

# **Executive Summary**

## **Optimizing Surface Ship Manning**

### **Purpose of Study**

The panel was chartered to review and assess efforts to optimize manning on surface ships. This included the review of previous studies of the subject, current programs within the U.S. and foreign navies, and relevant technology efforts. The panel was also asked to identify technology opportunities and to recommend changes in procedures and policy that would hasten and improve efforts to optimize ship manning in the Navy.

### **Background**

The Navy's total budget has declined by 40% since 1985, but Operation and Support (O&S) costs have remained almost constant. Unless the O&S portion of the budget can be decreased, funding that is essential to recapitalize and modernize the Fleet will be insufficient. Because personnel costs comprise over 50% of O&S costs, it is imperative to reduce the number of people necessary to fight ships of the future as well as the legacy ships of today's Fleet. There is also a realization that the Navy operates in a new political/military/social environment, and modern Sailors are very different from those in the past. Career alternatives, quality of life issues, and family responsibilities make recruiting and retention more difficult for the Navy. These factors all point to the importance of focusing on optimizing manning in our Surface Navy.

### **Recommendations**

The panel reviewed several initiatives the Navy has undertaken to understand and manage ownership costs throughout the life cycle of systems to produce savings for recapitalization and modernization. New requirements to plan for Total Ownership Cost (TOC) in acquisition programs have caused a growing body of cost data to be developed. But continued efforts are required to expand this database, improve the cost methodology, and clearly identify the components of manpower costs.

Smart Ship has been a significant program to demonstrate how technology insertion and changes in procedure can reduce manning, maintain capability and improve shipboard quality of life. However, the Navy has encountered several obstacles in diffusing the lessons learned, adopting improvements in process, and extending technology innovations throughout the Surface Navy because it lacks top-down leadership and an articulated implementation strategy. This experience points to the enormity of the problem the Navy faces in adapting to the revolutionary changes anticipated in the Navy's Land Attack Destroyer DD 21 and other optimally manned ship development programs. In order to accomplish such revolutionary change the Navy must:

1. Provide top-down leadership in the form of a Chief of Naval Operations (CNO) appointed Flag Board that is responsible for implementing strategies to ensure

that required technological, procedural, and organizational changes are adopted throughout the Navy.

2. Modify the ship design process to include Human Engineering so that optimal human/system performance is achieved with as few Sailors as possible.
3. Align the execution of Research and Development (R&D) efforts so that ship components and subsystems for optimally manned ships incorporate the same kind of processes and specifications utilized for the platform.
4. Modify recruitment, training, compensation and career progression strategies to reflect the changes in organization structure, skill mix, and expanded decision making required on more automated, optimally manned ships.