



National Transportation Safety Board Aviation Accident Final Report

Location:	Chenega Bay, AK	Accident Number:	ANC06LA067
Date & Time:	06/02/2006, 1430 AKD	Registration:	N21545
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private certificated pilot reported that he was looking for potential landing areas near a cabin on a remote island during a cross-country Title 14, CFR Part 91 personal flight. He scanned an area at 400 feet above ground level (agl) for about 15 to 20 minutes. The airplane was configured with 20 degrees of flaps, carburetor heat on, and an engine power setting of about 18 to 20 inches of manifold pressure. The outside temperature was 52 degrees F. He spotted the cabin he was looking for, and began a descent for a low-level pass along a beach. The pilot configured the airplane to full flaps, the engine power was near idle, and the carburetor heat was "on." He then attempted to add engine power to level the airplane, but it did not respond. He pushed the throttle in and out several times without any change in power from idle. The airplane continued to descend, and as the wheel began to strike low brush, the engine went to full power, but the airplane touched down in the rough terrain and nosed over. The airplane received structural damage to the fuselage and wings. In the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1) submitted by the pilot, he indicated that during the flight to the island, the engine developed a slight roughness, accompanied by about a 1 inch drop in manifold pressure. He noted the carburetor temperature gauge was indicating -35 degrees F. He applied carburetor heat, which raised the carburetor heat temperature to about 0 degrees F, but no further. The pilot said he then decreased the engine power to idle, reapplied carburetor heat, and noted that after about 1 minute, the carburetor temperature increased to about 55 degrees F, which resolved the engine roughness. The pilot reported that he previously had a carburetor heat problem about 8 months prior to the accident. After a normal landing at an airport, he applied engine power to takeoff, but the engine would only produce about 14 inches of manifold pressure with the carburetor heat on. After several seconds of idling the engine with full carburetor heat applied, full power was restored. The pilot indicated that the airplane had an annual inspection in February, 2006, and he had flown the airplane for about 120 hours without a repeat of the problem. The airplane was recovered from the island, but the engine was not examined by FAA or NTSB personnel.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A loss of engine power for an undetermined reason while maneuvering at low level over a beach, which resulted in an in-flight collision with rough terrain and a nose over. A factor in the accident was the rough/uneven terrain.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: MANEUVERING

Findings

1. LOW PASS - PERFORMED - PILOT IN COMMAND
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Occurrence #4: NOSE OVER

Phase of Operation: EMERGENCY LANDING

Factual Information

On June 2, 2006, about 1430 Alaska daylight time, a wheel-equipped Cessna 182 airplane, N21545, sustained substantial damage when it collided with rough terrain during a low pass over a remote landing area on Montague Island, about 17 miles southeast of Chenega Bay, 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 operated by the pilot. The private certificated pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed, and a VFR flight plan was filed. The flight originated at Merrill Field, Anchorage, Alaska, about 1300, and the destination was Montague Island.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on June 5, the pilot reported that he was looking for potential landing areas near a cabin located at San Juan Bay, on the southwest coast of the island. Once at the island, he scanned the area of the bay at 400 feet above ground level (agl) for about 15 to 20 minutes. The airplane was configured with 20 degrees of flaps, carburetor heat on, and an engine power setting of about 18 to 20 inches of manifold pressure. The outside temperature was 52 degrees F. He then climbed to 600 feet agl and spotted the cabin he was looking for, and began a descent for a low-level pass along a beach.

The pilot indicated that he configured the airplane for a landing approach from 600 feet, and planned to descend to tree-top level, parallel to a sandy beach, checking to see if the area was suitable for a nose wheel-equipped airplane. The pilot said the airplane had full flaps, the engine was near idle, and the carburetor heat was "on." His track over the ground placed the airplane over rough terrain consisting of brush and driftwood. The pilot said he attempted to add engine power to level the airplane, but it did not respond. He pushed the throttle in and out several times without any change in power from idle. The airplane continued to descend and as the wheel began to strike low brush, the engine went to full power, but the airplane touched down in the rough terrain and nosed over. The airplane received structural damage to the fuselage and wings.

In the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1) submitted by the pilot, he indicated that during the flight to Montague Island, the engine developed a slight roughness, accompanied by about a 1 inch drop in manifold pressure. He noted the carburetor temperature gauge was indicating -35 degrees F. He applied carburetor heat, which raised the carburetor heat temperature to about 0 degrees F, but no further. The pilot said he then decreased the engine power to idle, reapplied carburetor heat, and noted that after about 1 minute, the carburetor temperature increased to about 55 degrees F, which resolved the engine roughness.

The pilot reported that he previously had a carburetor heat problem about 8 months prior to the accident. After a normal landing at an airport, he applied engine power to take off, but the engine would only produce about 14 inches of manifold pressure with the carburetor heat on. After several seconds of idling the engine with full carburetor heat applied, full power was restored. The pilot indicated that the airplane had an annual inspection in February, 2006, and he had flown the airplane for about 120 hours without a repeat of the problem.

The pilot said that after the accident, he checked to see that the emergency locator transmitter (ELT) was activated, but he was not sure if any signal was emanating from the antenna which was under the overturned airplane. He then activated his personal locator beacon (PLB), to

which the U.S. Coast Guard responded with a rescue helicopter. The pilot and his dog were transported to Valdez, Alaska.

The airplane was recovered from the island, but the engine was not examined by FAA or NTSB personnel.

Pilot Information

Certificate:	Private	Age:	34, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without Waivers/Limitations	Last FAA Medical Exam:	10/01/2005
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	227 hours (Total, all aircraft), 138 hours (Total, this make and model), 181 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N21545
Model/Series:	182	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18261706
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	02/01/2006, Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	119 Hours	Engines:	1 Reciprocating
Airframe Total Time:	6920 Hours as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-470
Registered Owner:	Joseph V. Riggs	Rated Power:	230 hp
Operator:	Joseph V. Riggs	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	11 °C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anchorage, AK (PAMR)	Type of Flight Plan Filed:	VFR
Destination:	Chenega Bay, AK	Type of Clearance:	None
Departure Time:	1300 ADT	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	59.801944, -147.893056

Administrative Information

Investigator In Charge (IIC):	Scott Erickson	Report Date:	01/31/2007
Additional Participating Persons:	Scott Norman; FAA-AL-ANC 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/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).