

STRATEGIC SEALIFT PROGRAM (SSP)



Navy ACAT IC Program

Total Number of Systems:	19
Total Program Cost (TY\$):	\$5725M
Average Unit Cost (TY\$):	\$299M
Full-rate production:	2QFY94

Prime Contractor

Avondale Industries
National Steel and Shipbuilding Company
Newport News Shipbuilding

SYSTEM DESCRIPTION & CONTRIBUTION TO JOINT VISION 2010

The Strategic Sealift Program (SSP) is a *focused logistics* program that provides ships to transport or afloat pre-positioned logistic support for a projected military force. This mission is a vital part of *dominant maneuver* in the current power projection environment. The representative cargo per ship encompasses equipment for one-third of a heavy Army brigade task force and its supporting supplies. SSP projects and sustains the force by providing 'strategically mobile forces,' "ready on arrival."

The SSP ships are Large (950 feet long, 106 feet wide, and 55,000 long ton displacement), Medium Speed (24 knots), Roll-on/Roll-off (RO/RO) vessels referred to as LMSR. The sealift ships are expected to be capable of self-sustained RO/RO and Lift-on/Lift-off (LO/LO) operations at a pier and in an In-the-Stream scenario through stern and side port ramps to a RO/RO Discharge Facility (RRDF). In addition, the LMSR is required to be capable of self-sustained LO/LO cargo operations in an ILS scenario by interfacing with lighterage.

The LMSR ships are not armed and do not have a combat system. They do have a C³I suite sufficient to perform their intended mission in conjunction with other naval vessels.

BACKGROUND INFORMATION

The program currently plans for 19 ships, five of which are conversions of existing commercial container vessels, and 14 of which will be newly constructed ships. All 19 ships use common cargo handling systems procured by the Navy. Three contractors are building LMSRs. A performance type procurement description was used; therefore specific ship configurations differ as the respective builders interpret the mission requirements.

The current TEMP was approved in June 1996. In view of the single ship mission and similarities in the LMSR configurations, the test approach is for a single ship class, with four "flights." A mix of operational test events and operational assessments will address the minor hardware variance.

As non-developmental items, DT has been limited, focusing on production assurance testing in conjunction with the builders. Systems and integration testing is witnessed by Navy, U.S. Coast Guard, and American Bureau of Shipping representatives.

Operational Testing (OT-IIA) of the LMSR conversion ship was planned and administered in accordance with the DOT&E-approved TEMP and OT Plan. OT-IIA was conducted during September 1996, aboard United States Naval Ship (USNS) Shughart (T-AKR 295) at Savannah, GA and Norfolk, VA. The OT was conducted in conjunction with a planned Army sealift deployment exercise, which moved a representative load of Army equipment (over 1,000 pieces and included tanks, trucks and various helicopters) from the 3d Infantry Division in Savannah, GA to Ft. Story, VA. The USNS Shughart was assessed as operationally effective and potentially operationally suitable. No significant deficiencies were observed.

Due to cracking cloverleaf tie downs on the decks of the USNS BOB HOPE, the operational test (OT-IIB) scheduled for USNS BOB HOPE in July 1998, was rescheduled to 1QFY99. OT-IIB was subsequently rescheduled for 3QFY00 and the USNS FISHER was designated the OT-IIB test article.

TEST & EVALUATION ACTIVITY

An OA of the first NASCO new construction LMSR ship, USNS WATSON, was conducted in FY99. Assessment and reporting of the assessment by the Multi-service Test Team have not been completed and will be reported in the FY00 Annual Report. Initial observations of the USNS WATSON loadout are: (1) the NASCO new construction LMSR ships are easier to load compared to the two classes of renovation LMSR ships previously evaluated; (2) the NASCO new construction LMSR ship holds approximately one-third more cargo than two renovation classes of LMSR ships; (3) efficient stow planning was hindered by inaccurate ship data (repeat finding); and (4) the final stowage plan did not appear to take full advantage of all available space (either additional equipment could have been stowed or available space could have been used to facilitate the exercise and maintenance of pre-positioned equipment).

The multi-Service Test Team spent most of this year refining plans for the OT-IIB to be conducted 3QFY00. To potentially reduce the scope of required testing on OT-IIB, plans were developed to capture useful pier-side on-load/off-load data from the BRIGHT STAR exercise in

1QFY00. That effort was intended to satisfy data requirements to assess two of the 17 critical operational issues associated with the Strategic Sealift Program. Although extremely useful for providing insights to the Strategic Sealift System, the BRIGHT STAR pier-side data collected was not sufficient to completely satisfy the two critical operational issues being examined. The scope of OT IIB will not be adjusted based on this data. It appears that OT IIB will slip yet again from the 3QFY00 date due to competing requirements for critical units needed for the major portions of the test.

TEST & EVALUATION ASSESSMENT

Based on the results of OT-IIA, the strategic sealift ship (NASCO conversion) is assessed to be operationally effective and potentially operationally suitable. No significant deficiencies were observed however, limited strategic sealift “in-the-stream” data were collected during OT-IIA. Strategic sealift “in-the-stream” data need to be fully developed.

OT-IIB, scheduled to be conducted April-May 2000, is designed to examine the Avondale new construction ship as part of the strategic sealift system and focused on the surge sealift mission, as well as ship offload “in-the-stream.” A Strategic Sealift System shortfall currently being addressed, but not as part of the Strategic Sealift ship program, has to do with the supporting lighterage. Shortfalls in the lighterage system (capability, inventory, and doctrine) could adversely affect the U.S.’s ability to project power in a timely manner in situations where adequate port facilities are not available. This situation is significant in that we may be able to get the force to a crisis in a timely fashion but, in some situations, be challenged to get the force off the ship. The overall class assessment will be made upon completion of the OT-IIB event and will include an evaluation of the ship’s ability to unload “in-the-stream” using current doctrine and presently fielded RO/RO Discharge Facilities. The class assessment will address the ship configurations from all three prime contractors.

