Statement of
Brigadier General Michelle D. Johnson, USAF
Director of Strategy, Policy, Programs and Logistics
United States Transportation Command

Before the House Armed Services Committee
Subcommittee on Air and Land Forces
On The Mobility Capabilities and Requirements Study
April 28, 2010
Introduction

Chairman Smith, Ranking Member Bartlett, and members of the subcommittee, thank you for the invitation to testify today on global mobility issues. On behalf of General McNabb, I want to express United States Transportation Command’s (TRANSCOM) appreciation of this subcommittee’s support for our Command and for the military men and women and DOD civilians who strive every day to protect our Nation and its interests.

Mobility Capabilities and Requirements Study

It is my honor to speak to you today concerning TRANSCOM’s mobility requirements in the context of the recently completed Mobility Capabilities and Requirements Study (MCRS). This 18 month-long effort, accomplished by TRANSCOM and our components in direct partnership with the Office of the Secretary of Defense, Cost Assessment and Program Evaluation (OSD/CAPE), provides TRANSCOM with a look at requirements through 2016 in order to ensure our plans and investments provide us the mobility capability needed to support the future warfight.

Scope

MCRS assessed a broad spectrum of mobility systems including airlift, aerial refueling, sealift, surface transportation, ashore and afloat prepositioning, forward stationing and infrastructure. As in past mobility studies, we examined the mix of military and commercial lift assets, recognizing our commercial partners can and should be leveraged wherever possible. The analysis was based on illustrative conventional and irregular military operations over a notional seven year period and modeled after the National Defense Strategy, ranging from continuing current conflict levels to all out war with a major adversary. In each of the scenarios, the mobility assets required to get the warfighter to the fight, sustain them during the fight, and bring
them home safely was calculated in detail. It is these calculations that will be used to “right size” our mobility capabilities and force structure for the future.

**Methodology**

MCRS developed three cases to evaluate a broad spectrum of military operations in order to inform the QDR and support decisions regarding future mobility force structure. No single case defines a complete picture for the stresses our mobility forces may need to respond to in the future and the set of cases is intended to inform the spectrum of stress we anticipate for our mobility forces based on the National Defense Strategy. Mobility demand consists of several layers. Each case contains two surge events, defense support to civil authorities (DSCA) or otherwise often referred to as homeland defense (HLD), and a 2016 representation of steady state activity that must be supported and sustained around the globe for crisis response and to support overseas contingency operations. Surge events for the cases are outlined as follows:

- **Case 1:** Two nearly simultaneous large-scale land campaigns, plus three nearly simultaneous homeland defense (HLD) consequence management events. This case stresses our strategic and intra theater lift assets.

- **Case 2:** Consists of an air/naval campaign that stresses our Air Refueling fleet combined with a response to an asymmetric campaign. During the peak activity there is a significant HLD or consequence management event. This case includes scenarios and operations directly from the QDR scenario set and steady state security environment.

- **Case 3:** U.S. forces surge to conduct a large land campaign against the backdrop of an ongoing long-term irregular warfare campaign that has been ongoing for two years and is not unlike OEF/OIF over the last many years in terms or size and scope. This case also includes three nearly simultaneous HLD consequence management events. It includes a scenario that represents the Department’s first in-depth mobility look at supporting irregular warfare into an infrastructure constrained environment. It is also the first in-depth look the Department has conducted for mobility that informs both the stresses on the total force mix to sustain a long war and addresses from a mobility perspective the Nation’s ability to surge for a second warfight under these conditions.
Transportation requirements to support each case were calculated and programmed capabilities were applied to identify gaps in planned capabilities.

**Assumptions**

The MCRS used the 2009 President’s Budget (PB) as the program of record with appropriate PB10 adjustments. Other assumptions included the following: non-mobility forces will not exceed programmed levels; force development planning assumptions are in effect; and the Defense Planning Scenario (DPS) guidance is in effect. The DPS states that U.S. forces must be prepared to support two nearly-simultaneous conventional campaigns or one conventional campaign if involved in a long-duration irregular warfare campaign. In addition, forces must be prepared to support three nearly-simultaneous domestic events and ongoing steady state operations.

**Overall Assessment and Impact**

The MCRS results indicated that the Department’s planned mobility capabilities are sufficient to support the most demanding projected requirements, with a few exceptions. Inter- and intra-theater airlift capabilities, surge sealift, prepositioned and Continental U.S. (CONUS) transportation assets are sufficient. However, the most demanding scenario identified shortfalls in air refueling aircraft, Offshore Petroleum Discharge System (OPDS), and infrastructure at foreign destinations required to support major force deployments. In general, the fundamental constraint when attempting to reduce deployment timelines is destination infrastructure. Procurement of additional airlift, sealift and prepositioned assets by itself will not overcome this reality. The Department should continue to explore strategies to ensure we maintain global reach by reducing our reliance on destination infrastructure when possible.
The MCRS results differed from the previous mobility study due to changes in several planning factors. Since the Mobility Capabilities Study of 2005 (MCS), the definition of the Steady State Security Posture activities has been refined based on experiences in Operations IRAQI FREEDOM and ENDURING FREEDOM. Additionally, the program of record used for MCRS is updated from that used for MCS. For instance, MCS assumed that 112 C-5s would eventually be modernized whereas the program of record used in MCRS is 52 modernized C-5s. On balance with a reduction in overall C-5 fleet reliability was growth in the number of C-17 aircraft as the program of record of 180 used for MCS grew to 223 in MCRS.

Inter-theater airlift mission success requires a viable fleet of C-17s and C-5s, in addition to our Civil Reserve Air Fleet (CRAF). The MCRS determined that our CRAF is sufficient to support future requirements, as is the programmed strategic airlift fleet of 223 C-17s and 111 C-5s which provides a capacity of 35.9 million ton-miles per day (MTM/D). This more than covers the highest MCRS airlift demand of 32.7 MTM/D. MCRS reconfirms findings from previous mobility studies that C-17s and C-5s are largely interchangeable in the strategic airlift role. MCRS also reconfirms that MTM/D-equivalent fleet mixes provided very similar force closure profiles and that the MTM/D metric is valid for evaluating fleet mix options when supporting large-scale, high volume operations. Alternative fleet mix options with various levels of modernization ranging from 293 to 304 were reported as equivalent capability. The excess capacity will allow for retirement of the oldest, least reliable aircraft in the fleet and free up support facilities and personnel as well as aircrews for newer aircraft or other missions.

Intra-theater airlift capabilities are also sufficient to meet all of the MCRS scenarios. C-130s, C-17s and C-27s make up the preponderance of our intra-theater lift. The programmed aircraft fleet of 401 C-130s is sufficient to meet the peak C-130 demand of 335 aircraft which
occurred in Case 1. However, based on current total force planning objectives C-130 aircrews are unable to sustain steady state operations in combination with a long duration irregular warfight which occurred in Case 3. Neither the MCS nor the MCRS quantified the Army direct support mission. Although MCRS did not specifically model the C-27s, it did allocate appropriate ramp space and fuel to C-27s and other scenario specified aircraft.

With regard to the intra-theater airlift mission for supporting HLD, MCRS analysis determined that ground transportation provides the best rate of closure - more than 10 times the rate of airlift - when moving significant forces and large amounts of equipment from dispersed locations in response to major HLD events. In MCS, HLD missions were largely attributed to C-130s whereas in MCRS HLD missions are primarily accomplished with ground transport and a few DoD and short range CRAF assets.

PB11 accelerates the retirement of a number of legacy C-130Es. The impact of these retirements on our global mobility operations is expected to be minimal as the Air Force finalizes a plan which will ensure the C-130 training pipeline remains viable while the fleet continues to meet contingency requirements.

Aerial refueling requirements exceeded programmed capability. The current tanker inventory consists of 474 USAF aircraft - 415 KC-135s and 59 KC-10s in addition to the USMC's 79 KC-130 tankers. The MCRS demand ranged from a low of 383 KC-10/KC-135R equivalents and 66 KC-130s to a high of 567 KC-10/KC-135R equivalents and 79 KC-130s - a shortfall of 93 aircraft in the most demanding case. This shortfall would be mitigated by a modernized fleet including the KC-X, requiring fewer aircraft to meet the same demand with improved reliability, better utilization and fewer aircraft in depot maintenance.
Sealift is the primary means for delivering large ground forces and is essential to building up combat power required to seize the initiative in major ground operations. MCRS indicated that the available sealift fleet of organic, commercial, alliance, and effective U.S. controlled (EUSC) roll-on/roll-off (RORO) ships and containerships was sufficient to meet the military objectives of the most demanding MCRS case, although there was no appreciable RORO reserve in two of the three cases studied. Maintaining viable Department RORO capacity is critical given there are only 276 in the worldwide market appropriate for carrying military equipment of which 92 are US Flag or EUSC. The MCRS demand slightly exceeded the U.S. and allied capacity fuel tanker ships; however, the study noted that this could be mitigated by gaining access to the 1,980 useful tankers available globally.

MCRS reports that Joint Logistics Over-the-Shore (JLOTS) and Joint High Speed Vessels (JHSV) are critical enablers for deployment and sustainment and are sufficient to meet the most demanding case. Off-Shore Petroleum Discharge System (OPDS) is critical for carrying fuel over the shore where port infrastructure is lacking. MCRS found that one OPDS is insufficient to meet the demands of two overlapping land campaigns.

MCRS found that the fundamental constraint when attempting to reduce deployment timelines in support of U.S. objectives is generally the lack of foreign destination infrastructure required to support major force deployment timelines. MCRS reports that the Department should continue to explore strategies that seek mitigation and states there should be continued focus on flexible multi-modal nodes and capabilities that facilitate adaptable transportation networks to increase velocity and throughput.
Current Operational Impacts

Current operations in Afghanistan and recent requirements for transportation to assist in the Haiti earthquake response have highlighted the requirement to deliver support to areas without sufficient infrastructure. The Haiti earthquake provided an opportunity to operationally exercise two capabilities that TRANSCOM has developed to address areas with insufficient infrastructure. The Joint Task Force-Port Opening (JTF-PO) for airports and seaports and the JLOTS capabilities provide the means to transport supplies, personnel and equipment to areas with limited or nonexistent airport and/or seaport capabilities. JTF-PO units deploy rapidly to establish air and/or seaport operations in unimproved, austere locations. JLOTS provides the infrastructure required to deliver supplies and equipment from a ship to the shore in the absence of an established port. Together, these capabilities allow us to rapidly establish logistics operations in locations with little or no available port or airfield infrastructure.

In addition, we are undertaking a global access study to identify the most critical enroute locations with a nexus of air, sea and land capabilities. These multi-modal sites provide TRANSCOM with the maximum capability to rapidly mobilize forces and materiel anywhere in the world. Multi-modal locations like Rota, Spain, Diego Garcia and Souda Bay, Greece are vital to global force projection. The close proximity of seaports to airports and highway/railroad access provides TRANSCOM with options to support the needs of the Geographical Combatant Commanders. By allowing the volumes of equipment required for a contingency to travel partially by sea and onward by air or ground, we are able to increase supply chain velocity which results in decreased delivery times and reduced costs.
Looking Ahead

TRANSCOM's requirement to support irregular warfare against a global enemy in difficult operating environments will continue far into the future. Lack of transportation infrastructure and the unfriendly terrain experienced in Afghanistan continue to pose challenges to delivering required support to the warfighter in the field. To overcome these issues, TRANSCOM continues to leverage emerging technologies to develop new delivery methods. For example, in partnership with the U.S. Joint Forces Command and the Marine Corps, we are exploring the possibility of utilizing unmanned aircraft to deliver cargo in austere and urban environments. We are also exploring improving the speed and accuracy of delivery through the development of the next generation of guidance, navigation and control systems for the Joint Precision Airdrop System (JPADS) - a combat-proven tool which has produced excellent results in the high terrain of Afghanistan.

TRANSCOM also supports the Air Force’s planned acquisition of a Light Mobility Aircraft (LiMA). These aircraft will be used to train partner nations in mobility operations. While there are no current plans to use these aircraft in direct support of TRANSCOM, the partnership capacity that will result from such a program will pay great dividends in our global logistics mission.

Final Thoughts

TRANSCOM’s mission is to get the warfighter to the fight, sustain them during the fight, and get them back home when the mission is complete - all while being responsible stewards of the taxpayers' trust and dollars. We continually examine our processes to improve our effectiveness and our efficiency to provide the warfighter the support needed as quickly as possible, while also reducing costs. The men and women of TRANSCOM, our components and
strategic partners are proud to provide critical support to those who put themselves on the line every day. More than just a slogan, “a promise made is a promise kept,” is the driving force that provides hope to those in the fight and illustrates a sacred trust that we will deliver what the warfighter needs, where they need it, when they need it at the best cost.

Thank you again for the opportunity to share the results of the MCRS study with the committee.