



Aviation Investigation Final Report

Location:	Haines, Alaska	Accident Number:	ANC07LA035
Date & Time:	May 1, 2007, 17:00 Local	Registration:	N185M
Aircraft:	Cessna A185F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The airplane was being operated by a mountain flying service delivering climbers and their equipment to a glacier base camp, under Title 14, CFR Part 135. The commercial certificated pilot said during the landing roll on the glacier, while turning to the left, the right ski loaded up with snow. He said the ski attachment to the right main landing gear broke, and the gear leg dug into the snow. The airplane nosed down, and the right wing struck the surface of the glacier, damaging the wing and aileron. The pilot said an examination of the landing gear revealed that the ski attaching bolts had sheared. He said he had made several trips to the glacier that day, and that there were no problems with the airplane or the landing gear prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The main landing gear attachment bolts to the right ski sheared during the landing roll in deep snow, resulting in a nose down, and structural damage to the right wing and aileron.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,MAIN GEAR ATTACHMENT - SHEARED

Occurrence #2: NOSE DOWN
Phase of Operation: LANDING - ROLL

Findings

2. WING,WING RIB - BUCKLED
3. FLIGHT CONTROL,AILERON - BUCKLED
4. TERRAIN CONDITION - SNOW COVERED

Factual Information

On May 1, 2007, about 1700 Alaska daylight time, a ski-equipped Cessna A185F airplane, N185M, sustained substantial damage when the right main landing gear broke while landing on a glacier, about 74 miles west of Haines, Alaska. The airplane was being operated by Mountain Flying Service, Haines, as a visual flight rules (VFR) on-demand passenger flight under Title 14, CFR Part 135, when the accident occurred. The commercial certificated pilot, and the three passengers were not injured. Visual meteorological conditions prevailed, and a VFR flight plan was filed. The flight departed the Haines Airport, Haines, about 1600.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on May 2, the pilot said during the landing roll on the glacier, he started a left turn, and the right ski started loading up with snow. He said the ski attachment to the right landing gear broke, and the gear leg dug into the snow. He reported the airplane nosed down, and the right wing struck the surface of the glacier. The pilot said an examination of the landing gear revealed that the ski attaching bolts had sheared, and that the right wing and aileron received structural damage. He said he had made several trips to the glacier that day, and that there were no problems with the gear prior to the accident. Due to the remote location, the airplane was not examined by the NTSB.

Pilot Information

Certificate:	Commercial	Age:	52, Male
Airplane Rating(s):	Single-engine land	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 Without waivers/limitations	Last FAA Medical Exam:	February 1, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 1, 2007
Flight Time:	7700 hours (Total, all aircraft), 7300 hours (Total, this make and model), 37 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N185M
Model/Series:	A185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18504264
Landing Gear Type:	Ski	Seats:	4
Date/Type of Last Inspection:	March 1, 2007 Annual	Certified Max Gross Wt.:	3525 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	9539 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-550-D
Registered Owner:	Paul Swanstrom	Rated Power:	300 Horsepower
Operator:	Mountain Flying Service	Operating Certificate(s) Held:	Commuter air carrier (135), On-demand air taxi (135)
Operator Does Business As:	Mountain Flying Service	Operator Designator Code:	

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:	Scattered	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:	4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Haines, AK (PAHN)	Type of Flight Plan Filed:	VFR
Destination:	Haines, AK	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	59.005554,-137.807495

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Charles Wisner; Juneau FSDO-05; Juneau, AK
Original Publish Date:	July 25, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65686

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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](#).