

# **Aviation Investigation Final Report**

Location: SEATTLE, Washington Accident Number: SEA85LA066

Date & Time: February 23, 1985, 19:05 Local Registration: N1539U

Aircraft: CESSNA TU206F Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

THE ACFT LANDED SHORT OF RWY 13R AT BOEING FLD FOLLOWING A LOSS OF PWR DUE TO FUEL EXHAUSTION. THE ACFT WAS TOPPED OFF FOR A TTL OF 108 GALS OF FUEL BEFORE THIS THIRD LEG OF A X-COUNTRY FLT. THE PLT STATED THAT THE ENG CEASED OPERATING EN ROUTE, HOWEVER, PWR WAS REGAINED WHEN THE FUEL SELECTOR WAS SWITCHED FROM THE RIGHT TO THE LEFT MAIN TANK. WHILE BEING VECTORED FOR AN ILS APCH TO TACOMA ARPT, THE ENG CEASED OPERATING ONCE AGAIN. UPON BREAKING OUT OF THE OVERCAST THE PLT SPOTTED BOEING FLT AND ATTEMPTED THE LANDING THERE. BOTH THE LEFT AND RIGHT MAIN AN AUX TANKS WERE FOUND EMPTY AFTER THE ACCIDENT AND FUEL STAINS WERE VISIBLE BEHIND THE REFUELING CAPS ON BOTH MAIN TANKS. THE RIGHT MAIN FUEL CAP WAS TESTED AND FOUND TO LEAK SEVERLY. THE LEFT FUEL CAP TESTED NORMAL. AD 84-10-01 WHICH ADDRESSES LEAKAGE AROUND THE FILLER CAPS WAS REPORTED TO HAVE BEEN COMPLIED WITH 2 DAYS PRIOR TO THE ACCIDENT. THE BLADDER IN THE LEFT MAIN TANK WAS FOUND STUCK UP AROUND THE NECK OF THE FILLER OPENING.

### **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) - NONMECHANICAL

Phase of Operation: DESCENT

#### Findings

1. FLUID, FUEL - EXHAUSTION

2. (C) FUEL SYSTEM, CAP - LEAK

3. (F) FUEL SYSTEM, TANK - IMPROPER

4. (C) MAINTENANCE, COMPLIANCE WITH AD - POOR - OTHER MAINTENANCE PERSONNEL

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

**Findings** 

5. (F) FLARE - MISJUDGED - PILOT IN COMMAND

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# **Factual Information**

#### **Pilot Information**

| Certificate:              | Commercial; Private   | Age:                              | 53,Male        |
|---------------------------|---|-----------------------------------|----------------|
| Airplane Rating(s):       | Single-engine land; Single-engine 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):     | None  | Toxicology Performed:             | No             |
| Medical Certification:    | Class 2 Valid Medicalno waivers/lim.  | Last FAA Medical Exam:            | August 1, 1984 |
| Occupational Pilot:       | No  | Last Flight Review or Equivalent: |                |
| Flight Time:              | 1260 hours (Total, all aircraft), 238 hours (Total, this make and model), 1050 hours (Pilot In Command, all aircraft), 52 hours (Last 90 days, all aircraft), 8 hours (Last 24 hours, all aircraft) |                                   |                |

# Aircraft and Owner/Operator Information

| Aircraft Make:                | CESSNA                     | Registration:                     | N1539U          |
|-------------------------------|----------------------------|-----------------------------------|-----------------|
| Model/Series:                 | TU206F TU206F              | Aircraft Category:                | Airplane        |
| Year of Manufacture:          |                            | Amateur Built:                    |                 |
| Airworthiness Certificate:    | Normal                     | Serial Number:                    | U20602247       |
| Landing Gear Type:            | Retractable - Tricycle     | Seats:                            |                 |
| Date/Type of Last Inspection: | February 21, 1985 100 hour | Certified Max Gross Wt.:          | 3600 lbs        |
| Time Since Last Inspection:   | 13 Hrs                     | Engines:                          | 1 Reciprocating |
| Airframe Total Time:          | 620 Hrs                    | Engine Manufacturer:              | CONTINENTAL     |
| ELT:                          | Installed, not activated   | Engine Model/Series:              | TSIO-520-C      |
| Registered Owner:             | EDWARD AUSTIN              | Rated Power:                      | 285 Horsepower  |
| Operator:                     |                            | Operating Certificate(s)<br>Held: | None            |
| Operator Does Business As:    |                            | Operator Designator Code:         |                 |

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### **Meteorological Information and Flight Plan**

| Conditions at Accident Site:     | Visual (VMC)                     | Condition of Light:                  | Night/dark  |
|----------------------------------|----------------------------------|--------------------------------------|-------------|
| Observation Facility, Elevation: | BFI ,17 ft msl                   | Distance from Accident Site:         |             |
| Observation Time:                | 19:05 Local                      | Direction from Accident Site:        |             |
| <b>Lowest Cloud Condition:</b>   | Unknown / 2000 ft AGL            | Visibility                           | 20 miles    |
| Lowest Ceiling:                  | Broken / 2000 ft AGL             | Visibility (RVR):                    |             |
| Wind Speed/Gusts:                | 10 knots /                       | Turbulence Type<br>Forecast/Actual:  | /           |
| Wind Direction:                  | 120°                             | Turbulence Severity Forecast/Actual: | /           |
| Altimeter Setting:               | 30 inches Hg                     | Temperature/Dew Point:               | 18°C / 16°C |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |                                      |             |
| Departure Point:                 | PRINCE RUPERT (CYPR)             | Type of Flight Plan Filed:           | IFR         |
| Destination:                     | SEATTLE , WA (SEA )              | Type of Clearance:                   | IFR         |
| Departure Time:                  | 14:25 Local                      | Type of Airspace:                    | Class D     |

# **Airport Information**

| Airport:             | BOEING FIELD BFI  | Runway Surface Type:             | Grass/turf     |
|----------------------|-------------------|----------------------------------|----------------|
| Airport Elevation:   | 17 ft msl         | <b>Runway Surface Condition:</b> | Dry            |
| Runway Used:         | 13R               | IFR Approach:                    | ILS            |
| Runway Length/Width: | 10000 ft / 200 ft | VFR Approach/Landing:            | Forced landing |

# **Wreckage and Impact Information**

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial               |
|------------------------|--------|-------------------------|---------------------------|
| Passenger<br>Injuries: |        | Aircraft Fire:          | None                      |
| Ground Injuries:       | N/A    | Aircraft Explosion:     | None                      |
| Total Injuries:        | 1 None | Latitude,<br>Longitude: | 47.539993,-122.30941(est) |

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#### **Administrative Information**

Investigator In Charge (IIC): Carrers, Candace

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=40121

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.

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