



National Transportation Safety Board Aviation Accident Final Report

Location:	Iliamna, AK	Accident Number:	ANC06LA001
Date & Time:	10/02/2005, 1930 AKD	Registration:	N9950X
Aircraft:	Cessna 185	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airline transport pilot was conducting a 14 CFR Part 91 personal cross-country flight, when the engine lost power about 20 miles from the final destination. The pilot said the symptoms were similar to fuel starvation, but according to his calculations he should have had 30 minutes of fuel remaining. In a written statement to the NTSB, the pilot wrote that the morning following the accident, before the airplane was recovered, he "noticed a substantial amount of frost/ice buildup around the left fuel vent, and on the ground from the fuel venting throughout the night," and "in my opinion it seemed to indicate that there was still a fair amount of water in the fuel that caused this ice buildup." He wrote, "although I felt I properly drained the tanks prior to takeoff, it seems there was still water trapped in the tanks." After recovery the airplane's engine was prepared with a new propeller and clean fuel at an aircraft maintenance facility. The engine was started, and run through a variety of power settings, without any evidence of mechanical malfunction. The pilot reported that during the forced landing, the landing gear was torn off, structurally damaging the fuselage. He also stated that prior to the accident there were no known mechanical anomalies 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 preflight inspection, which failed to detect water-contaminated fuel, resulting in a loss of engine power during cruise flight, and subsequent in-flight collision with terrain.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) FLUID,FUEL - CONTAMINATION,WATER
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. TERRAIN CONDITION - GROUND

Factual Information

On October 2, 2005, about 1930 Alaska daylight time, a Cessna 185 airplane, N9950X, collided with terrain during an emergency landing following a loss of engine power during normal cruise, about 20 miles west of Iliamna, Alaska. The airplane was being operated by the pilot as a visual flight rules (VFR) personal cross-country flight under Title 14, CFR Part 91, when the accident occurred. The airline transport pilot and sole passenger were not injured. Visual meteorological conditions prevailed, and no flight plan was filed. The flight departed from a dirt airstrip 20 miles north of Aleknagik, Alaska, about 1830.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on October 4, the pilot said about 20 miles west of Iliamna the engine lost power. He said the symptoms were similar to fuel starvation, but according to his calculations he should have had 30 minutes of fuel remaining. He said during the forced landing the landing gear was torn off, structurally damaging the fuselage. He said prior to the accident there were no known mechanical anomalies with the airplane.

In a written statement to the NTSB dated October 16, the pilot wrote that the morning following the accident he "noticed a substantial amount of frost/ice buildup around the left fuel vent, and on the ground from the fuel venting throughout the night," and "in my opinion it seemed to indicate that there was still a fair amount of water in the fuel that caused this ice buildup." He wrote, "although I felt I properly drained the tanks prior to takeoff, it seems there was still water trapped in the tanks."

On October 12, after recovery, the airplane's engine was prepared with a new propeller and clean fuel. The engine was started, and run through a variety of power settings, without any evidence of mechanical malfunction.

Pilot Information

Certificate:	Airline Transport; Commercial; Military	Age:	41, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	03/01/2005
Occupational Pilot:		Last Flight Review or Equivalent:	08/01/2004
Flight Time:	6925 hours (Total, all aircraft), 440 hours (Total, this make and model), 4550 hours (Pilot In Command, all aircraft), 85 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N9950X
Model/Series:	185	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	185-0150
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	02/01/2005, Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:	70 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1120 Hours	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-470
Registered Owner:	Mark Hedlund	Rated Power:	260 hp
Operator:	Mark Hedlund	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 10000 ft agl	Temperature/Dew Point:	4° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Light and Variable, Variable	Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Aleknagik, AK	Type of Flight Plan Filed:	None
Destination:	Iliamna, AK (PAIL)	Type of Clearance:	None
Departure Time:	1850 ADT	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		

Administrative Information

Investigator In Charge (IIC): Lawrence R Lewis **Adopted Date:** 04/25/2006

Additional Participating Persons: Charlotte Lockett; Anchorage, FSDO-03; Anchorage, AK

Publish Date:

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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