National Transportation Safety Board
Washington, DC 20594

Brief of Accident

Adopted 08/29/2013

CEN12LA204
File No. 31009 | 03/02/2012 | Roanoke ,TX | Aircraft Reg No. N373JT | Time (Local): 14:20 CST

Make/Model:	Piper/PA-30
Engine Make/Model:	Lycoming / IO-320 SERIES
Aircraft Damage:	Substantial
Number of Engines:	2
Operating Certificate(s):	None
Type of Flight Operation:	Personal
Reg. Flight Conducted Under:	Part 91: General Aviation

	Fatal	Serious	Minor/None
Crew	0	0	1
Pass	0	0	0

Last Depart. Point:	CRYSTAL CITY, TX
Destination:	Denton, TX
Airport Proximity:	On Airport/Airstrip
Airport Name:	Northwest Regional Airport
Runway Identification:	36
Runway Length/Width (Ft):	3500 / 40
Runway Surface:	Asphalt
Runway Surface Condition:	Dry

Condition of Light:	Day
Weather Info Src:	Weather Observation Facility
Basic Weather:	Visual Conditions
Lowest Ceiling:	None
Visibility:	10.00 SM
Wind Dir/Speed:	360 / 012 kts
Temperature (°C):	18
Precip/Obscuration:	No Obscuration; No Precipitation

Pilot-in-Command Age: 78

Certificate(s)/Rating(s)
Private; Multi-engine Land

Instrument Ratings
None

Flight Time (Hours)

Total All Aircraft:	12000
Last 90 Days:	40
Total Make/Model:	Unk/Nr
Total Instrument Time:	UnK/Nr

*** Note: NTSB investigators may not have traveled in support of this investigation and used data provided by various sources to prepare this aircraft accident report. ***

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.
Updated at Aug 29 2013 10:24AM

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OCCURRENCES

Landing-flare/touchdown - Landing gear collapse

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

Findings Legend: (C) = Cause, (F) = Factor

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