

**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 H-1 upgrade 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 allow the support of increases in six weapons stations. The AH-1Z brings increases in aircraft agility, maximum continuous speed, and payload. The advanced cockpit reduces operator workload, improves situational awareness, and provides growth potential for future weapons and Joint interoperability. It integrates on-board planning, communications, digital fire control, self-contained navigation, night targeting, and weapons systems in mirror-imaged crew stations. The UH-1Y incorporates the identical rotor system and dynamic components, which results in maximum commonality and supportability between the two aircraft. The UH-1Y increases aircraft agility, maximum continuous speed, and payload and restores the required aircraft power margin and provides adequate mission payload and warfighting capability growth potential.

**Operational Impact**

The H-1 Upgrade (UH-1Y/AH-1Z) program is designed to reduce life-cycle costs, significantly improve operational capabilities, resolve existing safety deficiencies, and extend the service life of both aircraft. 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 Upgrade (UH-1Y/AH-1Z) program continues in the EMD Phase. The Critical Design Review was completed in 1998 without major discrepancies. The Marine Corps has delivered four AH-1Ws and three UH-1Ns to Bell Helicopter for modification to support the EMD Phase. The AH-1Z flew its first flight on 7 December 2000. The UH-1Y is scheduled for its first flight during FY01. The total program buy is for 180 AH-1Zs and 100 UH-1Ys for the Marine Corps.

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|-------------------------------|---|-------------|
| <b>Procurement Profile:</b>   | <b>FY02</b>   | <b>FY03</b> |
| <b>Quantity:</b>              | 0   | 0           |
| <b>Developer/Manufacturer</b> | Bell Helicopter Textron Inc- Fort Worth, TX<br>Integrated Cockpit - Northrop Grumman-<br>Woodland Hills, CA<br>AH-1Z Target Sight System - Lockheed Martin -<br>Orlando, FL |             |