



Aviation Investigation Final Report

Location: FELTON, Pennsylvania Accident Number: NYC92LA119

Date & Time: June 16, 1992, 15:30 Local Registration: N21RE

Aircraft: PIPER PA-24-180 Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

AFTER TAKEOFF, FOLLOWING THE INSTALLATION OF A PROPELLER GOVERNOR OIL LINE, A LOSS OF OIL PRESSURE WAS NOTICED. A PRECAUTIONARY LANDING WAS MADE IN A WHEAT FIELD. THE OIL RETURN LINE FROM THE NUMBER THREE CYLINDER WAS FOUND DISCONNECTED. THE MECHANIC WHO PERFORMED THE WORK STATED HE WAS A ONE MAN SHOP AND DUE TO DIFFICULTIES, THE JOB TOOK 3 HOURS INSTEAD OF THE PROJECTED 1 1/2 HOURS. HE ALSO SAID HE ALLOWED CUSTOMER PRESSURE TO OVERRIDE HIS STANDARDS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A PRECAUTIONARY LANDING IN UNSUITABLE TERRAIN. AN ADDITIONAL CAUSE WAS THE FAILURE OF THE MECHANIC TO TIGHTEN THE OIL RETURN LINE ON THE NUMBER THREE CYLINDER. A FACTOR RELATED TO THE ACCIDENT WAS THE PRESSURE THE MECHANIC FELT TO COMPLETE THE JOB IN A TIMELY MANNER.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE - NORMAL

Findings

1. (C) LUBRICATING SYSTEM, OIL LINE - LOOSE

- 2. (C) MAINTENANCE, INSTALLATION IMPROPER OTHER MAINTENANCE PERSONNEL
- 3. (F) PRESSURE OTHER MAINTENANCE PERSONNEL
- 4. PRECAUTIONARY LANDING PERFORMED PILOT IN COMMAND(CFI)

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

5. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND(CFI)

6. (C) TERRAIN CONDITION - HIGH VEGETATION

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Factual Information

Pilot Information

| Certificate: | Commercial; Flight instructor | Age: | 49,Male |
|---------------------------|---|-----------------------------------|----------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Right |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | Yes |
| Instructor Rating(s): | Airplane single-engine | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medicalw/ waivers/lim | Last FAA Medical Exam: | August 7, 1991 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 14000 hours (Total, all aircraft), 113 hours (Total, this make and model), 13800 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | PIPER | Registration: | N21RE |
|-------------------------------|--------------------------|-----------------------------------|-----------------|
| Model/Series: | PA-24-180 PA-24-180 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 24-1718 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | September 1, 1991 Annual | Certified Max Gross Wt.: | 2550 lbs |
| Time Since Last Inspection: | 72 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1585 Hrs | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, not activated | Engine Model/Series: | O-360-A1A |
| Registered Owner: | HUGH J. HARMON | Rated Power: | 180 Horsepower |
| Operator: | HUGH J. HARMON | Operating Certificate(s) 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: | LNS ,403 ft msl | Distance from Accident Site: | 21 Nautical Miles |
| Observation Time: | 15:50 Local | Direction from Accident Site: | 50° |
| Lowest Cloud Condition: | Unknown | Visibility | 25 miles |
| Lowest Ceiling: | Broken / 25000 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 12 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 180° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 25°C / 14°C |
| Precipitation and Obscuration: | No Obscuration; No Precipita | ation | |
| Departure Point: | SMOKETOWN , PA (37PA) | Type of Flight Plan Filed: | None |
| Destination: | FREDERICK , MD (FDK) | Type of Clearance: | None |
| Departure Time: | 15:30 Local | Type of Airspace: | Class G |

Airport Information

| Airport: | | Runway Surface Type: | |
|--------------------|----|---|-------|
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: None | |
| Runway Length/Widt | h: | VFR Approach/Landing: Precautionary lan | nding |

Wreckage and Impact Information

| Crew Injuries: | 2 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|---------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 39.850742,-76.559867(est) |

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Administrative Information

| Investigator In Charge (IIC): | Hancock, Robert | |
|--------------------------------------|--|--|
| Additional Participating Persons: | FRANK GURISH; HARRISBURG , PA | |
| Original Publish Date: | August 26, 1993 | |
| Last Revision Date: | | |
| Investigation Class: | <u>Class</u> | |
| Note: | | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=37173 | |

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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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