

UNCLASSIFIED

House Armed Services Committee – Air and Land Forces Subcommittee

March 7, 2007

Subject: Air Force Airlift and Tanker Programs

**Combined Statement of
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I. Introduction

Mr. Chairman and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to discuss Air Force Airlift and Tanker Programs.

Your Air Force is fully engaged around the world, fighting terrorism and insurgents in the Global War on Terror (GWOT) while fulfilling our roles as Airmen for the joint team. Simultaneously, we stand prepared for rapid response to conflict around the globe as our Nation's strategic reserve. Air forces succeed when they anticipate and are allowed to shape the future strategic environment and develop the capabilities for the next fight. Air forces succeed when they remain focused on their primary mission as an independent force that is part of an interdependent joint team. We fly, fight and dominate in three war fighting domains – air, space and cyberspace – giving our Nation sovereign options to employ military force like no other nation.

II. We Are At War

The missions your Air Force is flying today are the latest in a string of 16 continuous years of Air Force combat in the Central Command (CENTCOM) Area of Responsibility (AOR), beginning with our initial deployments to Operation DESERT SHIELD in August 1990 through ongoing operations in Iraq and Afghanistan.

Through 20 February 2007 your Air Force has flown over 82% of the coalition's 280,025 sorties in Operation IRAQI FREEDOM and 78% of the coalition's 159,735 sorties in Operation ENDURING FREEDOM. In addition to our daily operations, the Air Force has also seen several surge periods over the past 16 years, resulting in unexpected wear and tear on our people and platforms. And, like each of the other Services, we've suffered combat losses.

On an average day, the Air Force flies approximately 430 sorties in support of Operations IRAQI FREEDOM and ENDURING FREEDOM. Of this number, approximately 275 are airlift sorties (both inter- and intra-theater) and 35 are air refueling sorties whose average daily offload is 2.1 million pounds of fuel to 175 receiver aircraft. The rest of the sorties are intelligence, surveillance, and reconnaissance (ISR), and strike.

Supporting CENTCOM is just a small part of what we do for our Nation's defense. The Air Force has responded to or has been prepared to respond across the entire spectrum of conflict – from rapid humanitarian aid to major combat operations. We have flown over 46,794 sorties in support of Operation NOBLE EAGLE and over 3,280 counter drug sorties, while also supporting operations in the Horn of Africa (HOA) and the Philippine Islands.

Air Force airlift aircraft have relatively low density compared to the incredible demand for them. Since 11 September 2001, these aircraft have flown 303,429 mobility sorties, moved 4,904,371 passengers and transported 2,164,548.4 tons of cargo in support of GWOT. Our C-130 aircraft are used extensively in support of the GWOT and from FY02 to FY05 the Air Force C-130 fleet flew 196,000 more hours than originally programmed. Their role in intra-theater airlift keeps convoys off the roads and away from IEDs. On average, our monthly airlift missions replace approximately 3,500 trucks, providing our ground forces the flexibility to reassign those vehicles and associated support troops to other missions.

III. Warfighter Tanker and Airlift Capability Needs

America's Global Reach relies on Air Force tankers, airlift, and spacelift.¹ Like our space and cyber forces, tankers and lift are single points of failure. Without them we will not be able to deliver on our commitments to the Nation and the joint force. Our heavy mobility aircraft – including cargo, special operations, tanker and VIP Special Airlift Mission (VIP/SAM) variants – carry out the Air Force's daily Global Reach missions. One Air Mobility Command aircraft takes off from a runway somewhere in the world every 90 seconds, 24 hours a day, seven days a week, 365 days a year. We are sending them into hostile areas where they're vulnerable to enemy fire more and more in order to support the joint team. The primary threat to these aircraft is the Man Portable Air Defense System (MANPADS), or shoulder-fired IR missile. Since the 1960s, more than 500,000 MANPADS have been produced, and they have become more technologically advanced and more lethal over the years. They are widely proliferated to those with hostile intent toward the United States. The Large Aircraft IR Countermeasures (LAIRCM) systems we are installing on our heavy mobility aircraft will increase their survivability.

Versatility enables air mobility to be a Joint Force multiplier and provide senior leaders more "day one" options. Versatility is dependent on possessing adaptable, multi-mission aircraft. Platforms such as the KC-X and C-17 provide the Combatant Commander with multiple options.

Tanker

It is noteworthy that the Air Force is providing vital air refueling capability via the oldest aircraft in the Air Force inventory. BRAC acknowledged this fact when it recommended all 85 KC-135E be transferred to the Aerospace Maintenance and Regeneration Center (AMARC). The average age of aircraft in our tanker fleet is 43.3 years. Fifteen percent of our current air refueling fleet consists of the KC-135E model aircraft, which has an average age of 49.4 years. That's significantly older than the aircrew flying them. Fourteen of our KC-135 fleet will be grounded this Fiscal Year due to Expanded Interim Repair (EIR) expiration, followed by 16 aircraft in FY08, 44 aircraft in FY09 and the remaining 11 aircraft in FY10. All 85 of our KC-135E model aircraft will be grounded by the end of FY10 due to EIR expiration.

The Air Force has programmed to retire all of the remaining KC-135E aircraft by the end of FY08. The projected cost to keep a KC-135E flying with no additional warfighting capability (i.e. a basic KC-135E) after EIR expiration is \$17.3M per aircraft (85 x \$17.3M per aircraft = \$1.4B for the entire fleet). The projected cost to maintain these obsolete tanker aircraft on the ramp after EIR expiration (referred to as XJ status) is approximately \$11.7M (85 x \$138K per aircraft) in FY08.

The KC-10 represents approximately ten percent of the current Air Force Tanker fleet (59 aircraft). With an average age of 22 years, the aircraft has begun to experience aging aircraft-related problems and recently the Air Force has initiated an Aircraft Modernization Program (AMP) to ensure that the aircraft remains viable through 2045.

¹ Our space lift rockets and Airmen have successfully launched the last 49 national security payloads in a row, and we have had 100 percent success with our EELV class of vehicles.

The KC-10 AMP will ensure that the aircraft meets Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) requirements and safely operates in a global environment well into the future. In addition to CNS/ATM upgrades, AMP will include reliability and maintainability upgrades, and install a digital "backbone" to facilitate future modernization efforts.

Since aerial refueling tankers are one of the single points of failure in modern, joint warfare, our Secretary and Chief of Staff made tanker replacement and recapitalization your Air Force's #1 acquisition priority. Our vision is a tanker born joint and able to refuel Air Force, Navy, and Allied aircraft on every mission using both boom and hose/drogue refueling capabilities.

KC-X

Retiring operationally cost-prohibitive and less capable aircraft allows the Air Force to focus on recapitalization and invest in transformational capabilities. The KC-135E is a good example. It is significantly less capable than the KC-135R with less fuel offload capability and fails to meet world-wide airspace and noise restrictions.

Operations in the 21st century mandate continuous modernization of our mobility platforms. To that end, the KC-X replacing the KC-135 "will revolutionize the way we do business". The KC-X will be able to multi-point refuel joint and coalition aircraft, carry cargo, and self-deploy.

Release of the KC-X request for proposal (RFP) on 30 January 2007 set the stage for a fair and open competition that will lead to the fielding of a flexible and versatile platform. The resultant tanker will possess numerous advantages over the current KC-135 fleet. In today's dynamic political-military environment, and with fiscal constraints in mind, the command must maximize the abilities of each platform.

The KC-X RFP defines an integrated, capability-based, best-value approach and is the first third of the fleet-wide tanker replacement program that will leverage new technologies and industry best practices. The RFP includes specific factors for assessing the capability contribution of each offeror. Along with cost and assessments of past performance and proposal risk, these factors provide the source selection authority with excellent means to determine the best value between proposals of significantly differing capabilities and cost.

The RFP stipulates nine primary key performance parameters:

- 1) Air refueling capability
- 2) Fuel offload and range at least as great as the KC-135
- 3) Compliant CNS/ATM equipment
- 4) Airlift capability
- 5) Ability to take on fuel while airborne
- 6) Sufficient force protection measures
- 7) Ability to network into the information available in the battle space
- 8) Survivability measures (defensive systems, Electro-Magnetic Pulse (EMP) hardening, chemical/biological protection, etc)
- 9) Provisioning for a multi-point refueling system to support Navy and Allied aircraft

The Air Force has gone through a rigorous review process for KC-X and has validated that the RFP accurately reflects the requirements as laid out by the warfighter. The Air Force remains committed to a full and open competition and will continue to be conducted in a transparent and deliberate manner. The Air Force expects to award the KC-X contract in 2007.

Airlift

Changes in military force structure, including the President's proposed troop strength increase and the Integrated Global Presence and Basing Strategy (IGPBS) reset, could increase airlift requirements and subsequently create the need for additional C-17 capacity. Operationally, the C-17 is extremely capable, has been incredibly busy, and will stay that way into the foreseeable future. Our Air Force's C-17 aircraft are performing remarkably well as our Nation's most reliable airlifter. With over one million total fleet hours, the C-17 is proving its value time and again. As the warfighter's platform of choice, we've employed C-17 aircraft interchangeably in inter- and intra-theater roles that have accelerated their wear and tear. We currently deploy 20 aircraft to the CENTCOM AOR in support of GWOT. The C-17 is also our nation's primary aeromedical evacuation aircraft, having transported more than 20,000 litter and ambulatory patients since the beginning of Operation IRAQI FREEDOM.

In the case of the C-130, vanishing vendors, SecDef directed safety modifications, and decreased access to international airspace limit the overall effectiveness of this workhorse. Although strategic lift is vitally important for moving personnel and equipment, the lynchpin to the warfighter is the ability to go the last tactical mile. A synchronized intra-theater airlift system empowers the Combatant Commander with the ability to employ the Air Force's unique core competencies in their AOR. The aging C-130 fleet faces many challenges including obsolete parts, costly structural repairs, and noncompliance with air traffic management requirements. The active duty Air Force possesses 75% of the oldest C-130 aircraft in the fleet – an average of 42 years. The most pressing challenges today are unprogrammed repair costs associated with cracks in the center wing box (CWB) and modernizing a portion of the fleet to meet the needs of the Nation in the future.

The correct balance of new and modernized aircraft creates a force mix which maximizes the versatility and reliability to the warfighter by designing a "mobility enterprise." This equitable distribution of assets creates a seamless enterprise resulting in reduced O&M costs, easily networked systems, and increased precision and effectiveness within the Defense Transportation System.

C-17

To date, we have accepted delivery of 162 C-17 aircraft. The original programmed buy of 180 aircraft was extended to 190 by the FY07 Bridge Supplemental Funding. The ten additional aircraft addressed our backup aircraft inventory (BAI) shortfall and provided a replacement for the Dover C-5 loss and two aircraft for USAFE.

International sales, coupled with the ten additional C-17 aircraft funded in the FY07 Defense Appropriations Act, are keeping the C-17 production line intact. Sales of four aircraft to Australia and a fifth to UK, along with Canada's recently signed letter of acceptance (LOA) for four C-17 aircraft, extend the production line to July 2009. Continued allied acquisition of C-17

strengthens coalition partnerships in GWOT. The Air Force is also working with NATO countries as they address the potential buy of three aircraft.

The C-17 is and will continue to be a great national asset; however our Nation is at a major C-17 production milestone with significant long-term impacts to the mobility enterprise. Without additional orders, the C-17 production fleet will begin to shutdown this year. To ensure the versatility of the mobility enterprise, careful consideration is and must continue to be given to the correct mix of aircraft before closing production.

C-5

Modernization of the C-5 fleet remains an Air Force priority to meet Combatant Commander requirements for on-time airlift delivery of oversized and outsized cargo. C-5 modernization includes over 70 structure and reliability enhancement items to improve force closure through the year 2040 by increasing the number of available aircraft with their unmatched outsized and oversized, roll-on / roll-off capability at a substantially reduced cost of operation. While the C-5A is among the oldest in the Air Force inventory, there are no major structural life issues. In June 2004, in the Air Force Fleet Viability Board's judgment, with the addition of avionics and engine modifications, the C-5A has at least 25 years of service life remaining and is assessed to be viable. Update of the avionics suite began in FY04 and update of engine and reliability enhancements is scheduled to begin in FY07 with the procurement of long-lead items.

The C-5 modernization effort is a two part program. The Avionics Modernization Program (AMP) modernizes the avionics and allows the aircraft to meet evolving Communication Navigation Surveillance/Air Traffic Management (CNS/ATM) requirements world-wide. AMP is required prior to entering the second phase, the Reliability Enhancement and Re-engining Program (RERP). Once a C-5 is both AMP- and RERP-modified, the fully modernized C-5 will be re-designated as the C-5M. The C-5M will be able to takeoff with more cargo, on a hotter day and from a shorter runway than either the C-5A or C-5B. It will be able to climb faster to higher altitudes where it can cruise unrestricted in international airspace with better fuel efficiency, increasing its unrefueled range and requiring less tanker support. The C-5M will do all of this while producing less noise and pollution.

Where AMP enhances airspace access capability, RERP adds the equivalent of ten tails with increased performance to fully exploit AMP's airspace access improvements as well as increase maintenance reliability. A fully modified C-5M is expected to yield improved wartime fleet availability and mission capable rate to 75%. The C-5M will have improved performance, be capable of operating in the CNS/ATM environments, have increased payload capability, and increase transportation system throughput. Specifically, a 58% faster climb improves access to CNS/ATM airspace and reduces in-flight refueling; a 30% shorter takeoff roll improves performance from obstacle-restricted airfields, and a cleaner/quieter aircraft improves access to airfields world-wide and reduces closure time. For example in wartime, the C-5M could directly transport two Army Stryker vehicles and their troops from Pope AFB, NC, to Incirlik AB, Turkey, whereas the legacy C-5A/B would have to stop for fuel in Rota, Spain. The RERP test program is currently flying two modified aircraft with outstanding success. To effectively support the National Defense Strategy, we need the C-5 aircraft's unique lift capabilities in combination with the C-17. C-5 modernization is an essential companion to the remaining C-17 procurement to meet known and forecast mobility requirements.

C-130

As of February 2007, 53 Air Force C-130 aircraft are grounded or restricted. All but one of those aircraft resides in the active duty. At 38,000 equivalent baseline hours (EBH), restricted aircraft are deemed combat ineffective due to flight maneuver and cargo capacity limitations. At 45,000 EBH, aircraft are unworthy of safe flight and are grounded. Maintaining these aircraft adds an unnecessary expense while increasing workloads on our already stressed maintenance personnel. Only through innovative management and great cooperation with our Reserve and Guard Total Force partners have we been able to meet the needs of the warfighter. To mitigate the immediate effects, we have implemented both short-term and long-term strategies to maintain a combat effective intra-theater airlift fleet, which meets warfighter requirements.

The Center Wing Box (CWB) inspect and repair program provided the short-term fix to keep C-130 aircraft operational while awaiting CWB replacement. Aircraft inspected and repaired can operate up to 7,000 EBHs beyond the unrestricted limit. We have had near term success in repairing 27 of the CWBs and plan to repair up to 62 C-130E/H aircraft at an estimated average cost of \$700K per aircraft. However, not all aircraft inspected will be repairable. Recently, three C-130E aircraft were inspected and found to have substantial damage. Repair estimates exceeded \$2M per aircraft and were not considered fiscally prudent given their limited life expectancy.

The Air Force is using the C-130 Avionics Modernization Program (AMP) to upgrade the fleet. The purpose of the C-130 AMP is to lower the cost of ownership while complying with the Air Force Navigation and Safety (Nav/Safety) Master Plan and applicable CNS/ATM mandates. AMP is a cockpit modernization program that replaces aging, unreliable equipment and adds equipment necessary to meet Nav/Safety and CNS/ATM requirements. The new equipment will lower the cost of ownership by reducing cockpit crew manning, increasing aircraft reliability, maintainability, and sustainability as well as reducing the number of different aircraft configurations. The C-130 AMP includes improved precision airdrop capability, Night Vision Imaging System (NVIS), and improvements to the precision approach and landing capability. The standardized cockpit will allow crewmembers to be trained to fly in one aircraft type and require only one mission qualification thereby reducing training cost.

The Air Force supports the C-130 AMP and considers it a “must do” program. In order to support our National Military Strategy, the Air Force is retiring its oldest and least capable C-130E aircraft as allowed by Congress. The Air Force must start equipping the C-130 fleet with a more modern, more capable, and more cost effective cockpit to meet current and future warfighter requirements.

C-130J

The C-130J is a completely modernized version of the workhorse C-130 that has served us admirably for over 50 years. The C-130J will climb higher more quickly, and fly faster and longer than its predecessors. Its ability to takeoff and land in shorter distances will allow use of more locations. Improved reliability and maintainability will mean longer time between scheduled maintenance, reducing cost.

The Air Force is currently funded to complete Multi-Year Procurement #1 (MYP1) in FY08, delivering 79 USAF C-130J aircraft (62 Combat Delivery, 10 WC-130J and 7 EC-130J). Three aircraft were added in the FY06 Supplemental budget with delivery expected in FY10, bringing the total to 82 aircraft. GWOT Supplemental for FY07 and FY08 added five and fifteen MAF aircraft respectively.

The Commander of Air Mobility Command declared IOC for the C-130J on 5 October 2006. Mission capable rates were very impressive (96%) but the lack of instrument formation capability was rated as having substantial impact on operational effectiveness. A software modification to correct the anomalies is now part of the updated Multi-Year agreement.

JCA

The final piece to the intra-theater mix is the Joint Cargo Aircraft (JCA). The JCA will supplement the C-130 fleet by delivering smaller payloads more effectively. Procurement of the JCA will recapitalize a portion of the retiring C-130 fleet allowing your Air Force to attain the right mix of aircraft to meet COCOM requirements.

In December 2005, PDM-III directed merging the Army Future Cargo Aircraft (FCA) and the Air Force Light Cargo Aircraft (LCA) programs into the JCA with acquisition under the Joint Program Office. In June 2006, the Army Vice Chief of Staff and the Air Force Vice Chief of Staff signed a JCA Memorandum of Agreement (MOA). The USA/USAF will conduct Business Case Analyses to determine the most cost effective methods for implementing the USD (AT&L)-directed single supply chain, single training base, and single maintenance process.

In October 06 the JCA Joint Program Office stood up at Redstone Arsenal, Huntsville, AL. Air Force manpower is working permanent positions. Army production (two aircraft) will begin in FY07 if Joint Milestone C approval is received in May 2007. Air Force production begins in FY10 (eight aircraft).²

IV. Closing

We are building a 21st century Air Force prepared to dominate in the 21st century – strategically, operationally, and tactically. Airlift and tanker refueling provide us the means to asymmetrically provide Global Vigilance, Global Reach, Global Power, and worldwide Expeditionary Combat Support. These capabilities are critical to the joint team fight, and are a critical component of the future joint force. The Air Force is committed to advancing airlift and tanker programs to fully support the joint team. We appreciate your continued support in turning our vision into an operational reality. Our Nation must invest today to ensure tomorrow's air, space and cyberspace dominance.

² RAND is currently completing the Intra-theater Airlift Capabilities Based Assessment (F-Studies) and will also provide a fleet mix analysis by December 2007. These studies will analyze the intra-theater airlift capability determining the right mix (C-130 and JCA) to meet COCOM requirements.