



Aviation Investigation Final Report

Location:	Eek, Alaska	Accident Number:	ANC05TA022
Date & Time:	January 19, 2005, 13:30 Local	Registration:	N9452N
Aircraft:	Cessna 185	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Public aircraft		

Analysis

The private certificated pilot, a Fish and Wildlife Protection Officer, and the passenger, a State Trooper, were utilizing a wheel/ski-equipped airplane to conduct surveillance activities of hunters. The pilot was landing to the west on the hard packed snow and ice-covered lake, which he thought would required a correction for a left crosswind. After landing, as the airplane neared the end of its 950 long landing roll, the nose of the airplane veered to the left, and the airplane began to slide sideways. The airplane turned about 90 degrees to the left, and the right ski dug into the snow. The right wing and right stabilizer subsequently struck the surface of the frozen lake. The pilot noted in his written report: "As I exited the pilot's side of the aircraft, I was extremely surprised to find that the wind was actually a left quartering tailwind, at about 15 knots." The airplane sustained substantial damage to the right wing and right stabilizer. There were no preaccident mechanical anomalies noted with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate evaluation of weather conditions, which resulted in an on ground encounter with terrain during the landing roll. Factors associated with the accident were a tailwind, and snow-covered, icy terrain conditions.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

1. (F) WEATHER CONDITION - TAILWIND
2. (C) WEATHER EVALUATION - INADEQUATE - PILOT IN COMMAND
3. (F) TERRAIN CONDITION - ICY

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - SNOW COVERED

Factual Information

On January 19, 2005, about 1330 Alaska standard time, a wheel/ski equipped Cessna 185 airplane, N9452N, sustained substantial damage while landing on a frozen, snow-covered lake, about 70 miles east of Eek, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country public use flight when the accident occurred. The airplane was operated by the State of Alaska, Department of Public Safety, Anchorage, Alaska. The private certificated pilot, a Fish and Wildlife Protection Officer, and the passenger, an Alaska State Trooper, were not injured. Visual meteorological conditions prevailed, and VFR flight following procedures were in effect. The flight originated at the Bethel Airport, Bethel, Alaska, about 1200.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on January 20, the supervisor for the State of Alaska's aircraft section reported that the pilot and passenger were en route to Heart Lake to conduct surveillance activities of caribou hunters in the area. The supervisor said that the pilot was landing on the snow-covered lake, with the airplane's skis selected to the down position. He said that during the landing roll, the airplane's right ski dug into the snow, and the right wing and right stabilizer struck the surface of the frozen lake. The airplane sustained substantial damage to the right wing and right stabilizer.

According to the pilot's written statement that was included with the NTSB Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) and submitted by the State of Alaska, the pilot reported that he was landing to the west on the hard packed snow and ice-covered lake, which he thought would required a correction for a left crosswind. He said that after landing, and as the airplane neared the end of its 950 long landing roll, the nose of the airplane veered to the left, and the airplane's skis began to slide sideways atop the hard packed snow-covered ice. Unable to correct the veer, the airplane eventually turned about 90 degrees to the left, and the right ski dug into the snow. The right wing and right stabilizer subsequently struck the surface of the frozen lake. The pilot noted in his written report: "As I exited the pilot's side of the aircraft, I was extremely surprised to find that the wind was actually a left quartering tailwind, at about 15 knots."

The NTSB Pilot/Operator Aircraft Accident Report did not disclose any preaccident mechanical anomalies with the airplane.

Pilot Information

Certificate:	Private	Age:	37, 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 1 Without waivers/limitations	Last FAA Medical Exam:	February 1, 2004
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 1, 2004
Flight Time:	1500 hours (Total, all aircraft), 1400 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9452N
Model/Series:	185	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18504359
Landing Gear Type:	Tailwheel; Ski/wheel	Seats:	4
Date/Type of Last Inspection:	October 1, 2004 100 hour	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	60.2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5277.5 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-520-D
Registered Owner:	Alaska Dept. of Public Safety	Rated Power:	300
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	Alaska State Troopers	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:	Clear	Visibility	25 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BETHEL, AK (BET)	Type of Flight Plan Filed:	Company VFR
Destination:	Eek, AK	Type of Clearance:	None
Departure Time:	12:00 Local	Type of Airspace:	

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:	60.210411,-162.029968(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	Scott E Norman ; Anchorage FSDO; Anchorage, AK
Original Publish Date:	January 31, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60891

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](#).