

FACT SHEET

V-280 Valor



The Bell V-280 *Valor* is a tiltrotor aircraft being developed by Bell and Lockheed Martin for the Army's Future Vertical Lift program. The aircraft was officially unveiled at the 2013 Army Aviation Association of America's Annual Professional Forum and Exposition in Fort Worth. The V-280 made its first flight on Dec. 18, 2017, in Amarillo.

In June 2013, Bell Helicopter announced that the V-280 design had been selected by the Army for the joint multi-role technology demonstrator phase. The Army classified the offering as a Category I proposal, meaning it is a well-conceived, scientifically, or technically sound proposal pertinent to program goals and objectives with applicability to Army mission needs.

On Dec. 5, 2022, the V-280 was chosen by the Army as the winner of the Future Long-Range Assault Aircraft program to replace the Sikorsky UH-60 Black Hawk.

Special emphasis has been placed on reducing the weight of the V-280 in comparison to the V-22, which would reduce cost. To do this, composites are used extensively in the wing, fuselage, and tail. Wing skins and ribs are made of a honeycomb-stiffened "sandwich" construction with large-cell carbon cores for fewer, larger, and lighter parts.

Skins and ribs are paste-bonded together to eliminate fasteners. With these measures, costs are reduced by over 30 percent compared to a scaled V-22 wing. Bell expects the V-280 to cost around the same as an AH-64E or MH-60M.

While the Osprey has a higher disk loading and lower hover efficiency than a helicopter, the V-280 will have a lower disk loading, and longer wing for greater hover and cruise efficiency.

In October 2021, Bell and Rolls-Royce jointly announced that the V-280 Valor powerplant would switch from the T64 turboshaft used on the prototype to a derivative of the Rolls-Royce T406/AE 1107C used on the Osprey, which would be named the AE 1107F.

At the same time as increasing power from 5,000 to 7,000 horsepower, the AE 1107 is a known element in tiltrotor aircraft with its two decades of prior use, which lowers sustainment costs and decreases risks of the project.

#