

Aviation Investigation Final Report

Independence Charter Township,

Michigan

Date & Time: September 2, 2019, 12:40 Local

Aircraft: Piper J3C

Defining Event: Unknown or undetermined

Flight Conducted Under: Part 91: General aviation - Personal

Accident Number: CEN19LA297

Registration: N98278

Aircraft Damage: Substantial

Injuries: 2 Serious

Analysis

Location:

The pilot of the float-equipped airplane had performed several takeoffs and landings before the accident takeoff. During the accident takeoff, he perceived a reduced climb performance that was exacerbated by turbulence. He maneuvered the airplane to avoid power lines, the airplane entered an aerodynamic stall, and impacted terrain. A postimpact fire ensued. The airplane sustained substantial damage to the empennage, fuselage, and both wings. The pilot stated that the floats were pumped before the flight, and that the engine did not show any indications of a malfunction.

An examination of the wreckage did not reveal any anomalies. The airplane was operated near maximum gross weight, assuming no more than 8 gallons of fuel were onboard, and no water was in the floats. Although atmospheric conditions were conducive to the development of carburetor icing at glide power settings, whether carburetor icing contributed to the accident could not be determined. The reason for the reduced climb performance could not be determined.

Probable Cause and Findings

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

The reduction in climb performance for reasons that could not be determined. Contributing to the accident was the pilot's failure to maintain control of the airplane after the loss of performance.

Findings

Aircraft	Climb capability - Not attained/maintained
Aircraft	(general) - Unknown/Not determined

Page 2 of 6 CEN19LA297

Factual Information

History of Flight

Initial climb	Loss of control in flight
Initial climb	Unknown or undetermined (Defining event)

On September 2, 2019, about 1240 eastern daylight time, a float-equipped Piper J3C-65 airplane, N98278, was substantially damaged when it was involved in an accident near Independence Charter Township, Michigan. The pilot and passenger were seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to information collected by the responding Federal Aviation Administration (FAA) inspector, the pilot had performed three previous takeoffs from Walters Lake. The pilot stated that, shortly following the accident takeoff, he noticed a reduced climb performance which he perceived was exacerbated by turbulence. He maneuvered to avoid high-tension power lines that ran east-west along the flight route. During the turn, the airplane entered an aerodynamic stall which the pilot was able to recover from; however, the airplane subsequently stalled a second time, and the pilot was unable to recover the airplane before the collision with terrain. The pilot and passenger were able to exit the airplane, and a post impact fire ensued. The airplane sustained substantial damage to the empennage, fuselage, and both wings.

The pilot reported that the floats were "pumped" normally before the flight, and that the engine did not show any indications of a malfunction.

Examination of the wreckage by the FAA did not reveal any anomalies. Calculations performed by the FAA inspector showed the airplane near, but not over the maximum takeoff weight. The fuel was estimated at 8 gallons but could not be verified due to the fire.

A review of meteorological data indicated the potential for serious carburetor icing at glide power settings.

Page 3 of 6 CEN19LA297

Pilot Information

Certificate:	Private	Age:	64,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	February 1, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 26, 2018
Flight Time:	20000 hours (Total, all aircraft), 60 hours (Total, this make and model), 50 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N98278
Model/Series:	J3C 65	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18453
Landing Gear Type:	None; Float	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	C-85-12F
Registered Owner:	Veratile Aviation LLC	Rated Power:	85 Horsepower
Operator:	Private Individal	Operating Certificate(s) Held:	None

Page 4 of 6 CEN19LA297

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPTK,976 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	12:40 Local	Direction from Accident Site:	207°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 3500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	24°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Independence Charter Township, MI	Type of Flight Plan Filed:	None
Destination:	Independence Charter Township, MI	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

	·		
Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	42.756846,-83.351221(est)

Page 5 of 6 CEN19LA297

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Scott Stokes; FAA FSDO; Belleville, MI
Original Publish Date:	March 4, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=100183

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.

Page 6 of 6 CEN19LA297