



vertiflite Commentary

Still Need a New Scout

By Mike Hirschberg, Executive Director

The U.S. Army is currently observing Voluntary Flight Demonstrations being performed by several companies with representative demonstrators for a new Armed Aerial Scout (AAS) to replace the venerable OH-58 Kiowa Warrior.

The Kiowa, if not the oldest, is perhaps the weariest of the U.S. military's combat aircraft.

The OH-58 first originated in a Light Observation Helicopter (LOH) competition in 1960. Bell flew the 206/OH-4 in 1962 but the Hughes (now Boeing) OH-6 Cayuse was selected in 1965. The 206 was significantly improved into the civil 206A Jet Ranger. When the OH-6 production rate could not satisfy Army needs, the 206A was selected for production as the OH-58A, entering service in 1969. The aircraft has been repeatedly upgraded and improved, with the OH-58D Kiowa Warrior becoming operational in 1985. Production ended in 1989, with 2,200 Kiowas built.

Soon after the Army fielded leap-ahead capabilities with the UH-60A Black Hawk utility and the AH-64A Apache attack helicopters, the Service began development of an advanced scout under the Light Helicopter Experimental (LHX) program. Boeing-Sikorsky was selected in 1991 to develop the RAH-66 Comanche, which first flew in 1996. Despite being,



unquestionably, the world's most advanced helicopter, it suffered from changing requirements, funding instability, technical challenges and other issues. Development dragged on until 2004, when it was terminated after an investment of \$6.9B.

The Army – busy fighting two wars with fielded aircraft that were badly suffering from a lack of investment – canceled the Comanche to apply the funds to long overdue upgrades to other Army aircraft. These included self-defense capabilities and cockpit updates, which helped to rapidly achieve reductions in wartime crashes and combat losses, and speeding the fielding of the UH-60M, CH-47F/G,

Apache Block III and OH-58D Cockpit and Sensor Upgrade Program (CASUP).

In parallel, the Army initiated the Armed Reconnaissance Helicopter (ARH) program, seeking quick fielding of a capability based on a commercial-off-the-shelf aircraft. In 2005, the Army selected the Bell ARH-70 Arapaho based on the Bell 407, integrated with sensors and a Mission Equipment Package, as well as a more capable engine and rotors. Although originally intended as minimum changes to a commercial product, the program expanded uncontrollably to meet the military's requirements, and the cost grew by 70% before it too was terminated in 2008.

The Army, still facing the valid operational need that had prompted the LHX program in the 1980s, initiated the Armed Aerial Scout program with a prolonged Analysis of Alternatives (AoA). With the wars draining resources, it took until this summer to initiate a Voluntary Flight Demonstration, where industry is using its own resources to develop and demonstrate aircraft that are representative of their AAS offerings. Five companies – AgustaWestland North America, Bell, Boeing, EADS North America, and MD Helicopters – are all reported to be participating to “inform the decision” about what an

AAS acquisition program could be. The Army plans call for release of a Request for Proposals in 2014 – ten years after the cancellation of the Comanche and more than a quarter century since the need to replace the Kiowa was identified.

Having flown for a half-century, the Kiowa is tired, with insufficient investments over the past two decades. Unable to operate in the high/hot environment of Afghanistan, the aircraft has become a challenge to keep its availability up, and its time on station and payload capacity is so limited that it has only marginal utility in the field. The CASUP will sustain it for a few more years, and hopefully it is the last “Band Aid” before an operational AAS will replace it.

With the Chinook having reached its 50th anniversary last year, and the vast bulk of the Army’s fleet – the Apache and Black Hawk – nearing their 40th anniversaries, the Army must begin replacing fielded rotary wing systems before the specter of unacceptable losses seen in the early days of the conflicts in Afghanistan and Iraq becomes the Army’s only foreseeable future.

The time for procurement of a new armed aerial scout is now. With the sundown of all current U.S. military production less than a decade away, there will be significant excess capacity in the industrial base, and a risk that its capabilities will degrade. Industry is preparing for the major Future Vertical Lift (FVL) Medium acquisition, planned for fielding in 2030, which kicks off with the Joint Multi-Role (JMR) Technology Demonstration effort. Between now and the expected FVL Engineering and Manufacturing Development (EMD) period, the Army has a fleeting opportunity to procure a system and simultaneously maintain the industrial capacity for FVL. Any



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delay will postpone FVL or could force any scout program out another two decades after FVL-Medium development has ended.

The U.S. Army needs to make the hard choice to budget for both

programs, and get the AAS program underway as soon as possible in order to finally realize the replacement of its venerable OH-58 Kiowa Warrior.

