



Aviation Recapitalization: An Imperative for Today and Tomorrow's Army

The Army relies on its aviation assets for daily operations, regular training and combat missions. Helicopters, in particular, face a punishing regimen in peacetime and in war. Realistic combat training and routine support sorties place inordinate wear and tear on aircraft and their components. In real-world missions, Army aviation supports the unrelenting operations tempo, allowing the enemy no reprieve from armed attacks, air assaults and long-range reconnaissance.



UH-60 Black Hawk formation

Why Recapitalize?

Adding to the strenuous demands on the Army's helicopter fleet, many of the aircraft are more than 20 years old. Despite regular maintenance and meticulous safety inspections, these helicopters are exceeding their lifespan capabilities. The AH-64 Apache, UH-60 Black Hawk and CH-47 Chinook helicopters provide specific and inimitable functions in the Army warfighting doctrine. Rather than seek near-term replacements for these models, the Army has opted to upgrade and refurbish them through recapitalization.

The recapitalization effort seeks to modernize on-board electronics, restore airframe integrity and improve flight performance for the existing fleet. By improving the aircraft already in service, recapitalization extends the life of the helicopters, reduces operational and support costs, increases reliability and safety, enhances capabilities and reduces the battlefield footprint of logistical support. Increased performance efficiency will cut time and resources spent on maintenance. For total force readiness, this recapitalization effort must be adequately resourced and should include all components (active, Guard and Reserve) and all aircraft (Apache, Black Hawk and Chinook).



MH-47 Chinook retrieves troops



AH-64A Apache formation

Future and Near-term threats

Recapitalization grew from the cost savings created when the Army retired older aircraft, like the Vietnam-era UH-1 Iroquois ("Huey") and AH-1 Cobra, and reduced the fleet. The plan addresses current and prospective threats for the Army by tackling existing shortfall risks and guiding improvement, keeping long-term transformation in mind. While the Objective Force promises forward leaps in combat power, recapitalization provides solutions for the near term and the means of accomplishing them almost immediately.

Aviation Recapitalization (continued)



AH-64A/D Apache Models

The AH-64 Apache has been the Army's primary attack aviation asset since its full-scale production began in 1983. Of the current 730 AH-64A/D models, 704 Apaches are slated for recapitalization. The plan calls for the conversion of 501 A-model Apaches to the AH-64D Longbow configuration, with the remaining 203 AH-64A models undergoing selected component recapitalization. The upgrades reflect lessons learned and reliability and safety initiatives. The Army mandated that the recapitalized Apaches must meet or exceed existing Longbow performance standards. The resulting changes will increase the Apache's reliability, capability and safety. The Apache recapitalization

program is currently in progress and is scheduled to run through Fiscal Year (FY) 2010.

UH-60A/L/M Black Hawk Models

The UH-60 Black Hawk serves as the Army's objective utility helicopter. Whether making air assault insertions, ferrying troops and equipment, providing medical evacuations or serving as an airborne command, control and communications center, the Black Hawk has a vital role in the field. The UH-60A came into service in 1977. Resulting upgrades led to the fielding of the UH-60L model in 1989.



Currently, 960 A-models and 570 L-models are in service. Recapitalizing the entire A-fleet and some of the L-fleet into the projected 1,200 UH-60M models requires upgrades to the airframes, propulsion systems and cockpit components. Digitized navigation, warning and countermeasure systems will improve the pilot's electronics array. Revised rotor and driveshaft assemblies will extend lift. Maintenance put into the airframe structure will also contribute to the UH-60M's projected life expectancy through 2020 and beyond. The first of the new Black Hawks is slated for delivery to units in 2006.



CH-47D/F Chinook Models

Since 1962, the CH-47 Chinook has provided the Army with medium and heavy lift capability for large-scale troop and equipment transports. The CH-47D fleet arrived in service in 1982. Of the 431 D models, 301 will undergo recapitalization to the CH-47F configuration. Thirty-six of the special operations variation MH-47 will be recapitalized also. With similar digitized avionics augmentations as in the Black Hawks and Apaches, engine upgrades, extended-range fuel system and airframe and rotor component restoration, the Chinook will be fit for duty through 2030 and longer. Production on the F-model should begin in FY 2003.

Recapitalization cost-effectively modernizes Army aviation while maintaining near-term readiness.