



Aviation Investigation Final Report

Location:	LIBERAL, Kansas	Accident Number:	CHI96LA024
Date & Time:	October 24, 1995, 14:40 Local	Registration:	N1613M
Aircraft:	CESSNA A185E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

AFTER LANDING, THE AIRPLANE ENCOUNTERED A GUST OF WIND, WHICH TURNED THE AIRPLANE TO THE RIGHT. THE PILOT STATED THAT HE APPLIED FULL LEFT RUDDER AND POWER TO CORRECT. SUBSEQUENTLY, THE LEFT MAIN GEAR FAILED, AND THE AIRPLANE EXITED TO THE RIGHT OF THE RUNWAY, COMING TO REST ON ITS NOSE AND RIGHT WING. REPORTED WINDS AT THE AIRPORT WERE 190 DEGREES AT 23 KNOTS WITH GUSTS TO 28 KNOTS. THERE WAS A RUBBER SKID MARK FOLLOWED BY METAL SKID MARKS ON THE RUNWAY. THE LEFT TIRE HAD SCRATCHES ON THE OUTSIDE WALL, AND THE AXLE HAD SHEARED OFF AT THE FOUR BOLTS THAT ATTACHED IT TO THE LANDING GEAR. THE LEFT BOTTOM WING TIP WAS ALSO SCRATCHED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for wind conditions, which resulted in a loss of directional control and an inadvertent ground swerve.

Findings

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

Findings

1. (F) WEATHER CONDITION - GUSTS

2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

5. LANDING GEAR, AXLE - OVERLOAD

Factual Information

On October 24, 1995, at 1440 central daylight time (cdt), a Cessna A185E, N1613M, operated and owned by an instrument rated commercial pilot, was substantially damaged during landing at Liberal Municipal Airport, Liberal, Kansas. While landing, the left main landing gear wheel broke off. The pilot reported minor injuries. A VFR flight plan was on file. The personal 14 CFR Part 91 flight had departed Platte Municipal Airport, Platte, South Dakota, at 1113 cdt.

From the pilot's written statement, the pilot said he had landed on runway 17 and was taxiing to a taxiway turn off when the airplane veered to the right from a gust of wind. The pilot stated, "...he applied full left rudder and applied power to correct but the airplane skidded to the right and tipped up on the nose and right wing tip... ." Five minutes before the accident, Liberal automatic weather observation station (AWOS) reported winds from 190 degrees at 23 knots with gusts to 28 knots.

A Federal Aviation Administration (FAA) Principal Maintenance Inspector (PMI) represented the NTSB during the on-scene investigation. The PMI said, there were 120 feet long rubber skid mark followed shortly after by a metal skid mark about 30 to 40 feet long on the runway. The left tire showed abrasive scratches on the outside of the tire and the axle was sheared off at the four bolts that attach it to the landing gear. The bottom of the left wing tip showed evidence of scrapping.

Pilot Information

Certificate:	Commercial; Private	Age:	56, 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 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	September 6, 1994
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1377 hours (Total, all aircraft), 588 hours (Total, this make and model), 1280 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N1613M
Model/Series:	A185E A185E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18501833
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	June 13, 1995 Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	60 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1622 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated	Engine Model/Series:	IO-520-D
Registered Owner:	SIRES, ROGER R.	Rated Power:	300 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:	LBL ,2883 ft msl	Distance from Accident Site:	
Observation Time:	14:35 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 12000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	23 knots / 28 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PLATTE , SD (1D3)	Type of Flight Plan Filed:	VFR
Destination:	(LBL)	Type of Clearance:	VFR
Departure Time:	11:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	LIBERAL MUNICIPAL AIRPORT LBL	Runway Surface Type:	Asphalt
Airport Elevation:	3687 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	7101 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Carlson, Todd
Additional Participating Persons:	RONALD E CENTER; WICHITA , KS
Original Publish Date:	March 21, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=10146

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).