



# **Aviation Investigation Final Report**

Location: Spring Branch, Texas Accident Number: GAA18CA507

Date & Time: August 23, 2018, 12:45 Local Registration: N110DV

Aircraft: Vans RV10 Aircraft Damage: Substantial

**Defining Event:** Abrupt maneuver **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The pilot reported that, on short final, the airplane was too low, too slow, and right of the runway centerline, and that he overcorrected to clear trees located at the approach end of runway 12. Subsequently, the airplane stalled and touched down on the upsloping approach end of the runway. The right wing struck rising terrain in the safety area on the right side of the runway, and the airplane skidded across the grass safety area and came to rest on the parallel taxiway.

The airplane sustained substantial damage to both wings and the engine mounts.

The runway had rising terrain at both the approach and departure ends. The airport facility directory noted that runway 12 had 20-ft-tall trees 25 ft from the runway threshold and required a 4:1 glideslope to remain clear of them.

The pilot reported that there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation.

### **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 the proper glidepath and his subsequent abrupt maneuver to avoid trees, which led to the exceedance of the airplane's critical angle of attack and resulted in an aerodynamic stall during landing and a subsequent loss of directional control.

## **Findings**

Aircraft Descent/approach/glide path - Not attained/maintained

Aircraft Directional control - Not attained/maintained

Personnel issues Aircraft control - Pilot

Aircraft Angle of attack - Not attained/maintained

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## **Factual Information**

### **History of Flight**

Approach-VFR pattern final Abrupt maneuver (Defining event)

**Landing-flare/touchdown** Aerodynamic stall/spin

**Landing** Loss of control on ground

**Landing** Runway excursion

#### **Pilot Information**

Certificate:	Private	Age:	55,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	November 9, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 26, 2017
Flight Time:	(Estimated) 714 hours (Total, all aircraft), 340 hours (Total, this make and model), 705 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Vans	Registration:	N110DV
Model/Series:	RV10	Aircraft Category:	Airplane
Year of Manufacture:	2007	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	40065
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 10, 2017 Condition	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	726 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	10-540
Registered Owner:		Rated Power:	260 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:	KSAT,789 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	17:51 Local	Direction from Accident Site:	191°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / 16 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	34°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	Meridian, MS (MEI )	Type of Flight Plan Filed:	IFR
Destination:	Meridian, MS (MEI )	Type of Clearance:	IFR
Departure Time:	09:39 Local	Type of Airspace:	Class G

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#### **Airport Information**

Airport:	Kestrel Airpark 1T7	Runway Surface Type:	Asphalt
Airport Elevation:	1261 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	3000 ft / 40 ft	VFR Approach/Landing:	Full stop;Traffic pattern

#### **Wreckage and Impact Information**

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	29.811666,-98.426109(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Jason Dunn; FAA; San Antonio, TX
Original Publish Date:	September 26, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=98149

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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