

GENERAL OBJECTIVE

Identify science and technology opportunities, as well as policy and process improvements, to reduce onboard manning for damage control and maintenance of in-service platforms.

BACKGROUND

In 1995, NRAC conducted two studies: (1) Reduced Ship Manning reviewed how technology could be used to reduce ship manning; and (2) Life Cycle Cost Reduction assessed the impact of science and technology on life cycle cost initiatives of current Department of the Navy (DON) systems and projected acquisition programs. The recommendations of these studies were endorsed by the Chief of Naval Operations (CNO) and resulted in the initiation of the Smart Ship program.

In addition to identifying the potential for science and technology to significantly reduce ship manning and life cycle costs, the 1995 studies also addressed the policy and system changes needed to achieve these goals. It was also noted that the operational Navy voiced a recurring concern that manpower aboard ships was difficult to reduce because of damage control and maintenance requirements. After a review of these studies by the Assistant Secretary of the Navy (Research, Development, and Acquisition), it was concluded that a follow-up study was warranted to further explore these issues and opportunities.

SPECIFIC TASKING

- a) Review previous studies, current program, training procedures, and regulations regarding these issues.
- b) Review lessons learned from recent shipboard casualties to assess damage control processes, technology shortfalls, and manning requirements.
- c) Examine perceived constraints imposed on reduced shipboard manning by onboard maintenance and damage control requirements.
- d) Assess damage control policies and technologies being utilized by foreign navies.
- e) Recommend specific demonstration projects, other technology transfer mechanisms, and policy changes to facilitate early fleet adoption of the most promising concepts.