



Aviation Investigation Final Report

Location: CHITINA, Alaska Accident Number: ANC98LA080

Date & Time: June 21, 1998, 15:30 Local Registration: N80596

Aircraft: Cessna 185F Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot was landing on a remote airstrip next to a lodge. The airstrip's gravel bar, and sand bar surface, were uneven and soft. During the landing roll, the airplane encountered an uneven area of the gravel bar, and bounced into an area of soft sand. The tip of the left main wheel ski assembly dug into the ground, and the airplane then nosed over. The airplane received damage to the main landing gear, fuselage, and wings.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's selection of unsuitable terrain for landing. Factors in the accident were uneven and soft terrain on the landing strip.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

1. (F) TERRAIN CONDITION - ROUGH/UNEVEN

2. (F) TERRAIN CONDITION - SOFT

3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

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

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Factual Information

On June 21, 1998, about 1530 Alaska daylight time, a wheel/ski equipped Cessna 185F airplane, N80596, sustained substantial damage while landing at a remote airstrip, about 63 miles east of Chitina, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country personal flight under Title 14 CFR Part 91, when the accident occurred. The airplane was registered to Ultima Thule Outfitters Inc., Chitina. The certificated commercial pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed. The flight originated at the Chitina Airport, about 1450.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on June 21, 1998, at 1735, the pilot reported he was transporting personal camping equipment to the Ultima Thule Lodge. The lodge is located along the Chitina River in the Wrangle-St. Elias National Preserve, and has its own airstrip. The airstrip is oriented east/west. It is 1,500 feet long, and 20 feet wide. The airstrip is comprised of part gravel bar, and part sand bar. The surface is uneven and soft.

The pilot stated he touched down on the airstrip while landing toward the west. During the landing roll, the airplane encountered an uneven area of the gravel bar, and bounced into an area of the sand bar. The left wheel encountered an area of soft sand and rapidly decelerated. The tip of the left main wheel ski assembly dug into the ground, and the airplane then nosed over. The airplane received damage to the main landing gear, fuselage, and wings.

Pilot Information

Certificate:	Commercial	Age:	27,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-w/ waivers/lim	Last FAA Medical Exam:	June 4, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3500 hours (Total, all aircraft), 400 hours (Total, this make and model), 4300 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N80596
Model/Series:	185F 185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18503130
Landing Gear Type:	Ski/wheel	Seats:	1
Date/Type of Last Inspection:	May 27, 1998 100 hour	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	33 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4101 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	10-520
Registered Owner:	ULTIMA THULE OUTFITTERS INC.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	XUOC

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:	Unknown	Visibility	40 miles
Lowest Ceiling:	Overcast / 8000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	2 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	, AK (CXC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	Class G

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Airport Information

Airport:	ULTIMA THULE LODGE	Runway Surface Type:	Gravel
Airport Elevation:	1250 ft msl	Runway Surface Condition:	Dry;Soft
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	1500 ft / 20 ft	VFR Approach/Landing:	Full stop

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:	61.449024,-143.149734(est)

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Administrative Information

Investigator In Charge (IIC):	Erickson, Scott	
Additional Participating Persons:	GERALD MARTELLI; ANCHORAGE , AK	
Original Publish Date:	July 2, 1999	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3164	

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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.

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