

# JOINT MARITIME COMMAND AND CONTROL CAPABILITY (JCC(X)) SHIP



JCC(X) is the Navy's proposed replacement capability for the current four aging command ships. The new ships should provide Joint Force Commanders and embarked component commanders with enhanced mission capability for joint campaign battle management employing advanced command, control, communications, and computer integrated systems. The details of how the required capabilities will be provided are currently being defined, based on a recently completed Analysis of Alternatives (AOA). Candidate configurations include Joint Command and Control functions aboard dedicated built-for-the-purpose ships, converted ships, or distributed among a number of platforms. Both alternatives include a reach-back capability to ashore facilities that support the on-site force commander.

## **BACKGROUND INFORMATION**

The Navy currently operates four dedicated command ships, which have been in service for 27 to 36 years. The replacement ship class will operate in much different combat operational environments from those for which the existing ships were built. The information revolution is changing operational concepts for military and naval forces, and U.S. forces operations are now required to be jointly interoperable, as well as increasingly interactive with allied and coalition forces as well as non-defense agencies and organizations.

The JROC validated the Mission Need Statement for JCC(X) in September 1999 and the USD(AT&L) granted Milestone 0 approval in November 1999.

OSD guidance for the AOA called for a two-part assessment. Part 1 addressed whether an afloat command capability will be needed in the future. Part 1 findings are:

- An afloat JCC capability will be an essential element of robust operational-level command and control for joint operations in the future.
- The mix of dedicated and distributed JCC capabilities should be examined further in Part 2 of the AOA.

Part 2 of the AOA was completed in FY01. This study considered the required C4ISR operational functions and queried several of the current operational and joint command staffs in the process of

developing alternatives. Implications of alternatives in the following areas were presented for Navy decisions:

- Division of C4I functions between the command ship and reachback to staff elements in secure locations ashore. Those decisions interact with choices for the optimal number of staff personnel to be accommodated on-board ship.
- Anticipated future technologies and their effect on staff size and organization.
- Number of ships required to meet responsiveness criteria and hedges to reduce risks.
- Ship characteristics, particularly survivability features, maximum speed, and whether the ship should be crewed entirely by Navy personnel, or by a combination of Military Sealift Command and uniformed personnel.

The Program Initiation Decision Review (PIDR), in lieu of a Milestone 1 DAB, is expected in FY02. The ORD, required at the PIDR, has yet to receive Navy Requirements Oversight Council concurrence prior to JROC approval. The PIDR, the Evaluation Strategy, Acquisition Program Baseline, Command, Control, Communications, and Computer Integrated Support Plan (C4ISP) and a preliminary cost analysis are also required.

### **TEST & EVALUATION ACTIVITY**

DOT&E has participated in the Joint Oversight Group discussions of the AOA, but the immaturity of this program has not permitted specific test and evaluation activities during this year.

### **TEST & EVALUATION ASSESSMENT**

Since the joint command capability may be distributed between the ship and other facilities afloat and ashore, the JCC(X) ship capability itself could contribute only a partial-response to the overall C4ISR task requirements. Determining the effectiveness of the integrated command and control systems entity and the contribution of the JCC(X) within that structure will be a substantial challenge and it will require evaluation of the distributed elements of C4ISR as well as the JCC(X). Evaluating the suitability, effectiveness, and survivability of any facility and/or platform, which will house the JCC(X), will be a further challenge.

The operational assessment of the JCC(X)'s suitability, effectiveness, and survivability will focus on the JCC(X) capability, not just the ship platform and operations in its intended environment.