for comparative studies to determine the level of degradation that has occurred since then."

Funded primarily by NOAA and working aboard the NOAA research vessel *Ronald H. Brown*, the May 30 through June 9 expedition will use Dr. Ballard's remotely operated vehicles (ROVs) to conduct a more sophisticated documentation of the state of *Titanic* than was possible in the 1980s.

"As the nation's ocean agency, NOAA has an interest in the scientific and cultural aspects of *Titanic*," said Capt. Craig McLean, director of NOAA's Office of Ocean Exploration. "NOAA's focus is to build a baseline of scientific information from which we can measure the scientific processes and deterioration of *Titanic*, and apply that knowledge to many other deepwater shipwrecks and submerged cultural resources."

In 1985, Dr. Ballard discovered the remains of *Titanic* in over 12,000 feet [3,600 meters] of water off the Grand Banks of Newfoundland. He returned to the site in 1986 with a National Geographic Society film crew. Since then, RMS Titanic, Inc. has obtained the rights to conduct salvage operations at the site, and has recovered more than 6,000 artifacts. Several tour companies and movie producers have also visited the site in manned submersible vehicles.

In 2001, NOAA issued "Guidelines for Research, Recovery and Salvage of RMS Titanic," including a general principle that activities should have minimum adverse impact on *Titanic* and its artifacts.

"We believe that the world's oceans are the museums of the deep and that it is in the interest of all peoples to protect and conserve both wrecks of recent history as well as submerged sites of antiquity for future generations," Dr. Ballard said. "We are returning to *Titanic* to assess the state of the ship and help determine its future."

Lt. JG Jeremy Weirich of NOAA's Commissioned Corps will oversee the expedition's marine archaeology program. Dwight Coleman of MAIFE and URI is chief of research.

In addition to mapping *Titanic*, expedition goals include microbial research by scientist Roy Cullimore, who will study the natural deterioration of the ship's hull caused by tiny microbes that feed on iron and create icicle-shaped formations called "rusticles." While rusticles have been observed for many years, little is known about them.

Most of the wood on the ship has been eaten by mollusks that feed on organic matter, and natural environmental conditions at the site, such as pressure, temperature and salinity, have also caused the ship's remains to degrade.

On Monday, June 7, 2004 at 9 p.m. ET/PT, the National Geographic Channel will provide audiences with unprecedented access to the ongoing expedition by broadcasting a one-hour special, "Return to Titanic," which will originate from the NOAA research ship *Ronald H. Brown* and include the first live underwater telecast from *Titanic*.

MAIFE is opening a complementary exhibit on April 15 that coincides with the June expedition. The exhibit tells the story of *Titanic*, Dr. Ballard's original discovery of the ship, and the return mission this spring. The centerpiece of the exhibit is the world's only authenticated model of *Titanic*, an 18-foot [5.4-meter] model that took longer to build than the original ship and cost more than \$1.4 million to create.

Simultaneous with the expedition, Mystic's Immersion Project will allow thousands of children across the country to experience the *Titanic* mission as it is happening. From June 4 through 9, four shows a day will be transmitted live from the expedition via satellite and Internet2 to participating sites.

The JASON Foundation for Education will create a new middle school math curriculum called JASON Math Adventure: Geometry and Return to Titanic,

which will follow the work of researchers on the *Titanic* expedition. Students will learn how geometry concepts are used to position the *Ronald H. Brown* at the *Titanic* wreck and the ROV *Hercules* on the bow of *Titanic*. JASON will also provide a behind the scenes look at the expedition using the Internet and video conferencing technology to allow Dr. Ballard to teach middle school science classes across the country live from sea.

Technology partners on the expedition include EDS of Texas, whose technology team is wiring the

mission, and VBrick Systems of Connecticut, whose products will enable the mission feed to be broadcast to children across the country.

For accounts of the expedition in progress and links to partner websites, visit www.returntotitanic.com.

The opinions expressed in this press release are those of the expedition sponsors and do not necessarily reflect the views or policies of the U.S. government.