



Aviation Investigation Final Report

| | | | |
|--------------------------------|------------------------------|-------------------------|-------------|
| Location: | Benson, Minnesota | Accident Number: | CEN23LA311 |
| Date & Time: | July 14, 2023, 16:30 Local | Registration: | N22FK |
| Aircraft: | AIR TRACTOR INC AT-802 | Aircraft Damage: | Substantial |
| Defining Event: | Low altitude operation/event | Injuries: | 1 None |
| Flight Conducted Under: | Part 137: Agricultural | | |

Analysis

The pilot reported that on the afternoon of the aerial application flight, the visibility was degrading due to smoke from nearby wildfires. Upon arrival at the target field, he circled twice to study the powerlines and obstacles, where he observed two distantly spaced power poles, and mistakenly thought they were termination points of a powerline. During the low-level aerial application pass, the airplane subsequently impacted a powerline as he flew between the power poles. The pilot returned to the airport and landed without incident. The airplane sustained substantial damage to the right aileron. The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to adequately survey a field for obstructions prior to a low-level aerial application pass, which resulted in an impact with a powerline. Contributing to the accident was the degraded visibility due to the smoke in the area.

Findings

| | |
|-----------------------------|------------------------------------|
| Environmental issues | Haze/smoke - Effect on personnel |
| Personnel issues | Flight planning/navigation - Pilot |

Factual Information

History of Flight

| | |
|-----------------------------------|---|
| Maneuvering-low-alt flying | Loss of visual reference |
| Maneuvering-low-alt flying | Low altitude operation/event (Defining event) |

Pilot Information

| | | | |
|----------------------------------|--|--|--------------------|
| Certificate: | Commercial | Age: | 38,Male |
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Front |
| Other Aircraft Rating(s): | None | Restraint Used: | Unknown |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | |
| Medical Certification: | Class 2 Without waivers/limitations | Last FAA Medical Exam: | September 19, 2022 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | May 2, 2022 |
| Flight Time: | (Estimated) 7000 hours (Total, all aircraft), 1704.9 hours (Total, this make and model), 6726.5 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 105.9 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|--------------------------------------|---------------------------------|---------------------------------------|-----------------------------|
| Aircraft Make: | AIR TRACTOR INC | Registration: | N22FK |
| Model/Series: | AT-802 | Aircraft Category: | Airplane |
| Year of Manufacture: | 2022 | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 802-0965 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | June 28, 2023 100 hour | Certified Max Gross Wt.: | 16000 lbs |
| Time Since Last Inspection: | 88.8 Hrs | Engines: | 1 Turbo prop |
| Airframe Total Time: | 486.2 Hrs as of last inspection | Engine Manufacturer: | Pratt & Whitney |
| ELT: | | Engine Model/Series: | PT6-67AG |
| Registered Owner: | Fast Ag Air LLC | Rated Power: | 1350 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | Agricultural aircraft (137) |

Meteorological Information and Flight Plan

| | | | |
|---|----------------------------------|---|-------------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | KMVE, 1034 ft msl | Distance from Accident Site: | 11 Nautical Miles |
| Observation Time: | 16:35 Local | Direction from Accident Site: | 222° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 13 knots / 16 knots | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | 320° | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 29.76 inches Hg | Temperature/Dew Point: | 29°C / 15°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Benson, MN (KBBB) | Type of Flight Plan Filed: | None |
| Destination: | Benson, MN (KBBB) | Type of Clearance: | None |
| Departure Time: | 16:00 Local | Type of Airspace: | Class G |

Airport Information

| | | | |
|-----------------------------|-------------------------------|----------------------------------|---------|
| Airport: | Benson Municipal Airport KBBB | Runway Surface Type: | Asphalt |
| Airport Elevation: | 1039 ft msl | Runway Surface Condition: | Unknown |
| Runway Used: | 14/32 | IFR Approach: | None |
| Runway Length/Width: | 4000 ft / 75 ft | VFR Approach/Landing: | Unknown |

Wreckage and Impact Information

| | | | |
|----------------------------|--------|-----------------------------|--------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 45.10089,-95.542383(est) |

Administrative Information

| | |
|--|---|
| Investigator In Charge (IIC): | Galbraith, Damian |
| Additional Participating Persons: | Gregory Thurston; FAA; Minneapolis, MN |
| Original Publish Date: | October 17, 2023 |
| Last Revision Date: | |
| Investigation Class: | Class 4 |
| Note: | The NTSB did not travel to the scene of this accident. |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=192646 |

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](#).