Bell to Advance U.S. DoD High-Speed VTOL Capabilities

An artist's conception of Bell Textron's entry in the AFWERX High-Speed Vertical Take-Off and Landing Concept Challenge. *BELL TEXTRON*

Fort Worth, Texas — Bell Textron Inc. has advanced to the next phase of the AFWERX High-Speed Vertical Take-Off and Landing Concept Challenge, a crowdsourcing effort for the U.S. Air Force and Special Operations Command, the company said Feb. 16.

Bell is one of 11 companies from more than 200 challenge entrants selected to receive market research investments aimed at advancing solutions that enable optimal agility in austere environments.

"Bell is thrilled that our HSVTOL concepts have been selected for the next phase of the U.S. Air Force's AFWERX Challenge," said Jason Hurst, Bell's vice president of Innovation. "In entering this next phase, Bell's teams will continue to lay the groundwork for the production of another revolutionary

military aircraft and provide USSOCOM and the U.S. Air Force with conceptual designs and development roadmaps to accelerate this capability to the warfighter."

Bell's HSVTOL vehicles blend the hover capability of a helicopter with the speed, range and survivability features of fighter aircraft. This family of scalable aircraft concepts is designed to support a range of missions, including personnel recovery, autonomous ISR/Strike and tactical mobility, with low-downwash hover capability and jet-like speeds of more than 400 knots.

Bell's concepts are envisioned as part of a broader HSVTOL mission system framework that provides the next generation of speed, range, and survivability. These concepts provide the flexibility to carry out USAF and USSOCOM missions across the full spectrum of conflict and political scenarios. It emerged as a top-tier entrant in the HSVTOL Concept Challenge by meeting or exceeding rigorous evaluation criteria focused on technical merit, reliability, scalability, and other factors.

"The HSVTOL Concept Challenge has surfaced an impressive range and caliber of solutions to help us understand how to build a new class of air vehicles," said Dr. Reid Melville, chief innovation officer, Air Force Research Laboratory Transformational Capabilities Office. "We believe the organizations selected to receive market research investments at this stage have the potential to deliver truly groundbreaking innovation."

Over the next six months, Bell will further develop its HSVTOL solution, working closely with the USAF, USSOCOM, and Collaboration.Ai, the prime contractor facilitating the HSVTOL Concept Challenge.