

Bell V-280 Valor Receives High Marks During Low-Speed Agility Testing



The Bell V-280 Valor in action. Bell Helicopter
FORT WORTH, Texas – The Bell V-280 Valor recently completed flight demonstrations ahead of schedule of its low-speed agility key performance parameter in the U.S. Army-led Joint Multi-Role Technology Demonstrator (JMR TD) program, Bell Helicopter announced.

The V-280 Valor, which the U.S. Marine Corps is monitoring for possible use as well, has demonstrated in flight testing that it has the raw control power in pitch, roll and yaw maneuvers to meet the Army's Level 1 handling qualities requirements, which is the highest performance standard for agility.

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Ryan Ehinger, V-280 program manager at Bell

This flight testing validates Bell's engineering models and development processes to design, build and test an aircraft on an aggressive development schedule that meets Army performance requirements.

"This latest flight milestone proves that the V-280 Valor tilt-rotor delivers first-rate handling for pilots during low-speed maneuvers without sacrificing speed, range or payload that the military needs for multidomain operations," said Ryan Ehinger, the V-280 program manager at Bell.

Flight testing of the V-280 Valor.

For pilots, this achievement provides additional proof that the V-280 will have unprecedented agility on the objective (at the "X") for operational effectiveness, according to the Bell release. The aircraft's digital flight controls and performance-driven design increases mission effectiveness by providing a high level of agility, reducing pilot workload and enhancing flight safety.

As the JMR TD period of performance winds down, Bell and Team Valor continue to expand the flight envelope and demonstrate new capabilities to prove the V-280 Valor's key technologies and reduce the risk for future vertical lift programs.

The latest flight statistics for the V-280 include:

- Forward flight over 300 knots true airspeed.
- More than 110 hours of flight and over 225 rotor-turn hours.
- Greater than 50-degree banked turns.
- 4,500-feet-per-minute rate of climb and sustained flight at an altitude of 11,500 feet.
- Single flight ferry of more than 370 miles.
- Demonstrated Level 1 low-speed agility with fly-by-wire controls.
- In-flight transitions between cruise mode and vertical takeoff and landing.