



National Transportation Safety Board

Aviation Accident Data Summary

Location:	Roanoke, TX	Accident Number:	CEN12LA204
Date & Time:	03/02/2012, 1420 CST	Registration:	N373JT
Aircraft:	PIPER PA-30	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot said he was on a cross-country flight and he noticed that the alternators were producing about 9 volts. He tried to troubleshoot the problem, and he switched the alternators off and on a “number” of times, but he was unable to get them to indicate more than 8 to 9 volts (the pilot used the term “alternator” and “generator” interchangeably in his statement). He said that he heard a “squeal” coming through the headset, and when the right alternator was switched off, the noise would stop. He said that he eventually lost radio communication capability while en route to his destination, and he diverted to an alternate airport. The pilot lowered the landing gear on the downwind leg, and he observed that the nose landing gear was extended by its reflection in the spinner. The landing roll was “normal” until the right main landing gear collapsed, and then the left main landing gear collapsed. A postaccident examination of the landing gear did not disclose any evidence of a mechanical malfunction. The pilot reported that he lost all electrical power due to a loss of one or both alternators. It is likely that the right alternator failed, so when the pilot turned off the right failed alternator, the noise stopped; however, the left alternator could not put out enough voltage to power the radios and other electrical demands. By the time the gear was lowered, there was not enough power to lock the left and right main landing gears in place, so they both collapsed during the landing roll. Had the pilot realized that he had lost electrical power and followed the emergency checklist, he could have verified the locked status of the landing gear and followed the emergency landing gear procedures to extend the gear.

Flight Events

Landing-flare/touchdown - Landing gear collapse

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot’s failure to follow the published emergency procedures to lower the landing gear following a loss of electrical power.

Findings

Aircraft-Aircraft systems-Electrical power system-DC generation system-Failure
Personnel issues-Task performance-Use of equip/info-Use of equip/system-Pilot - C

Pilot Information

Certificate:	Private	Age:	78
Airplane Rating(s):	Multi-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	12000 hours (Total, all aircraft), 12000 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N373JT
Model/Series:	PA-30	Engines:	2 Reciprocating
Operator:	On file	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	IO-320 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	AFW, 722 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	12 knots/ 17 knots, 360°
Temperature:	18°C / 4°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CRYSTAL CITY, TX (20R)	Destination:	Denton, TX (DTO)

Airport Information

Airport:	Northwest Regional Airport (52F)	Runway Surface Type:	Asphalt
Runway Used:	36	Runway Surface Condition:	Dry
Runway Length/Width:	3500 ft / 40 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Edward F Malinowski	Adopted Date:	08/29/2013
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=83221		

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