

National Transportation Safety Board Aviation Accident Final Report

Location: BOCA RATON, FL Accident Number: MIA90LA056

Date & Time: 01/17/1990, 0009 EST **Registration:** N335GP

Aircraft: CESSNA 404 Aircraft Damage: Substantial

Defining Event: Injuries: 3 Minor

Flight Conducted Under: Part 91: General Aviation - Ferry

Analysis

WHILE LEVEL AFTER DESCENDING, THE RT ENG QUIT. PLT FEATHERED THE PROP, ADVISED ATC, & WAS DIVERTING TO ALTERNATE WHEN LT ENG QUIT. HE POSITIONED THE LT ENG BOOST PUMP TO HIGH & LOW WITH NEGATIVE RESULTS, BUT DID NOT FEATHER THE PROP. POSITION OF BOOST PUMPS, WHEN ENGS QUIT, WAS NOT DETERMINED. ACFT LANDED ON OVERPASS THAT WAS UNDER CONSTRUCTION. THERE WAS FUEL LEAKAGE AFTER ACCIDENT DUE TO ACFT DAMAGE. FUEL QUANTITY WAS SUFFICIENT. EXAM OF ACFT REVEALED RT ENG FLEXIBLE DUCT FROM TURBOCHARGER TO PLENUM CHAMBER SEPARATED DUE TO LOOSE CLAMP. HOSE WAS INSTALLED & CLUB PROP INSTALLED FOR EACH ENG RUN. BOTH ENGS OPERATED NORMALLY. INDUCTION AIR HOSE WAS PULLED DURING RT ENG RUN. ENG RAN ROUGH DUE TO EXCESSIVE RICH MIXTURE. NO DETERMINATION COULD BE MADE FOR THE REASON OF THE LEFT ENG POWER LOSS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: LOSS OF POWER IN THE RIGHT ENGINE DUE TO A DISCONNECTED DUCT BETWEEN THE TURBOCHARGER AND THE PLENUM CHAMBER. THE REASON FOR THE LOSS OF POWER IN THE LEFT ENGINE WAS NOT DETERMINED.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: APPROACH

Findings

1. 1 ENGINE

2. (C) RAM/INDUCTION AIR - DISCONNECTED

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

3. 1 ENGINE

4. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #3: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. OBJECT - BRIDGE/OVERPASS

Page 2 of 5 MIA90LA056

Factual Information

Pilot Information

| Certificate: | Commercial | Age: | 35, Male |
|---------------------------|---|------------------------|----------------------------|
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 1 Valid Medicalno waivers/lim. | Last FAA Medical Exam: | 06/26/1989 |
| Occupational Pilot: | Last Flight Review or Equivalent: | | |
| Flight Time: | 1487 hours (Total, all aircraft), 35 hours (Total, this make and model), 1216 hours (Pilot In Command, all aircraft), 225 hours (Last 90 days, all aircraft), 105 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| All craft and Owner/op | | | |
|-------------------------------|--|--------------------------------|-----------------|
| Aircraft Make: | CESSNA | Registration: | N335GP |
| Model/Series: | 404 404 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 404-0009 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 10 |
| Date/Type of Last Inspection: | 08/10/1989, Annual | Certified Max Gross Wt.: | 8400 lbs |
| Time Since Last Inspection: | 46 Hours | Engines: | 2 Reciprocating |
| Airframe Total Time: | 3286 Hours | Engine Manufacturer: | CONTINENTAL |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | GTSIO-520-M |
| Registered Owner: | TITAN 404, INC. | Rated Power: | 375 hp |
| Operator: | TITAN 404, INC. | Operating Certificate(s) Held: | None |

Page 3 of 5 MIA90LA056

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Night/Bright |
|----------------------------------|------------------------------|--------------------------------------|-------------------|
| Observation Facility, Elevation: | FLL, 11 ft msl | Distance from Accident Site: | 19 Nautical Miles |
| Observation Time: | 2347 EST | Direction from Accident Site: | 189° |
| Lowest Cloud Condition: | Scattered / 2500 ft agl | Visibility | 10 Miles |
| Lowest Ceiling: | Overcast / 4000 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 11 knots / 11 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 250° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 23°C / 17°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | WILMINGTON, DE (ILG) | Type of Flight Plan Filed: | IFR |
| Destination: | FORT LAUDERDALE, FL (FLL) | Type of Clearance: | IFR |
| Departure Time: | 1845 EST | Type of Airspace: | Class E |
| | | | |

Airport Information

| Airport: | BOCA RATON (BCT) | Runway Surface Type: | |
|----------------------|------------------|---------------------------|----------------|
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced Landing |

Wreckage and Impact Information

| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
|---------------------|---------|----------------------|-------------|
| Passenger Injuries: | 2 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 3 Minor | Latitude, Longitude: | |

Administrative Information

| Investigator In Charge (IIC): | TIMOTHY W MONVILLE | Report Date: | 09/10/1992 |
|-----------------------------------|--|--------------|------------|
| 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/ . | | |

Page 4 of 5 MIA90LA056

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.

Page 5 of 5 MIA90LA056