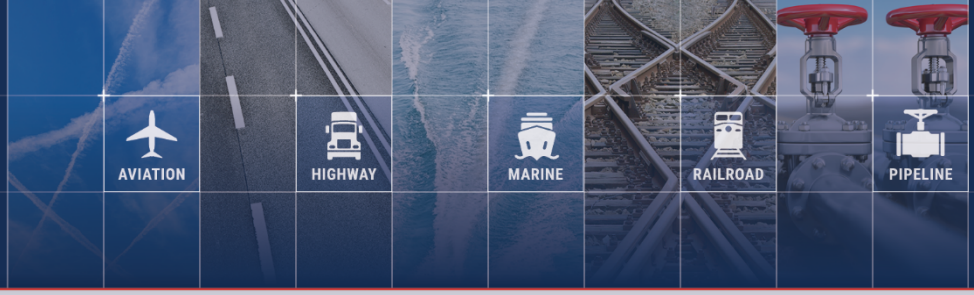


# Aviation Investigation Final Report

| | | | |
|---|---|---|---|
| **Location:** | Bay Port, Michigan | **Accident Number:** | CEN23LA374 |
| **Date & Time:** | August 19, 2023, 11:00 Local | **Registration:** | N8075G |
| **Aircraft:** | Cessna A188B | **Aircraft Damage:** | Substantial |
| **Defining Event:** | Loss of control in flight | **Injuries:** | 1 Minor |
| **Flight Conducted Under:** | Part 137: Agricultural | | |

## Analysis

The pilot reported that he was beginning his fourth agricultural application flight of the day and that the air temperature and wind speed had increased from previous flights that morning. He began the takeoff roll to the north on the soft, wet runway and noted that toward the end of the runway, the airplane entered “ground effect” and had difficulty climbing. He attempted a slight right turn to avoid trees on the northwest end of the runway and the airplane descended into a soybean field and impacted a drainage ditch. The airplane nosed over and tumbled multiple times which resulted in substantial damage to both wings, fuselage, and empennage. The pilot reported that there were no mechanical malfunctions with the airplane that would have precluded normal operation.

The nearest recorded weather observation reported the wind from 240° at 6 knots, which resulted in a left quartering tailwind for the takeoff.

## Probable Cause and Findings

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

The pilot’s decision to takeoff from a soft wet runway with a quartering tailwind which resulted in a lack of climb performance and impact with terrain.

## Findings

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|---|---|
| **Personnel issues** | Decision making/judgment - Pilot |
| **Environmental issues** | Tailwind - Effect on equipment |
| **Environmental issues** | Soft surface - Effect on equipment |
| **Aircraft** | Climb rate - Not attained/maintained |

# Factual Information

## History of Flight

| | |
|---|---|
| **Initial climb** | Loss of control in flight (Defining event) |

## Pilot Information

| | | | |
|---|---|---|---|
| **Certificate:** | Commercial | **Age:** | 34,Male |
| **Airplane Rating(s):** | Single-engine land | **Seat Occupied:** | Single |
| **Other Aircraft Rating(s):** | Glider | **Restraint Used:** | 4-point |
| **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:** | April 26, 2023 |
| **Occupational Pilot:** | Yes | **Last Flight Review or Equivalent:** | May 3, 2022 |
| **Flight Time:** | 692.5 hours (Total, all aircraft), 191.1 hours (Total, this make and model), 614.6 hours (Pilot In Command, all aircraft), 274.1 hours (Last 90 days, all aircraft), 132.4 hours (Last 30 days, all aircraft) | | |

## Aircraft and Owner/Operator Information

| | | | |
|---|---|---|---|
| **Aircraft Make:** | Cessna | **Registration:** | N8075G |
| **Model/Series:** | A188B | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | 1973 | **Amateur Built:** | |
| **Airworthiness Certificate:** | Restricted (Special) | **Serial Number:** | 18801226T |
| **Landing Gear Type:** | Tailwheel | **Seats:** | 1 |
| **Date/Type of Last Inspection:** | June 1, 2023 Annual | **Certified Max Gross Wt.:** | 4200 lbs |
| **Time Since Last Inspection:** | 114 Hrs | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | 6454.5 Hrs at time of accident | **Engine Manufacturer:** | Continental |
| **ELT:** | Not installed | **Engine Model/Series:** | IO520 |
| **Registered Owner:** | VAUGHNS FLYING SERVICE INC | **Rated Power:** | 300 Horsepower |
| **Operator:** | VAUGHNS FLYING SERVICE INC | **Operating Certificate(s) Held:** | Agricultural aircraft (137) |
| **Operator Does Business As:** | VAUGHNS FLYING SERVICE INC | **Operator Designator Code:** | V26G |

## Meteorological Information and Flight Plan

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|---|---|---|---|
| **Conditions at Accident Site:** | Visual (VMC) | **Condition of Light:** | Day |
| **Observation Facility, Elevation:** | KBAX,766 ft msl | **Distance from Accident Site:** | 12 Nautical Miles |
| **Observation Time:** | 10:55 Local | **Direction from Accident Site:** | 111° |
| **Lowest Cloud Condition:** | Clear | **Visibility** | 10 miles |
| **Lowest Ceiling:** | None | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | 6 knots / | **Turbulence Type Forecast/Actual:** | None / Unknown |
| **Wind Direction:** | 240° | **Turbulence Severity Forecast/Actual:** | Unknown / Unknown |
| **Altimeter Setting:** | 30.09 inches Hg | **Temperature/Dew Point:** | 21°C / 12°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | Bay Port, MI | **Type of Flight Plan Filed:** | None |
| **Destination:** | Bay Port, MI | **Type of Clearance:** | None |
| **Departure Time:** | | **Type of Airspace:** | Class G |

## Wreckage and Impact Information

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|---|---|---|---|
| **Crew Injuries:** | 1 Minor | **Aircraft Damage:** | Substantial |
| **Passenger Injuries:** | N/A | **Aircraft Fire:** | None |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 1 Minor | **Latitude, Longitude:** | 43.880328,-83.287515 |

## Administrative Information

| | |
|---|---|
| **Investigator In Charge (IIC):** | Brown, Zane |
| **Additional Participating Persons:** | Dave Zwicker; FAA FSDO East Michigan; Belleville, MI |
| **Original Publish Date:** | February 20, 2024 |
| **Last Revision Date:** | February 22, 2024 |
| **Investigation Class:** | Class 4 |
| **Note:** | The NTSB did not travel to the scene of this accident. |
| **Investigation Docket:** | https://data.ntsb.gov/Docket?ProjectID=192917 |