

# **Aviation Investigation Final Report**

| Location:               | ANCHORAGE, Alaska     | a           | Accident Number: | ANC94LA019  |
|-------------------------|-----------------------|-------------|------------------|-------------|
| Date & Time:            | November 20, 1993,    | 11:15 Local | Registration:    | N7586Z      |
| Aircraft:               | CESSNA                | 206         | Aircraft Damage: | Substantial |
| Defining Event:         |                       |             | Injuries:        | 4 None      |
| Flight Conducted Under: | Part 91: General avia | ition       |                  |             |

## **Analysis**

AFTER TAKE OFF THE PILOT ATTEMPTED TO REDUCE THE POWER BY RETARDING THE THROTTLE. THE THROTTLE WAS STIFF AND HE APPLIED MORE PRESSURE AND THEN IT JERKED OUT AND HE WAS ONLY ABLE TO MAINTAIN 1000 RPM ON HIS ENGINE. MANIPULATION OF THE THROTTLE DID NOT CHANGE THE RPM. HE WAS FORCED TO LAND ON A TAXIWAY AND THE AIRPLANE STRUCK TWO PARKED VEHICLES DURING THE ROLL OUT. EXAMINATION OF THE AIRPLANE SHOWED THAT THE THROTTLE CABLE HAD FROZEN DUE TO MOISTURE. THE PILOT STATED HE PREHEATED THE ENGINE COMPARTMENT TO A WARM TEMPERATURE.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FROZEN THROTTLE CABLE DUE TO MOISTURE.

### Findings

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

Findings
1. (C) THROTTLE/POWER LEVER,CABLE - FROZEN
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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings 2. OBJECT - VEHICLE

## **Factual Information**

On November 20, 1993, at 1115 Alaska standard time, a wheel equipped Cessna 206 airplane, N7586Z, registered to and operated by Airlift Alaska, experienced a non-mechanical power loss during takeoff and was forced to land. The business flight, operating under 14 CFR Part 91, was departing Merrill Field on a visual flight rules flight plan and visual meteorological conditions prevailed. The destination was the Denali Strip #2 near Cantwell, Alaska. The airplane was substantially damaged and two vehicles were also damaged. The Airline Transport Certificated Pilot-in-Command and his passenger were not injured.

According to the Pilot in Command, they had reached an altitude of 500 feet above ground level and he tried to reduce power. The throttle would not move so he pulled harder. The throttle then jerked out and the engine power reduced to less than 1000 RPM. The Pilot-in-Command attempted to push the throttle back in but it would not move. They subsequently completed a forced landing on taxiway "delta" on Merrill Field.

| Certificate:              | Airline transport; Flight instructor   | Age:                              | 40,Male          |
|---------------------------|--|-----------------------------------|------------------|
| Airplane Rating(s):       | Single-engine land; Single-engine<br>sea; Multi-engine land  | Seat Occupied:                    | Left             |
| Other Aircraft Rating(s): | Helicopter   | Restraint Used:                   |                  |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | No               |
| Instructor Rating(s):     | Airplane single-engine   | Toxicology Performed:             | No               |
| Medical Certification:    | Class 2 Valid Medicalw/<br>waivers/lim   | Last FAA Medical Exam:            | January 19, 1993 |
| Occupational Pilot:       | Yes  | Last Flight Review or Equivalent: |                  |
| Flight Time:              | 12500 hours (Total, all aircraft), 3500 hours (Total, this make and model), 12300 hours (Pilot In<br>Command, all aircraft), 270 hours (Last 90 days, all aircraft), 90 hours (Last 30 days, all aircraft),<br>6 hours (Last 24 hours, all aircraft) |                                   |                  |

#### **Pilot Information**

### Aircraft and Owner/Operator Information

| Aircraft Make:                   | CESSNA   | Registration:                     | N7586Z                   |
|----------------------------------|--|-----------------------------------|--------------------------|
| Model/Series:                    | 206 206  | Aircraft Category:                | Airplane                 |
| Year of Manufacture:             |  | Amateur Built:                    |                          |
| Airworthiness Certificate:       | Normal   | Serial Number:                    | 20606371                 |
| Landing Gear Type:               | Tricycle   | Seats:                            | 6                        |
| Date/Type of Last<br>Inspection: | September 28, 1993 Annual                              | Certified Max Gross Wt.:          | 3600 lbs                 |
| Time Since Last Inspection:      | 13 Hrs   | Engines:                          | 1 Reciprocating          |
| Airframe Total Time:             | 4423 Hrs   | Engine Manufacturer:              | CONTINENTAL              |
| ELT:                             | Installed, activated, did not aid in locating accident | Engine Model/Series:              | IO-520-F                 |
| Registered Owner:                | MICHAEL J. YORKE                                       | Rated Power:                      | 300 Horsepower           |
| Operator:                        | AIRLIFT ALASKA   | Operating Certificate(s)<br>Held: | On-demand air taxi (135) |
| Operator Does Business As:       |  | Operator Designator Code:         | HYGA                     |
|                                  |  |                                   |                          |

# 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                              | 90 miles        |
| Lowest Ceiling:                  | None                             | Visibility (RVR):                       |                 |
| Wind Speed/Gusts:                | /                                | Turbulence Type<br>Forecast/Actual:     | /               |
| Wind Direction:                  | 0°                               | Turbulence Severity<br>Forecast/Actual: | /               |
| Altimeter Setting:               |                                  | Temperature/Dew Point:                  | -23°C           |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |   |                 |
| Departure Point:                 |                                  | Type of Flight Plan Filed:              | VFR             |
| Destination:                     | CANTWELL , AK                    | Type of Clearance:                      | VFR             |
| Departure Time:                  | 11:10 Local                      | Type of Airspace:                       | Class D;Class E |

### **Airport Information**

| Airport:             | MERRILL FIELD MRI | Runway Surface Type:      | Asphalt        |
|----------------------|-------------------|---------------------------|----------------|
| Airport Elevation:   | 136 ft msl        | Runway Surface Condition: | Ice;Snow       |
| Runway Used:         | 15                | IFR Approach:             | None           |
| Runway Length/Width: | 3000 ft / 75 ft   | VFR Approach/Landing:     | Forced landing |

# Wreckage and Impact Information

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial                |
|------------------------|--------|-------------------------|----------------------------|
| Passenger<br>Injuries: | 3 None | Aircraft Fire:          | None                       |
| Ground Injuries:       | N/A    | Aircraft Explosion:     | None                       |
| Total Injuries:        | 4 None | Latitude,<br>Longitude: | 61.220199,-149.849884(est) |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Kobelnyk, George                            |  |  |
|--------------------------------------|---|--|--|
| Additional Participating<br>Persons: | BOB BILAK; ANCHORAGE , AK                   |  |  |
| Original Publish Date:               | June 30, 1994                               |  |  |
| Last Revision Date:                  |   |  |  |
| Investigation Class:                 | <u>Class</u>                                |  |  |
| Note:                                |   |  |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=2474 |  |  |

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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 <u>here</u>.