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BY THE COMMITTEE ON ARMED SERVICES  
SUBCOMMITTEE ON AIR AND LAND FORCES  
UNITED STATES HOUSE OF REPRESENTATIVES**

**DEPARTMENT OF THE AIR FORCE  
PRESENTATION TO THE HOUSE ARMED SERVICES COMMITTEE  
SUBCOMMITTEE ON AIR AND LAND FORCES  
UNITED STATES HOUSE OF REPRESENTATIVES**

**SUBJECT: UNITED STATES TRANSPORTATION COMMAND POSTURE AND AIR  
FORCE MOBILITY AIRCRAFT PROGRAMS**

**STATEMENT OF: GENERAL ARTHUR J. LICHTER  
COMMANDER, AIR MOBILITY COMMAND**

**APRIL 1, 2008**

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## **INTRODUCTION**

Mr. Chairman and distinguished committee members, thank you for the invitation to testify today in support of the “United States Transportation Command Posture and Air Force Mobility Aircraft Programs” hearing. It is my honor to represent the 133,000 Active Duty, Air National Guard and Air Reserve mobility Airmen who make up Air Mobility Command (AMC). Appearing before you today with the commander of United States Transportation Command (USTRANSCOM), General Norton Schwartz, and the Assistant Secretary of the Air Force for Acquisition, Ms. Sue Payton, presents an incredible opportunity to discuss a myriad of important issues critical to our national security. My testimony will focus on topics critical to AMC. Primarily, I will discuss the Air Force’s versatile new air refueling tanker, the KC-45A. Secondly, I will explain how our intertheater and intratheater airlift fleets are impacted by ever-changing requirements. Finally, I will outline several other issues on the forefront of this subcommittee’s legislative agenda.

## **THE KC-45A**

I look forward to receiving KC-45As as soon as possible. The KC-45A is needed now to offset the aging KC-135 fleet and to maintain support to the warfighter. I firmly believe potential failure of our tanker fleet represents a significant risk to our national security; we simply must bring a new tanker online. Without a reliable tanker capability, our nation’s ability to project power and reach is severely limited. The concept of operations (CONOPS) being developed for the KC-45A will take full advantage of its ability to support the mobility mission as a tanker with multi-role capabilities.

In its primary role, the KC-45A will provide in-flight air refueling to allow receivers to complete specific mission objectives. All KC-45As will be capable of refueling receptacle- and probe-equipped receivers on every mission; a capability that is inherent in only 14-percent of our current fleet, excluding KC-135E models. Additionally, all KC-45As will be capable of carrying multi-point refueling pods and will be capable of receiver air refueling to extend their range and persistence in all mission areas. Again, excluding KC-135E models, these capabilities are only available on 7-percent and 12-percent (respectively) of our current refueling fleet.

The KC-45A will be able to augment its primary air refueling mission with a variety of secondary missions, either stand-alone, or in conjunction with air refueling (dual role). These missions include: airlift of passengers and/or cargo, Combat Search and Rescue (CSAR) support, and the off-loading of fuel on the ground at Forward Area Refueling Point (FARP) locations. In addition, every KC-45A will have an integral Aeromedical Evacuation (AE) capability not available on the current tanker fleet. The integral AE capability inherent to the KC-45A can be further augmented with the ability to “roll on” additional AE support equipment.

Other KC-45A enhancements which will supplement its mission set are its secure voice and data communication links and global connectivity capabilities. These important features will help improve overall situational awareness (SA) and battle space clarity. With on-board defensive systems, the KC-45A will be capable of operating in previously-denied airspace, increasing employment options as compared to current air refueling platforms. All KC-45As will have the capability to takeoff, land, and refuel in a night vision environment, further enhancing the warfighter’s effectiveness.

AMC looks forward to the KC-45A entering the fleet and addressing the warfighters' gaps and shortfalls. This truly remarkable platform represents a great step forward for the AMC, Air Force, and Joint warfighter.

### **EVOLVING REQUIREMENTS & EFFECTS ON THE AIRLIFT FLEET**

Without question, future force structure requirements are evolving. This evolution is driven by many changes, including the growth of our ground forces by 92,000 troops, the growth in the size and weight of ground force equipment (the Future Combat System (FCS)), and the redeployment of overseas forces to CONUS. Additionally, we have seen an increased size and use of Special Operations Forces (SOF), additional use of our intertheater airlift assets in an intratheater role, and the stand up of a new combatant command – AFRICOM. All of these changes, coupled with the ongoing Global War on Terror (GWOT) contribute to changing requirements. The Mobility Capability and Requirements Study (MCRS), due to complete in May 2009, will make informed recommendations with respect to our airlift force structure.

### **C-5 Reliability and Re-engining Program / C-17 Procurement**

The C-5 Reliability Enhancement and Re-engining Program (RERP) will improve the reliability and reduce the operating costs of the 52 C-5s that are modified. During the Nunn-McCurdy certification process, the Joint Requirements Oversight Council (JROC) certified “The required organic strategic airlift capacity of 33.95 MTM/D (million ton miles per day) derived from the fleet mix specified in the latest Mobility Capabilities Study is essential to national security and must be safeguarded.” The current program for 190 C-17s, 52 RERP modified C-5s, and 59 legacy C-5As will not quite provide the organic strategic airlift capacity of 33.95 MTM/D specified by the JROC. Therefore, we remain concerned and vigilant that given the dynamic nature of our world and the increasing imperative for rapid warfighter response,

coupled with the fact that our current strategic airlift baseline is based upon a three-year old MCS-05, that we have the correct balance with acceptable risk. The C-5 provides a combination of outsize capability, high capacity, and long-range airlift that is unequalled in any other airlift platform. However, the C-5 aircraft is also a complex legacy platform that requires modernization to abate rising operational and sustainment costs while achieving acceptable reliability. Therefore, the 52 C-5s that are currently programmed for the RERP modification will provide reliable airlift at reduced operating costs. We are very confident that the modernized C-5, the C-5M, will achieve our operational and sustainment goals and well serve the warfighter throughout the coming decades. That said, there remains a significant segment of the C-5 fleet that is not currently programmed nor scheduled for the current C-5 Re-engining and Reliability Program (RERP), and we know those 59 aircraft will present a significant sustainment challenge for us in the future. Thus, we are faced with choosing, in an exceptionally austere fiscal climate, the path for modernization or the path for new acquisition – or a combination of both. While we examine our options we know that any decisions must be well grounded and validated – the impending Mobility Capability Requirement Study (MCRS), which we hope will be complete within a year, will be one of the tools that will better inform us as to the correct path. Management of any critical mission area is always a complex challenge and history tells us usually includes a combination of acquisition, modernization, sustainment, and retirement variables. We appreciate Congress' support over the years in allowing AMC to design and execute the correct roadmap for the future.

As we contemplate the future of the C-5 fleet, the discussion naturally turns to C-17 procurement. The C-17 continues to be the backbone of the nation's strategic air mobility fleet and it is "soldiering" along every day, under an incredibly difficult operational tempo. It is truly

an airplane for the times – designed and built for both expeditionary and major contingency operations providing great depth and breadth to the mobility “playbook.” Like Secretary Wynne and General Moseley, I support the President’s Budget for 190 C-17s. This figure includes 10 aircraft provided in the FY07 GWOT Supplemental. Clearly, with Congress’ help, we are working hard to be good stewards of the taxpayer’s dollar while achieving the strategic airlift fleet mix the warfighter requires; therefore, I believe it is important to retain all options for our nation’s airlift fleet as future requirements are determined.

### **Intratheater Airlift**

On 31 December 2007, RAND’s Project AIR FORCE completed the USAF Intratheater Airlift Fleet Mix Analysis (UIAFMA) for Air Mobility Command. The analysis evaluates alternatives to fill the capability gaps caused by C-130E grounding or retirement. Alternatives include a Service Life Extension Program (SLEP) for older C-130s or the acquisition of additional mobility assets such as C-130J-30s, C-17s or C-27Js. The study found that C-130E SLEP was not a cost-effective alternative and that the C-130J-30 is the most cost-effective alternative for meeting the Mobility Capability Study (MCS) shortfall caused by the retirement of the C-130Es. Concerning the C-27J, the study found that additional USAF C-27Js beyond the 24 acquired for the U.S. Army Time-Sensitive Mission-Critical requirement are not as cost-effective as the C-130J-30 for the MCS missions examined. The current total acquisition plan for C-27Js is 78 aircraft, with the Air Force acquiring 24 and the Army acquiring 54.

The UIAFMA found that the C-27J is 60%-70% less cost-effective than the C-130J-30 in performing MCS missions. RAND did identify some missions outside of the Mobility Capabilities Study where the C-27J is more cost-effective than the C-130J-30. The C-27J was 5%-15% more cost-effective than the C-130J-30 on Operation ENDURING FREEDOM

(OEF) and Operation IRAQI FREEDOM (OIF) Scheduled Theater Airlift Routes (STAR) and OEF Point-to-Point missions. In addition to missions analyzed by the RAND USAF Intratheater Fleet Mix Analysis, the Air Force is interested in follow-on analysis of alternative missions exploiting the potential cost-effectiveness of the C-27. Among those potential mission areas are recapitalization of Operational Support Aircraft (OSA) inventories, precision airdrop of Container Delivery System bundles and Joint Precision Airdrop System (JPADS) operations, delivery of Special Operations Forces teams and other small unit maneuvers, Air National Guard support of Federal Emergency Management Agency (FEMA) regions, more efficient movement of small payloads throughout theater, taking more “convoys off the road,” and building international partnerships around a common airframe.

The Air Force’s intratheater airlift force structure requirements, to meet requirements resulting from personnel end strength growth of the Army and Marine Corps, will be examined as a part of the ongoing Mobility Capabilities Requirements Study (MCRS) to be completed by May 2009. The intratheater lift needed to meet the Army’s concept of operations, as it relates to the Future Combat System (FCS) and the recently announced non-transportability of the FCS on a C-130 aircraft, is a subject of discussions in MCRS. Army concepts of operations such as mounted vertical maneuver have not been developed in sufficient detail to permit an assessment of the types or numbers of platforms that will be required to support them.

#### **Update on Ongoing Studies**

Congress tasked the DoD to contract a Federally Funded Research and Development Center (FFRDC) to complete an airlift fleet mix study by 10 January 2009. OSD identified the Institute for Defense Analyses (IDA) as the FFRDC to conduct this study. AMC is working with USTRANSCOM to sponsor this study.

Additionally, DoD is conducting a Mobility Capabilities and Requirements Study (MCRS). This study is tasked by the Secretary of Defense Guidance for the Development of the Force (GDF) and requires an internal in-progress review by February 2009 and a final report by May 2009. The MCRS will examine changes in mobility demand that have occurred since the MCS was published in 2005, such as 92,000 ground force increase, the reposition of U.S. overseas forces as a result of the Integrated Global Presence and Basing Strategy (IGPBS), Future Combat System transportability and employment concepts, and the Global War on Terror. This study is being co-led by the Office of the Secretary of Defense and United States Transportation Command, with AMC participation.

## **MISCELLANEOUS ISSUES**

### **KC-10 AMP**

The KC-10 is the younger of the current legacy aircraft in our tanker fleet. It is critical to continue with the sustainment and modernization of this unique asset. The Aircraft Modernization Program (AMP) Capabilities Development Document was Joint Requirements Oversight Council approved in June 06 and addressed numerous issues to support our warfighters: Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM), network centric operations, survivability, force protection, reliability, maintenance, and several obsolescence issues. Affordability (\$2.2B cost estimate) led to AMP cancellation. AMC is now developing a de-scoped effort, limited to absolutely essential obsolescence (Boom Control Unit (BCU) and Inertial Navigation System (INS)/Flight Management System (FMS)) and mission sustainment issues (CNS/ATM requirement for airspace access).

The BCU is the KC-10's number-one obsolescence issue; the seven computers that are the heart of the BCU and are required to conduct aerial operations are no longer in production.



Once available spares are depleted, this system will be unsupported. This could occur as early as 2010, according to the latest engineering analysis. The BCU is being approached as a stand alone program (estimated at ~\$20M), and because of its urgency Air Mobility Command and Air Force Materiel Command (AFMC) are working to place the BCU on contract as soon as possible.

The number-two obsolescence issue is focused on the KC-10's Inertial Navigation System/Flight Management System (INS/FMS). Current INSs are no longer in production and limited spares reduce its long-term supportability. In addition, the current FMS is at its limit for throughput capacity/memory capability. Therefore, any change to the INS will require the FMS to be upgraded. A fix to these two items with current technology also allows AMC to address the KC-10 mission sustainment issue to comply with known CNS/ATM mandates and allow for continued mission effectiveness (airspace access) through 2015. AFMC estimates the cost at \$300M - \$400M, and AMC is currently working through the acquisition process to refine estimates, develop, fund, and complete the program prior to 2015.

### **KC-135E Retirements**

I want to thank you for the relief from some of the retirement restrictions provided in the FY08 NDAA language; it has provided some relief. The FY08 NDAA language limited the retirement of the 85 remaining KC-135Es to no more than 48 aircraft. Also in the FY08 NDAA language, Congress made retirement of the 37 remaining aircraft contingent on the Air Force award of the KC-X contract, any bid protest arising from the contract award being adjudicated by the Government Accountability Office (GAO), and the Air Force having responded to GAO determinations arising from any such bid protest.

As of 21 March of this year, the USAF has 67 KC-135Es remaining. Of those, only 15 are currently flying. The remaining 52 are classified as “excess to need” aircraft that are in “XJ status.” Aircraft units must continue to store and maintain them even though they are not flying. Of the 52 XJ status aircraft, 27 are grounded due to engine strut restrictions and/or overdue Programmed Depot Maintenance inspections. While in XJ Status, KC-135E aircraft awaiting retirement generate Operations & Sustainment costs estimated at \$121.4K per aircraft per year. KC-135E retirement restrictions (specifically the requirement to maintain these aircraft in Type 1000 storage) are costly and offer no return on investment. Once retired, Type 1000 Storage generates an additional \$40K per aircraft in induction costs, plus \$33K per aircraft every four years thereafter, while also eliminating a source of spare parts for flying KC-135R-model aircraft.

Even if the decision was made to regenerate the E-models out of storage, AMC would be challenged to source crews and maintenance personnel qualified to fly and fix them. For these reasons I strongly urge the COMPLETE lifting of KC-135E retirement limits and Type 1000 storage restrictions.

### **The C-130 Fleet**

Air Mobility Command requires a total of 127 combat delivery C-130Js to replace retiring C-130Es. The 15 C-130Js requested in the FY08 supplemental, coupled with 32 C-130Js funded in the FYDP, will provide the command with the 127 aircraft required to replace the Es and meet the Mobility Capability Study minimum requirement of 395 combat delivery C-130s.

With respect to the center wingbox replacement program, we need the \$59M requested in the FY08 supplemental to turn the corner and get ahead of the curve so that we are replacing wingboxes just before there is a negative operational impact. As of 20 March 2008 we have

retired 101 aircraft, 2 aircraft are currently grounded, and 26 additional aircraft are restricted due to problems with the center wingbox.

We have verified with the program office and the contractor that there will be sufficient production capacity to meet production demands of new C-130J aircraft and our center wingbox replacement requirements.

**Air Refueling Fee for Service:**

Air refueling fee-for-service involves the use of commercial contractors to provide boom air refueling in lieu of Air Force Active Duty/Reserve Component units accomplishing this mission. The FY08 National Defense Authorization Act provided direction to run a five-year pilot program, and AMC is working closely with SAF/AQ, the Air Staff, and Air Force Materiel Command to develop and execute this capability. Air refueling mission areas under consideration include: air refueling support to flight test operations, training support, support to homeland defense operations, deployment support, air bridge support, aeromedical evacuation, and emergency air refueling. Currently, we are working in partnership with the Air Force Aeronautical Systems Center (ASC) to assess industry inputs submitted in response to a 26 February 2008 Request For Information (RFI). An Industry Day is planned for the week of 14 April and a formal Request For Proposals (RFP) is planned for later in FY08.

The second phase will consist of source selection and certification of participating aircraft and crews in the commercial air refueling venture. Certification will require operators to gain a major supplemental type certification (STC) modification certificate from the Federal Aviation Administration (FAA), due to structural changes required on participating aircraft. Crews will need FAA check rides and company certification in the air refueling components of flight operations, and contractor aircraft will have to qualify with Air Force receivers. Upon attaining

proper certification, commercial contractors will perform air refueling missions at AMC's direction in accordance with contracted program guidelines. The final phase of the program will be a five-year test run of the capability, after which time a new business case analysis will be performed to determine whether the program should be continued.

### **Civil Reserve Airlift Fleet**

The FY08 National Defense Authorization Act directs an independent assessment of the Civil Reserve Air Fleet (CRAF) – USTRANSCOM has the lead in supporting this study which is being accomplished by the Institute for Defense Analysis. However, simultaneously, there is a Secretary of the Air Force-directed CRAF study ongoing, being performed by the Council for Logistics Research (CLR). The initial focus of this study was to review how the DoD moves cargo via commercial air, and determine if it is possible to move toward the method the U.S. Post Office has adopted by negotiating rates with the commercial industry to save taxpayers money.

This CLR-led study has expanded beyond the initial guidance and is now looking at ways to ensure the CRAF remains a viable program for national security for years to come, post Operation ENDURING FREEDOM/Operation IRAQI FREEDOM. CLR provided a progress update to AMC and USTRANSCOM leadership in February 2008. The study has included interviews with government representatives as well as industry experts, and gathering of historical data from the two previous CRAF activations to support Operations DESERT SHIELD/DESERT STORM and OIF. The final report is due to the Secretary of the Air Force in July 2008.

### **CONCLUSION**

The air mobility fleet continues to face many challenges, while remaining one of the Department of Defense's crown jewels. Critically, the air mobility capability of the nation must

remain vibrant, flexible, and responsive to meet the imperatives of the warfighter and allow the nation to project our national interests. We appreciate Congress' support to help us recapitalize and modernize America's mobility fleet and make our plans a reality.