



# Aviation Investigation Final Report

<b>Location:</b>	ANCHORAGE, Alaska	<b>Accident Number:</b>	ANC86FA035
<b>Date &amp; Time:</b>	March 16, 1986, 16:10 Local	<b>Registration:</b>	N70010
<b>Aircraft:</b>	CESSNA A185E	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

ACFT HIT TREES AND POWER LINES AND CRASHED ON CITY RESIDENTIAL STREET FOLLOWING ENGINE FAILURE DURING TAKEOFF CLIMB. ENGINE DRIVEN FUEL PUMP FAILED DUE TO LONG TERM EXPOSURE TO WATER IN FUEL. OVER TWO QUARTS WATER WAS COLLECTED FROM AIRCRAFT TANKS AFTER CRASH. PILOT MISJUDGED ALTITUDE AND DISTANCE FROM SUITABLE LANDING AREA.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

#### Findings

1. (F) FUEL SYSTEM,PUMP - FAILURE,TOTAL
  2. (F) MAINTENANCE,SERVICE OF AIRCRAFT/EQUIPMENT - IMPROPER - PILOT IN COMMAND
  3. (F) FLUID,FUEL - WATER
  4. (F) MAINTENANCE,SERVICE OF AIRCRAFT/EQUIPMENT - IMPROPER - OTHER MAINTENANCE PERSONNEL
  5. (F) AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND
  6. (F) JUDGMENT - POOR - PILOT IN COMMAND
-

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

-----

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

Findings

- 7. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)
- 8. (C) ALTITUDE - MISJUDGED - PILOT IN COMMAND
- 9. (C) PROPER GLIDEPATH - NOT UNDERSTOOD - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	May 22, 1985
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1532 hours (Total, all aircraft), 500 hours (Total, this make and model), 1478 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N70010
<b>Model/Series:</b>	A185E A185E	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18501890
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 10, 1985 Annual	<b>Certified Max Gross Wt.:</b>	3350 lbs
<b>Time Since Last Inspection:</b>	120 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2371 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO-520-F-D
<b>Registered Owner:</b>	FRED E. JOHNSON	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	ANC ,75 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	15:51 Local	<b>Direction from Accident Site:</b>	240°
<b>Lowest Cloud Condition:</b>	Scattered / 5000 ft AGL	<b>Visibility</b>	90 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	300°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	4°C / -4°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ANCHORAGE , AK	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	ANCHORAGE , AK (LHD )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	16:05 Local	<b>Type of Airspace:</b>	Class D;Class E

## Airport Information

<b>Airport:</b>	LAKE HOOD LHD	<b>Runway Surface Type:</b>	Ice;Snow
<b>Airport Elevation:</b>	144 ft msl	<b>Runway Surface Condition:</b>	Ice;Rough;Snow
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 Minor	<b>Latitude, Longitude:</b>	61.159374,-149.989089(est)

## Administrative Information

**Investigator In Charge (IIC):** Daw, Roy

**Additional Participating Persons:** ALFRED E FLEENER; ANCHORAGE , AK  
JOHN R HALLINAN; ANCHORAGE , AK  
GERALD PATTERSON; ANCHORAGE , AK

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=4588>

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](#).