Aviation Investigation Final Report

Location:	Barnesville, Georgia	**Accident Number:**	ERA19LA052
Date & Time:	November 17, 2018, 11:12 Local	**Registration:**	N111TA
Aircraft:	Piper PA28	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	2 Minor, 2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that the student pilot was taking off for an instructional flight from an upsloping, 3,000-ft-long turf runway with 7- to 8-knot headwinds. The airspeed reached 65 knots and was increasing at the predesignated decision point, which was about 60% of the runway length. After takeoff, the airplane unexpectedly banked left. The student called out that the flight controls were not responding, and the instructor simultaneously took the controls. Realizing that the airplane would not clear trees at the departure end of the runway, the instructor chose to land the airplane straight ahead and aim it between trees. The airplane touched down about 200 ft before the trees and traveled forward until it struck several of them, which resulted in substantial damage to the airframe.

Postaccident examination of the airframe and engine did not reveal evidence of any preaccident mechanical malfunctions or failures that would have precluded normal operation. Further, flight control continuity was confirmed from the flight control surfaces to the cockpit controls. Given that no mechanical anomalies were found during postaccident examination of the airframe, it is likely that the student failed to maintain airplane control during takeoff and that the flight instructor's delayed remedial action resulted in the subsequent off-runway landing.

Probable Cause and Findings

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

The student pilot's failure to maintain airplane control during takeoff and the flight instructor's delayed remedial action, which resulted in an off-runway landing and subsequent collision with trees.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	(general) - Not attained/maintained
Personnel issues	Delayed action - Instructor/check pilot
Environmental issues	Tree(s) - Effect on operation

Factual Information

History of Flight

Initial climb	Loss of control in flight (Defining event)
Landing	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

On November 17, 2018, about 1112 eastern standard time, a Piper PA-28-180, N111TA, was substantially damaged after a collision with trees and terrain at Little Tobesofkee Creek Ranch Airport (GA86), Barnesville, Georgia. The flight instructor and student pilot incurred minor injuries, and two passengers were not injured. The airplane was operated by Clear Blue Sky Aviation LLC under the provisions of 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed, and no flight plan was filed for the flight to Macon Downtown Airport (MCN), Macon, Georgia. The instructional flight that originating at the time of the accident.

The flight instructor reported that runway 35 was selected for the takeoff due to the prevailing wind out of the north at 7 to 8 kts. The student was at the controls for the takeoff. The takeoff was initiated and acceleration seemed normal, considering the runway upslope and 3,000 ft-long turf surface. The airspeed reached 65 kts and was increasing at the predesignated decision point, which was about 60% of the runway length. After takeoff, the airplane banked to the left unexpectedly. The instructor did not recall the stall warning light illuminating. The student called out a lack of responsiveness from the flight controls and the flight instructor simultaneously took the controls. The pilots realized that the airplane would not clear trees at the departure end of the runway, so the flight instructor elected to land the airplane straight ahead and aim it between the trees. The airplane touched down about 200 ft from the trees and continued until it struck several small trees and one large tree. The airplane came to a stop, the engine was secured, and the pilots and passengers egressed the airplane and were met by first responders.

An inspector with the Federal Aviation Administration responded to the accident site and examined the wreckage. The airplane crashed in a wooded area to the north of the airport boundary. Structural damage occurred to the wings and fuselage. There was no fire.

The wreckage was recovered to a salvage facility where a more detailed examination was performed. The fuselage was generally intact. Both wings were cut off near the wing roots by recovery personnel. The right wing exhibited leading edge crushing signatures from contact with trees. The aileron cables were cut by recovery personnel. The aileron cables were otherwise connected to the ailerons and the ailerons were connected to the attachment points on the wings. Aileron cable continuity was established from the cut ends at the wing roots to the control yokes. Elevator and rudder continuity were confirmed from the control surfaces to the cockpit controls. The vertical stabilizer, rudder, and stabilator were undamaged.

The engine remained attached to the firewall. The metal, fixed pitch propeller remained attached to the crankshaft. The engine crankshaft was turned through manually by turning the propeller. Internal engine

continuity was confirmed. Compression and suction were observed on all cylinders. Valve action was normal on all cylinders. The engine contained oil. Both spark plugs were removed from each cylinder. They were normal in color and wear when compared to a Champion inspection chart. The carburetor was intact. The venturi and floats were in place and undamaged. The gascolator was drained and it contained about 1 oz of clean, blue-colored fuel. Both magnetos produced a visible spark at all leads when rotated.

The stall warning light operated normally when tested. The airplane was not equipped with a stall warning horn.

Flight instructor Information

Certificate:	Airline transport; Flight instructor; Private	**Age:**	60,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	January 9, 2018
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 27, 2017
Flight Time:	5300 hours (Total, all aircraft), 600 hours (Total, this make and model), 5000 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	48,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	None None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	12 hours (Total, all aircraft), 12 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N111TA
Model/Series:	PA28 180	**Aircraft Category:**	Airplane
Year of Manufacture:	1966	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	28-3746
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 1, 2018 Annual	**Certified Max Gross Wt.:**	2400 lbs
Time Since Last Inspection:	3 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5400 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	C91 installed	**Engine Model/Series:**	O-360-A4A
Registered Owner:		**Rated Power:**	180 Horsepower
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:	KOPN,796 ft msl	**Distance from Accident Site:**	8 Nautical Miles
Observation Time:	11:15 Local	**Direction from Accident Site:**	260°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	10°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.26 inches Hg	**Temperature/Dew Point:**	15°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Barnesville, GA (GA86)	**Type of Flight Plan Filed:**	None
Destination:	Macon, GA (MAC)	**Type of Clearance:**	None
Departure Time:	11:12 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Little Tobesofkee GA86	**Runway Surface Type:**	Grass/turf
Airport Elevation:	755 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	35	**IFR Approach:**	None
Runway Length/Width:	3000 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	Both in-flight and on-ground
Total Injuries:	2 Minor, 2 None	**Latitude, Longitude:**	32.979999,-84.099998(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Michael A Pupek; FAA/FSDO; Atlanta, GA
Original Publish Date:	April 13, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=98663