Preface

After the end of the Cold War, the U.S. Navy made SSN 637-class nuclear attack submarines available to the scientific community to conduct scientific research underneath the Arctic sea ice caps. Sponsored by the Navy and civilian science agencies, these missions provided a wealth of important scientific data. However, this class of submarine is now retiring from the Navy’s active fleet, and it has been proposed that one of these vessels be converted into a dedicated research platform.

The National Science Foundation asked RAND’s Science and Technology Policy Institute to assess the costs and benefits of operating an SSN 637-class nuclear submarine for unclassified scientific research throughout the world’s oceans. This draft presents results of this assessment.

Originally created by Congress in 1991 as the Critical Technologies Institute and renamed in 1998, the Science and Technology Policy Institute is a federally funded research and development center sponsored by the National Science Foundation and managed by RAND. The Institute’s mission is to help improve public policy by conducting objective, independent research and analysis on policy issues that involve science and technology. To this end, the Institute

- Supports the Office of Science and Technology Policy and other Executive Branch agencies, offices, and councils
- Helps science and technology decisionmakers understand the likely consequences of their decisions and choose among alternative policies
- Helps improve understanding in both the public and private sectors of the ways in which science and technology can better serve national objectives.

Science and Technology Policy Institute research focuses on problems of science and technology policy that involve multiple agencies. In carrying out its mission, the Institute consults broadly with representatives from private industry, institutions of higher education, and other nonprofit institutions.
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