

# **Aviation Investigation Final Report**

Location: WESTMORE, Vermont Accident Number: NYC99LA221

Date & Time: September 6, 1999, 08:00 Local Registration: N8535B

Aircraft: Valenza VOLKSPLANE VP-II Aircraft Damage: Destroyed

**Defining Event:** 1 Fatal

Flight Conducted Under: Part 91: General aviation - Ferry

### **Analysis**

The pilot had recently bought the homebuilt airplane, which hadn't been flown in the previous 3 years, and he reassembled it at his airstrip. He conducted an engine ground test, and subsequently decided to change the original propeller to one with a smaller diameter in order to prevent ground strike damage. The pilot then decided to fly the airplane to another airport, where additional repairs could be made. It was his first flight in the accident airplane, and according to a witness, the takeoff was conducted under 'fairly calm' wind conditions. The airplane began its takeoff roll about 250 feet from the approach end of the grass airstrip, on a downwards slope. It lifted off after rolling about 1,000 feet, but did not gain enough altitude to avoid 50-foot trees at the far end. It turned toward the left, but then descended into two pine trees which were in a gully, and below the elevation of the airstrip. The airplane sheared off the treetops, then rolled inverted, and struck the ground. The engine was heard operating strongly throughout the takeoff attempt, and the wooden propeller blades were shattered. The pilot had about 300 hours of flight time.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate altitude/clearance from the trees. A related factor was the pilot's lack of familiarity with the airplane.

#### **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: TAKEOFF - INITIAL CLIMB

#### Findings

1. OBJECT - TREE(S)

2. (C) ALTITUDE/CLEARANCE - INADEQUATE - PILOT IN COMMAND 3. (F) LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND

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#### **Factual Information**

On September 6, 1999, about 0800 Eastern Daylight Time, a homebuilt Volksplane VP-II, N8535B, was destroyed during takeoff from a private airstrip near Westmore, Vermont. The certificated private pilot was fatally injured. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed for the ferry flight to Newport State Airport (EFK), Newport, Vermont. The flight was conducted under 14 CFR Part 91.

According to a Federal Aviation Administration (FAA) Inspector, the pilot had recently bought the disassembled airplane, which hadn't been flown in the previous 3 years, and reassembled it at his airstrip. He conducted an engine ground test, and subsequently decided to change the original propeller to one with a smaller diameter in order to prevent ground strike damage. The pilot then decided to fly the airplane to Newport State, where additional repairs could be made. It was his first flight in the accident airplane.

A witness stated that the takeoff was conducted under "fairly calm" wind conditions. The airplane began its takeoff roll about 250 feet from the approach end of the grass airstrip. It lifted off after rolling about 1,000 feet, but did not gain enough altitude to negotiate 50-foot trees at the far end of the airstrip. The airplane turned toward the left, toward a low point in the tree line, but then hit two pine trees approximately 8 feet below their tops. It sheared off the treetops, then rolled inverted, and struck the ground. The witness heard the engine operating strongly throughout the takeoff attempt.

On-scene investigation revealed that the takeoff was made from a downwards slope, and that the trees which were hit, were in a gully, and below the airstrip's elevation. Airplane control continuity was confirmed, although the cables were separated, and the cable pulleys were loose. All control surfaces were accounted for at the accident site, and the wooden propeller blades were shattered. A 6-inch by 1-inch by 3-foot board was found bolted to, and centered on the underside of the empennage. It was beneath and parallel to the stabilator. Bailing wire held the pressure carburetor and manifold to the engine mount, and there were no nuts on either the left hand or right hand upper forward wing strut turnover bar. One aileron cable under the fuselage did not have a nut on an attachment bolt, another cable had a nut that was finger tight with no cotter key, neither aileron cable turnbuckle under the fuselage was safetywired, and the forward pulley for the stabilator was missing.

An autopsy and toxicological testing were performed on the pilot's remains by the Vermont Department of Health, Burlington, Vermont.

The family of the deceased pilot would not provide pilot or maintenance logbooks. On the pilot's latest third class medical certificate application, dated August 22, 1997, he stated that he had 300 hours of flight time.

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# **Pilot Information**

Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	August 22, 1997
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	300 hours (Total, all aircraft)		

# **Aircraft and Owner/Operator Information**

Aircraft Make:	Valenza	Registration:	N8535B
Model/Series:	VOLKSPLANE VP-II VOLKSPLANE	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	V2-12-79-SV
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	September 6, 1999 Unknown	Certified Max Gross Wt.:	750 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Volkswagen
ELT:	Not installed	Engine Model/Series:	VW 1600
Registered Owner:	ROLLAND L STURTEVANT	Rated Power:	50 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BTV ,330 ft msl	Distance from Accident Site:	50 Nautical Miles
Observation Time:	07:54 Local	Direction from Accident Site:	260°
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	, VT (NONE)	Type of Flight Plan Filed:	None
Destination:	NEWPORT , VT (EFK )	Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	Class G

# **Airport Information**

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:	1000 ft msl	<b>Runway Surface Condition:</b>	Dry;Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	1500 ft	VFR Approach/Landing:	None

# Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

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#### **Administrative Information**

Investigator In Charge (IIC): Cox, Paul

Additional Participating Persons:

Original Publish Date: April 20, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=47318

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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