

Aviation Investigation Final Report

Location:	Macon, Georgia	Accident Number:	ERA14LA137
Date & Time:	February 19, 2014, 14:15 Local	Registration:	N9026N
Aircraft:	Piper J3C-65	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Two witnesses reported that they saw the pilot performing touch-and-go landings. During takeoff, the airplane lifted off about halfway down the runway and began a right turn to the crosswind leg of the airport traffic pattern when it was about 100 feet above ground level (agl). As the airplane began the right turn, its bank angle increased from about 30 to 90 degrees, and its forward speed slowed. The airplane subsequently stalled, rolled right, and descended uncontrolled into a grassy area adjacent to the runway. Examination of the wreckage did not reveal any preimpact mechanical malfunctions or anomalies that would have precluded normal operation. The recorded wind near the accident site about the time of the accident was aligned with the departure runway at 11 knots gusting to 20 knots. Federal Aviation Administration guidance advises pilots not to turn to the crosswind leg until the airplane is beyond the departure end of the runway and has reached an altitude of 700 feet agl or higher. The pilot's turn at 100 feet agl while in the traffic pattern was too low and did not allow sufficient altitude to recover from an in-flight upset.

Probable Cause and Findings

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

The pilot's failure to maintain airplane control while maneuvering in the traffic pattern at low altitude in gusting wind. Contributing to the accident was the pilot's improper decision to maneuver in the traffic pattern at a low altitude that did not allow for recovery.

Findings

Personnel issues	Aircraft control - Pilot	
Aircraft	(general) - Not attained/maintained	
Environmental issues	Gusts - Effect on operation	
Personnel issues	Decision making/judgment - Pilot	

Factual Information

History of Flight

Maneuvering-low-alt flying	Loss of control in flight (Defining event)
Maneuvering-low-alt flying	Aerodynamic stall/spin
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On February 19, 2014, about 1415 eastern standard time, a Piper J3C-65, N9026N, operated by a private individual, was substantially damaged during a collision with terrain, following a loss of control while maneuvering at low altitude over Macon Downtown Airport (MAC), Macon, Georgia. The airline transport pilot and passenger were seriously injured. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the planned local flight.

The pilot reported that he was seriously injured in the accident and did not recall the accident sequence. Two witnesses were standing near a hangar at the airport and watched the accident airplane perform touch-and-go landings. They reported that the airplane lifted off about halfway down runway 28 and began a right turn to a crosswind leg of the airport traffic pattern, about 100 feet above ground level (agl). As the airplane began the right turn, a gust of wind struck the airplane. One of the witnesses added that the wind gust increased the bank angle from approximately 30 degrees to 90 degrees and the forward speed slowed. The airplane then stalled, rolled right, and descended uncontrolled into a grassy area adjacent to the runway.

Examination of the wreckage by a Federal Aviation Administration (FAA) inspector did not reveal any preimpact mechanical malfunctions. He confirmed flight control continuity from the cockpit controls to their respective control surfaces. He was able to rotate the propeller about 90 degrees. Impact damage to the cylinders precluded him from rotating the propeller through 360 degrees. The inspector further stated that although the fuel tank was compromised, he observed evidence of fuel at the accident site.

Middle Georgia Regional Airport (MCN), Macon, Georgia was located about 8 miles southwest of the accident site. The recorded weather at MCN, at 1353, included: wind from 280 degrees at 11 knots, gusting to 20 knots; broken ceiling at 3,300 feet, and visibility 10 miles.

Review of the FAA Airplane Flying Handbook (FAA-H-8083-3A) revealed: "...On the departure leg after takeoff, the pilot should continue climbing straight ahead, and, if remaining in the traffic pattern, commence a turn to the crosswind leg beyond the departure end of the runway within 300 feet of pattern altitude." Traffic pattern altitudes are usually 1,000 feet agl.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	55
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi- engine sea	Seat Occupied:	Rear
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	January 25, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	4516 hours (Total, all aircraft), 482 hours (Total, this make and model), 4373 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9026N
Model/Series:	J3C-65	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18447
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 1, 2013 Annual	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:	80 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1096 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	C91 installed, activated, did not aid in locating accident	Engine Model/Series:	C90-8FJ
Registered Owner:	CLEAR BLUE SKY AVIATION LLC	Rated Power:	90 Horsepower
Operator:	Guy Foulkes	Operating Certificate(s) Held:	None

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:	8 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	210°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 3300 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 20 knots	Turbulence Type Forecast/Actual:	/ Unknown
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/ Unknown
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	22°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Macon, GA (MAC)	Type of Flight Plan Filed:	None
Destination:	Macon, GA (MAC)	Type of Clearance:	None
Departure Time:	14:15 Local	Type of Airspace:	

Airport Information

Airport:	Macon Downtown Airport MAC	Runway Surface Type:	Asphalt
Airport Elevation:	437 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	4694 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	32.821666,-83.561943(est)

Administrative Information

Investigator In Charge (IIC):	Cratz Babart	
Investigator In Charge (IIC):	Gretz, Robert	
Additional Participating Persons:	Michael A Pupek; FAA/FSDO; Atlanta, GA	
Original Publish Date:	November 3, 2014	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=88856	

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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.