

Prepared Statement
of
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Before the
Senate Armed Services Seapower Subcommittee
On Strategic Airlift

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Mr. Chairman, Senator Wicker, and distinguished members of the committee, thank you for the opportunity to appear before you to discuss the Department of Defense requirements for strategic airlift.

The Office of Cost Assessment and Program Evaluation has extensively studied strategic airlift requirements through a series of studies beginning in the early 1990s. Last year we completed the Mobility Capabilities Requirements Study (MCRS), which assessed peacetime and wartime demands on our airlift system. We conducted this study in conjunction with US Transportation Command. It serves as the analytic underpinning of the US Air Force's current fleet management plan and supports retirement of 32 C-5 aircraft. Here I will briefly summarize the results of that study.

The MCRS was an eighteen-month, department-level assessment of a broad spectrum of mobility capabilities, which included strategic airlift, intra-theater airlift, sealift, aerial refueling, ashore and afloat prepositioning, surface transportation, and infrastructure. As with past mobility studies, MCRS assessed the mix of military (organic) and commercial lift capabilities needed to support the National Defense Strategy. The analysis was based on illustrative conventional and irregular military operations conducted over a notional seven year timeframe.

It is important to keep in mind the distinction between the resources the department uses for planned wartime capability and those it uses in steady-state operations. When operating at full wartime capability (surge demand), the department mobilizes Guard and Reserve forces and employs them along with active forces at wartime utilization rates. Additionally, the President has the authority to activate the Civil Reserve Air Fleet (CRAF) which can contribute as many as 900 aircraft. When not operating at full wartime capability (i.e., steady-state sustainment), Guard and Reserve forces are not mobilized, and CRAF is not activated. This is why the department sometimes relies on commercial/ foreign source airlift like the Russian built IL-76 and AN-124 to support current operations. Accommodating a short-term surge with use of commercial assets is more cost-effective than maintaining additional force structure that is not required full time.

MCRS assessed steady-state requirements by evaluating historical support to global logistics and by modeling the deployment, employment, redeployment, and sustainment of forces supporting globally dispersed operations. Steady-state analysis is important for two primary reasons. First, it quantifies the level of effort needed from the mobility system to support daily operations without mobilization. Second, it sets the initial conditions for the location of forces that need to be relocated by the mobility system to support the commencement of surge events.

USTRANSCOM analysts examined seven years of mission data from the Global Decision Support System database to identify historical support requirements for global logistics. Global logistic missions include routine channel missions, exercise missions, and Special Assignment Airlift Missions (SAAMs) that fly daily support for Combatant Commands (COCOMs). Channel missions consist of cargo and passenger missions—organic and commercial—flown in support of COCOMs. The study assumed that exercises other than Joint Chiefs of Staff/ COCOM exercises would be canceled or curtailed when U.S. forces were engaged in one war fight and that all exercises would be cancelled when engaged in two overlapping warfights. SAAMs include movement of nuclear weapons and nuclear weapons related material, presidential logistics support, special operations support, and other time-sensitive, high priority airlift requirements. The study assumed some SAAM requirements would continue even during overlapping campaigns.

As part of the steady-state assessment, the study analyzed two different Department-approved strategic environments consisting of representative vignettes arranged over a seven year timeline. The “Global Insurgency” strategic environment included 64 distinct operations and reflected an increased level of effort for irregular warfare representing an expansion and intensification of global operations. The strategic environment developed during the most recent Quadrennial Defense Review included 69 vignettes which had a similar irregular warfare emphasis.

For our analysis of surge requirements, we developed three different cases to evaluate peak airlift demands. Each case included homeland defense and major campaigns. The cases involved demanding operational assumptions. The model used in the analysis accounts for the fact that many aircraft are not loaded to their maximum weight capacity due to load size, scheduling constraints, and route structure. The MCRS cases were defined as follows:

Case 1 evaluated two overlapping large-scale land campaigns occurring in different theaters of operation, concurrent with three nearly-simultaneous homeland defense consequence management events, plus support to ongoing steady-state operations, to include Operation Enduring Freedom (OEF). This case required a military strategic airlift fleet with a capacity of 32.7 million-ton-miles per day (MTM/D), which can be met with a fleet of 300 aircraft (222 C-17s, 52 C-5Ms, and 26 C-5As).

Case 2 evaluated a large scale air/naval campaign immediately followed by a major campaign in a different theater of operation, plus one large-scale homeland defense consequence management event, plus support to ongoing steady-state operations, to include OEF. This case required a military strategic airlift fleet with a capacity of 30.7 MTM/D, which can be met with a fleet of 277 aircraft (222 C-17s, 52 C-5Ms, and 3 C-5As).

Case 3 evaluated U.S. forces surging to conduct a large-scale land campaign against the backdrop of an ongoing long-term irregular warfare campaign of a size and scale similar to the 2007 OIF surge force. Case 3 also included three near-simultaneous homeland defense consequence management events, plus support to ongoing steady-state operations, to include OEF. This case required a military strategic airlift fleet with a capacity of 29.1 MTM/D, which can be met with a fleet of 264 aircraft (222 C-17s, 42 C-5Ms, 0 C-5As).

The results of our study showed that it is the surge events that drive the size of the strategic airlift fleet. These events are periods of finite, but extremely high levels of demand for strategic airlift. In comparison, steady-state demands represent prolonged requirements, but with significantly lower peaks. While these requirements contribute to the surge demand, they do not drive the size of the organic airlift fleet. Based on the MCRS findings, the department needs a military fleet capacity between 29.1 and 32.7 million ton-miles per day which can be met with 264 to 300 aircraft.

These results support the Air Force desire to retire 32 C-5A aircraft. It is our assessment that the retirement of these aircraft will not increase operational risk. Without this change, the department would be required to maintain a strategic airlift fleet in excess of what is required, costing the department billions of dollars over the life of the aircraft.

Thank you again for the opportunity to appear before you, and I look forward to your questions.