RECORD VERSION

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INTRODUCTION

Chairman Murtha, Congressman Young, and distinguished Members of the Subcommittee on Defense, thank you for this opportunity to discuss Army Aviation programs. We are pleased to represent Army leadership, the civilian members of the Army acquisition workforce, and the more than one million courageous men and women in uniform who have deployed to combat over the last seven years and who have relied on us to provide them with world-class aviation systems for mission success. We thank Members of this Committee for your shared commitment to this goal. We are grateful for your advice and guidance, along with your steadfast support.

It has been five years since the Army with the support of Members of Congress and the Office of the Secretary of Defense (OSD) terminated the Comanche helicopter program to allow modernization of the entire Army Aviation fleet. In just those few years, we have seen steady and substantial progress. Today, nine of the 13 systems identified for funding at Comanche termination are in production. By Fiscal Year 2011 (FY2011), we will have started fielding all the aircraft programs, except the Armed Reconnaissance Helicopter. That means 69 percent of all these programs are in some form of production today – low, initial, or full rate production, with 54 percent in full rate production.

These programs will contribute directly to overseas contingency operations by priority fielding to units preparing to deploy to combat operations or currently deployed in support of combat operations. We want to emphasize that every one of these programs will be fielded to units next in rotation to the warfight or units now supporting the warfight. Currently operating in combat operations are the CH-47F and UH-60M

helicopters, the Sky Warrior Alpha, Sky Warrior Block '0', and Raven Unmanned Aircraft Systems and a pre-production variant of the Micro Air Vehicle spun out of the Future Combat System. The Light Utility Helicopter has enabled the return of UH-60s to the warfighting fleet and has allowed retirement of UH-1 and OH-58s in both the Active and Reserve Components.

The Army Aviation fleet is performing extremely well in Iraq and Afghanistan under exceptionally challenging and dangerous conditions. More than 3 million flight hours have been flown since hostilities began in Iraq in March 2003. Our monthly operational tempo (OPTEMPO), depending on the aircraft type, is three to five times higher than normal peacetime mission requirements. Despite these demands, our mission capable rates met or exceeded the 75 percent standard established for Army aircraft.

These numbers have been achieved as the demand for aviation forces and platforms has continued to increase. While numbers of troops deployed ebbs and flows, the demand for aviation forces continues to grow and will be at its peak within the next 60 days as a sixth aviation brigade will deploy to theater. Army Aviation has an essential role in overseas contingency operations, and will continue to perform that role until the last Soldier comes home.

With the support of Members of Congress and the American people, we are meeting the requirements of a high OPTEMPO and keeping our aviation assets at a high state of readiness which includes the following:

- Extensive Mission Equipment Packages installed on deploying aircraft to provide enhanced aircraft/aircrew survivability in combat operations,

improve communications and situational awareness, improve aircraft performance, and help negate the detrimental effects on aircraft and components from operations in the harsh desert environment;

- Additional aircraft modifications such as mounted Forward Looking Infrared (FLIR) for Medical Evacuation and Satellite Communications to meet the operational needs of our combatant commanders;
- Installation of Digital Source Collectors to monitor and provide real-time information on the health and condition of aircraft systems to support the Conditioned Based Maintenance concept;
- Higher repair parts stockage levels, visibility over requirements, and express shipments that preclude deployed aircraft being down for parts for any length of time;
- Substantial maintenance and supply support in theater, to provide around the clock scheduled/unscheduled maintenance support to deployed units;
- Aviation reset's extensive Special Technical Inspection and Repair program, which provides fully mission capable aircraft back to deployed units in the shortest time possible; and
- Procurement of replacement aircraft against operational losses of which you have fully funded all our requests submitted to date, and we thank you.

The Army is currently managing a number of major aircraft programs that provide the current capability to the commanders in the field, and will provide enhanced capability in the future.

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The **UH-60 Black Hawk** is the work horse of Army Aviation. The current UH-60 fleet is comprised of 1,748 aircraft, including 951 UH-60As (produced between 1978 and 1989), 689 UH-60Ls (produced since 1989) and 108 new UH-60Ms.

The Black Hawk helicopter is in its 32nd year of production. To date, the Army has employed seven multi-year, multiservice production contracts. The current contract extends from FY2007 to FY2011 and includes Navy H-60 aircraft, as well as Foreign Military Sales aircraft.

The ongoing UH-60A to UH-60L recapitalization program extends the service life of the Black Hawk program while providing the improved capability and safety margin of the UH-60L. The Army plans to induct 38 aircraft in FY2009 and 228 aircraft between FY2010 and FY2015.

The UH-60M program incorporates a digitized cockpit for improved combat situational awareness, lift, range, and handling characteristics for enhanced maneuverability and safety. These improvements also extend the service life of the aircraft.

The Army plans to improve the safety of the UH-60M platform with a Preplanned Product Improvement upgrade through the installation of digital source collectors, and improved handling capabilities provided by Fly-By-Wire technology, plus increased

rotorcraft interoperability through the integration of a Common Aviation Architecture System shared with the CH-47F Chinook and Special Operations helicopter fleets. Additionally, the Army intends to pursue a Common Engine Program shared with the AH-64 Apache fleet.

The **Light Utility Helicopter** (LUH) program is successfully executing the Army transformation strategy and meeting all cost, schedule, and performance targets as specified in the acquisition strategy. The aircraft has been fielded to the National Training Center at Fort Irwin, California; the Joint Readiness Training Center at Fort Polk, Louisiana; and the U.S. Army Transportation Corps at Fort Eustis, Virginia. Additionally, the LUH has been fielded to Army National Guard (ARNG) units.

The Army is procuring 345 aircraft with a firm fixed price contract. To date, the Army has purchased 128 UH-72 Lakota aircraft -- 58 aircraft have been delivered and more than 54 fielded. The UH-72A has demonstrated exceptional readiness rates that exceed 90 percent. The Lakota is currently conducting Medical Evacuation, VIP, and general support missions. It has also been fielded to ARNG units to conduct disaster relief, counter drug operations, and institutional training missions.

Production of the LUH is transitioning from Germany to Columbus, Mississippi. Forty aircraft were produced in Germany and the remaining 305 will be produced in the United States as part of a three phase production duplication plan. The complete domestic production line operation is on schedule to begin in April 2009 and will have fully transferred to Columbus by the end of 2009. Increasing domestic content is also part of the production duplication plan and is expected to exceed the 65 percent goal.

The ARNG is pursuing funding to procure, apply, and sustain a Mission Equipment Package – searchlight, FLIR, situational awareness/command and control moving map displays, hoists and Medical Evacuation kits to support the Security and Support battalions in their support of the homeland security/homeland defense/counter-drug mission.

The **CH-47 Chinook** is a proven heavy-lift helicopter, supporting our Soldiers every day in Iraq and Afghanistan and conducting missions that no other helicopter on the battlefield can accomplish. It is the Army's only helicopter capable of intra-theater cargo movement of payloads up to 16,000 pounds.

The Army is fully committed to the procurement of 513 Army CH-47F and U.S. Special Operations Command MH-47G aircraft. To date, the Army has taken delivery of 61 CH-47F and 49 MH-47G aircraft, has an additional 222 CH-47F and six MH-47G aircraft on contract, and has fielded four operational CH-47F Chinook units – two of which have deployed to the theater of operations.

The U.S. Army signed a five year firm-fixed price contract for 181 CH-47F Chinook aircraft that will achieve a minimum savings of $450 million or 11 percent. The multi-year contract provided for 34 option aircraft, 10 of which were executed with the basic contract. The CH-47F Chinook program is on-cost, on-schedule, and has met or exceeded all performance requirements.

The **AH-64D Apache** is the world's most lethal and survivable helicopter. It is the most feared weapon system in the current theater of operations. Continued modernization, including the ongoing fielding of the Modernized Target Acquisition

Designation Sight/Pilot Night Vision Sensor (M-TADS/PNVS), is critical to maintaining that position.

The Block III Apache is essential to the Army's current and future forces. It is the Army's only manned aviation platform able to meet the network centric requirements of the future force as well as Joint Force requirements. It is also the first aircraft designed for and fully capable of complete control of Unmanned Aerial Vehicles (UAVs). This characteristic fully enables the synergistic manned-unmanned teaming between attack aircraft and UAVs that is showing such promise on the battlefield. The Apache Block III System Development and Demonstration remains on schedule and within budget. All Acquisition Program Baseline milestones have been met or exceeded to date. A Longbow Apache, with Block III technologies installed, performed well in the recent Future Combat Systems Experiment 2.1/Joint Expeditionary Force Experiment Spiral 3.0 and was the only Army aviation platform participating.

High OPTEMPO in Iraq and Afghanistan, coupled with repeated deployments of Longbow units, have consumed an inordinate percentage of the Apache airframes' useful life. The majority of aircraft will enter Block III remanufacture with less than 50 percent of the airframe's design life (10,000 hours) remaining. Block III remanufacture is an ideal opportunity to insert new airframes into the Apache fleet at minimal additional cost, providing 100 percent of the design life back to the fielded unit.

The Army is on track with its commitment to modernize the remaining AH64A battalions in the National Guard. The Army will remanufacture two of these battalions in FY10 and 11 leaving only two AH64A battalions in the Army. The modernization plan

for the last two battalions of AH64A will be dependent on the outcome of the 'Analysis of Alternatives' for the Armed Scout Helicopter.

The Army and the Department of Defense remain committed to the requirement for a manned **Armed Scout Helicopter** (ASH) capability and the need to deliver this capability to our Soldiers in a responsible and timely manner.

As a capability bridging strategy, the Secretary of the Army approved a strategy to maintain the Armed Reconnaissance Helicopter (ARH) funds within Army aviation and redistribute them into three primary efforts: (1) sustaining and improving the OH-58D Kiowa Warrior; (2) modernizing the ARNG AH-64A fleet; and (3) conducting a competition for and procuring the capabilities associated with the future ASH. The Vice Chief of Staff of the Army and the Army Acquisition Executive jointly signed a Memorandum for the Record codifying this strategy.

To support the potential procurement effort, the Army is conducting a bottom up review of the armed reconnaissance capability requirement to include a thorough assessment of the specific requirements identified for the initial ARH program, as well as initiating a formal 'Analysis of Alternatives'. The analysis will cover the entire spectrum of options – from the potential use of UAVs to the use of a manned/unmanned aircraft mix to the procurement of a new manned platform.

Due to the time required to complete these assessments, the Army is currently evaluating what additional enhancements and life extension work, if any, will be required to continue to safely sustain the Kiowa Warrior fleet until a replacement is procured.

The U.S. Army Audit Agency completed an official After Action Review to identify lessons learned from the termination of the ARH program. The results are being evaluated for assimilation into Army acquisition programs and for use in developing an acquisition strategy to meet the manned ARH requirement.

The **Joint Cargo Aircraft** (JCA), or C-27 aircraft, corrects operational shortfalls and provides commonality with other aviation platforms to provide direct support to the Army in meeting on-demand tactical transport of time sensitive/mission critical (TS/MC) cargo and passengers to forward deployed units.

The JCA meets a validated Joint Requirements Oversight Counsel approved requirement. The Army 'Analysis of Alternatives', validated by OSD, supports 75 JCA to meet Army's TS/MC requirement. The JCA supports Army/Air Force National Guard with increased capability for domestic mission responsibilities.

The first two C-27 aircraft have been delivered to the Army for testing and the next 11 aircraft are already on contract. The program is meeting all cost, schedule, and performance targets. The first JCA unit will deploy to Operation Enduring Freedom (OEF) in FY2010.

The **Joint Heavy Lift** (JHL) was intended to be a Vertical Take Off and Landing heavy-lift aircraft supporting mounted vertical maneuver. The JHL requirement has been incorporated into the U.S. Air Force lead **Joint Future Theater Lift** (JFTL) effort. The JFTL requirements document is under development. The envisioned aircraft will provide a heavy lift (20+ ton) payload capability at 200+ miles, aerial sustainment to the point of need, the ability to operate over tactical and operational distances to/from land or sea bases, and the ability to self-deploy.

The **Aerial Common Sensor** (ACS) program is the Army's future multi-intelligence, manned, fixed-wing, Reconnaissance, Surveillance and Target Acquisition/ISR system that carry multiple highly accurate intelligence sensors, processing tools, air/ground/satellite communications, and onboard operators/analysts. This unique combination of attributes provides the ground tactical commander an assured near-real-time operational view of unprecedented clarity enabling tactical ground forces to operate at their highest potential. ACS is awaiting Defense Acquisition Executive approval to release the Technology Development (TD) Request for Proposal. A successful source selection will result in the award of two competing TD contracts which call for preliminary system design and prototyping efforts. The JROC approved the ACS Capability Development Document in November 2008.

Unmanned Aircraft Systems (UAS) are a rapidly growing capability that Army Aviation has helped to develop. As an example of how quickly this capability has grown within the Army, when Operation Iraqi Freedom (OIF) began in March 2003, there were only six aircraft deployed in support of that operation. Today, we have more than 1,100 air vehicles in either OIF or OEF. This capability continues its fast growth. For example, it took the Army 13 years to fly the first 100,000 hours of UAVs. It took us less than a year to fly the next 100,000 hours, and we fly more than that each year in theater.

The **Extended Range/Multipurpose (ER/MP) UAS**, or Sky Warrior, will be deployed and integrated with the Combat Aviation Brigade, with immediate responsive Reconnaissance, Surveillance, and Target Acquisition to the division commander.

ER/MP can carry multiple simultaneous payloads to include: (1) Electro-optical/Infrared/Laser Designator; (2) Synthetic Aperture Radar; (3) Communications Relay; and (4) Weapons. ER/MP UAS will use both Tactical Common Data Link and Satellite Communications data links. The program is on track to deploy a Quick Reaction Capability to OIF in July 2009 and another in summer 2010. The Program of Record will field its First Unit Equipped in FY2011.

The hand-launched and rucksack portable **Raven Small Unmanned Aircraft System** (SUAS) provides the small unit with enhanced situational awareness and increased force protection through expanded reconnaissance and surveillance coverage of marginal maneuver areas. Commanders at the company level have greater ability to shape over-the-hill operations with their own dedicated UAS.

The Raven is fielded to the U.S. Special Operations Command, the U.S. Marine Corps, the U.S. Air Force, and the ARNG to provide increased capabilities for domestic mission responsibilities as required. There are over 1,318 Raven SUAS fielded and more than 300 Raven SUAS supporting Soldiers in Iraq and Afghanistan. The program is meeting all cost, schedule, and performance targets.

The **Shadow** Tactical Unmanned Aircraft System (TUAS) provides DoD and coalition partners with a high quality, reliable, and interoperable UAS. Currently, units are flying at an OPTEMPO of up to three times what was originally envisioned for the system. While the OPTEMPO remains high, the accident rate has been reduced each year.

The U.S. Marine Corps is partnered with the Army for purchase of systems, support equipment, and performance based logistics services. Through this approach, economies of scales provide efficiencies for cost, commonality, and joint operations.

Currently, 66 systems have been delivered and fielded to the Army and six to the Marine Corps. The readiness rate of the Shadow system averages above 94 percent. As of March 2009, the total hours flown by Shadow in support of theater operations were 352,101 hours, out of a total program history of 385,118 hours flown. More than 90 percent of all Shadow hours flown since 2000 have been in support of theater operations.

The **Future Combat Systems Class I and Class IV UAS** will provide significantly enhanced capabilities to the force. Class I systems provide a ducted fan capability with a hover and stare capability, allowing the system to stay in one area for an extended period of time with maneuverability into complex environments that would be impractical for current force fixed wing UAS. The system was first developed by the Defense Advanced Research Projects Agency and transitioned to Program Manager Future Combat Systems in 2007 and Program Manager UAS in 2008. Eighteen systems have been fielded to the 25th Infantry Division in OIF.

The Class IV UAS is a brigade-level Vertical Take Off and Landing UAS that provides the brigade commander with a day/night and adverse weather RSTA capability. The Class IV UAS has an endurance of up to 5.3 hours with Vertical Take Off and Landing ability at unprepared and unimproved landing zones. It has the ability to carry multiple sensors simultaneously (up to 600 lbs), and perform onboard processing and sensor cross-cueing while providing streaming video using networks

communications. Class IV capabilities include: minefield detection; moving target indication and sensor cross-cueing; Radio Frequency and Infrared threat detection; meteorological survey; and, Manned/Unmanned teaming. Currently there are no Vertical Take Off and Landing UAS fielded.

CONCLUSION

Today, we have five combat aviation brigades committed to current combat operations with another one deploying in 2009 to Operation Enduring Freedom. We still have an aviation operational presence in the Balkans and the Sinai; we are conducting operations supporting drug interdiction; and we are still committed to maintaining security on the Korean Peninsula. Additionally, we fulfill requirements to support homeland security and defense, humanitarian support missions, and disaster relief. Army Aviation has a very important role in the defense and security of our Nation. With only 19 Active and Reserve Component Combat Aviation Brigades, the demands placed on our aviation crews and aviations systems are heavy. Still, these demands are being met around the clock and around the world by our world-class Soldier Aviators, crewmembers, and aviation systems.

The programs that we have described above have and will continue to provide an improved capability for our Soldiers in the field. We thank Members of this Committee for their advice, guidance, and steadfast support to sustain and continue to modernize Army Aviation.