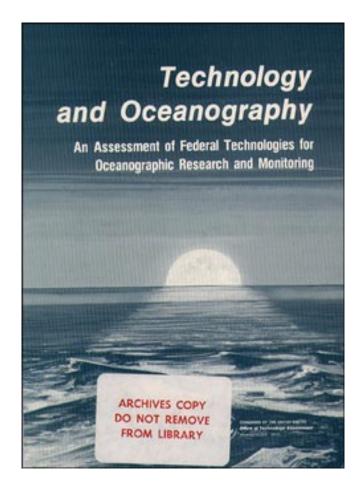
Technology and Oceanography: An Assessment of Federal Technologies for Oceanographic Research and Monitoring

June 1981

NTIS order #PB82-101718



For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402

Library of Congress Catalog Card Number 81-600086

Foreword

This assessment of technologies which are supported by the Federal Government for oceanographic research and monitoring was prepared at the request of the Senate Committee on Commerce, Science, and Transportation. It was requested to provide Congress with a useful structure to evaluate both ongoing ocean programs and new initiatives, especially those that involve costly and complex technologies.

The report describes the status of technologies in use today, such as research ships, submersibles, buoy systems, aircraft, and satellites. It analyzes future problems and opportunities and examines the Federal agencies and programs charged with conducting oceanic studies and providing the necessary management and hardware systems. It analyzes selected national programs directed toward conserving and managing marine fishery resources, developing a new oceanographic satellite system, investigating the geology and possible resource potential of the continental margins beneath the deep ocean, and developing a future climate-prediction capability.

OTA received valuable assistance from contractors, individual consultants, working groups, and many expert advisors in the preparation of this assessment. Each of the Federal ocean agencies also provided valuable descriptive material and useful review comments. An advisory panel of experienced oceanographers and technology specialists from academia and industry reviewed and critiqued the final draft report.

A comprehensive overview and analysis such as this report has not been available in the past because the Federal ocean effort is distributed among so many diverse agencies. A large number of productive and promising oceanographic programs require substantial investments in technology to address critical national concerns. Choices about the future course of these programs and the technologies to support them will undoubtedly require careful congressional review.

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Acknowledgments

Many individuals and groups have assisted in various aspects of this study, each making a valuable contribution to the information and analyses assembled and presented here. While all contributors have not agreed with all aspects of the entire report, all views on major issues are presented. Substantial contributors include:

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