

Aviation Investigation Final Report

Location: Harvest, Alabama Accident Number: ATL07CA126

Date & Time: September 12, 2007, 17:00 Local Registration: N269RV

Aircraft: Rans, Inc. RV-9A Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot stated, "A normal left hand traffic pattern was used with full flaps for landing approach. The airspeed was a little higher than normal at around 70 mph instead of 65 mph for flare entry. The touch down point was earlier than planned. I misjudged the rising airfield terrain for my flare and touched down as a firm three point rather than on the mains first. I immediately took the weight off the nose wheel. From the nose gear fairing fiberglass pieces and the short groove in the turf, it appeared that when I first touched down I damaged the fairing and perhaps locked the wheel. The nose gear touched back down to leave another groove indicative of the nose fork twisting into the ground. The slope flattened out and the plane ballooned. I tried to add power but was too late. When the airplane settled down the damaged nose gear dug in, the [prop] struck and the airplane overturned. The flight was for experience with no intended destination." He also stated, "I should have been more aware of the rising terrain at this end of the airfield and better managed my airspeed. In addition I should have been more aware of the problem with this aircrafts nose gear and used a higher nose wheel tire pressure and replaced it with the manufacture's improved assembly with additional fork clearance. I should have read the recent NTSB June 21, 2007 report on 18 recent RV A model accidents with the nose wheel."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper landing flare and touchdown.

Findings

Occurrence #1: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) TOUCHDOWN - IMPROPER - PILOT IN COMMAND

Occurrence #2: NOSE OVER

Phase of Operation: LANDING - ROLL

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Factual Information

The pilot stated, "A normal left hand traffic pattern was used with full flaps for landing approach. The airspeed was a little higher than normal at around 70 mph instead of 65 mph for flare entry. The touch down point was earlier than planned. I misjudged the rising airfield terrain for my flare and touched down as a firm three point rather than on the mains first. I immediately took the weight off the nose wheel. From the nose gear fairing fiberglass pieces and the short groove in the turf, it appeared that when I first touched down I damaged the fairing and perhaps locked the wheel. The nose gear touched back down to leave another groove indicative of the nose fork twisting into the ground. The slope flattened out and the plane ballooned. I tried to add power but was too late. When the airplane settled down the damaged nose gear dug in, the [prop] struck and the airplane overturned. The flight was for experience with no intended destination." He also stated, "I should have been more aware of the rising terrain at this end of the airfield and better managed my airspeed. In addition I should have been more aware of the problem with this aircrafts nose gear and used a higher nose wheel tire pressure and replaced it with the manufacture's improved assembly with additional fork clearance. I should have read the recent NTSB June 21, 2007 report on 18 recent RV A model accidents with the nose wheel."

Pilot Information

Certificate:	Private	Age:	53,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	December 1, 2006
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	September 1, 2006
Flight Time:	365 hours (Total, all aircraft), 80 hours (Total, this make and model), 264 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Rans, Inc.	Registration:	N269RV
Model/Series:	RV-9A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	90246
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	January 1, 2007 100 hour	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:	8 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	68 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-320-B2C
Registered Owner:	Scott D. Millhouse	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KDCU,592 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	16:30 Local	Direction from Accident Site:	210°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	29°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	DECATUR, AL (DCU)	Type of Flight Plan Filed:	None
Destination:	Harvest, AL (00AL)	Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	

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Airport Information

Airport:	Private Strip 00AL	Runway Surface Type:	Grass/turf
Airport Elevation:	820 ft msl	Runway Surface Condition:	Dry;Rough
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	2600 ft / 150 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:	34.857223,-86.769721

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Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Clive Johnson; Birmingham FSDO-09; Birmingham, AL
Original Publish Date:	March 31, 2008
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66660

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.

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