



Aviation Investigation Preliminary Report

Location:	Fort Blackmore, VA	Accident Number:	ERA25FA065
Date & Time:	December 4, 2024, 14:51 Local	Registration:	N627TT
Aircraft:	TRUITT JAMES B VANS RV-8A	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Business		

On December 4, 2024, about 1451 eastern standard time, an experimental amateur-built Vans RV-8A, N627TT, was substantially damaged when it was involved in an accident near Fort Blackmore, Virginia. The commercial pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 business flight.

According to the operations manager at Virginia Highlands Airport (VGI), Abington, Virginia, the pilot received 16.8 gallons of 100LL aviation fuel prior to departure. He watched the airplane depart runway 24, and as the pilot approached the end of the runway, the airplane “did a sharp bank and left pull into the downwind.” According to the operations manager, the airplane then “did a low pass over the runway at about 50 ft” before performing a “vertical” climb at the end of the runway and departing the airport area. He also commented that he has known the pilot since 2015 and had never seen him fly the airplane in that manner prior to the accident flight.

Preliminary Automatic Dependent Surveillance-Broadcast (ADS-B) track data revealed that the airplane departed from runway 24 at VJI at 1426. The airplane then flew in the vicinity of the airport consistent with the operations manager’s description before proceeding to the southwest (see figure 1). The airplane maintained the southwest ground track for approximately 20 miles before turning to the west, then northwest. The track data showed altitude variations from approximately 2,100 ft to 3,700 ft mean sea level (msl) along the route of flight. About 1444, at an altitude of 2,725 ft msl, the airplane began a left turn to the west, followed by a sharp left turn and a climb of 200 ft. The airplane then began a right turn and climbed to 2,825 ft, descended to 2,600 ft, climbed again to 2,875 ft, followed by a decent to 2,450 ft. The last track data, recorded at 1447, indicated that the airplane’s last recorded altitude was 2,150 ft.



Figure 1 – The accident airplane’s ADS-B flight track (yellow line and arrows) from the departure airport, VJI, to the location of the accident site.

The accident site was located at a private airstrip. According to the owner of the private airstrip, who was also a family member of the accident pilot, the pilot had a business meeting in Louisville, Kentucky that he was going to attend. The family member stated that in the past it was not uncommon for the pilot to occasionally fly over the property at low altitudes while enroute to various destinations, but the pilot had never landed at the property.

A witness recorded a video of the accident airplane as it maneuvered over the airstrip. The video depicted the airplane flying low over the turf runway before entering a short, gradual, climb. Shortly after the climb initiated, the airplane began a roll to the right that continued to an inverted attitude, after which the nose of the airplane pitched toward the ground and the airplane descended to ground impact. Figure 2 shows a series of eight still frames from the witness video.



Figure 2- Still frames from the witness video showing the airplane as it maneuvered shortly before impact.

The wreckage came to rest upright on the turf runway of the airstrip, and oriented on a 320° magnetic heading. The debris field was confined to about an 80 ft radius and contained all structural components of the airplane. A ground scar that was 10 ft-long, and consistent with the geometry of the airplane's right wing, along with a crater that was about 2 ft in diameter and about 12 inches deep was located about 8 ft from the main wreckage of the airplane. The propeller was separated from the engine and remained in the crater.

The cockpit instrument panel was displaced forward and down. All navigational instrumentation and the engine monitoring system were destroyed by impact forces. The fuselage was buckled and compressed from impact. The empennage was buckled and twisted to the right. The rudder cables were connected to the rudder and were pinched and bound as a result of impact damage to the fuselage. The elevator torque tubes were crushed and broken due to impact forces at the point of the partial separation of the empennage to the fuselage. The elevator torque tubes remained connected to the elevators. Both wings displayed leading-edge damage. The right wing was displaced aft, and the left wing was displaced forward. Continuity of the torque tubes from the control stick to the ailerons was established.

The engine remained attached to the engine mount and firewall. The engine mount was broken and bent in multiple locations, displacing the engine downward. The engine crankshaft flange was impact-separated and attached to the propeller. One magneto was destroyed by impact

forces. The second magneto had minor impact damage. The magneto with minor impact damage produced bright blue spark at all leads when the impulse coupling was actuated.

The top spark plugs were removed, and the electrodes exhibited normal wear and coloration consistent with normal engine operation. The engine crankshaft was rotated 720° via a drive tool through the vacuum pump drive pad. Thumb compressions were established, and valve action movement was observed on all cylinders. Continuity of the crankshaft to the camshaft was established throughout the engine.

The two-blade metal propeller displayed chordwise scoring, torsional bending, and leading-edge polishing. One propeller blade was bent forward and exhibited “S” bending.

The pilot purchased the airplane in October of 2021. A condition inspection of the airplane was completed on July 6, 2024.

Aircraft and Owner/Operator Information

Aircraft Make:	TRUITT JAMES B	Registration:	N627TT
Model/Series:	VANS RV-8A	Aircraft Category:	Airplane
Amateur Built:	Yes		
Operator:	On file	Operating Certificate(s) Held:	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	LNP,2684 ft msl	Observation Time:	14:55 Local
Distance from Accident Site:	12 Nautical Miles	Temperature/Dew Point:	3°C /-4°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	12 knots / 19 knots, 200°
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	30 inches Hg	Type of Flight Plan Filed:	NONE
Departure Point:	Abington, VA (VJI)	Destination:	Louisville, KY

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	36.776773,-82.583361 (est)

Administrative Information

Investigator In Charge (IIC):	Enders, Ryan
Additional Participating Persons:	Jeffrey Burch; FAA/FSDO; Charleston, WV
Investigation Class:	Class 3

Note: