



Aviation Investigation Final Report

Location:	McCarthy, Alaska	Accident Number:	ANC04LA001
Date & Time:	October 10, 2003, 14:00 Local	Registration:	N9278C
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane was carrying supplies to a remote airstrip. On approximately the tenth landing of the day, the left main landing gear wheel separated from the gear leg. The airplane veered to the left, and the right main landing gear collapsed. The left main landing gear leg fractured through the upper wheel mounting-bolt holes. The landing strip is gravel covered and rough. The airplane sustained structural damage to the fuselage and right wing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The separation of the left main landing gear wheel from the gear leg, which resulted in a loss of directional control, and collapse of the right main landing gear. A factor contributing to the accident was the rough and uneven airstrip.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

1. TERRAIN CONDITION - RUNWAY
2. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (C) LANDING GEAR,WHEEL - SEPARATION

4. (C) LANDING GEAR,MAIN GEAR - FRACTURED

Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #4: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Factual Information

On October 10, 2003 about 1400 Alaska daylight time, a wheel-equipped Cessna 180 airplane, N9278C, sustained substantial damage when the left main landing gear wheel separated from the airplane during landing at a private airstrip, about 15 miles east of McCarthy, Alaska. The airplane was being operated by the pilot as a visual flight rules (VFR) personal flight under Title 14, CFR Part 91, when the accident occurred. The solo commercial pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated at the McCarthy Airport, McCarthy, about 1330.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on October 10, a friend of the pilot said he was relaying information received from the pilot via radio telephone. He related the pilot said he was ferrying supplies to a remote airstrip located on a family homestead. The pilot said on about the tenth trip to the homestead, the left main landing gear wheel separated from the airplane during landing, resulting in the collapse of the right main landing gear, and structural damage to the right wing and the fuselage.

During a telephone conversation with the NTSB IIC on October 14, the pilot said the day prior to the accident the airplane's landing gear was changed from floats to wheels. He said there were no mechanical or installation problems noted during the exchange. The pilot said he had made about 10 trips with supplies from McCarthy, about 15 miles from the homestead, prior to the accident. He said the runway is one-way in, and he landed with a slight tailwind. In a subsequent written statement by the pilot dated November 18, the pilot reported a smooth approach and touchdown. After the wheels made contact with the ground he reported that the "left landing gear snapped off along the top two axle mounting bolts," and that the left gear leg furrowing into the ground resulted in the airplane veering sharply to the left. The right main landing gear collapsed, and the fuselage and right wing impacted the ground.

Pilot Information

Certificate:	Commercial	Age:	52, Male
Airplane Rating(s):	Single-engine land; Multi-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 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	December 20, 2001
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 20, 2001
Flight Time:	1140 hours (Total, all aircraft), 199 hours (Total, this make and model), 1017 hours (Pilot In Command, all aircraft), 55 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9278C
Model/Series:	180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	31377
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	February 1, 2003 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	130 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5272.2 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-470-K
Registered Owner:	Kurt Stenehjelm	Rated Power:	230 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Few / 6000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	McCarthy, AK (AK0)	Type of Flight Plan Filed:	None
Destination:	McCarthy, AK	Type of Clearance:	None
Departure Time:	13:20 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Gravel
Airport Elevation:	2800 ft msl	Runway Surface Condition:	Dry
Runway Used:	1	IFR Approach:	None
Runway Length/Width:	2000 ft / 100 ft	VFR Approach/Landing:	Valley/terrain following

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:	55.920726,-159.490142(est)

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Sally Turnbull; Anchorage, FSDO-03; Anchorage, AK
Original Publish Date:	October 28, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=58128

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](#).