

# **Aviation Investigation Final Report**

Location: GLENDIVE, Montana Accident Number: SEA92FA101

Date & Time: May 17, 1992, 11:25 Local Registration: N2920L

Aircraft: MOONEY M20F Aircraft Damage: Destroyed

**Defining Event:** 4 Fatal

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

THE PILOT OF THE MOONEY M20F RETRACTED HIS LANDING GEAR ALMOST IMMEDIATELY AFTER THE TIRES LIFTED OFF THE RUNWAY. HE CONTINUED TO ACCELERATE WHILE FLYING VERY LOW OVER THE AIRFIELD, AND THEN EXECUTED A STEEP RIGHT HAND 180 DEGREE TURNING PULL-UP. NUMEROUS PILOT-RATED WITNESSES STATED THAT DURING THIS PULL-UP THE AIRCRAFT APPEARED TO BE FLYING JUST ON THE EDGE OF A STALL. HE THEN PROCEEDED TO THE APPROACH END OF THE AIRFIELD, ENTERED A DESCENDING TURN AND THEN EXECUTED A HIGH SPEED, LOW LEVEL PASS. DURING THIS PASS A HELIUM FILLED BALLOON WAS RELEASED FOR THE PILOT TO ATTEMPT TO BURST WITH THE AIRCRAFT'S PROPELLER. AT THE CONCLUSION OF THIS PASS, THE PILOT MADE A RAPID CLIMBING PULL-UP TO THE LEFT, REACHING AN ALTITUDE OF APPROXIMATELY 300 FEET ABOVE GROUND LEVEL. THE BANK ANGLE AT THE TOP OF THE CLIMBING TURN WAS ESTIMATED BY THE WITNESSES TO BE APPROXIMATELY 50 DEGREES. THE AIRCRAFT MAINTAINED APPROXIMATELY THE SAME ANGLE OF BANK AS IT DESCENDED TOWARD THE TERRAIN, ULTIMATELY IMPACTING NEAR THE RUNWAY.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: AN EXCESSIVE RATE OF DESCENT, AND THE PILOT'S OVERCONFIDENCE IN HIMSELF AND THE AIRCRAFT.

#### **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING

#### Findings

- 1. (F) LOW PASS PERFORMED PILOT IN COMMAND
- 2. (F) PULL-UP PERFORMED PILOT IN COMMAND
- 3. (C) DESCENT EXCESSIVE PILOT IN COMMAND
- 4. (C) OVERCONFIDENCE IN PERSONAL ABILITY PILOT IN COMMAND
- 5. (C) OVERCONFIDENCE IN AIRCRAFT'S ABILITY PILOT IN COMMAND

Page 2 of 6 SEA92FA101

## **Factual Information**

#### **Pilot Information**

| Certificate:              | Airline transport; Flight engineer  | Age:                              | 49,Male           |
|---------------------------|---|-----------------------------------|-------------------|
| Airplane Rating(s):       | Single-engine land; Single-engine<br>sea; Multi-engine land; Multi-<br>engine sea | Seat Occupied:                    | Left              |
| Other Aircraft Rating(s): | None  | Restraint Used:                   |                   |
| Instrument Rating(s):     | Airplane  | Second Pilot Present:             | No                |
| Instructor Rating(s):     | None  | Toxicology Performed:             | Yes               |
| Medical Certification:    | Class 3 Valid Medical-no waivers/lim.   | Last FAA Medical Exam:            | December 10, 1990 |
| Occupational Pilot:       | UNK   | Last Flight Review or Equivalent: |                   |
| Flight Time:              | 8000 hours (Total, all aircraft)  |                                   |                   |

Page 3 of 6 SEA92FA101

### **Aircraft and Owner/Operator Information**

| Aircraft Make:                | MOONEY                            | Registration:                     | N2920L          |
|-------------------------------|-----------------------------------|-----------------------------------|-----------------|
| Model/Series:                 | M20F M20F                         | Aircraft Category:                | Airplane        |
| Year of Manufacture:          |                                   | Amateur Built:                    |                 |
| Airworthiness Certificate:    | Normal                            | Serial Number:                    | 670314          |
| Landing Gear Type:            | Retractable - Tricycle            | Seats:                            | 4               |
| Date/Type of Last Inspection: | November 4, 1991 Annual           | Certified Max Gross Wt.:          | 2740 lbs        |
| Time Since Last Inspection:   |                                   | Engines:                          | 1 Reciprocating |
| Airframe Total Time:          |                                   | Engine Manufacturer:              | LYCOMING        |
| ELT:                          | Installed, not activated          | Engine Model/Series:              | IO-360-A1A      |
| Registered Owner:             | FISCHER, RICHARD C. &<br>VERRIL J | Rated Power:                      | 200 Horsepower  |
| Operator:                     | FISCHER, RICHARD C. &<br>VERRIL J | Operating Certificate(s)<br>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:        |            |
| <b>Lowest Cloud Condition:</b>   | Clear                        | Visibility                           | 30 miles   |
| Lowest Ceiling:                  | None                         | Visibility (RVR):                    |            |
| Wind Speed/Gusts:                | 8 knots /                    | Turbulence Type<br>Forecast/Actual:  | /          |
| Wind Direction:                  | 160°                         | Turbulence Severity Forecast/Actual: | /          |
| Altimeter Setting:               | 30 inches Hg                 | Temperature/Dew Point:               | 19°C / 6°C |
| Precipitation and Obscuration:   | No Obscuration; No Precipita | ation                                |            |
| Departure Point:                 | (GDV)                        | Type of Flight Plan Filed:           | None       |
| Destination:                     | MINOT , ND (MOT )            | Type of Clearance:                   | None       |
| Departure Time:                  | 11:00 Local                  | Type of Airspace:                    | Class G    |

Page 4 of 6 SEA92FA101

### **Airport Information**

| Airport:             | DAWSON COMMUNITY GDV | Runway Surface Type:             | Asphalt |
|----------------------|----------------------|----------------------------------|---------|
| Airport Elevation:   | 2456 ft msl          | <b>Runway Surface Condition:</b> | Dry     |
| Runway Used:         | 12                   | IFR Approach:                    | None    |
| Runway Length/Width: | 5704 ft / 100 ft     | VFR Approach/Landing:            | None    |

## Wreckage and Impact Information

| Crew Injuries:         | 1 Fatal | Aircraft Damage:        | Destroyed                  |
|------------------------|---------|-------------------------|----------------------------|
| Passenger<br>Injuries: | 3 Fatal | Aircraft Fire:          | On-ground                  |
| Ground Injuries:       | N/A     | Aircraft Explosion:     | On-ground                  |
| Total Injuries:        | 4 Fatal | Latitude,<br>Longitude: | 47.119144,-104.870674(est) |

Page 5 of 6 SEA92FA101

#### **Administrative Information**

| Investigator In Charge (IIC):        | Anderson, Orrin                              |  |
|--------------------------------------|--|--|
| Additional Participating<br>Persons: | DENNY BRIDGES; SEATTLE , WA                  |  |
| Original Publish Date:               | June 30, 1993                                |  |
| Last Revision Date:                  |  |  |
| Investigation Class:                 | <u>Class</u>                                 |  |
| Note:                                |  |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=41577 |  |

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.

Page 6 of 6 SEA92FA101