



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Chattahoochee, Florida	Accident Number:	ERA22FA036
Date & Time:	October 31, 2021, 13:20 Local	Registration:	N479JJ
Aircraft:	Vans RV4	Aircraft Damage:	Destroyed
Defining Event:	Loss of control in flight	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot departed the airport for a cross country flight. Shortly after departure, radar services were terminated by air traffic control and the pilot was cleared for a radio frequency change. Seventeen minutes later, radar contact was lost. Automatic dependent surveillance-broadcast data obtained from the Federal Aviation Administration revealed the airplane climbed to about 2,500 ft mean sea level and made a few turns to the north and northeast before heading northwest. The airplane began to lose groundspeed, turned to the left and descended, then gained groundspeed as it continued to descend. The last data track showed the airplane at 650 ft and a groundspeed of 172 knots.

A witness was outside at his house when the canopy from the airplane fell in his yard. The canopy was about 1.5 miles away from the main wreckage. The accident site was in a wooded area and the wreckage path was about 550 ft long. The airplane was heavily fragmented and scattered along a debris path. The canopy handle was found in the open position with the looking pin damaged and bent at its tip. It is likely that the canopy was not locked correctly before takeoff and that it opened in flight and departed the airplane. The airplane then made a gradual slow left descending turn and continued to gain airspeed until it contacted trees and the ground at a high rate of speed. Based on the available evidence, it could not be determined if the canopy contacted and incapacitated the pilot when it separated from the airplane, which then resulted in a loss of control.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to properly secure the canopy before takeoff, allowing the canopy to open and then separate in flight, which resulted in the pilot's failure to maintain control of the airplane for reasons that could not be determined based on the available evidence.

Findings

Aircraft	Flight compartment windows - Incorrect use/operation
Personnel issues	Incorrect action performance - Pilot
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Prior to flight	Ground handling event
Enroute-cruise	Part(s) separation from AC
Enroute-cruise	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On October 31, 2021, about 1320 eastern daylight time, an experimental, amateur-built Vans RV-4, N479JJ, was destroyed when it was involved in an accident near Chattahoochee, Florida. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot departed Tallahassee International Airport (TLH), Tallahassee, Florida, about 1303 destined for Monroe County Aeroplex Airport (MVC), Monroeville, Alabama. After departure, an air traffic controller terminated radar services and approved the pilot to change radio frequencies. About 17 minutes later, radar contact was lost.

According to automatic dependent surveillance-broadcast (ADS-B) data obtained from the Federal Aviation Administration (FAA), the airplane climbed northbound to about 3,000 ft mean sea level (msl) after departure, then it turned right about 90° to the east, then back to the north. The airplane descended to about 2,500 ft and overflowed Lake Jackson then headed westbound before turning northwest bound. The airplane’s altitude varied between about 2,000 and 2,500 ft. As the airplane flew about .70 nautical miles southwest of Mount Pleasant, it began to lose groundspeed and began turning left and descending, then gaining groundspeed while continuing to descend. Radar contact with the airplane was lost about 17 minutes after takeoff. The last data track showed the airplane at 650 ft and a groundspeed of 172 knots.

An off-duty law enforcement officer was doing yardwork at his house when the airplane’s bubble-style canopy fell in his yard (the airplane was equipped with a bubble-style canopy that was hinged on the side). The canopy was about 1.5 miles away from the main wreckage.

WRECKAGE AND IMPACT INFORMATION

The accident site was in a wooded area and the wreckage path was about 550 ft long. The airplane was heavily fragmented and scattered along a debris path on a heading of about 220° magnetic. The outboard portion of the right wing, including the aileron, was separated and found in the vicinity of an initial tree strike. Small pieces of sheet metal, wheel pants, pieces of

the carburetor, fuel tank wing sections and stringers were located along the wreckage path for about 400 ft. The empennage was leaning against a tree with impression marks about 15 ft up the tree. The inboard section of the left wing was found about 500 ft along the wreckage path. The fuel tank was breached, and the left wing was fire damaged. The engine, propeller, pieces of the landing gear, and parts of the instrument panel were located at the end of the wreckage path. Both propeller blades were impact separated. The canopy was impact damaged and the frame was bent in several areas. The canopy handle was found in the open position with the locking pin damaged and bent at its tip. The locking mechanism on the canopy could not be tested.

MEDICAL AND PATHOLOGICAL INFORMATION

Toxicology testing performed by the FAA's Forensic Services Laboratory did not reveal any evidence of alcohol or other impairing drugs.

An autopsy was performed on the pilot by the Office of the Medical Examiner, District Two, Tallahassee, Florida. The report listed the cause of death as blunt traumatic injuries.

Pilot Information

Certificate:	Private	Age:	79, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 21, 2013
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	725 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Vans	Registration:	N479JJ
Model/Series:	RV4 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	79
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	June 8, 2021 Condition	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	648 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320-E2A
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TLH, 68 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	129°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 3300 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	18°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Tallahassee, FL (TLH)	Type of Flight Plan Filed:	None
Destination:	Monroeville, AL (MVC)	Type of Clearance:	VFR
Departure Time:	13:03 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	30.649152,-84.7231(est)

Administrative Information

Investigator In Charge (IIC):	Boggs, Daniel
Additional Participating Persons:	Gregory Joy; FAA; Tampa, FL Mike Childers; Lycoming ; Atlanta, GA
Original Publish Date:	October 5, 2023
Last Revision Date:	November 5, 2024
Investigation Class:	Class 3
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=104184

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