



Aviation Investigation Final Report

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|--------------------------------|---|-------------------------|-----------------|
| Location: | MARION, Iowa | Accident Number: | CHI94LA271 |
| Date & Time: | August 9, 1994, 07:10 Local | Registration: | N234KB |
| Aircraft: | PIPER PA-34-200 | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 2 Minor, 3 None |
| Flight Conducted Under: | Part 135: Air taxi & commuter - Non-scheduled | | |

Analysis

THE PILOT POSITIONED THE AIRPLANE ON THE RUNWAY IN PREPARATION FOR TAKEOFF. THE PILOT STATED HE LINED THE AIRPLANE ON THE RIGHT SIDE OF THE RUNWAY TO DEPART ON THE GRASS IN ORDER TO AVOID AN AREA OF LOOSE GRAVEL WHICH WAS LOCATED AT THE NORTH END OF THE RUNWAY. ACCORDING TO STATEMENTS FROM SEVERAL OF THE PASSENGERS ABOARD THE AIRPLANE, THE WINDSHIELD OF THE AIRPLANE WAS COMPLETELY OBSCURED WITH FROST DURING TAXI AND ON THE TAKEOFF ROLL. AFTER APPLYING FULL POWER FOR TAKEOFF THE AIRPLANE VEERED TO THE LEFT. THE PILOT THEN APPLIED RIGHT RUDDER AND SCANNED THE INSTRUMENTS. THE AIRPLANE'S LEFT WING IMPACTED AN AIRPLANE WHICH WAS PARKED ALONG SIDE OF THE RUNWAY. A SECOND AND THIRD IMPACT OCCURRED WITH TWO OTHER PARKED AIRPLANES BEFORE THE AIRPLANE CAME TO REST.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE AIRCRAFT PRELIGHT AND HIS FAILURE TO REMOVE THE FROST FROM THE WINDSHIELD WHICH OBSTRUCTED HIS VIEW.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
3. VISUAL LOOKOUT - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

4. OBJECT - AIRCRAFT PARKED/STANDING

Factual Information

On August 9, 1994, at 0710 central daylight time, a Piper PA-34- 200, N234KB, registered to P and N Corporation of Marion, Iowa, was destroyed when it struck several parked airplanes during an attempted takeoff at Marion, Iowa. The Airline Transport Pilot (ATP) and two passengers reported no injuries, the two other passengers aboard reported minor injuries. Visual meteorological conditions prevailed for the flight and a VFR flight plan was filed. The flight operated under 14 CFR Part 135, and originated in Marion, Iowa, with an intended destination of Kansas City, Missouri.

In a written statement, the pilot reported that after completing the engine run up, he positioned the airplane on the runway 17 (2770' x 100') in preparation for takeoff. He stated he lined the airplane on the right side of the runway to depart on the grass in order to avoid an area of loose asphalt located at the north end of the runway. The pilot stated the airplane veered to the left after he applied full power. He applied right rudder and started to scan the engine instruments. When he looked up he saw the parked airplanes which lined the edge of the runway. The left wing of N234KB impacted a parked airplane. After this first impact, N234KB impacted a second parked airplane, spun around, and impacted the right elevator of a third parked airplane.

According to a statement made by the passenger who was seated in the right front seat, he observed an excessive amount of dew on the front windshield when he boarded the airplane. He stated there was sufficient moisture to totally obscure any view directly ahead of the aircraft. When he questioned the pilot about the frost prior to taxi, the pilot responded that the defrosters would be operable in a few minutes. The passenger stated the windshield was still obscured while the pilot taxied the airplane to the runway for takeoff. The pilot then applied full power for takeoff. At this time, the passenger became very concerned that he was still unable to see out of the windshield. He was however able to see out the side window and it appeared to him that the airplane was not lined up correctly on the runway. The passenger tried to alert the pilot that they were off course, but at this time the initial impact with the first parked airplane occurred.

Statements from two other passengers aboard N234KB, also reported they observed that the windshield was completely fogged over preventing any view outside. They stated the airplane was off the centerline of the runway as the pilot began the takeoff roll. The passenger, who was seated directly behind the pilot, stated it was only after the initial impact that he heard a reduction in engine power.

Pilot Information

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| Certificate: | Airline transport; Commercial; Flight instructor | Age: | 37, 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 multi-engine; Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 1 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | March 31, 1994 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 5578 hours (Total, all aircraft), 388 hours (Total, this make and model), 5439 hours (Pilot In Command, all aircraft), 173 hours (Last 90 days, all aircraft), 78 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------|---------------------------------------|--------------------------|
| Aircraft Make: | PIPER | Registration: | N234KB |
| Model/Series: | PA-34-200 PA-34-200 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 34-7350251 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | July 22, 1994 Annual | Certified Max Gross Wt.: | 4000 lbs |
| Time Since Last Inspection: | 45 Hrs | Engines: | 2 Reciprocating |
| Airframe Total Time: | 4977 Hrs | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, not activated | Engine Model/Series: | IO-360-C1E6 |
| Registered Owner: | P AND N CORPORATION | Rated Power: | 200 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: | CID ,862 ft msl | Distance from Accident Site: | 12 Nautical Miles |
| Observation Time: | 06:51 Local | Direction from Accident Site: | 220° |
| Lowest Cloud Condition: | Scattered / 10000 ft AGL | Visibility | 12 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 7 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 50° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 13°C / 12°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | | Type of Flight Plan Filed: | Company VFR |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 07:10 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|-----------------|----------------------------------|------------|
| Airport: | MARION C17 | Runway Surface Type: | Grass/turf |
| Airport Elevation: | 862 ft msl | Runway Surface Condition: | Wet |
| Runway Used: | 17 | IFR Approach: | |
| Runway Length/Width: | 2800 ft / 60 ft | VFR Approach/Landing: | |

Wreckage and Impact Information

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|----------------------------|-----------------|-----------------------------|---------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Destroyed |
| Passenger Injuries: | 2 Minor, 2 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Minor, 3 None | Latitude, Longitude: | 42.030235,-91.580986(est) |

Administrative Information

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| Investigator In Charge (IIC): | Corsones, Christine |
| Additional Participating Persons: | ROBERT BOLINGER; DES MOINES , IA |
| Original Publish Date: | January 26, 1995 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=9630 |

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](#).