Acknowledgements

This study benefited from the invaluable help of a great many individuals. Our advisory committee — Robert Anderson, Jack Bash, Bob Brown, Dale Chayes, Bernie Coakley, Dennis Conlon, Don Heinrichs, Edward F. McGinley, Peter McRoy, Barbara Moore, Drew Rothrock, Ray Sambrotto, James Swift, Frank Tesoriero, Barrie Walden — gave generously of their time and expertise in helping us frame and vet the study. Tom Pyle of the National Science Foundation and George Newton of the Arctic Research Commission were always available for thoughtful comments and advice throughout the course of our work. The Naval Sea Systems Command; Naval Center for Cost Analysis (NCCA); the Submarine Maintenance Engineering, Planning and Procurement (SUBMEPP) activity; and Electric Boat Corporation all provided information critical to our cost analysis. Douglas Brubaker, Norm Cherkis, Tom Crew, John Farrell, Peter Mikhalevsky, and Michael Maxall provided helpful insights on oceanographic research. James Bellingham offered helpful information about autonomous underwater vehicles. Gerald Schatz advised us on relevant issues of maritime law. Robert Anderson and Jeff Gossett of the Arctic Submarine Laboratory offered helpful input and comments, as did Gary Brass of the Arctic Research Commission. In their roles as RAND consultants, Mal McKinnon and Denis Rushworth contributed much to our analysis of the costs and capabilities of a dedicated science submarine. We also benefited greatly from the assistance of our RAND colleagues John Birkler, Bruce Don, and Steve Rattien. Finally, the meticulous comments of our reviewers, Jim Bartis and John Schank, greatly improved this document.