

Department of Defense
U.S. Army

The Development of A Campaign Plan
For Force Projection:
The Shaping of Policy

Paper 2
The Theater Support Vessel for Submission to NDIA

Option

Prepared for:

COL Genaro J. Dellarocco
Project Manager,
Force Projection
U.S. Army

Monthly Status Report for June, 2003
Deliverable 2 of 12

Prepared Under Contract #DAAE07-02-P-T402

By:

Sheila R. Ronis, Ph.D.
President
The University Group, Inc.
Birmingham, MI 48009

30, June 2003

Army Transformation and The Theater Support Vessel (TSV)

By: Sheila R. Ronis, Ph.D., President
The University Group, Inc.
Birmingham, Michigan

“(We will)...continue to transform our military forces to ensure our ability to conduct rapid and precise operations to achieve decisive results.”

*The National Security Strategy of the United States
September, 2002*

The National Security Strategy of the United States, published in September, 2002, is the high level framework for securing the country.

To be relevant in the 21st Century, the U.S. Army will be expected to perform well along the entire war-peace spectrum of contingencies and operations other than war facing them. Strategic and flexible systems such as the Army’s Theater Support Vessel are a part of the solution to Army transformation.

The Army needs to function in its myriad missions from humanitarian assistance to helping to improve peace prospects, from deterring war around the world to being prepared to fight a war, if necessary. Title 10 USC: Provides statutory guidance on Service missions – Army to provide “land forces, aviation and watercraft support...” In fact the Army has more boats than the Navy...about 300. They provide different functions, however. The Army’s vessels provide strategic logistics and force projection, especially intratheater. The lighter systems include mechanized Landing Craft, Mechanized (LCM), Landing Craft, Utility (LCU), Logistics Support Vessels (LSV), LARC LX (Amphibian), Miscellaneous small harbor boats (J Boats), Lighter, and Amphibious Resupply Cargo Modular Causeway Systems.

Floating Utility Systems include Small Tugs (ST), Large Tugs (LT), Pusher Tugs (PT). Other vessels include Floating Machine Shop, Barges, Cargo Barges, Derrick (BD), and (Floating Cranes).

We know that many of today's and tomorrow's challenges and opportunities will be precisely because of the amount of continuous change and uncertainty in the world. We also know that there will be many different venues for conflict from littoral regions to urban areas, within the U.S. homeland as well as around the world. The information age will reduce the timelines to react or recover, with instant global communications, information access and advanced technologies.

What kinds of capabilities are required for the U.S. Army to remain strong, yet have the flexible capabilities it will need in the future to remain relevant to the task at hand?

Army Transformation and the Objective Force are required if the National Security Strategy is to be carried out effectively through the National Military Strategy. But a part of Transformation requires revolutionary thinking, a paradigm shift.

To ensure the Army is capable of moving rapidly and precisely, their new Theater Support Vessel (TSV) is being developed.

Col. Genaro Dellarocco, PM, Force Projection, Combat Service Support, has said, "The TSV provides great value-added to the warfight...whatever you want to say"

According to Dave Crum, Combined Arms Support Command, (CASCOM). DCD-Transportation, in a briefing for the TSV Industry day, "The TSV Mission is to rapidly self deploy to a Joint Operations Area (JOA) and provide operational and tactical level intra-theater sealift of forces (personnel and equipment) and delivery of sustainment to forces within the JOA."

Twelve TSVs in one theater will move an entire Stryker Brigade in one lift. With six TSVs in two geographically different theaters, two brigades can be moved in two lifts.

Part of the solution to Transformation is the development and utilization of the TSV. The TSV will contribute many capabilities that the Army needs for its Transformation, and the nation needs to support the National Security Strategy and the National Military Strategy that is being developed. U.S.

Defense Secretary Donald Rumsfeld, in his top ten transformation priorities has outlined four that are relevant to the need for the TSV. In a September 17, 2002 cover letter to most of the senior U.S. military officers and civilian defense officials, the Secretary said, he wanted to:

- “Transform the joint force into lighter, more agile, easily deployable military units
- Fashion a more relevant footprint
- Shorten all DoD processes by 50%
- Reduce time to respond”

The TSV responds to all four requests of Secretary Rumsfeld. The TSV enables the Objective Force to become reality. In essence, the TSV delivers complete packages of “ready-to-fight” combat units with their equipment while substantially decreasing the logistics’ footprint in an intra-theater environment. The TSV transports units in hours, not days. This capability to choose the time and place to quickly initiate action and deliver complete units will allow the combatant commander to gain and maintain operational momentum and positional advantage over an adversary.

The TSV increases ports accessible to the Joint Task Force Commander by a factor of 4...sustaining the Transforming Army. Utilizing the TSV is an “anti-access area denial risk mitigation” strategy since “port denial is one of the most likely early scenarios,” according to the Mobility Requirements Study.

The Objective Force must be responsive, deployable, agile, versatile, lethal, survivable, and sustainable. From a deployability perspective the Objective Force will need lift assets that can enable it to meet its deployability goals, provide for assured access, decrease predictability and dwell time, and quickly deliver troops and equipment together in sufficient size to generate immediate combat power.

The TSV, the Army’s future watercraft, is a critical element of required lift assets. It will provide commanders high-speed intra-theater sealift mobility with the agility to achieve positional advantage over operational distances. Not limited to major ports, the TSV will operate in austere and degraded environments without losing effectiveness because of its shallow draft capabilities. Moreover, it will allow the Objective Force commander to

deliver intact combat power at unpredictable points. The TSV has many characteristics that facilitate Army Transformation and Objective System Capabilities.

First of all, the TSV can provide intratheater movement of combat-ready units and follow-on sustainment to coastal areas with limited port infrastructure to access austere and degraded ports thus reducing the effectiveness of asymmetric threats. We know that our enemies will use anti-access strategies for their ports. The TSV mitigates these strategies. In fact, it can bypass theater choke points with multiple entry points.

The vessel can move more than 40 knots fully loaded (current logistics support vessel speed is 10 knots). Its capacity is 1250 ST (short tons) with a range of 4700 NM at 40 knots with a light load. Its sea state is 7+ survivable with a wave height up to 40 feet.

The vessel has the capacity for en route mission planning with on-board joint interoperable command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR).

The TSV can rapidly employ prepositioned assets. When forward deployed, ashore and afloat prepositioning provides increased options for the commander. The vessel permits soldiers and equipment to move together while reducing the Area of Operations for Combat Support/ Combat Service Support (AOCS/CSS) footprint.

Troops come off the ramp in a 'ready-to-fight' capability.

The TSV improves throughput and compliments intratheater air lift with the C-17 and C-130.

While aircraft may deploy some forces and their equipment to distant theaters, sealift will continue to be vital since 95% of dry cargo and 99% of liquid cargo will likely move by sea.

Some have observed that air movement times across the Pacific are measured in hours, but sailing times still reflect the "tyranny of distance." The revolution in military affairs has yet to conquer the tyranny of time and distance for U.S. ground forces that must deploy from (Continental United States) CONUS.

Transformation emphasizes an improved link between operations and logistics, resulting in precise time-definite delivery of assets to the war-fighter. The TSV is a fast, efficient, and agile distribution asset – able to move with precision in a quickly changing environment. The TSV is a key combat power and distribution enabler, by providing the means to move logistics requirements to the right place, in time, and in the right quantities.

Transformation alone will not bring about a strategically responsive force. Forward-deployed forces and prepositioning will remain essential elements of responsiveness. Coupled with forward-deployed TSVs, they offer Combatant Commanders an immediate engagement tool and inordinate agility. The TSV is a force projection capability – not just another platform.

There is another reason to consider the building and utilization of the TSV. *The U.S. shipbuilding industrial base is in trouble.* There are few, if any, intra-U.S. coastal freighters with capacities over 1,000 tons operating on the East and West coasts. Facts and figures about U.S. ship building industry that further show the need for the TSV include:

- More than 60 shipyards have gone out of business in the last 40 years, eliminating over 200,000 jobs.
- The number of U.S. flagged cargo ships has fallen from 3,644 in 1948 to 351.
- Only 128 of these are oceangoing and only three nations have fleets with an average age older than that of the U.S.
- The U.S. share of the world shipping market has plummeted, from 43% in 1950 to 4% today.
- Foreign companies carry 97% of all cargo between U.S. and foreign ports. The last U.S. flagged merchant ship was built in 1992.

The current TSV sourcing strategy will ultimately build 24 TSVs, and will involve two United States shipbuilders.

The TSV is a force projection capability, not just another platform. It is the only Army unique intratheater lift platform that meets Army Transformation vision goals.