

The Army Aviation Association of America staged its annual convention in Nashville, Tennessee, on 9-12 May, focusing on the US Army's RAH-66 Comanche programme and modernisation of UH-60 Black Hawk and AH-64 Apache helicopters

PAUL LEWIS REPORTS

Boeing and Sikorsky seek extra cash to keep Comanche flying

BOEING AND SIKORSKY are seeking an additional \$108 million in US Congressional funding for the RAH-66 Comanche programme to continue flying the second prototype next year. The start of engineering and manufacturing development has been advanced by 19 months, to next year, but more money is needed in the



transition from the demonstration and validation phase to fly the second aircraft. Without the extra funding, the aircraft will remain grounded for the next two and half years. The two RAH-66 prototypes have completed nearly 150h of flight testing.

Finds sought to modernise UH-60

THE US ARMY wants initial funding next year to start a two-step avionics and powerplant modernisation programme for its Sikorsky UH-60A/L Black Hawk utility helicopters.

A Black Hawk modernisation programme calls for up to 613 UH-60As to be upgraded to UH-60L+, starting in 2002. Another 357 will be modernised to the UH-60Q medevac configuration. This will be followed by the remanufacture of 255 UH-60Ls to the UH-60X from around 2008.

The army is seeking an initial \$31.4 million to begin UH-60L+ development work. Improvements will focus on installing a new digital

cockpit, uprated General Electric T700-701C turboshafts offering 16% more power than the present engines and wide chord rotor blades. The army is aiming to cut operational and support costs by \$600 per flight hour.

"A tiered evolutionary approach has been adopted to allow for an upgrade to the UH-60L+. It provides everything that is required with the exception of improved range and lift, which will need a new engine," explains Keith Roberson, US Army utility helicopters deputy project manager.

The army is to request funding in 2001 to begin preliminary work on a 2,240kW (3,000shp) Common

Engine Programme (CEP) for the UH-60X and, later, the Boeing AH-64D Longbow Apache. It is intended to leverage technology from the AlliedSignal/GE Joint Advanced Turbine Gas Generator (JTAGG), which is entering its third demonstrator phase.

JTAGG 3 is targeting a 40% reduction in specific fuel consumption, 35% lower production and support costs and a 120% increase in power over that of the T700-701C. The army wants the UH-60X to be capable of lifting a 4,100kg (9,000lb) external load in hot-and-high conditions over a range of 300km (160nm). The UH-60A can carry less than half

this weight over a similar range.

"The intention is to hold a competition and downselect before the engineering and manufacturing development phase," says Roberson. CEP is intended to be a drop-in replacement for the UH-60L's T700-701C engines, which will either be fitted to the upgraded UH-60L+, or put back into the army's spares inventory.

No decision has been taken on the selection of a common avionics suite for the UH-60L+/X, but it is likely to be based on the UH-60Q cockpit, which has Litton liquid crystal multifunction displays and Canadian Marconi CMA 2082A avionics management systems. □

US Army nears decision on Apache requirement

THE US ARMY hopes to decide towards year-end on the number of Boeing AH-64D Apache helicopters it plans to remanufacture, as well as the mix and quantity of Lockheed Martin Longbow fire control radars needed to equip the fleet.

It originally planned to modernise 748 AH-64As and acquire enough millimetre wave radars to equip 227 of these helicopters. Earlier this year it said it intended scaling this back to 530 AH-64Ds, of which 500 would be fitted with the mast-mounted radar.

With the first battalion of AH-64D now operational, the army has launched a fresh operational analy-

sis of its requirement. "A study in August 1993 determined the optimum mix was one radar for every three aircraft. Now they're saying the study wasn't in-depth enough and are looking at a new mix," says army Longbow product manager Lt Col Ralph Pallotta.

The training and doctrine study is to be concluded by September, but this could slip to the end of the year. This process is being watched closely by Boeing, which is lobbying to modernise a third batch of 218 AH-64As from 2006. Lockheed Martin says it expects to receive a second Longbow order.

Boeing is negotiating a second multi-year contract to modernise

298 AH-64As in 2001-5 as a follow-on to the 232 helicopters being rebuilt. The new deal also includes an option for additional 62 AH-64D upgrades for the army, along with some for foreign military sales.

A key factor in the army's decision will be the cost of maintaining a mixed fleet of AH-64Ds and AH-64As. The latter will replace National Guard Bell AH-1 Cobras. Industry sources claim that remanufacturing all 748 machines will be cheaper than acquiring additional Longbows and having to maintain separate training and logistics support for the two different versions. □

NEWS IN BRIEF

■ SUITE TESTS

Flight tests will begin this year of the ITT Industries ALQ-211 suite of integrated RF countermeasures (SIRFC). Two self-protection suites have been delivered to the US Army for ground tests. Operational test and evaluation and production will begin in 2000. The army is to fit SIRFC to Boeing AH-64D Longbow Apaches, CH-47s and MH-47Es and Sikorsky UH-60s and MH60Ks. The air force is to install it on the Bell Boeing CV-22 tiltrotor.