



National Transportation Safety Board Aviation Accident Data Summary

Location:	Telluride, CO	Accident Number:	DCA13FA148
Date & Time:	09/01/2013, 1310 MDT	Registration:	N169GL
Aircraft:	BEECH 1900D	Injuries:	12 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

During approach to landing the crew selected landing gear down and observed a problem with the left main landing gear (MLG). The landing gear hydraulic motor pump automatically shut down when the landing gear was not locked down after 16 seconds and an internal mechanical lock intended to hold the landing gear actuator in the selected position, did not engage.

The crew carried out the abnormal procedures checklist and attempted to extend the left MLG using the manual landing gear extension procedures, but was unsuccessful. The crew then prepared for landing in accordance with the procedures contained in the quick reference handbook for landing with main gear up or unsafe.

As the airplane slowed through about 80 knots on the landing roll, the left main landing gear collapsed.

Post-accident inspection indicated hydraulic fluid had leaked from a hole, which was normally plugged with a Lee plug, on the left main actuator between the primary and secondary extend ports. The Lee plug was missing and was not found. Examination of the actuator and of the hydraulic fluid quantity remaining indicated the Lee plug was in place during the in-flight attempts to extend the landing gear.

The airplane landed with the gear not locked down and as the landing gear collapsed, the piston in the actuator forced hydraulic fluid back through the system increasing the landing gear actuator internal hydraulic pressure sufficiently to force the Lee plug out of position. The remaining fluid in the actuator leaked out of the hole until system pressure decreased to ambient pressure.

Flight Events

Landing-landing roll - Landing gear collapse

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure of the left main landing gear actuator internal lock to engage in the locked position for undetermined reasons.

Findings

Aircraft-Aircraft systems-Landing gear system-Landing gear actuator-Malfunction - C
Not determined-Not determined-(general)-(general)-Unknown/Not determined - C

Pilot Information

Certificate:	Airline Transport	Age:	32
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	5800 hours (Total, all aircraft), 3000 hours (Total, this make and model), 4700 hours (Pilot In Command, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	30
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):		Instructor Rating(s):	Airplane Single-engine
Flight Time:	2576 hours (Total, all aircraft), 1350 hours (Total, this make and model), 1011 hours (Pilot In Command, all aircraft), 261 hours (Last 90 days, all aircraft), 99 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BEECH	Registration:	N169GL
Model/Series:	1900D	Engines:	2 Turbo Prop
Operator:	GREAT LAKES AVIATION LTD	Engine Manufacturer:	P&W
Air Carrier Operating Certificate:	Flag carrier (121)	Engine Model/Series:	PT6A SER
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KTEX, 9078 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Broken / 10000 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	12 knots, 90°
Temperature:	19°C / 9°C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	DENVER, CO (DEN)	Destination:	Telluride, CO (TEX)

Airport Information

Airport:	TELLURIDE RGNL (TEX)	Runway Surface Type:	Asphalt
Runway Used:	27	Runway Surface Condition:	Dry
Runway Length/Width:	7111 ft / 100 ft		

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	10 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): David Helson

Adopted Date: 09/02/2015

Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=87932>

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