

H-1 UPGRADE PROGRAM

DESCRIPTION

The H-1 Upgrade (UH-1Y/AH-1Z) program replaces the current two-bladed rotor system on the UH-1N and AH-1W aircraft with a new, four-bladed, all-composite rotor system coupled with a sophisticated fully integrated, state-of-the-art cockpit. In addition to the new rotor system and cockpit, the UH-1Y and AH-1Z will incorporate a new performance-matched transmission, a four-bladed tail rotor and drive system, and upgraded landing gear for both aircraft. Additionally, structural modifications to the AH-1Z will support the increase to six weapons stations.



The advanced cockpit, common to both aircraft, reduces operator workload, improves situational awareness, and provides growth potential for future weapons and joint interoperability. The cockpit integrates on-board planning, communications, digital fire control, self-contained navigation, night targeting, and weapons systems in mirror-imaged crew stations. The UH-1Y and AH-1Z are approximately

84% common throughout the aircraft, which significantly benefits MAGTFs in supporting the two aircraft. Ongoing developmental testing of the UH-1Y and AH-1Z has demonstrated a marked increase in aircraft agility, maximum continuous speed, and payload.

OPERATIONAL IMPACT

The H-1 Upgrade is designed to resolve existing safety deficiencies, significantly improve operational capabilities, and reduce life-cycle costs. Commonality between aircraft will greatly enhance the maintainability and deployability of the systems with the capability to support and operate both aircraft within the same squadron structure.

PROGRAM STATUS

The H-1 Program continues in the Engineering and Manufacturing development (EMD) phase. The H-1 Upgrades entered the first phase of operational testing during FY 2003.

To date, the five EMD (3 AH-1Z's and 2 UH-1Y's) aircraft have amassed over 1500 flight hours since first flight. On 22 October 2003, the Under Secretary of Defense for Acquisition Technology and Logistics approved the program to proceed with low rate initial production for Lot 1 aircraft. The total program buy for the Marine Corps is 100 UH-1Ys and 180 AH-1Zs.

PROCUREMENT PROFILE:

Quantity:

FY04

9

FY05

9

DEVELOPER/MANUFACTURER:

Bell Helicopter Textron Inc., Fort Worth, TX

Integrated Cockpit: Northrop Grumman, Woodland Hills, CA

AH-1Z Target Sight System: Lockheed Martin, Orlando, FL