

# **Aviation Investigation Final Report**

Location: Hampton, Georgia Accident Number: ERA20CA200

Date & Time: May 21, 2020, 19:15 Local Registration: N665HM

Aircraft: Vans RV8 Aircraft Damage: Substantial

**Defining Event:** Sys/Comp malf/fail (non-power) **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot of the experimental, amateur-built tailwheel airplane was also the owner and maintained it as well. He stated that during landing, the right main wheel locked up and the airplane veered right. The pilot immediately released right brake pressure and increased left brake pressure, but the airplane continued to veer right off the right side of the runway and came to rest inverted in a grass area. The pilot subsequently examined the right brake under the supervision of a Federal Aviation Administration inspector. The brake piston tested satisfactorily, and the pilot could not duplicate a brake locking event. He noted that one of the two caliper pins and one of the two pressure plate holes were worn beyond specification. The pilot added that the wear could cause the pressure plate to cock, or foreign object debris to enter, and cause unintended braking.

#### **Probable Cause and Findings**

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

A right main landing gear break malfunction during landing. Contributing to the accident was a worn right main landing gear caliper pin and pressure plate hole.

### **Findings**

Aircraft	Brake - Malfunction
Aircraft	Brake - Fatigue/wear/corrosion

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### **Factual Information**

### **History of Flight**

Landing	Sys/Comp malf/fail (non-power) (Defining event)
Landing	Loss of control on ground
Landing	Runway excursion
Landing	Nose over/nose down

### **Pilot Information**

Certificate:	Airline transport; Commercial; Flight instructor	Age:	61,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	March 17, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 24, 2020
Flight Time:	28784 hours (Total, all aircraft), 31 hours (Total, this make and model), 11000 hours (Pilot In Command, all aircraft), 74 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

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

Aircraft Make:	Vans	Registration:	N665HM
Model/Series:	RV8 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	2011	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	82384
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 1, 2019 Condition	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	34 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	443.9 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1A
Registered Owner:	On file	Rated Power:	180 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:	HMP,882 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	19:15 Local	Direction from Accident Site:	0°
<b>Lowest Cloud Condition:</b>	Scattered / 7500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	24°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Peachtree City, GA (HMP)	Type of Flight Plan Filed:	None
Destination:	Hampton, GA (HMP)	Type of Clearance:	None
Departure Time:	18:50 Local	Type of Airspace:	

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### **Airport Information**

Airport:	Henry County Airport HMP	Runway Surface Type:	Asphalt
Airport Elevation:	0 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	06	IFR Approach:	None
Runway Length/Width:	5500 ft / 75 ft	VFR Approach/Landing:	Full stop

### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.389999,-84.331108

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#### **Administrative Information**

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	Danny Cox; FAA/FSDO; Atlanta , GA
Original Publish Date:	January 29, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101347

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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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