



# Aviation Investigation Preliminary Report

<b>Location:</b>	Winslow, AR	<b>Accident Number:</b>	CEN23FA190
<b>Date &amp; Time:</b>	May 17, 2023, 12:37 Local	<b>Registration:</b>	N522MJ
<b>Aircraft:</b>	Beech E-90	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

On May 17, 2023, about 1237 central daylight time, a Beech E-90 airplane, N522MJ, was destroyed when it was involved in an accident near Winslow, Arkansas. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations (CFR)* Part 91 personal flight.

The pilot had contacted an avionics repair facility at Drake Field Airport, Fayetteville, Arkansas (FYV) to discuss autopilot issues he was having with the airplane. He told the avionics technician that when engaged in heading hold mode the autopilot would place the airplane into a steep left bank. The technician had the pilot perform ground checks of the autopilot system with no discrepancies noted. He then had the pilot perform a maintenance flight in visual flight rules conditions to test the autopilot system. The pilot told the technician that during the test flight, the airplane still entered a left roll and he disengaged the autopilot once a 40° bank was reached. The technician advised the pilot that he would need to bring the airplane in for service and to not utilize the autopilot during the flight. The pilot planned to fly the airplane to FYV and leave it at the avionics facility for maintenance.

According to Automatic Dependent Surveillance – Broadcast (ADS-B) data, the flight originated from the University-Oxford Airport (UOX), Oxford, Mississippi, about 1127, and proceeded on a direct course toward FYV. The airplane climbed to 16,000 ft msl and remained there until 1221 when a descent was initiated. The descent continued to 8,000 ft msl when the airplane leveled briefly before descending again. The airplane continued on a straight heading toward FYV until 1230 when the airplane made a turn to the left. At this time, the airplane was about 6,100 ft msl. The airplane continued descending and flew toward VIXMU, which was an intermediate/initial approach fix (IF/IAF) for the RNAV runway 34 approach to FYV. The airplane turned to the right before reaching VIXMU, and then turned slightly to the left placing it on a 45° intercept for the approach segment between VIXMU and OPVIE, which was the final approach fix (FAF). During this time the airplane descended to about 3,525 ft, then climbed

back up to 3,950 ft. When it had reached 3,950 ft it began a right turn, presumably to intercept the inbound approach course, but the airplane continued in the right turn and descended (see Figures 1 and 2). The final ADS-B data point, about 0.1 miles from the accident site, was at 1236:26 with a recorded altitude of 2,900 ft msl. The calculated descent rate between the final two data points was in excess of 15,000 ft/min.

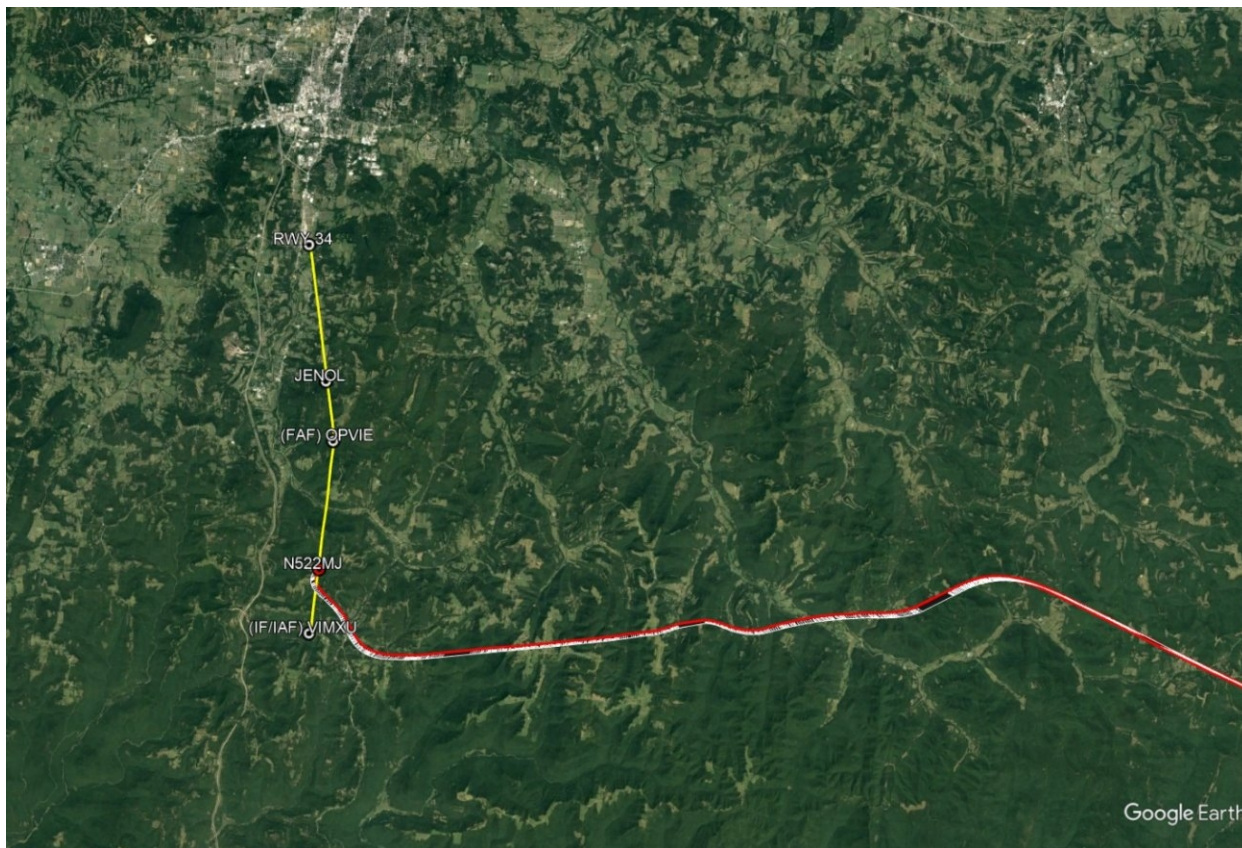


Figure 1. The final portion of the accident flight shown in red with the FYV RNAV 34 approach fixes and approach segments depicted in yellow.

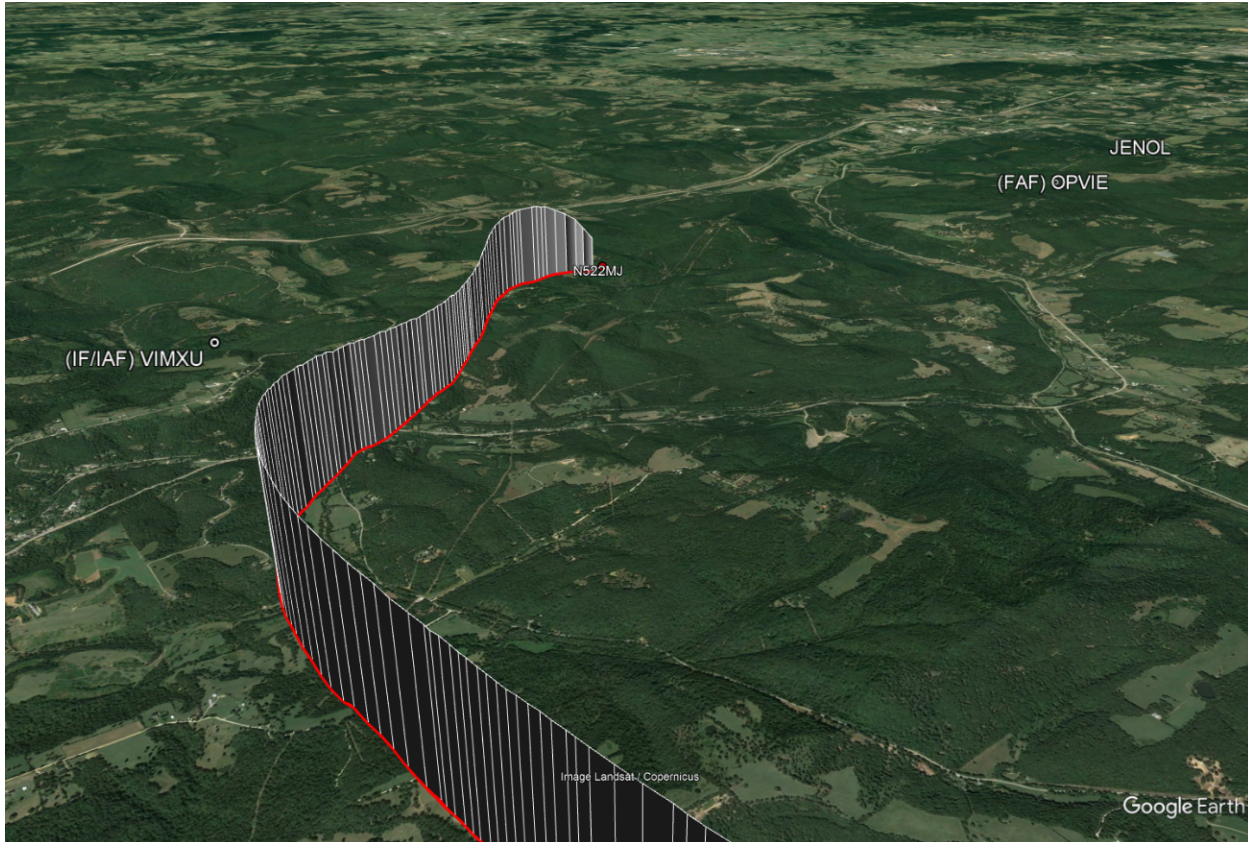


Figure 2. A 3-dimensional view of the final portion of the accident flight. The accident location and the approach fix (VIMXU) are depicted.

The airplane impacted wooded terrain, descending through an opening in the tree canopy. Based on the damage to the surrounding trees, the impact signatures and the airplane damage, the descent was near vertical. Both engines and propellers were embedded in the terrain, and the entire airplane was fragmented. All major airframe and flight control surfaces were identified in the immediate vicinity of the impact location. The airplane wreckage was retained for further examination.

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N522MJ
<b>Model/Series:</b>	E-90	<b>Aircraft Category:</b>	Airplane
<b>Amateur Built:</b>			
<b>Operator:</b>	PPR2 INC	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Designator Code:</b>			

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	IMC	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KFYV,1259 ft msl	<b>Observation Time:</b>	12:53 Local
<b>Distance from Accident Site:</b>	10 Nautical Miles	<b>Temperature/Dew Point:</b>	19°C /15°C
<b>Lowest Cloud Condition:</b>	Scattered / 1500 ft AGL	<b>Wind Speed/Gusts, Direction:</b>	3 knots / , 80°
<b>Lowest Ceiling:</b>	Overcast / 2100 ft AGL	<b>Visibility:</b>	10 miles
<b>Altimeter Setting:</b>	29.97 inches Hg	<b>Type of Flight Plan Filed:</b>	IFR
<b>Departure Point:</b>	Oxford, MS (UOX)	<b>Destination:</b>	Fayetteville, AR (FYV)

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	35.8424,-94.1482

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Brannen, John
<b>Additional Participating Persons:</b>	
<b>Investigation Class:</b>	<a href="#">Class 3</a>
<b>Note:</b>	