



# **Aviation Investigation Final Report**

Location: Pineview, Georgia Accident Number: ERA21FA184

Date & Time: April 13, 2021, 08:52 Local Registration: N4912Q

Aircraft: Cessna A188 Aircraft Damage: Destroyed

**Defining Event:** Controlled flight into terr/obj (CFIT) **Injuries:** 1 Fatal

Flight Conducted Under: Part 91: General aviation - Aerial application

## **Analysis**

The pilot had been performing aerial application over the local area for about 1 hour and 45 minutes, and had two more residences to spray before returning to the departure airport. Witnesses and GPS data revealed that the airplane was travelling northeast, about 50 ft above ground level, when it collided with powerlines. Examination of the airframe and engine did not reveal any preimpact mechanical malfunctions. The powerlines were depicted on the area sectional aeronautical chart, and solar calculations revealed that sun glare was not a factor because the sun was approximately 23° above the horizon and 50° to the right of the airplane's track at the time of the accident. The circumstances of the accident are consistent with the pilot's inadequate visual lookout while operating at low altitude during the aerial application flight, which resulted in collision with powerlines.

## **Probable Cause and Findings**

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

The pilot's inadequate visual lookout, which resulted in collision with powerlines during an aerial application flight.

# Findings

Personnel issues	Monitoring environment - Pilot
<b>Environmental issues</b>	Wire - Awareness of condition

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### **Factual Information**

### **History of Flight**

Monouvoring	Controlled flight into tarr/ohi (CEIT) (Defining event)
Maneuvering	Controlled flight into terr/obj (CFIT) (Defining event)

On April 13, 2021, about 0852 eastern daylight time, a Cessna A188B, N4912Q, was destroyed when it was involved in an accident near Pineview, Georgia. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight.

The airplane was based at a private airstrip in Unadilla, Georgia. According to the operator, the airplane departed Unadilla about 0705 with about 2 hours 30 minutes of fuel onboard. The pilot was spraying for mosquitos when the airplane collided with powerlines. At the time, he had two more residences to spray before returning to the airstrip.

#### **Pilot Information**

Certificate:	Airline transport; Commercial; Flight instructor	Age:	26,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Single
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:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	January 27, 2021
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 8, 2021
Flight Time:	4511 hours (Total, all aircraft), 50 hours (Total, this make and model), 3284 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

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# **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N4912Q
Model/Series:	A188 B	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802647T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 23, 2021 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	23 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7554 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	A&C Ag Aviation Inc.	Rated Power:	300 Horsepower
Operator:	A&C Ag Aviation Inc.	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:	MCN,354 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	08:53 Local	Direction from Accident Site:	350°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	17°C / 13°C
Precipitation and Obscuration:			
Departure Point:	Unadilla, GA	Type of Flight Plan Filed:	None
Destination:	Unadilla, GA	Type of Clearance:	None
Departure Time:	07:05 Local	Type of Airspace:	Class G

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### **Wreckage and Impact Information**

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	32.104723,-83.563501

The wreckage was located inverted, about 8 miles southeast of the departure airstrip, in a field near powerlines. The powerlines were about 50 ft above ground level and damage to the powerlines and landing gear were consistent with both main landing gear contacting the powerlines in a west-to-east direction. Both main landing gear separated during impact with the powerlines, and the propeller and lower engine cowling also exhibited damage from contact with the powerlines. The powerlines were approximately 1.25 inches thick, consisting of a steel core with aluminum wires twisted around the core.

Flight control continuity was established to the ailerons, elevator, and rudder. All flight control surfaces remained attached to the structure. The manual flap handle was in an extended position. The pilot's seat was fitted with a three-point safety harness. The webbings remained intact and were cut by first responders. The buckle remained fastened.

The engine's crankshaft was rotated by hand at the propeller, which remained attached to the crankshaft; suction and compression were observed on all cylinders and no internal binding was observed. One propeller blade was bent forward 180° at midspan and then bent aft at the tip. The other blade was twisted. Both blades exhibited leading edge polishing/grinding along the outboard one-third of each blade.

### **Medical and Pathological Information**

An autopsy was performed on the pilot by the Georgia Division of Forensic Sciences. The cause of death was multiple blunt force trauma.

Toxicology testing was performed by the FAA's Forensic Sciences Laboratory. The results were negative for alcohol and other drugs.

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#### **Additional Information**

Data downloaded from an onboard GPS revealed that the airplane was on a northeasterly track toward the powerlines. The last position recorded was at 0852:43, about 3/4-mile southwest of the accident site, indicating a groundspeed of 116 mph and a GPS altitude of 327 ft. The elevation at the accident site was 315 ft mean sea level.

The sectional aeronautical chart that covered the area of the accident depicted the powerlines struck by the airplane. Solar calculations for the location and time of accident revealed that the sun was approximately 23° above the horizon and 50° to the right of the airplane's track.

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#### **Administrative Information**

Investigator In Charge (IIC): Gretz, Robert

Additional Participating Persons: Steve Davidson; FAA/FSDO; Atlanta, GA Henry Soderlund; Textron Aviation; Wichita, KS

Original Publish Date: March 30, 2022

Last Revision Date: Investigation Class: Class 3

Note: The NTSB traveled to the scene of this accident.

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=102906

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.

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