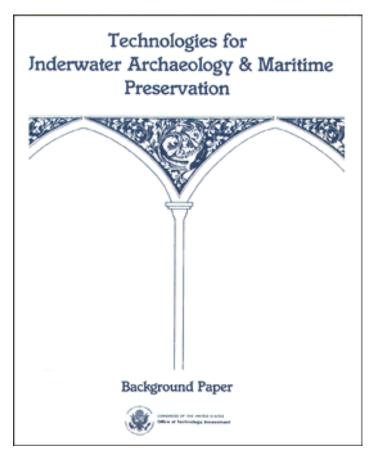
Technologies for Underwater Archaeology and Maritime Preservation

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Foreword

Exploration, trading, and other maritime activity along this Nation's coast and through its inland waters have played crucial roles in the discovery, settlement, and development of the United States. The remnants of these activities include such varied cultural historic resources as Spanish, English, and American shipwrecks off the Atlantic and Pacific coasts; abandoned lighthouses; historic vessels like Maine-built coastal schooners, or Chesapeake Bay Skipjacks; and submerged prehistoric villages in the Gulf Coast. Together, this country's maritime activities make up a substantial component of U.S. history.

This background paper describes and assesses the role of technology in underwater archaeology and historic maritime preservation. As several underwater projects have recently demonstrated, advanced technology, often developed for other uses, plays an increasingly important role in the discovery and recovery of historic shipwrecks and their contents. For example, the U.S. Government this summer employed a powerful remotely operated vehicle to map and explore the U.S.S. *Monitor*, which lies on the bottom off Cape Hatteras. This is the same vehicle used to recover parts of the space shuttle Challenger from the ocean bottom in 1986. The Commonwealth of Virginia is using a variety of advanced techniques to document and excavate one of General Cornwallis's ships, intentionally sunk off Yorktown during the Revolutionary War to prevent General Washington from capturing it. In international waters, the location and documentation of the British luxury liner *Titanic* was possible only by using a variety of sophisticated positional devices and deep water submersibles. These efforts have captured the interest and imagination of the American public.

This background paper also examines the legal framework that affects the salvage of historic shipwrecks and recovery of artifacts. Historic shipwrecks in U.S. coastal waters contain a wealth of important information about the economic and social history of this country. Yet they are suffering rapid attrition, in part because the United States lacks a coherent national policy to guide the identification and preservation of underwater and maritime cultural resources. For example, State laws governing historic shipwrecks found in State coastal waters often conflict with Federal Admiralty law, which gives private salvers the right to salvage shipwrecks, regardless of their age or historic value. Attempts to place historic shipwrecks under the same protection as other historic cultural resources have led to the Historic Shipwreck Act of 1987, which is discussed and analyzed in this background paper.

In undertaking this work, OTA sought the contributions of a wide spectrum of knowledgeable and interested experts within Federal and State Governments and the private sector. Some provided information and guidance, others reviewed drafts of this background paper. OTA gratefully acknowledges their contributions of time and intellectual effort.

John H. Libbour

JOHN H. GIBBONS Director

Workshop Participants: Technologies for Underwater Archaeology and Maritime Preservation, Feb. 20, 1986

Reynold Ruppe, Chairman Underwater Archaeologist, Department of Anthropology Arizona State University, Tempe, AZ

J, Barto Arnold III Underwater Archaeologist Texas Antiquities Committee Austin, TX

Calvin R. Cummings Senior Archaeologist Denver Service Center National Park Service Denver, CO

Anne G. Geisecke Consultant Underwater Archaeology and Maritime Preservation Arlington, VA

Daniel J. Lenihan Chief Submerged Cultural Resources Unit National Park Service Santa Fe, NM

Charles H. Mazel Nightsea Research Charlestown, MA Craig T. Mullen President Eastport International, Inc. Upper Marlboro, MD

Carol Olsen Underwater Archaeologist Maritime Preservation Department National Trust for Historic Preservation Washington, DC

J.K. Orzech Oceanographer Marine Biology Resources Division Scripps Institute of Oceanography La Jolla, CA

Sheli O. Smith Underwater Archaeologist Mariners Museum Newport News, VA

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Technologies for Underwater Archaeology and Maritime Preservation OTA Project Staff

Lionel S. Johns, Assistant Director, OTA Energy, Materials, and International Security Division

Peter D. Blair, Energy and Materials Program Manager

Ray A. Williamson, Project Director

Mary Lee Jefferson, Contractor

Jannelle Warren-Findley, Contractor

Administrative Staff

Lillian Chapman Linda Long

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Richard K. Anderson National Park Service

Richard Anusciewicz Minerals Management Service

Michele C. Aubry National Park Service

Larry Banks U.S. Army Corps of Engineers

johan T. Benson American Institute of Aeronautics and Astronautics Washington, DC

John D. Broadwater Virginia Division of Historic Landmarks Research Center for Archaeology Yorktown, VA

Toni Carrell National park Service

James Delgado National park Service

Ralph E. Eshelman Calvert Maritime Museum Solomons, MD

Rob Floyd john E. Chance & Associates, Inc. Lafayette, LA

John Fowler Advisory Council on Historic Preservation

Donald Frey Institute of Nautical Archaeology Texas A&M University College Station, TX

Ed Friedman Minerals Management Service

James Hand U.S. Army Corps of Engineers

Lynn Hickerson National Trust for Historic Preservation

Helen Hooper National Trust for Historic Preservation

Stanley Hordes HMS Associates Santa Fe, NM

paul Johnston Peabody Museum Salem, MA John R. Kern Department of State Division of Historical and Cultural Affairs Dover, DE

Thomas F. King Advisory Council on Historic Preservation

John J. Kneed National Park Service

Garry Kozak Klein Associates, Inc. Salem, NH

Emory Kristoff National Geographic Society Washington, DC

Edward M. Miller National Oceanic and Atmospheric Administration

Nancy Miller National Conference of State Historic Preservation Officers Washington, DC

Charles Moorhead U.S. Army Corps of Engineers

Marcia Myers National Trust for Historic Preservation

Loretta Neumann Foresight Science & Technology, Inc. Washington, DC

Mike Roberts Timelines, Inc. Groton, MA

Beth Savage National Park Service

Carol Shun National Park Service

Eugene Sterudt National Endowment for the Humanities

Melanie J. Stright Minerals Management Service

Douglas R. Weimer Congressional Research Service Library of Congress

Bill Westermeyer Office of Technology Assessment