



National Transportation Safety Board Aviation Accident Final Report

Location:	NOME, AK	Accident Number:	ANC97LA017
Date & Time:	01/02/1997, 1202 AST	Registration:	N23CB
Aircraft:	Cessna 185F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None

Flight Conducted Under: Part 91: General Aviation -

Analysis

The pilot and passenger prepared to depart on a volunteer search and rescue flight. A front seat belt became lodged under the fuel selector handle located on the cockpit floor between the two front seats. When the seat belt was pulled loose, the long, pointer end of the fuel selector handle snapped off. The pilot positioned the remaining portion of the fuel selector to what appeared to be the 'BOTH' position. Just after takeoff, the engine suddenly quit, and the pilot performed an emergency landing on snow covered terrain. Following the accident, the pilot discovered he had positioned the fuel selector to the 'OFF' position. The loss of the pointer end of the selector handle allowed the selector to rotate 360 degrees.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to properly verify the position of a fractured fuel selector handle, which resulted in fuel starvation and subsequent loss of engine power. A factor related to the accident was: the fractured handle that allowed the fuel selector to be rotated to an OFF position.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) FUEL SYSTEM,SELECTOR/VALVE - FRACTURED
2. (C) FUEL TANK SELECTOR POSITION - NOT VERIFIED - PILOT IN COMMAND
3. (C) FLUID,FUEL - STARVATION

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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

Findings

4. TERRAIN CONDITION - SNOW COVERED

Factual Information

On January 2, 1997, at 1202 Alaska standard time, a tundra tire equipped Cessna 185F, N23CB, crashed after takeoff about 4 miles northwest of Nome, Alaska. The airplane was being operated as a visual flight rules (VFR) local area personal flight when the accident occurred. The airplane, operated by the pilot, sustained substantial damage. The certificated private pilot was not injured. The sole passenger received minor injuries. Visual meteorological conditions prevailed.

The pilot reported that he and the passenger were preparing to depart on a volunteer search and rescue flight. A front seat belt became lodged under the fuel selector handle located on the cockpit floor between the two front seats. When the seat belt was pulled loose, the long pointer end of the fuel selector handle broke off. The pilot positioned the remaining rotating portion of the selector to what appeared to the "Both" fuel tank position. After departure, the engine suddenly quit about 200 feet above the ground and the pilot performed an emergency landing on snow covered terrain. The airplane received damage to the fuselage, landing gear and wings. Following the accident, the pilot reported that he found the fuel selector positioned to the "Off" position. The pilot indicated that without the long end of the pointer attached, the selector could be rotated 360 degrees to the "Off" position.

Pilot Information

Certificate:	Private	Age:	42, 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:	No
Medical Certification:	Class 3 Expired	Last FAA Medical Exam:	04/25/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 3880 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N23CB
Model/Series:	185F 185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18503331
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	04/12/1996, Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	156 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3059 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-D
Registered Owner:	N.B. TWEET AND SONS	Rated Power:	300 hp
Operator:	BRUCE H. TWEET	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OME, 37 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	1150 AST	Direction from Accident Site:	325°
Lowest Cloud Condition:	Scattered / 12000 ft agl	Visibility	30 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-23°C / -18°C
Precipitation and Obscuration:			
Departure Point:	, AK (OME)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1200 AST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): SCOTT R ERICKSON **Report Date:** 05/21/1998

Additional Participating Persons: HUGH A KEITH; FAIRBANKS, 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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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](#).