As demand for Army aviation platforms and systems continues to increase, Program Executive Office (PEO) Aviation strives daily to balance the current support needs while maintaining a focus on future modernization requirements. In support of Operations Enduring and Iraqi Freedom, Army aviation platforms have already flown more than 2.5 million flight hours from February 2003 to July 2008. These numbers reflect a staggering 200- to 300-percent increase over the peacetime operational tempo (OPTEMPO). Without question, this pace, coupled with the evolutionary threat of today’s fluid, nonlinear battlefield, drives the need for continued modernization.

Army aviation modernization initiatives include the procurement of CH-47F Chinooks with new DAFCS. Here, a CH-47 Chinook flies in Northern Iraq in support of Task Force Iron, 1st Armored Division. (U.S. Army photo by MAJ Enrique Vasquez, Combat Aviation Brigade (CAB), 1st Infantry Division (1ID)).
The Army initiated an aviation transformation plan in concert with the Comanche termination decision in 2004. The plan focused on modernizing the current fleet of aircraft along with procuring new, state-of-the-art aircraft to more effectively operate in current and future combat environments. PEO Aviation’s challenge remains: continue to maintain the existing level of support to warfighters while simultaneously remaining committed to making the necessary investments to modernize the fleet. Success in both of these areas is essential.

Supporting the Current Fight
Despite the demanding OPTEMPO, the fleet continues to reflect outstanding readiness rates. This is due principally to the proactive and aggressive maintenance accomplished by PEO Aviation personnel deployed worldwide. Without question, supporting warfighters remains the top priority for the aviation acquisition workforce. To that end, preset, reset, and condition-based maintenance (CBM) are current focus areas as PEO Aviation project managers (PMs) do everything they can to maintain the fleet’s mission capability and ensure Army aviators have the latest technologies available. To assist the warfighter, PEO Aviation is integrating targeting modifications and aircraft survivability enhancements, and conducting critical inspections on aviation systems prior to deployment to improve their mission effectiveness, survivability, and safety. CBM, performance-based logistics, and Soldier-focused logistics are examples of current initiatives that seek to enhance the ability to keep aircraft in the fight. This ensures appropriate, timely maintenance actions,
and that PEO Aviation has the parts it needs when it needs them by providing continual process improvement.

Unmanned Aircraft Systems (UAS) are providing even further support to Soldiers in the field by performing surveillance and reconnaissance operations without putting Soldiers’ lives at risk. UAS are already in theater and have flown more than 480,000 hours in support of both theaters of operation. Of note, the initial experimentation of directly teaming manned systems with the UAS was conducted. The effects of this still-developing capability are numerous including such anticipated benefits as reduced sensor-shooter timelines, enhanced situational awareness, and increased survivability.

Because of the increased demand on the capabilities that the UAS provide, the Army is continuing to develop and procure new unmanned aircraft. For example, 157 Raven B Small Unmanned Aerial Vehicles have been delivered to the Army and are headed to theater, and a second production contract is being finalized to purchase additional Ravens. The Sky Warrior Extended Range/Multipurpose Unmanned Aircraft is progressing through the Development and Demonstration Phase after completing Critical Design Review and Design Readiness Review. Prototype aircraft are currently being delivered for use in various tests, and a low-rate initial production (LRIP) contract is expected to be signed soon.

The Future
PEO Aviation must balance its current support and future modernization initiatives. It cannot, however, afford to focus on the current fleet at the expense of modernization. Continued investment in research and development is critical to success.

Near Term. Planned modernization activities for next year include:

• PM Apache is providing the Modernized Target Acquisition and Designation Sight to seven more battalions and performing further user testing with the Block III aircraft.
• PM Armed Reconnaissance Helicopter continues to progress through the System Development and Demonstration (SDD) phase of the program with its four test vehicles while closely monitoring the build process for SDD aircraft five and six.
• PM Cargo Helicopter plans to award a multiyear contract to procure additional CH-47F Chinook aircraft that include new Digital Advanced Flight Control System (DAFCS). The DAFCS provides near Level I flight handling qualities, making the CH-47F the best handling rotary-wing aircraft in the Army inventory.
• The UH-60 Black Hawk fleet, managed by PM Utility, continues as the workhorse for current operations. The UH-60 and UH-60L fleets are executing missions around the globe in support of the global war on terrorism. The new UH-60M will join ongoing operations this year. Thirty UH-60Ms were fielded to the First Unit Equipped in June 2008 and more fieldings continue. The aircraft features a fully digitized cockpit with four multifunction displays; 4-axis, fully coupled flight director; digital map; dual-embedded global positioning/inertial navigation system; integrated vehicle health management system; wide chord composite blades; and increase in...
engine horsepower. Additionally, an upgraded UH-60M is now approaching first flight and will bring an integrated Common Aviation Architecture System cockpit and fly-by-wire system to the Black Hawk fleet.

- PM Utility is also fielding the UH-72A Lakota, with initial fielding to Table of Distribution and Allowances units complete, and shifting execution of first deliveries to the U.S. Army National Guard (ARNG) to replace their aging UH-1 Huey and OH-58A/C Kiowa fleets.
- PM Aviation Systems manages multiple fleet sustainment and system programs and is also managing the new Joint Cargo Aircraft (JCA) program. The C-27J Spartan was chosen as the JCA platform, and the first six aircraft are on order. JCA is a multifunctional, twin engine, fixed-wing aircraft that will replace the C-23 Cessna and select C-12 Huron aircraft. The first flight for JCA number one occurred June 16, 2008, and delivery was anticipated for September 2008 to support the LRIP test program.

Fielding to the ARNG and Initial Operational Capability is scheduled for the fourth quarter 2010.

Far Term. With most of PEO Aviation's modernization programs either currently in or nearing production, Army aviation enters an era with no major upgrades or new aircraft on the books. Despite the great improvements achieved through the investment in current modernization, PEO Aviation has simply brought the aviation fleet up to the current state-of-the-art. PEO Aviation must look to the future and invest in science and technology projects that will provide the basis for aircraft operating in the 2040 timeframe. Areas of focus include flight performance, reconfigurable designs, lethality, man/machine integration, cargo handling, modeling and simulation, and ever greater levels of manned/unmanned teaming, to name a few.

PEO Aviation is confident that its proven capability to execute programs reflects actions its PMs have taken, and continue to take, to support the Soldier in the field. Further, PEO Aviation is poised to face future fiscal and technical challenges as it aggressively seeks to forever maintain that critical balance between meeting the immediate needs while properly forecasting the future requirements and developing the necessary plans/programs to meet them.

PEO Aviation will continue to plan, develop, and field state-of-the-art components for aircraft that will allow Soldiers on the ground to have confidence that PEO Aviation will be there when needed — to look ahead of them, bring them into the fight, support them in close combat, and bring them out when it is over.

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