

Mr. Michael J. Bayer  
Chair, Army Science Board  
2511 Jefferson Davis Highway  
Arlington, VA 22202

Dear Mr. Bayer:

I request that you conduct an Army Science Board (ASB) Summer Study on "Enabling Rapid and Decisive Strategic Maneuver for the Army After 2010." The study should address, as a minimum, the Terms of Reference (TOR) described below. The ASB members appointed should consider the TOR as guidelines and may include in their discussions related issues deemed important or suggested by the sponsors. Modifications to the TOR must be coordinated with the ASB office.

#### Background

a. Relevance of our Army will increasingly depend on how rapidly we can maneuver strategically. Strategic maneuver is the ability to rapidly project military power from all points of the globe to converge simultaneously with overwhelming land, air, space, and maritime forces which paralyze and dominate the enemy. The objective is to wrest the operational initiative, achieve dominance, prevent or terminate conflict by defeating the enemy or set the conditions for sustained decisive operations of follow-on campaign forces if they are necessary. The key enablers are deploying rapidly and seamlessly at the strategic, operational and tactical levels, sustaining smartly and commanding and controlling confidently.

b. The United States has one of the largest collections of advanced military equipment and the best-trained Soldiers in the world. When Department of Defense (DOD) cannot deploy decisive landpower quickly where needed, many effective uses of military power are unavailable to support the nation's full spectrum security requirements. Moving Soldiers and required cargo is the role of strategic mobility--the system of equipment, personnel, and logistic know-how that allows the DOD to deliver forces over intercontinental distances. Once in theater, operational (or intra-theater) and tactical mobility assets are critically important for delivering equipment over shorter distances.

c. The Army, along with the JCS and the other Services, has proposed substantial conceptual innovations for future forces. The Army After Next (AAN) initiative incorporates conceptual and technological advances to achieve Full Spectrum Dominance. The Army must be able to utilize Dominant Maneuver, Precision Engagement, and Information Dominance, while protecting the force from the spectrum

of threats and sustaining it with Focused Logistics. However, the efforts to develop such a force will mean nothing if it can't be deployed rapidly and sustained smartly anywhere in the world. There remain significant challenges to achieving such capabilities. In many respects the most complex of these challenges are in the areas of mobility, sustainment and command and control.

#### Terms of Reference

a. Predict and describe solutions to the challenges inherent to achieving rapid and decisive strategic maneuver by:

(1) Identifying mobility enablers for early and continuous entry of forces and supplies into and within the theater of operations.

(2) Identifying enablers to realize the full potential of the RML pertaining to providing the required sustainment to employ the early deploying force.

(3) Addressing the implications of an enemy "anti-access" capability.

(4) Assessing the current programmed assets to meet these challenges and identify shortfalls.

b. Review previous efforts and assessments undertaken in these areas. Examples are: the 1996-1998 studies done by the ASB and the Defense Science Board; the series of Mobility Requirements Studies (MRS) conducted by the Joint Staff and DOD, recent studies conducted by the U.S. Transportation Command (TRANSCOM), Army Materiel Command (AMC), Training and Doctrine Command (TRADOC), and Logistic Integration Agency (LIA).

c. With respect to procurement and acquisition: review and assess contemplated mobility related experiments, Advance Technology Demonstration (ATD) and Advance Concept Technology Demonstration (ACTD) and comment on their value in contributing to the capabilities sought for 2025 in rapidly deploying forces and sustaining forces to an overseas theater of operations. Propose, as necessary, alternative demonstrations and experiments. Review and comment upon ongoing and planned DOD mobility related acquisitions. (An example is the J-7 Mobility Study scheduled to start in October 1998). Similarly, investigate and comment upon the Joint Staff programs and the Air Force, Navy and Marine Corps approaches to Force Projection and Sustainment. Assess those air and sealift initiatives planned or contemplated by the private sector, which the military should leverage. Seek out and assess alternative commercial solutions, particularly advanced technology solutions

that would allow the Army to rapidly deploy forces and supplies. Identify opportunities for government Research Development Test and Evaluation (RDT&E) investments to increase military utility of commercial capabilities.

d. Examine and make recommendations on the process of reengineering or improvements by which deploying forces are moved from Fort to Port – Port to Port – Port to Fight. Provide insights applicable to transition from the near term to 2025, with emphasis on building the transition through Army XXI to 2025.

e. Assess the impact of the following:

(1) The development and potential uses of new strategic and intra-theater lift platforms and related technologies, both military and commercial.

(2) The incorporation of ultra-reliability and predictive diagnostics within systems.

(3) The shape, size and weight of future combat vehicles. Recommend steps that can be taken with respect to more efficiently transporting existing fleet vehicles to an overseas theater of operations.

(4) Incorporate all aspects of the Revolution in Military Logistics (RML) with particular emphasis on sustainment improvements. Look at the RML domains to include technology acquisition and sustainment actions required that substantially impact on getting the force to the fight most rapidly.

(5) Information systems and pipeline architecture to facilitate C4I for RML enablers, Velocity Management (VM), and Total Asset Visibility (TAV).

(6) Specifically address Reserve Component integration within the entire deployment and sustainment process.

f. Coordinate this study with the ongoing DCSOPS Strategic Lift Workshop in developing broad Army requirements for 2015 and 2025. Link with the concurrently conducted ASB summer study, “Full Spectrum Protection for 2025 Era – Ground Platforms” so that the mobility and sustainment findings and recommendations of both efforts are congruent.

g. Suggest significant additions, deletions and/or modifications to planned initiatives, including Joint and non-DOD, which would provide major capability improvements in the joint and combined environments. Utilize models and simulations

to evaluate outcomes. Model and simulate strategic-operational-tactical mobility and sustainment issues to determine comparative outcomes. Specifically request U.S. Transportation Command, Forces Command, STRICOM and Concepts Analysis Agency, Logistics Integration Agency, Deployment Modernization Office (DPMO) at Fort Eustis for modeling and simulation support. Request Logistics Management Institute for specific analysis. Use the February Power Projection Wargame at Fort Eustis as an additional method to evaluate and test tentative recommendations. Funding will be required for analysis and simulation support.

h. Provide actionable recommendations, which have suitable POM and JROC implementation.

Study Support. Sponsor of this study is GEN Dennis J. Reimer, Chief of Staff of the United States Army. Other sponsors are LTG Thomas N. Burnette, Deputy Chief of Staff for Operations and Plans; LTG John Coburn, Deputy Chief of Staff for Logistics; and LTG Randall L. Rigby, Deputy Commanding General, U.S. Chief Army Training and Doctrine Command. LTG Paul J. Kern is the ASA(RDA) cognizant deputy and BG Gilbert S. Harper, Commanding General, U.S. Army Transportation Center and Fort Eustis, is the TRADOC cognizant deputy. The staff assistants are MAJ Paul Daniels, ODCSOPS; Mr. Mike Hendricks, ODCSLOG; and Mr. Zbig Majchrzak, TRADOC.

Schedule. The study panel will initiate the study immediately and conclude its effort at the report writing session to be conducted July 12-22, 1999 at the Beckman Center on the campus of the University of California, Irvine. As a first step, the study co-chairs will submit a study plan to the sponsors and the Executive Secretary outlining the study approach and schedule. Conclusion of this study group will result in a final report to the sponsors in September 1999.

Sincerely,

Paul J. Hoeper  
Assistant Secretary of the Army  
(Research, Development and Acquisition)