



# **Aviation Investigation Final Report**

Location: BLAKELY ISLAND, Washington Accident Number: SEA92LA133

Date & Time: June 23, 1992, 11:00 Local Registration: N5794Q

Aircraft: MOONEY M20C Aircraft Damage: Substantial

**Defining Event:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

UPON ARRIVAL AT THE AIRPORT THE PILOT SET UP TO LAND WITH A TAILWIND COMPONENT. DURING THE FLARE A DOWNDRAFT WAS ENCOUNTERED AND THE AIRCRAFT LANDED HARD. THE PILOT ATTEMPTED A GO AROUND AND THEN ABORTED THE ATTEMPT DURING WHICH THE AIRCRAFT DEPARTED THE RIGHT SIDE OF THE RUNWAY. AFTER LEAVING THE RUNWAY THE NOSE GEAR SEPARATED FROM THE AIRCRAFT AND THE RIGHT MAIN LANDING GEAR STRUT COLLAPSED.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT IN COMMAND'S NOT MAINTAINING THE PROPER RATE OF DESCENT AND NOT MAINTAINING DIRECTIONAL CONTROL, AND SEPARATION OF THE NOSE GEAR STRUT AND OVERLOAD OF THE RIGHT MAIN GEAR STRUT. FACTORS CONTRIBUTING TO THE ACCIDENT WERE: WEATHER CONDITIONS: TAILWIND AND DOWNDRAFT, AND THE PILOT IN COMMAND'S SELECTION OF THE WRONG RUNWAY.

### **Findings**

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - TAILWIND

2. (F) WRONG RUNWAY - SELECTED - PILOT IN COMMAND

3. (F) WEATHER CONDITION - DOWNDRAFT

4. (C) PROPER DESCENT RATE - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

#### **Findings**

5. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #3: GEAR COLLAPSED Phase of Operation: LANDING - ROLL

#### Findings

6. (C) LANDING GEAR, NOSE GEAR STRUT - SEPARATION

7. (C) LANDING GEAR, MAIN GEAR STRUT - OVERLOAD

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## **Factual Information**

### **Pilot Information**

| Certificate:              | Private   | Age:                              | 66,Female     |
|---------------------------|---|-----------------------------------|---------------|
| Airplane Rating(s):       | Single-engine land  | 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 Medicalw/<br>waivers/lim                                  | Last FAA Medical Exam:            | June 19, 1990 |
| Occupational Pilot:       | UNK   | Last Flight Review or Equivalent: |               |
| Flight Time:              | 750 hours (Total, all aircraft), 750 hours (Total, this make and model) |                                   |               |

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

| Aircraft Make:                | MOONEY                   | Registration:                     | N5794Q          |
|-------------------------------|--------------------------|-----------------------------------|-----------------|
| Model/Series:                 | M20C M20C                | Aircraft Category:                | Airplane        |
| Year of Manufacture:          |                          | Amateur Built:                    |                 |
| Airworthiness Certificate:    | Normal                   | Serial Number:                    | 3099            |
| Landing Gear Type:            | Retractable - Tricycle   | Seats:                            | 4               |
| Date/Type of Last Inspection: | February 11, 1992 Annual | Certified Max Gross Wt.:          | 2575 lbs        |
| Time Since Last Inspection:   | 5 Hrs                    | Engines:                          | 1 Reciprocating |
| Airframe Total Time:          | 1293 Hrs                 | Engine Manufacturer:              | LYCOMING        |
| ELT:                          | Installed, not activated | Engine Model/Series:              | O-360-A1D       |
| Registered Owner:             | BREES, FRED N.           | Rated Power:                      | 180 Horsepower  |
| Operator:                     | BREES, EUNICE G.         | 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:                  | Day              |
|----------------------------------|----------------------------------|--------------------------------------|------------------|
| Observation Facility, Elevation: | FHR ,109 ft msl                  | Distance from Accident Site:         | 9 Nautical Miles |
| Observation Time:                | 10:45 Local                      | Direction from Accident Site:        | 230°             |
| <b>Lowest Cloud Condition:</b>   | Clear                            | Visibility                           | 15 miles         |
| Lowest Ceiling:                  | None                             | Visibility (RVR):                    |                  |
| Wind Speed/Gusts:                | 10 knots /                       | Turbulence Type<br>Forecast/Actual:  | /                |
| Wind Direction:                  | 320°                             | Turbulence Severity Forecast/Actual: | /                |
| Altimeter Setting:               | 29 inches Hg                     | Temperature/Dew Point:               | 24°C             |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |                                      |                  |
| Departure Point:                 | SEATTLE , WA (BFI )              | Type of Flight Plan Filed:           | None             |
| Destination:                     |                                  | Type of Clearance:                   | None             |
| Departure Time:                  | 10:15 Local                      | Type of Airspace:                    | Class G          |

## **Airport Information**

| Airport:             | BLAKELY ISLAND AIRPORT S08 | Runway Surface Type:             | Asphalt   |
|----------------------|----------------------------|----------------------------------|-----------|
| Airport Elevation:   | 70 ft msl                  | <b>Runway Surface Condition:</b> | Dry       |
| Runway Used:         | 19                         | IFR Approach:                    | None      |
| Runway Length/Width: | 2000 ft                    | VFR Approach/Landing:            | Full stop |

## Wreckage and Impact Information

| Crew Injuries:         | 1 Minor | Aircraft Damage:        | Substantial                |
|------------------------|---------|-------------------------|----------------------------|
| Passenger<br>Injuries: | 1 Minor | Aircraft Fire:          | None                       |
| Ground Injuries:       | N/A     | Aircraft Explosion:     | None                       |
| Total Injuries:        | 2 Minor | Latitude,<br>Longitude: | 48.559169,-122.799018(est) |

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#### **Administrative Information**

| Investigator In Charge (IIC):     | Mccreary, Steven                             |  |
|-----------------------------------|--|--|
| Additional Participating Persons: | D. AVEY; RENTON , WA                         |  |
| Original Publish Date:            | September 28, 1993                           |  |
| Last Revision Date:               |  |  |
| Investigation Class:              | <u>Class</u>                                 |  |
| Note:                             |  |  |
| Investigation Docket:             | https://data.ntsb.gov/Docket?ProjectID=42839 |  |

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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 here.

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