

National Transportation Safety Board Aviation Accident Final Report

Location: NASHVILLE, TN Accident Number: ATL90FA163

Date & Time: 09/06/1990, 1131 CDT Registration: N82MA

Aircraft: MITSUBISHI MU-2B-36 Aircraft Damage: Destroyed

Defining Event: Injuries: 1 Fatal

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

ON A PREVIOUS FLT, LOW POWER WAS NOTED IN THE RGT ENG, THE RGT ENG FUEL FLOW WAS 5 TO 8 GAL/HR LESS THAN THE LEFT ENG & THE RGT ENG TEMP (ITT) WAS ABT 500 DEG LESS THAN THE LEFT. A DECISION WAS MADE TO FERRY THE ACFT TO A MAINT FACILITY TO HAVE THE RGT ENG EXAMINED. THE PLT TOOK OFF ON A 5186' RWY (RWY 2C) WITH A LGT TAIL WIND IN 95 DEG TEMP, THOUGH THE ARPT HAD LONGER RWYS (7702', 8000' & 8500'). A WITNESS NOTED THE ACFT LIFTED OFF AT THE END OF THE RWY (CHARTS SHOWED THE TAKEOFF ROLL WITH NORMAL POWER SHOULD HAVE BEEN ABT 3100'). WITNESSES RPRTD THE ACFT REMAINED LOW (NEARLY HITTING A 55' LGT STANDARD) UNTIL IT ROLLED RGT & 'DROPPED LIKE A ROCK.' IMPACT OCCURRED IN A RGT WING LOW ATTITUDE ABT 2 MI FM THE DEP END OF RWY 2C. THE ACFT WAS EXTENSIVELY DMGD BY IMPACT & FIRE; NO PREIMPACT PART FAILURE WAS FND. BOTH ENGS HAD EVIDENCE OF ENG ROTATION AT THE TIME OF IMPACT. THE OPERATOR'S LEAD MECHANIC HAD RPRTD FOR DUTY ABT 3 HRS BEFORE THE ACDNT FLT, BUT HE HAD NOT BEEN INFORMED OF THE ENG PROBLEM BEFORE THE ACFT TOOK OFF.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE COMPANY/OPERATOR MANAGEMENT'S DECISION TO OPERATE THE AIRCRAFT WITH A KNOWN DEFICIENCY WITHOUT FURTHER MAINTENANCE, THE PILOT'S IMPROPER PLANNING/DECISION AND THE PILOT'S FAILURE TO ABORT THE TAKEOFF (WHILE THERE WAS SUFFICIENT RUNWAY REMAINING). FACTORS RELATED TO THE ACCIDENT WERE: LACK OF POWER IN THE RIGHT ENGINE, AND THE UNFAVORABLE METEOROLOGICAL CONDITIONS AT THE AIRPORT.

Findings

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: TAKEOFF - ROLL/RUN

Findings

- 1. (F) WEATHER CONDITION HIGH DENSITY ALTITUDE
- 2. (F) WEATHER CONDITION TAILWIND
- 3. (F) POWERPLANT OUTPUT LOW
- 4. (C) MAINTENANCE NOT PERFORMED COMPANY/OPERATOR MANAGEMENT
- 5. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT PERFORMED COMPANY/OPERATOR MANAGEMENT
- 6. (C) PREFLIGHT PLANNING/PREPARATION INADEQUATE PILOT IN COMMAND
- 7. (C) ABORT NOT PERFORMED PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

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Factual Information

Pilot Information

| Certificate: | Airline Transport | Age: | 49, Male |
|---------------------------|--|------------------------|------------|
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | | Toxicology Performed: | Yes |
| Medical Certification: | Class 1 Valid Medicalw/waivers/lim. | Last FAA Medical Exam: | 10/02/1989 |
| Occupational Pilot: | Last Flight Review or Equivalent: | | |
| Flight Time: | 9379 hours (Total, all aircraft), 5854 hours (Total, this make and model), 8286 hours (Pilot In Command, all aircraft), 108 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | MITSUBISHI | Registration: | N82MA |
|-------------------------------|------------------------|-----------------------------------|--------------------------|
| Model/Series: | MU-2B-36 MU-2B-36 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 665 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 3 |
| Date/Type of Last Inspection: | 03/26/1990, AAIP | Certified Max Gross Wt.: | 11575 lbs |
| Time Since Last Inspection: | 50 Hours | Engines: | 2 Turbo Prop |
| Airframe Total Time: | 6714 Hours | Engine Manufacturer: | GARRETT |
| ELT: | Installed | Engine Model/Series: | TPE-331 |
| Registered Owner: | B AND J LEASING, INC. | Rated Power: | 715 hp |
| Operator: | TENNESSEE AIR CORP. | Operating Certificate(s) Held: | On-demand Air Taxi (135) |
| | | | |

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Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
|----------------------------------|------------------------|--------------------------------------|------------------|
| Observation Facility, Elevation: | BNA, 598 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 1138 CDT | Direction from Accident Site: | 0° |
| Lowest Cloud Condition: | Clear / 0 ft agl | Visibility | 6 Miles |
| Lowest Ceiling: | None / 0 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 5 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 220° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 35°C / 17°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | (BNA) | Type of Flight Plan Filed: | None |
| Destination: | MURFREESBORO, TN (MBT) | Type of Clearance: | VFR |
| Departure Time: | 1130 CDT | Type of Airspace: | |
| | | | |

Airport Information

| Airport: | NASHVILLE INTL (BNA) | Runway Surface Type: | Asphalt |
|----------------------|----------------------|---------------------------|---------|
| Airport Elevation: | 598 ft | Runway Surface Condition: | Dry |
| Runway Used: | 2C | IFR Approach: | None |
| Runway Length/Width: | 5186 ft / 150 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

| Crew Injuries: | 1 Fatal | Aircraft Damage: | Destroyed |
|---------------------|---------|----------------------|-----------|
| Passenger Injuries: | N/A | Aircraft Fire: | On-Ground |
| Ground Injuries: | N/A | Aircraft Explosion: | On-Ground |
| Total Injuries: | 1 Fatal | Latitude, Longitude: | |

Administrative Information

| Investigator In Charge (IIC): | RALPH | E HICKS | Report Date: | 04/13/1992 |
|-----------------------------------|--|---------|--------------|------------|
| Additional Participating Persons: | | | | |
| Publish Date: | | | | |
| Investigation Docket: | NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at publing@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/ . | | | |

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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

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