Strategic Mobility

by Major Angela R. Phelps

The ability to project more forces in a shorter period of time creates a higher probability of a decisive win.

In my mind, as far as I see, the single most important enhancement the nation needs to meet our two-MRC [major regional conflict] contingency strategy is strategic lift.

—General John M. Shalikashvili
Chairman, Joint Chiefs of Staff

The ability to move forces and equipment to the right place at the right time has always been a crucial factor in the success of military operations. Strategic mobility is even more critical today as our forces and resources decrease in size and availability. Changes in national strategy place greater demands on logistics systems and processes and require innovative approaches to deploying the force. Our strategic mobility programs have developed rapidly over the last 5 years to meet these new demands. We continue to research new methods that will improve our abilities well into the future.

Evolution of Strategic Mobility

Current strategic mobility programs evolved from a significant change in the national military strategy (NMS). Before fiscal year (FY) 1990, the NMS emphasized a forward-based force, instantly ready to defend Central Europe. As a result of experiences in Operation Desert Storm, the NMS was changed to require a force capable of responding rapidly to threats against our vital interests worldwide. The Army's strategic vision changed in response to the requirements of the new NMS. Since FY 1990, the Army's strategic vision has been based on rapid force projection, primarily from units in the continental United States (CONUS). The Army's ability to project forces became the subject of the congressionally mandated Mobility Requirements Study (MRS). The study, completed in January 1992, recommended enhancement of the strategic mobility base to include sealift, airlift, and CONUS infrastructure improvements. These enhancements are the key to readiness and decisive victory.

'Firstest With the Mostest'

The ability to project more forces in a shorter period of time creates a higher probability of a decisive win. In 1990, General Carl Vuono, then Chief of Staff of the Army, defined the Army's strategic position as the ability to deploy a five-division corps, with associated support, in 75 days. In addition to General Vuono's position, the MRS concluded that the Army needed to establish a sustainment support package to fully support a heavy combat brigade. This equipment was to be pre-positioned afloat in a strategic location ready to respond to crises worldwide. The requirement for a port-opening package capability also was recognized as a critical element in rapid force deployment. The ability to fully deploy in 75 days depended on implementation of the recommendations in the MRS—faster sealift, greater airlift capability, and use of pre-positioned equipment.

Strategic Mobility Triad

Strategic mobility, as mandated by the MRS, is based on enhanced sealift, airlift, and use of pre-positioned equipment. Some of the mandated enhancements included acquisition of large, medium-speed roll-on-roll-off (LMSR) ships and expansion of the current Ready Reserve Force for sealift; acquisition of 120 C-17 aircraft for strategic airlift; and strategic pre-positioning of sets of equipment.

The Army developed its own strategy, known as

the Army strategic mobility program (ASMP), to fully implement and integrate the components of the strategic mobility triad with the requirements of the MRS. The triad and ASMP work together to meet requirements of the NMS in support of national defense. Each component of the strategic mobility triad has experienced significant growth since FY 1990 and continues to develop as new requirements emerge.

Strategic Sealift

Several categories of vessels comprise the strategic sealift program. Each category has a specific capability and falls into one of two strategic sealift fleets—pre-positioned or surge.

The pre-positioned fleet (also known as Army War Reserve-3, or AWR-3) contains equipment for a heavy combat brigade task force. It now consists of 14 ships: 3 lighter aboard ships are stocked with basic sustainment and munitions supplies; 1 heavy-lift pre-positioned ship carries port-opening equipment; 1 T-class auxiliary crane ship has the necessary self-sustaining capability to offload ships in open water; 7 roll-on-roll-off (RORO) ships contain equipment, supplies, and sustainment for the heavy brigade; and 2 container ships, recently added to the pre-positioned fleet, transport various sustainment supplies.

AWR-3 are both flexible and versatile. Strategic positioning of the AWR-3 ships provides the capability to rapidly deploy equipment and supplies to a theater while maintaining the flexibility to move to a second theater if necessary. The AWR-3 fleet is easy to tailor to various levels of activity. Four distinct modules can be formed to provide support for small humanitarian missions; peacekeeping and humanitarian support operations; limited combat and peace-enforcing operations; and full combat and support operations. The capabilities of AWR-3 will continue to increase until the fleet reaches its envisioned end-state goal of 16 ships in FY 2001.

The surge fleet transports sustainment supplies and equipment following initial deployment of forces. Currently, the surge fleet consists of 31 RORO ships and 8 fast sealift ships. By end state in 2001, surge capacity will expand to 55 ships. The Army fully supports procurement of ships to reach the end-state goal of 36 RORO ships in the surge fleet. Two RORO ships joined the fleet in FY 1995, and two more are expected to be procured with $70 million allocated for FY 1996. The Department of Defense continues to pursue funding of about $100 million for the remaining three RORO ships.

The most significant development in sealift, however, is the LMSR ship, which is designed to replace the RORO ships currently in the pre-positioned fleet and enhance the size of the surge fleet. The LMSR is a self-sustaining ship capable of simultaneous RORO and lift-on-lift-off operations for vehicles and containers. In addition, it can deliver cargo onto a pier or offload instream in sea state 3 (3 1/2- to 5-foot waves and a wind speed of 13.68 to 16.35 knots [Joint Publication 4-01.6, Joint Logistics Over the Shore]). Its ability to travel at 24 knots enables it to deploy forces within the MRS-recommended timelines.

The Navy plans to procure 19 LMSR's through FY 2001. Five of the 19 ships will be converted container ships. The remaining 14 ships will be new construction. Transition to use of the LMSR's will begin with delivery of the first ships this year. Delivery of remaining ships will complete the transition from the current pre-positioned fleet to end-state pre-positioned and surge fleets.

Strategic Airlift

The MRS defined specific requirements for enhanced airlift, namely by procuring 120 C-17 aircraft. These requirements developed as a direct result of the status of our current strategic aircraft fleet. The C-141 and C-5 have served the Army's requirements well during their lifetimes. However, both fleets, especially the C-141, are aging quickly and cannot be repaired economically. The Department of Defense and the Army have identified the C-17, currently produced by McDonnell Douglas, as the strategic airlifter of the future.

The C-17 has been developed specifically with military-unique requirements in mind. It can transport up to 102 paratroopers and 167,000 pounds of equipment and supplies, and can deliver equipment and supplies by five different methods. The outsized capability and shape of the C-17 allow more efficient loading than the C-5 or C-141.

The C-17 can carry twice the payload of a C-141; and its ability to land on shorter, less-developed airstrips, back up under its own power, and offload equipment directly onto the ground provides the direct-delivery capability needed during contingency operations.

ASMP as Integrator

The ASMP was developed to implement the findings of the MRS and enhance the strategic mobility triad. The Army has improved dramatically its fort-to-port movement capability by enablers such as infrastructure improvements, railcar and container procurement, watercraft development, and training programs.

Infrastructure improvements on installations and

depots have significantly increased movement capability. Planned funding for improvements for FY 1995 through FY 2001 totals approximately $719 million. Infrastructure improvements include rail, airfield, warehousing, and road upgrades. Specific projects designed to support efficient deployment are planned for the Charleston Naval Weapons Station in South Carolina and west coast containerized ammunition facilities. In many cases, the time required to deploy units has decreased by as much as 2 days as a direct result of infrastructure improvements on specific installations. Improvements at Fort Stewart, Georgia, include a container-handling facility, marshaling area, railroad pass track, and expansion of the ammunition supply point. Other projects, such as mobility warehouses, departure airfield control group facilities, deployment centers, and a rail loading facility, are under consideration for Fort Benning, Georgia; Fort Bragg, North Carolina; Fort Campbell, Kentucky; and Fort Lewis, Washington.

Procurement and stationing of railcars and containers on or near installations provide units early access to intermodal transportation. An additional 1,256 railcars are required to supplement existing pre-positioned railcars at installations, depots, and plants. A total of 374 railcars was purchased in FY 1993 and 1994. A total of 16,000 containers will be purchased from FY 1994 through 2001, at a cost of $84 million. These containers will provide storage for unit deployment equipment and supplies and for Force Provider support packages. This type of readily available transport has decreased the amount of time required for deploying units and increased unit readiness.

Continued development and procurement of Army watercraft contribute to the success of logistics-over-the-shore operations. The Army watercraft program has become more important as the number of contingency operations in underdeveloped countries has increased. Prototype upgrade work on the LARC-60, the only Army amphibious vessel, was completed in January 1995. Six logistics support vessels (LSV's), designed for intratheater transport, have been fielded; one is assigned as a training asset. The Army currently has 35 landing craft, utility (LCU 2000), vessels; they have greater cargo-carrying capacity than the 1600-class LCU's, which they are scheduled to replace. Construction of six powered causeway ferries, begun in FY 1995, will be completed during 1996; and the last of six 128-foot large tugboats was completed in 1994. Improved watercraft will enable forces to deploy heavy equipment into underdeveloped areas quickly without having to rely on costly specialized contracts and nonorganic equipment.

Training programs have increased unit and installation capabilities to deploy forces quickly. The sea emergency deployment readiness exercise (SEDRE), widely used and well received by units, provides critical training to units routinely deployed in contingency operations. The objective of a SEDRE is to train units in standard deployment procedures. The SEDRE concept includes an alert procedure, deployment of unit equipment and personnel, and upload and offload of a brigade-sized task force, using actual port facilities and ships, within the ASMP-specified standards. Sixteen successful SEDRE's were conducted in FY 1993 through 1995.

The enablers of the ASMP, combined with enhanced sealift and airlift, have contributed to an integrated and synchronized strategic mobility program. Continued success of each component is necessary to increase our Nation's capability to respond to crises with a credible force.

Future of Strategic Mobility

Strategic mobility doesn't stop with the end state envisioned in FY 2001. The Army is already researching methods and programs that will increase our ability to move from CONUS to another theater even faster than currently planned. Programs now under development in commercial industry eventually could provide the Army the capability to move personnel, equipment, and supplies over water in vessels traveling in speeds up to 100 knots. Such ultrafast sealift vessels could prove to be the ultimate flexible deterrent in modern military operations. Continued research in asset visibility and distribution will result in faster and more accurate delivery of supplies to units beyond the port. We have made great progress in only a few short years of strategic mobility enhancement. Our challenge in the future will be to keep our current programs on track in an era of diminishing resources and to continue to provide rapid force projection into the 21st century. **ALOG**

Major Angela R. Phelps is currently a student at the Army Command and General Staff College, Fort Leavenworth, Kansas. She was assigned previously as a staff officer in the Office of the Deputy Chief of Staff for Logistics, Department of the Army, and as an intern with the Joint Staff. Major Phelps has a bachelor's degree in theater arts from Gonzaga University, Spokane, Washington, and is a graduate of the Army Airborne School, the Basic and Advanced Transportation Officer Courses, and the Combined Arms and Services Staff School. Her next assignment will be as the division transportation officer for the 10th Mountain Division (Light Infantry), Fort Drum, New York.