



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|---|-------------------------|--------------------|
| Location: | FORT BELVOIR, VA | Accident Number: | DCA83AA019 |
| Date & Time: | 03/11/1983, 0258 EST | Registration: | N120AE |
| Aircraft: | PIPER PA-31-350-T1020 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 Serious, 1 Minor |
| Flight Conducted Under: | Part 135: Air Taxi & Commuter - Non-scheduled | | |

Analysis

ON A FLT FROM NEWARK, NJ TO RICHMOND, VA, THE DEPARTURE TIME WAS DELAYED, AND SUBSEQUENTLY, THE ACFT DID NOT ARRIVE AT RICHMOND UNTIL AFTER THE REFUELING FACILITIES WERE CLOSED. THE PLT DECIDED THERE WAS SUFFICIENT FUEL ABOARD TO COMPLETE THE NEXT FLT TO THE WASHINGTON NATIONAL ARPT, SO HE DEPARTED ON THAT FLT. HOWEVER, ABOUT 21 MI FROM HIS DESTINATION, HE DECLARED A LOW-FUEL STATE & REQUESTED VECTORS TO THE NEAREST ARPT. VECTORS WERE PROVIDED TOWARD DAVIDSON ARMY AIRFIELD. HOWEVER, BOTH ENGS SUBSEQUENTLY LOST POWER FROM LACK OF FUEL & THE ACFT CRASHED IN A WOODED AREA APRX 500 YDS SHORT OF RWY 32.

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: APPROACH

Findings

1. (F) FLUID,FUEL - LACK OF
2. (F) FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND
3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
4. (F) FLUID,FUEL - LOW LEVEL
5. (C) DELAYED - PILOT IN COMMAND
6. (C) FLUID,FUEL - EXHAUSTION
7. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: LANDING

Findings

8. (F) LIGHT CONDITION - DARK NIGHT
9. (F) OBJECT - TREE(S)

Factual Information

Pilot Information

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|----------------------------------|---|-------------------------------|------------|
| Certificate: | Airline Transport | Age: | 39, Male |
| Airplane Rating(s): | Multi-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | | Restraint Used: | Seatbelt |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane Multi-engine; Instrument Airplane | Toxicology Performed: | |
| Medical Certification: | Class 1 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | 12/07/1982 |
| Occupational Pilot: | Last Flight Review or Equivalent: | | |
| Flight Time: | 5675 hours (Total, all aircraft), 120 hours (Total, this make and model), 250 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|----------------------------|---------------------------------------|----------------------------|
| Aircraft Make: | PIPER | Registration: | N120AE |
| Model/Series: | PA-31-350-T1020 PA-31-350- | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 31-8253006 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | 7000 lbs |
| Time Since Last Inspection: | | Engines: | 2 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, activated | Engine Model/Series: | TIO-540 |
| Registered Owner: | ASREC AIR EAST, INC. | Rated Power: | 350 hp |
| Operator: | ASREC AIR EAST, INC. | Operating Certificate(s) Held: | Commuter Air Carrier (135) |

Meteorological Information and Flight Plan

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|----------------------------------|----------------------|---|------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Night/Dark |
| Observation Facility, Elevation: | DCA, 25 ft msl | Distance from Accident Site: | 8 Nautical Miles |
| Observation Time: | 0000 | Direction from Accident Site: | 0° |
| Lowest Cloud Condition: | Unknown / 0 ft agl | Visibility | 0 Miles |
| Lowest Ceiling: | Unknown / 0 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | -18°C / -18°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | RICHMOND, VA (RIC) | Type of Flight Plan Filed: | IFR |
| Destination: | WASHINGTON, DC (DCA) | Type of Clearance: | IFR |
| Departure Time: | 0000 | Type of Airspace: | Class E |

Airport Information

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|----------------------|------------------------|---------------------------|----------------|
| Airport: | DAVIDSON ARMY AIRFIELD | Runway Surface Type: | |
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 32 | IFR Approach: | |
| Runway Length/Width: | | VFR Approach/Landing: | Forced Landing |

Wreckage and Impact Information

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

Administrative Information

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|-----------------------------------|--|--------------|--|
| Investigator In Charge (IIC): | EDWARD C MONTGOMERY | Report Date: | |
| 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 pubinq@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 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](#).