



Aviation Investigation Final Report

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|--------------------------------|---|-------------------------|--------------------|
| Location: | BEDMINSTER, New Jersey | Accident Number: | NYC83FA110 |
| Date & Time: | May 13, 1983, 16:55 Local | Registration: | N28426 |
| Aircraft: | GRUMMAN AMERICAN AA5B | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 Serious, 1 Minor |
| Flight Conducted Under: | Part 135: Air taxi & commuter - Non-scheduled | | |

Analysis

THE ACFT CRASHED INTO TREES DURING A FORCED LANDING AFTER A LOSS OF POWER WHILE ENROUTE FROM WHITE PLAINS. THE ENGINE STARTED TO SHAKE AND THE RPMS DECREASED. THE PLT INITIATED EMERGENCY PROCEDURES BUT THE ENGINE CONTINUED TO RUN ROUGHLY. A DECISION WAS MADE TO LAND AT SOMERSET ARPT. THE LANDING APPROACH WAS HIGH AND THE PLT ELECTED TO GO AROUND. THE ENGINE POWER WAS NOT ENOUGH AND A FULL STALL FLAPS UP LANDING WAS MADE INTO THE TREE TOPS. THE ACFT SLID DOWN THE TREES AND STOPPED IN A PAST VERTICAL NOSE DOWN POSITION. DURING A POST ACCIDENT ENGINE EXAMINATION THE #1 CYLINDER HAD NO COMPRESSION. THE EXHAUST VALVE WAS BROKEN AND THE VALVE HEAD WAS NOT FOUND. THE CYLINDER EXHAUST VALVE GUIDE MEASURED .515. THE SPECIFICATION WHEN NEW IS .4985. THE SERVICE LIMIT IS .4995.

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(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) ENGINE ASSEMBLY, VALVE, INTAKE - FAILURE, TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (C) PROPER TOUCHDOWN POINT - EXCEEDED - PILOT IN COMMAND

3. (C) DISTANCE - MISJUDGED - PILOT IN COMMAND

4. (C) GO-AROUND - ATTEMPTED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: GO-AROUND (VFR)

Findings

5. (F) OBJECT - TREE(S)

Factual Information

Pilot Information

| | | | |
|----------------------------------|---|--|-------------------|
| Certificate: | Airline transport; Flight instructor | Age: | 50,Female |
| Airplane Rating(s): | Single-engine land; Single-engine sea; Multi-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane multi-engine; Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical-w/ waivers/lim | Last FAA Medical Exam: | November 12, 1982 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 4795 hours (Total, all aircraft), 550 hours (Total, this make and model), 4380 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 9 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|----------------------------|---------------------------------------|--------------------------|
| Aircraft Make: | GRUMMAN AMERICAN | Registration: | N28426 |
| Model/Series: | AA5B AA5B | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | AA5B-0606 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | December 1, 1982 100 hour | Certified Max Gross Wt.: | 2400 lbs |
| Time Since Last Inspection: | 82 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1556 Hrs | Engine Manufacturer: | Avco Lycoming |
| ELT: | Installed, activated | Engine Model/Series: | O-360-A4K |
| Registered Owner: | HORTMONT AVIATION SERVICES | Rated Power: | 180 Horsepower |
| Operator: | | Operating Certificate(s) Held: | On-demand air taxi (135) |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|-------------|
| 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: | 8 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 315° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | 21°C / 10°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | WHITE PLAINS , NY (HPN) | Type of Flight Plan Filed: | Company VFR |
| Destination: | DOYLESTOWN , PA (N88) | Type of Clearance: | |
| Departure Time: | 00:00 Local | Type of Airspace: | Class G |

Airport Information

| | | | |
|-----------------------------|-----------------|----------------------------------|----------------|
| Airport: | SOMERSET N52 | Runway Surface Type: | Macadam |
| Airport Elevation: | 105 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 12 | IFR Approach: | None |
| Runway Length/Width: | 2770 ft / 60 ft | VFR Approach/Landing: | Forced landing |

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): Kuzenko, Michael

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=35044>

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](#).