

Aviation Investigation Final Report

| Location: | ASHVILLE, New Y | ork | Accident Number: | NYC96FA024 |
|-------------------------|---|-----------------|----------------------|------------|
| Date & Time: | November 10, 199 | 95, 19:30 Local | Registration: | N62620 |
| Aircraft: | Piper | PA-23-250 | Aircraft Damage: | Destroyed |
| Defining Event: | | | Injuries: | 1 Fatal |
| Flight Conducted Under: | Part 91: General aviation - Executive/Corporate | | | |

Analysis

The pilot was on final approach at night to runway 15 at a private airport. During the approach, the airplane struck a tall tree about 900 feet prior to the approach end of the runway. The airplane then struck additional trees before coming to rest, inverted in a reservoir, abeam of the approach end of the runway. Witnesses reported that the engines sounded normal. No evidence of a mechanical failure or malfunction was found with the airplane or engines. There was a gusty crosswind from the right and rain was starting to fall. The runway was not equipped with a visual or electronic glideslope.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's misjudgment of altitude and distance to the runway during an approach to land. Factors relating to the accident were: the night and adverse weather conditions.

Findings

Occurrence #1: UNDERSHOOT Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) LIGHT CONDITION - DARK NIGHT

2. (F) WEATHER CONDITION - RAIN

3. (F) WEATHER CONDITION - CROSSWIND

4. (F) WEATHER CONDITION - GUSTS

5. (C) DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings 6. OBJECT - TREE(S)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings 7. TERRAIN CONDITION - WATER

Factual Information

HISTORY OF FLIGHT

On November 10, 1995, about 1930 eastern standard time, a Piper PA-23-250, N62620, owned and operated by Fairbank Farms, struck and unlighted obstacle while on approach to the Fairbank Farms Airport, Ashville, New York. The airplane was destroyed, and the airline transport pilot was fatally injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the corporate flight which had departed from the Pennridge Airport, Perkasie, Pennsylvania, about 1830, and was conducted under 14 CFR Part 91.

The pilot had departed from the Fairbank Farms Airport in the morning, and then made multiple stops prior to returning. There was no record of a weather briefing. Returning to Fairbank Farms, the pilot contacted Erie Approach Control at 1921, and was given the current altimeter. He then reported Fairbank Farms in sight, and was cleared to leave the frequency. No further radio calls were received from N62620.

Witnesses saw or heard the airplane as the pilot approached the airport for runway 15. They reported the engines sounded normal. One witness reported that just after the airplane flew nearby, she heard a noise which she described as a "backfire" She heard it three times with a pause between the 1st and 2nd occurrence. She added that it was starting to sprinkle and there was no fog.

The airplane was found partially submerged in a pond, 200 feet to the left, and 100 feet beyond approach end of runway 15. The accident occurred during the hours of darkness at location 42 degrees, 05 minutes North and 79 degrees, 24 minutes West.

PERSONNEL INFORMATION

The pilot was the holder of an Airline Transport Pilot Certificate, with airplane single engine land and sea, and multi-engine land ratings. He also held a flight instructor certificate for single engine airplanes and instrument airplane. He was issued a First Class FAA Airman Medical Certificate on January 11, 1995. On his medical application, the pilot reported his total time as 21334 hours with 17 hours in the preceding six months. His pilot log book was not recovered. FAA and insurance records were unable to verify if the pilot had completed a flight review in the preceding 24 months.

The pilot had been employed as a contract pilot by Fairbank Farms, for over three years during which time, the airplane was based at the Fairbank Farms Airport. His employer estimated the pilot had flown in excess of 500 hours in the accident airplane, and that the pilot flew the company airplane about 40 hours a month in past few months.

Based upon previous flying records, the pilot was estimated to have flown about 200 hours since his last medical application for a total time of 21534 hours.

METEOROLOGICAL INFORMATION

The following weather was obtained from the Jamestown Airport, Automated Weather Observation Site (AWOS), located 8 miles northeast of the accident site:

1925 - 1,900 feet scattered, 4,700 feet broken, 6,000 feet overcast, visibility 10 miles, winds from 180 degrees @ 10 knots, gusts 16 knots.

1940 - 2,200 feet scattered, 4,700 ft broken, 7,500 ft feet overcast, visibility 10 miles, winds from 180 degrees @ 9 knots, gusts 16 knots.

The Jamestown weather was available on the AWOS frequency. There is no record of who listened to the frequency, and it is unknown if the pilot accessed the frequency prior to landing.

WRECKAGE AND IMPACT INFORMATION

The airplane was examined at the accident site on November 11, and 12, 1995. The first point of observed contact was in the top of a tree about 900 feet from the approach end of runway 15, and 100 feet left of runway centerline. Several broken branches and pieces of cut wood were found near the base of the tree. The height of the break was measured at 63 feet. The height of tree that was broken off was estimated at 5 to 6 feet.

Additional trees, located about 100 feet prior to, and 100 feet left of the final approach course, were found with broken branches, at a height of about 10 feet above the ground. The left wing, outboard of the left engine, was found in this area.

The airplane wreckage was found about 200 feet beyond the second tree strike, and 200 feet left of the approach end of the runway, inverted, in a pond.

Following removal from the water, impact damage was visible on the leading edge of both wings. The fuel tanks in both wings were broken open. The landing gear was extended and the wing flaps were in the landing position.

The roof of the cabin was crushed against the instrument panel and cabin seat backs. The cockpit controls for the throttles and propellers were forward, and the mixtures were in the mid-range position.

Flight control continuity was confirmed to the ailerons, rudder and elevator. The aileron control cables on the left wing were pulled out of the wing. The elevator trim was set at 1.5

degrees tab up. The rudder trim was set at neutral.

Both engines were rotated and compression was found in all cylinders. The spark plugs were gray in appearance. Spark was obtained from both magnetos on each engine. The filters in the fuel control units were free of blockage. Fuel was found in the fuel lines to both engines and in the fuel control filters. Both propellers had their blades bent rearward.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was conducted by Dr. Fazlollah Loghamanee, Forensic Pathologist for Erie County, New York.

Toxicological testing that was conducted by FAA Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma, was negative for drugs and alcohol.

ADDITIONAL DATA / INFORMATION

Runway 15 was 2800 feet long, and 30 feet wide, and was equipped with low intensity runway lights. The approach was over an area of limited ground lighting. Runway 15 was not equipped with a visual or electronic glideslope. The area beyond the departure end of runway 15 was void of lighting. A witness reported she saw the runway lights illuminated on the night of the accident, and a check of the runway lights after the accident found them operational.

According to the Instrument Flying Handbook, Advisory Circular 61-27C; Illusions Leading to Landing Errors, "Atmospheric Illusions - Rain on the wind-screen can create an illusion of being at a higher altitude...."

The wreckage was released to the owner, Mr. Joseph Fairbanks, on November 11, 1995.

Pilot Information

| Certificate: | Airline transport; Flight instructor | Age: | 60,Male |
|---------------------------|--|-----------------------------------|------------------|
| Airplane Rating(s): | Single-engine land; Single-engine sea; Multi-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane single-engine; Instrument airplane | Toxicology Performed: | Yes |
| Medical Certification: | Class 1 Valid Medicalw/ waivers/lim | Last FAA Medical Exam: | January 11, 1995 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 21534 hours (Total, all aircraft), 500 hours (Total, this make and model), 120 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Piper | Registration: | N62620 |
|----------------------------------|---|-----------------------------------|-----------------|
| Model/Series: | PA-23-250 PA-23-250 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 27-7654092 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | July 1, 1995 100 hour | Certified Max Gross Wt.: | 5200 lbs |
| Time Since Last Inspection: | 29 Hrs | Engines: | 2 Reciprocating |
| Airframe Total Time: | 5921 Hrs | Engine Manufacturer: | Lycoming |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | IO-540-C4B5 |
| Registered Owner: | FAIRBANK FARMS | Rated Power: | 250 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Night/dark |
|----------------------------------|----------------------------------|---|------------------|
| Observation Facility, Elevation: | JHW ,1724 ft msl | Distance from Accident Site: | 8 Nautical Miles |
| Observation Time: | 18:25 Local | Direction from Accident Site: | 63° |
| Lowest Cloud Condition: | Scattered / 1900 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | Broken / 4700 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / 16 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 180° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 8°C / 1°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | PERKASIE , PA (N70) | Type of Flight Plan Filed: | None |
| Destination: | (NY89) | Type of Clearance: | None |
| Departure Time: | 18:20 Local | Type of Airspace: | Class G |

Airport Information

| Airport: | FAIRBANK FARMS NY89 | Runway Surface Type: | Asphalt |
|----------------------|---------------------|---------------------------|---------------------------|
| Airport Elevation: | 1350 ft msl | Runway Surface Condition: | Wet |
| Runway Used: | 15 | IFR Approach: | None |
| Runway Length/Width: | 2800 ft / 30 ft | VFR Approach/Landing: | Full stop;Traffic pattern |

Wreckage and Impact Information

| Crew Injuries: | 1 Fatal | Aircraft Damage: | Destroyed |
|------------------------|---------|-------------------------|---------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Fatal | Latitude, Longitude: | 42.110832,-79.419876(est) |

Administrative Information

| Investigator In Charge (IIC): | Hancock, Robert |
|--------------------------------------|---|
| Additional Participating Persons: | TONY JAMES; ROCHESTER , NY DONALD MILLER; ROCHESTER , NY DANIEL FLETCHER; WILLIAMSPORT , PA |
| Original Publish Date: | June 22, 1996 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=39077 |

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.