



Aviation Investigation Final Report

Location:	TELLURIDE, Colorado	Accident Number:	FTW96LA402
Date & Time:	August 23, 1996, 18:40 Local	Registration:	N757QT
Aircraft:	Cessna TR182	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

As the pilot lowered the landing gear, there was a total electrical failure. He said he could not recall if he observed a GEAR DOWN AND LOCKED indication. He attempted to reset the alternator/voltage regulator circuit breaker, but to no avail. During the landing, the main landing gear collapsed, but the nose landing gear remained down and locked. The airplane skidded off the runway, damaging the left horizontal stabilizer forward and aft spars. Postaccident examination by a repair facility (and later confirmed by the manufacturer) disclosed the generator control unit (GCU) had failed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the generator control unit (GCU), which resulted in a total electrical failure and failure of the main landing gear to lock in place.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. GEAR EXTENSION - INITIATED - PILOT IN COMMAND
2. (C) ELECTRICAL SYSTEM - FAILURE, TOTAL

Occurrence #2: GEAR COLLAPSED
Phase of Operation: LANDING

Factual Information

On August 23, 1996, approximately 1840 mountain daylight time, a Cessna TR182, N757QT, was substantially damaged when the main landing gear collapsed during landing at Telluride, Colorado. The private pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the personal flight that originated at Loveland, Colorado, on August 23, 1996, approximately 1630.

According to the pilot, when he was 10 miles from the airport, he called for an airport advisory but got no reply. When he was 5 miles from the airport, he lowered the landing gear. The pilot said there was a total electrical failure, and he but could not recall if he observed a GEAR DOWN AND LOCKED indication. He attempted to reset the alternator/voltage regulator circuit breaker but to no avail. Upon landing, the left and right main landing gears collapsed; the nose landing gear was down and locked.

This mishap was reported on the date of the occurrence as an incident. On September 23, 1996, the Denver Field Office of the National Transportation Safety Board was advised by the FAA's Salt Lake City, Utah, Flight Standards District Office that an airworthiness inspector had examined the airplane and found that the left horizontal stabilizer forward and aft spars were bent.

A spokesman for West Star Aviation, a repair facility in Grand Junction, Colorado, reported the generator control unit (GCU) had failed. The unit was sent to Precision Airmotive in Everett, Washington, for examination and testing. A company spokesman identified the GCU as one of their products and confirmed the unit had failed.

Pilot Information

Certificate:	Private	Age:	48, 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 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	February 23, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	460 hours (Total, all aircraft), 371 hours (Total, this make and model), 460 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N757QT
Model/Series:	TR182 TR182	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	R18201258
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 3, 1995 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	69 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1710 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-540-L3C5D
Registered Owner:	WILLIAM A. STERN	Rated Power:	235 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TEX ,9078 ft msl	Distance from Accident Site:	
Observation Time:	15:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	25 miles
Lowest Ceiling:	Broken / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	20°C
Precipitation and Obscuration:	Light - Showers - Rain		
Departure Point:	LOVELAND , CO (FNL)	Type of Flight Plan Filed:	None
Destination:	(TEX)	Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	TELLURIDE REGIONAL TEX	Runway Surface Type:	Asphalt
Airport Elevation:	9078 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	6870 ft / 100 ft	VFR Approach/Landing:	Full stop;Straight-in

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:	37.939857,-107.899749(est)

Administrative Information

Investigator In Charge (IIC): Scott, Arnold
Additional Participating Persons: THOMAS A DUFRESNE;

Original Publish Date: February 1, 1997

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=19990>

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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](#).