The FLRAA Decision is a Turning Point

By Mike Hirschberg, VFS Executive Director

In November, the US Army is expected to announce the long-awaited decision on the Future Long Range Assault Aircraft (FLRAA) competition. The result of 14 years of studies, demonstrations and government reviews, this selection will have profound impacts on the two competing teams, the Army and America’s allies.

A Short History

FLRAA is part of the Future Vertical Lift (FVL) initiative that was instigated in 2008 by Congress — at the behest of VFS and its members (see www.vtol.org/FVL). The Secretary of Defense established FVL in 2009 to focus technology development on replacing the existing US military helicopters with next-generation rotorcraft. FLRAA is the first program under FVL.

After the US Army awarded conceptual study contracts in 2011, Bell and Sikorsky-Boeing were down-selected in 2014 to each build a roughly 30,000-lb (13.6-metric-ton) gross-weight Joint Multi-Role Technology Demonstrator (JMR TD) aircraft.

Bell’s V-280 Valor tiltrotor first flew in December 2017; it accrued 214 flight hours and demonstrated a maximum speed of 305 kt (565 km) before it was retired in 2021. The coaxial compound Sikorsky-Boeing SB>1 Defiant made its first flight in March 2019 and hit 247 kt (457 km/h) in October 2021. Both aircraft demonstrated the potential for long-range operations and met the Army’s key performance parameters.

Decision Time

The two next-generation operational designs proposed for the FLRAA competition are designed for the Army’s requirements and are based on the lessons learned from JMR TD.

The companies submitted their proposals in September 2021, with at least one major update since then. At the Association of the United States Army (AUSA) Annual Meeting on Oct. 10–12, Army leaders said the decision would be announced in the coming weeks.

This decision will pick one team to produce thousands of high-end rotorcraft for decades to come.

All is not lost, of course, for the FLRAA team that is not selected. In addition to significant current and planned production for legacy helicopters by each of the competitors, the next program under FVL — the Future Armed Reconnaissance Aircraft (FARA) — is hot on the heels of FLRAA. Bell and Sikorsky are again squaring off for this competition, and the team not selected for FLRAA may well be selected for the 14,000-lb (6.35-t) FARA scout/attack helicopter.

Beyond FARA, the US Marine Corps has been studying a Family of Systems (FoS) for future rotorcraft that could leverage FLRAA or FARA developments, as could the US Navy’s FVL-Maritime Strike to replace the MH-60 Seahawk and MQ-8C Fire Scout helicopters.

In addition, the Army and other services must still develop replacements for many more types of aircraft, including the AH-64 Apache and CH-47 Chinook. Many more competitions will take place in the years to come.

Global Impact

The conflicts over the past two decades have highlighted the need to move beyond today’s enduring fleet of helicopters conceived in the 1960s and 1970s. The mountainous terrain and vast distances of Afghanistan, coupled with China’s increasingly bellicose postering in the Pacific, have highlighted this need for new capabilities. And Russia’s invasion of Ukraine has underscored the need for strengthened defenses in Europe and elsewhere, particularly for longer range and higher speed.

The Defiant and Valor technology demonstrators have proven the potential for next-generation rotorcraft to leap far beyond current Army helicopters, and far beyond anything else available in the world.

FVL aircraft or their derivatives could fulfill the needs of NATO countries and other allies, just as the Black Hawk and its derivatives nearly a half-century ago. Commercial derivatives or civil variants are also a possibility. The FLRAA decision could also have a major impact in solidifying or reshaping the existing US rotorcraft industrial base, with significant implications for the civil business as well.

Thus, the FLRAA decision is a turning point — immediately for the two competing teams and, longer term, for the US rotorcraft industry, the US Army and global market.

What do you think? Let me know at director@vtol.org.