



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Sugar Creek, Ohio | Accident Number: | CEN11CA660 |
| Date & Time: | August 30, 2011, 20:48 Local | Registration: | N7103M |
| Aircraft: | Cessna 175 | Aircraft Damage: | Substantial |
| Defining Event: | Loss of engine power (partial) | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot reported that the airplane's engine began to run rough during level flight, with about a 70 percent power setting. He switched fuel tanks and applied carburetor heat, but the airplane's engine continued to run rough. The pilot initiated a forced landing to a cornfield during night light conditions. Postaccident examinations of the airplane revealed that the firewall was buckled. No anomalies were found with regard to the airplane, engine, or systems during the postaccident examinations. According to the Federal Aviation Administration icing probability chart, the airplane was operating in conditions conducive to carburetor icing at the time of the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's delayed application of carburetor heat while operating in conditions conducive to carburetor icing.

Findings

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| Environmental issues | Conducive to carburetor icing - Contributed to outcome |
| Personnel issues | Delayed action - Pilot |

Factual Information

History of Flight

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| Enroute-cruise | Loss of engine power (partial) (Defining event) |
| Landing | Collision with terr/obj (non-CFIT) |

Pilot Information

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| Certificate: | Private | Age: | 25, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 1 With waivers/limitations | Last FAA Medical Exam: | March 26, 2010 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | April 21, 2011 |
| Flight Time: | 79 hours (Total, all aircraft), 79 hours (Total, this make and model), 23 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------------|---------------------------------------|-----------------|
| Aircraft Make: | Cessna | Registration: | N7103M |
| Model/Series: | 175 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 55403 |
| Landing Gear Type: | Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | March 18, 2011 Annual | Certified Max Gross Wt.: | 2350 lbs |
| Time Since Last Inspection: | 36 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1955 Hrs as of last inspection | Engine Manufacturer: | CONT MOTOR |
| ELT: | Installed, not activated | Engine Model/Series: | GO-300 SERIES |
| Registered Owner: | On file | Rated Power: | 175 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|-------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Night |
| Observation Facility, Elevation: | PHD,894 ft msl | Distance from Accident Site: | 25 Nautical Miles |
| Observation Time: | 20:53 Local | Direction from Accident Site: | 140° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.12 inches Hg | Temperature/Dew Point: | 18°C / 16°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | New Philadelphi, OH (PHD) | Type of Flight Plan Filed: | Unknown |
| Destination: | New Philadelphi, OH (PHD) | Type of Clearance: | None |
| Departure Time: | 19:40 Local | Type of Airspace: | |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|----------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 40.761943,-81.713058 |

Administrative Information

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| Investigator In Charge (IIC): | Brannen, John |
| Additional Participating Persons: | Kevin Abbuhl; FAA - Ceveland FSDO; Cleveland, OH |
| Original Publish Date: | November 22, 2011 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=81854 |

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](#).