

NAVY PROGRAMS

T-AKE 1 Class Dry Cargo/Ammunition Ship

SUMMARY

- The lead ship is under construction. In addition to the lead ship, the Navy awarded contracts for five of ten planned follow-on ships.
- Navy operational testers completed an operational assessment (OT-IIA) of T-AKE 1 in December 2002.
- A second operational assessment (OT-IIB) started in June 2004 and will finish in March 2005. It will re-examine deficiencies from OT-IIA, as well as several new areas.



The T-AKE will primarily function as a shuttle ship, ferrying cargo and ammunition between port and a larger, consolidating replenishment ship.

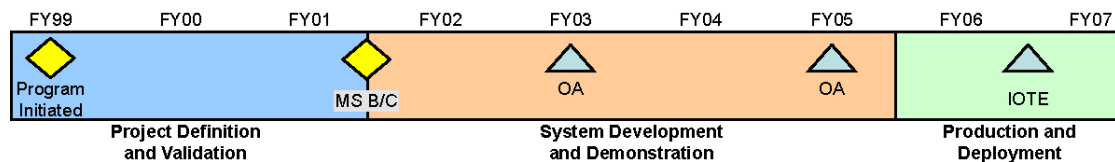
SYSTEM DESCRIPTION AND MISSION

The T-AKE Class Dry Cargo/Ammunition Ship will supply Navy combat forces at sea with ordnance and provisions. It will primarily function as a shuttle ship, ferrying cargo and ammunition between port and a larger, consolidating replenishment ship, known as a station ship, which stays with the strike group. As a secondary function, T-AKE will be capable of operating as a station ship when accompanied by an oiler.

T-AKE will re-supply customer ships by connected and vertical replenishment and will have a limited capacity to refuel ships. Civilian mariners of the Military Sealift Command or U.S. Merchant Marine will operate the ships. The Navy is constructing the ships to commercial standards with some additional survivability features and passive defense capabilities. They will have the Advanced Degaussing System to protect against mines and the AN/SLQ-25 (NIXIE) torpedo counter-measure system. T-AKE will require a combatant ship escort to protect it from threats when in a hostile environment.

In October 2001, the Navy awarded the contract for detailed design and construction of the lead ship. Ship construction is behind schedule, but still within the allotted timeframe. The Navy has contracted for six ships so far, and plans to buy 11 total. Construction of T-AKE 1 began in September 2003. Scheduled delivery is January 2006.

TEST AND EVALUATION ACTIVITY



The Navy's operational testers completed the first operational assessment (OT-IIA) of T-AKE in December 2002. This assessment examined the potential of ship design to achieve required performance levels.

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OT-IIB started in June 2004 and will continue through March 2005. It will re-examine deficiencies identified during OT-IIA and review all twenty-one critical operational issues. Subject matter experts will review documents, specifications, drawings, certifications, demonstrations, and modeling and simulation.

The Navy is studying the ability of a combatant escort to provide protection to large, unarmed ships like T-AKE. This report is due out in March 2005.

TEST AND EVALUATION ASSESSMENT

Based on the initial operational assessment, the T-AKE design is sound and we expect it to be able to perform its mission. However, we are concerned about the system being developed to track the onload, offload, and storage of ammunition and cargo. The Navy originally planned for the Shipboard Warehouse Management System to be an off-the-shelf hardware and software system, but it has required much more modification than expected. One of the significant challenges it faces is interfacing with both classified and unclassified data management systems. There is no land based test site or pilot installation planned, so the management system will not be available for Navy operational testers to evaluate prior to installation on the first ship.

Although cargo holds appear sufficiently designed to withstand a credible ballistic event, test results were unexpected and didn't match modeling and simulation predictions. Overall, the Navy's Detailed Design Vulnerability Assessment Report and surrogate testing are behind schedule.