



# **Aviation Investigation Final Report**

Location: STOW, Massachusetts Accident Number: BFO92LA148

Date & Time: September 25, 1992, 20:30 Local Registration: N1338W

Aircraft: MOONEY M20E Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

THE PILOT WAS PRACTICING LANDINGS AT NIGHT FOR CURRENCY. HE STATED THAT HE ELECTED TO LAND WITH THE LANDING LIGHT OFF, AND THE AIRPLANE TOUCHED DOWN LEFT OF THE RUNWAY CENTERLINE. THE LEFT LANDING GEAR WAS OFF THE RUNWAY, CAUSING THE AIRPLANE TO VEER LEFT. THE LEFT WING HIT BUSH(ES) AND DIRECTIONAL CONTROL WAS LOST. THE AIRPLANE CONTINUED ONTO ROUGH TERRAIN AND CAME TO REST WITH SUBSTANTIAL DAMAGED. THE PILOT REPORTED THERE WAS A LACK OF RUNWAY LIGHTING ON THE LEFT SIDE OF THE RUNWAY.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE PILOT TO ATTAIN PROPER RUNWAY ALIGNMENT DURING LANDING. FACTORS RELATED TO THE ACCIDENT WERE DARKNESS, A LACK OF RUNWAY LIGHTING ON THE LEFT SIDE OF THE RUNWAY, AND THE PILOT'S LACK OF VISUAL QUES.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### **Findings**

1. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

2. (C) PROPER ALIGNMENT - NOT ATTAINED - PILOT IN COMMAND

3. (F) LIGHT CONDITION - DARK NIGHT

- 4. (F) AIRPORT FACILITIES, RUNWAY EDGE LIGHTS NOT OPERATING 5. (F) LANDING LIGHTS NOT USED PILOT IN COMMAND
- 6. (F) VISUAL/AURAL DETECTION PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING

Findings

7. OBJECT - TREE(S)

Page 2 of 6 BF092LA148

## **Factual Information**

#### **Pilot Information**

| Airline transport; Flight instructor   | Age:  | 40,Male   |
|--|---|---|
| Single-engine land; Single-engine sea; Multi-engine land   | Seat Occupied:  | Left  |
| Glider   | Restraint Used:   |   |
| Airplane   | Second Pilot Present:   | No  |
| Airplane multi-engine; Airplane single-engine; Glider  | Toxicology Performed:   | No  |
| Class 2 Valid Medicalw/<br>waivers/lim   | Last FAA Medical Exam:  | October 8, 1992   |
| UNK  | Last Flight Review or Equivalent:   |   |
| 2140 hours (Total, all aircraft), 700 hours (Total, this make and model), 2060 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft) |   |   |
|  | Single-engine land; Single-engine sea; Multi-engine land Glider Airplane Airplane multi-engine; Airplane single-engine; Glider Class 2 Valid Medicalw/ waivers/lim UNK 2140 hours (Total, all aircraft), 700 h Command, all aircraft), 46 hours (La | Single-engine land; Single-engine sea; Multi-engine land  Glider Restraint Used:  Airplane Second Pilot Present:  Airplane multi-engine; Airplane single-engine; Glider  Class 2 Valid Medicalw/ waivers/lim  UNK Last Flight Review or Equivalent:  2140 hours (Total, all aircraft), 700 hours (Total, this make and model), 20 Command, all aircraft), 46 hours (Last 90 days, all aircraft), 10 hours (Last |

Page 3 of 6 BF092LA148

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

| Aircraft Make:                | MOONEY   | Registration:                     | N1338W          |
|-------------------------------|--|-----------------------------------|-----------------|
| Model/Series:                 | M20E M20E  | Aircraft Category:                | Airplane        |
| Year of Manufacture:          |  | Amateur Built:                    |                 |
| Airworthiness Certificate:    | Normal   | Serial Number:                    | 226             |
| Landing Gear Type:            | Retractable - Tricycle                                 | Seats:                            | 4               |
| Date/Type of Last Inspection: | August 7, 1992 Annual                                  | Certified Max Gross Wt.:          | 2575 lbs        |
| Time Since Last Inspection:   | 8 Hrs  | Engines:                          | 1 Reciprocating |
| Airframe Total Time:          | 3490 Hrs   | Engine Manufacturer:              | LYCOMING        |
| ELT:                          | Installed, activated, did not aid in locating accident | Engine Model/Series:              | IO-360-A1A      |
| Registered Owner:             | PAUL M. KINZELMAN                                      | Rated Power:                      | 200 Horsepower  |
| Operator:                     | PAUL M. KINZELMAN                                      | Operating Certificate(s)<br>Held: | None            |
| Operator Does Business As:    |  | Operator Designator Code:         |                 |

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

| - Wieteorologioai illiorillati   | gara a a a gara a a a a a a a a a a a a |   |                   |
|----------------------------------|---|---|-------------------|
| Conditions at Accident Site:     | Visual (VMC)                            | Condition of Light:                     | Night/dark        |
| Observation Facility, Elevation: | BED ,133 ft msl                         | Distance from Accident Site:            | 10 Nautical Miles |
| Observation Time:                | 18:45 Local                             | Direction from Accident Site:           | 80°               |
| <b>Lowest Cloud Condition:</b>   | Clear                                   | Visibility                              | 50 miles          |
| Lowest Ceiling:                  | None                                    | Visibility (RVR):                       |                   |
| Wind Speed/Gusts:                | /                                       | Turbulence Type Forecast/Actual:        | /                 |
| Wind Direction:                  | 0°                                      | Turbulence Severity<br>Forecast/Actual: | /                 |
| Altimeter Setting:               | 30 inches Hg                            | Temperature/Dew Point:                  | 6°C / 1°C         |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation        |   |                   |
| Departure Point:                 |   | Type of Flight Plan Filed:              | None              |
| Destination:                     |   | Type of Clearance:                      | None              |
| Departure Time:                  | 20:20 Local                             | Type of Airspace:                       | Class E           |

Page 4 of 6 BF092LA148

## **Airport Information**

| Airport:             | MINUTEMAN 6B6   | Runway Surface Type:             | Asphalt   |
|----------------------|-----------------|----------------------------------|-----------|
| Airport Elevation:   | 273 ft msl      | <b>Runway Surface Condition:</b> | Dry       |
| Runway Used:         | 3               | IFR Approach:                    | None      |
| Runway Length/Width: | 2800 ft / 50 ft | VFR Approach/Landing:            | Full stop |

## 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: |             |

Page 5 of 6 BF092LA148

#### **Administrative Information**

| Investigator In Charge (IIC):        | Guzzetti, Jeffrey                            |  |
|--------------------------------------|--|--|
| Additional Participating<br>Persons: | JOHN GAGLIARDI; BEDFORD , MA                 |  |
| Original Publish Date:               | September 28, 1993                           |  |
| Last Revision Date:                  |  |  |
| Investigation Class:                 | <u>Class</u>                                 |  |
| Note:                                |  |  |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=11855 |  |

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 BF092LA148