



Aviation Investigation Final Report

Location:	FAIRBANKS, Alaska	Accident Number:	ANC93LA039
Date & Time:	February 23, 1993, 13:30 Local	Registration:	N37BC
Aircraft:	CESSNA A185F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

DURING THE INITIAL CLIMB OUT THE ENGINE LOST ALL POWER. THE PILOT EXECUTED A 180 DEGREE TURN AND LANDED ON THE UNPLOWED PORTION OF THE CHENA MARINA STRIP. AFTER THE LANDING AND DURING THE ROLL OUT THE ELEVATOR BALANCE TAB STRUCK A PIECE OF ICE AND IT WAS TORN IN HALF. EXAMINATION OF THE AIRPLANE SHOWED THAT THE FUEL VALVE PLACARD WAS REPLACED INCORRECTLY. WHEN THE FUEL VALVE WAS PLACED IN THE BOTH POSITION, AS REQUIRED FOR TAKEOFF, THE VALVE WAS ACTUALLY IN THE OFF POSITION. THE AIRPLANE HAD JUST RECEIVED A NEW INTERIOR WHICH HAD BEEN INSTALLED BY AN UNCERTIFICATED INDIVIDUAL. THE AIRPLANE WAS NOT INSPECTED NOR WERE THERE ANY ENTRIES IN THE LOGBOOK SHOWING THE NEW UPHOLSTERY WORK.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FUEL SYSTEM SELECTOR VALVE BEING PLACED IN THE OFF POSITION DUE TO THE IMPROPER INSTALLATION OF THE FUEL SELECTOR PLACARD BY AN UNQUALIFIED PERSON. THE SNOW COVERED FORCED LANDING AREA WAS A FACTOR.

Findings

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

Findings

1. (C) MAINTENANCE, INSTALLATION - IMPROPER - UNQUALIFIED PERSON
2. FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - SNOW COVERED

Factual Information

On February 23, 1993, at 1330 Alaska standard time, a wheel equipped Cessna 185 airplane, N37BC, registered to and operated by the Pilot in Command, experienced a complete power loss on climb out after taking off from the Chena Marina Airstrip, Fairbanks, Alaska. The personal flight, operating under 14 CFR Part 91, executed a forced landing and landed on the unplowed portion of the airstrip. Visual meteorological conditions prevailed and no flight plan was filed. The Private Certificated Pilot in Command, the sole occupant, was not injured and the airplane received substantial damage.

According to FAA Inspector Cliff Smart, a witness called anonymously and stated there had been an accident at the Chena Marina Airstrip. After interviewing the pilot, Cliff Smart stated that the pilot made a takeoff and experienced a complete power loss during the climb out. He executed a turn and landed on the unplowed portion of the airstrip. After landing and during the subsequent roll out, the elevator balance tab struck a piece of ice and the right elevator was torn in half and off the stabilizer. Examination of the airplane by a certified A & P mechanic showed that the fuel valve placard was replaced incorrectly. When the fuel selector valve was placed in the "both" position, it was actually in the "off" position. The airplane had just received a new interior and a new external paint job.

Examination of the logbooks showed that the new paint had been properly inspected and signed off in the logbook according to FAR Part 43.3 and 43.9. However, there was no entry for the new upholstery. Furthermore, the work accomplished by the upholstery shop was completed by an uncertificated individual, John Neal of New Designs Upholstery located in North Pole, Alaska. The airplane was not inspected by a certificated mechanic prior to the flight.

Pilot Information

Certificate:	Private	Age:	51, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	August 23, 1991
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1000 hours (Total, all aircraft), 300 hours (Total, this make and model), 1000 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N37BC
Model/Series:	A185F A185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18502965
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	September 26, 1992 Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2579 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520
Registered Owner:	WILLIAMSON, KEN R.	Rated Power:	300 Horsepower
Operator:	WILLIAMSON, KEN R.	Operating Certificate(s) Held:	None
Operator Does Business As:		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	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	CHENA MARINA	Runway Surface Type:	Snow
Airport Elevation:	420 ft msl	Runway Surface Condition:	Ice;Snow;Soft
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	2000 ft / 80 ft	VFR Approach/Landing:	Forced landing

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:	64.810699,-147.719009(est)

Administrative Information

Investigator In Charge (IIC):	Kobelnyk, George
Additional Participating Persons:	CLIFF SMART; FAIRBANKS , AK
Original Publish Date:	June 30, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=2329

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](#).