



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

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:	10520
Registered Owner:	VAUGHNS FLYING SERVICE	Rated Power:	300 Horsepower
Operator:	VAUGHNS FLYING SERVICE	Operating Certificate(s) Held:	Agricultural aircraft (137)
Operator Does Business As:	VAUGHNS FLYING SERVICE	Operator Designator Code:	V26G

Meteorological Information and Flight Plan

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

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

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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.