



Aviation Investigation Final Report

Location:	PRICE, Utah	Accident Number:	SEA97LA024
Date & Time:	November 3, 1996, 15:40 Local	Registration:	N19EC
Aircraft:	Cessna A185E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot executed a landing to runway 18 (8,300 feet length) during which the tailwheel touched down followed by the main landing gear, and the aircraft bounced slightly. The aircraft began to track to the left and the pilot corrected. The aircraft returned to and crossed over the centerline during which the pilot was unable to stop the right veer before the aircraft departed the right side of the runway. As the aircraft left the runway the left main landing gear separated. A single tire smear mark was observed on the runway beginning at the centerline, arcing right and then oscillating briefly before exiting the runway's edge. A blue smear mark consistent with the aircraft's blue left wingtip paint near the runway's edge was noted. Winds were out of the southwest at 4 knots 2 minutes after the accident. Metallurgical examination of the left main landing gear bolt revealed smearing of the bolt threads.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control during the landing roll.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

3. LANDING GEAR,MAIN GEAR ATTACHMENT - OVERLOAD

Factual Information

On November 3, 1996, approximately 1540 mountain standard time, a Cessna A185E, N19EC, purchased on the previous day by a private pilot, was substantially damaged during a loss of control on landing at the Carbon County Airport, Price, Utah. The pilot and passenger were uninjured. Visual meteorological conditions existed and the VFR flight plan which had been filed, had not been activated at the time of the accident. The flight, which was personal, was to have been operated under 14CFR91, and originated at Houston, Texas, with its most recent stop at Blanding, Utah.

The pilot reported that he set up for landing on runway 18 and that the aircraft was "lined up (and) centered." He then executed the landing during which the tail-wheel touched down first followed by the main wheels and the aircraft bounced once slightly. He further reported that during the rollout the aircraft began to veer left during which he applied a correction and the aircraft began to track right back towards the centerline. He reported that "at (the) centerline, correction to straighten (the) tracking rendered no results" and the aircraft "continued to (the) right edge of (the) runway and fell over (the) left gear upon striking sand." The pilot also reported that "even applying left brake rendered no correction."

Both left and right landing gear attach bolts and associated nuts were examined along with a replacement bolt and nut from Cessna for the same aircraft (refer to photograph 1). The bolts were examined at the Safety Board's Materials Laboratory Division. The length dimensions were reported as follows:

Left Bolt: 2.394 inches Right Bolt: 2.359 inches New Bolt: 2.341 inches

The left bolt was observed to have a shallow split mid-shaft with longitudinal smearing noted running from the edge of the split face toward the thread end of the shaft (parallel to the bolt shaft longitudinal axis). A small degree of lateral displacement of the bolt's longitudinal axis was observed consistent with a shear or side load force being applied to the bolt perpendicular to the bolt's axis. Additionally, the threads at the end of the bolt displayed smearing and flattening, particularly along the outboard 50% of the threaded end (refer to photograph 2).

Runway 18 at the Carbon County airport measures 8,300 by 100 feet in length and width respectively. A series of photographs were taken of the aircraft beginning near the threshold of runway 18 and progressing towards the aircraft's final resting place. The first view is from the runway centerline looking south towards the aircraft approximately 2,300 feet distant (refer to photograph 3). The second photograph shows a single tire smear on the runway surface beginning in the vicinity of the centerline and arcing to the right (refer to photograph 4). The third photograph shows the single tire smear mark beginning to oscillate back and forth as it proceeds towards the west edge of the runway (refer to photograph 5). The final photograph

shows the aircraft at its final resting place slightly west of the runway edge and also shows a blue smear mark associated with the impact of the left blue wingtip with the runway surface (arrow) and the left main landing gear displaced to the right side of the aircraft (refer to photograph 6).

Winds at the Carbon County airport were reported as 230 degrees magnetic at 4 knots 1548 hours MST.

The pilot reported a total of approximately 50 landings in tail-wheel aircraft within the 90 days previous to the accident with approximately 15 landings in the Cessna 185.

Both left and right landing gear bolts and associated nuts were returned to the aircraft owner as documented on NTSB Form 6120.15 (attached).

Pilot Information

Certificate:	Private	Age:	49, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 5, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	480 hours (Total, all aircraft), 9 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N19EC
Model/Series:	A185E A185E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	185-1306
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	October 10, 1996 Annual	Certified Max Gross Wt.:	3320 lbs
Time Since Last Inspection:	14 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1918 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-D
Registered Owner:	JONES, DAVID, E.	Rated Power:	300 Horsepower
Operator:	JONES, GORDON, E.	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:	PUC ,5291 ft msl	Distance from Accident Site:	
Observation Time:	15:48 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	6°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BLANDING , UT (BDG)	Type of Flight Plan Filed:	VFR
Destination:	(PUC)	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	CARBON COUNTY PUC	Runway Surface Type:	Asphalt
Airport Elevation:	5921 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	8300 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.570091,-110.800827(est)

Administrative Information

Investigator In Charge (IIC):	Mccreary, Steven
Additional Participating Persons:	JAY MOONEY; SALT LAKE CITY , UT
Original Publish Date:	March 31, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42537

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