



# **Aviation Investigation Final Report**

Location: Lake Elmo, Minnesota Accident Number: CEN21LA004

Date & Time: October 2, 2020, 15:12 Local Registration: N62ZM

Aircraft: Piper PA46 Aircraft Damage: Substantial

**Defining Event:** Unknown or undetermined **Injuries:** 2 Serious

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

The pilot reported that, shortly after takeoff and following landing gear retraction, he noticed a "hiccup" in engine power and immediately started a turn back toward the airport. During the turn, the engine lost total power and the pilot performed a forced landing into a field of standing corn, during which the airplane sustained substantial damage.

A post-accident examination of the engine, accessories, fuel pump, fuel control unit, flow divider valve, and fuel-oil heat exchanger revealed no mechanical malfunctions or anomalies that would have precluded normal operation, and the reason for the loss of engine power could not be determined.

# **Probable Cause and Findings**

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

A total loss of engine power for reasons that could not be determined.

### **Findings**

Aircraft (general) - Unknown/Not determined

### **Factual Information**

On October 2, 2020, about 1512 central daylight time, a Piper PA-46-500TP, N62ZM, was substantially damaged when it was involved in an accident near Lake Elmo, Minnesota. The airline transport pilot and passenger sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations (CFR)* Part 91 personal flight.

The pilot reported that, shortly after takeoff and following landing gear retraction, he noticed a "hiccup" in engine power and immediately started a turn back toward the airport. During the turn, engine power was lost and the pilot performed a forced landing into a field of standing corn.

The airplane impacted terrain, bounced, and came to rest upright in the corn about ½ mile northwest of the departure end of the runway. The airplane sustained substantial damage to the right wing as a result of the impact and post-crash fire.

A post-accident examination of the engine, accessories, fuel pump, fuel control unit, flow divider valve, and fuel-oil heat exchanger revealed no mechanical malfunctions or anomalies that would have precluded normal operation.

### **History of Flight**

Takeoff	Unknown or undetermined (Defining event)
Takeoff	Loss of engine power (total)

#### **Pilot Information**

Certificate:	Airline transport	Age:	59,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter; Unmanned (sUAS)	Restraint Used:	3-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 3, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 13, 2020
Flight Time:	3828 hours (Total, all aircraft), 42 hours (Total, this make and model), 3710 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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# Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N62ZM
Model/Series:	PA46	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4697087
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	5134 lbs
Time Since Last Inspection:	55 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	2850 Hrs	Engine Manufacturer:	Pratt & Whitney
ELT:	C126 installed	Engine Model/Series:	PT6A-42A
Registered Owner:		Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSTP,711 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	245°
<b>Lowest Cloud Condition:</b>	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.19 inches Hg	Temperature/Dew Point:	10°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lake Elmo, MN	Type of Flight Plan Filed:	IFR
Destination:	Mesquite, TX (HQZ)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class G

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#### **Airport Information**

Airport:	Lake Elmo 21D	Runway Surface Type:	Asphalt
Airport Elevation:	932 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	32	IFR Approach:	None
Runway Length/Width:	2849 ft / 75 ft	VFR Approach/Landing:	None

### **Wreckage and Impact Information**

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	45.001181,-92.872386

#### **Administrative Information**

Investigator In Charge (IIC):	Williams, David		
Additional Participating Persons:	Nikolas; Halatsis; Minneapolis, MN Jon Hirsch; Piper Aircraft; Vero Beach, FL		
Original Publish Date:	May 6, 2022	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=102084		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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