



Aviation Investigation Final Report

Location: RALEIGH, North Carolina Accident Number: ATL86LA173

Date & Time: June 15, 1986, 20:06 Local Registration: N73BJ

Aircraft: PITTS S-15 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

DURING NORMAL CRUISE VFR FLIGHT AT 1,500 FT AGL, THE PILOT REPORTED HEARING AN ERRATIC HISSING SOUND AND THE ACFT BEGAN LOSING FUEL PRESSURE. THE AIRCRAFT LOST POWER AND A FORCED LANDING WAS MADE INTO A FIELD. THE RIGHT MAIN LANDING GEAR DROPPED INTO A HOLE AND THE AIRCRAFT NOSED OVER. INSPECTION OF THE WRECKAGE CONFIRMED THAT AN IMPROPER FITTING HAD BEEN INSTALLED IN THE PRESSURIZED FUEL SYSTEM. A TEE FITTING HAD BEEN INSTALLED IN PLACE OF AN ELBOW FITTING AND THE END CAP HAD LOOSENED ALLOWING THE LOSS OF FUEL PRESSURE AND SUBSEQUENT LOSS OF POWER.

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: CRUISE - NORMAL

Findings

1. (C) FUEL SYSTEM, LINE FITTING - INCORRECT

- 2. (C) MAINTENANCE, MODIFICATION IMPROPER PRODUCTION/DESIGN PERSONNEL
- 3. INADEQUATE CERTIFICATION/APPROVAL, AIRCRAFT FAA(ORGANIZATION)
- 4. (C) FUEL SYSTEM, LINE FITTING LOOSE

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER

Phase of Operation: LANDING - ROLL

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Factual Information

Pilot Information

| Certificate: | Commercial | Age: | 49,Male |
|---------------------------|---|-----------------------------------|------------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Unknown |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medicalno waivers/lim. | Last FAA Medical Exam: | February 5, 1986 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 944 hours (Total, all aircraft), 104 hours (Total, this make and model), 756 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | PITTS | Registration: | N73BJ |
|-------------------------------|---------------------------|-----------------------------------|-----------------|
| Model/Series: | S-15 S-15 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | BJ-2 |
| Landing Gear Type: | Tailwheel | Seats: | 1 |
| Date/Type of Last Inspection: | September 23, 1985 Annual | Certified Max Gross Wt.: | 900 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 100 Hrs | Engine Manufacturer: | LYCOMING |
| ELT: | Not installed | Engine Model/Series: | 0-320 |
| Registered Owner: | BRUCE C. JORDAN | Rated Power: | 150 Horsepower |
| Operator: | | 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: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 0° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | 32°C |
| Precipitation and Obscuration: | No Obscuration; No Precipi | ation | |
| Departure Point: | APEX , NC (NC81) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 19:55 Local | Type of Airspace: | Class G |
| | | | |

Airport Information

| Airport: | | Runway Surface Type: | |
|----------------------|-------------|----------------------------------|----------------|
| Airport Elevation: | 0 ft msl | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | 0 ft / 0 ft | VFR Approach/Landing: | Forced landing |

Wreckage and Impact Information

| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|-------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | |

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Administrative Information

Investigator In Charge (IIC): Coleman, Ben

Additional Participating ROBERT W SIMMONS; MORRISVILLE , NC

Persons:

Original Publish Date:

Investigation Class:

Last Revision Date:

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=7133

Class

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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