



Aviation Investigation Final Report

Location:	Americus, Georgia	Accident Number:	ERA12LA195
Date & Time:	February 25, 2012, 16:15 Local	Registration:	N59661
Aircraft:	Piper PA-36-300	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The airplane was being operated on a maintenance test flight after the installation of some aerial spray equipment. At an altitude of about 75 feet above ground level, the airplane pulled abruptly to the right. Using the maximum available engine power and left rudder, the pilot maintained control of the airplane and landed on the closest runway. However, after touchdown, the airplane veered off the right side of the runway and crossed a taxiway and a ditch before coming to rest about 300 feet from the runway. Postaccident examination revealed that the midspan section of the right wing's leading edge had separated, several screws were absent, and the remaining screws exhibited signs of inconsistent torque.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of maintenance personnel to properly secure a portion of the right wing leading edge, which resulted in the separation of the associated section of the leading edge during takeoff and the loss of directional control during the subsequent landing.

Findings

Aircraft	Plates/skins (on wing) - Incorrect service/maintenance
Aircraft	Plates/skins (on wing) - Damaged/degraded
Personnel issues	Replacement - Maintenance personnel

Factual Information

History of Flight

Initial climb	Part(s) separation from AC
Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

On February 25, 2012, about 1615 eastern standard time, a Piper PA-36-300, N59661, was substantially damaged following a loss of control on the ground during landing, after a section of the right wing leading edge separated in flight, at the Jimmy Carter Regional Airport (ACJ), Americus, Georgia. Day visual meteorological conditions prevailed and no flight plan had been filed. The certificated commercial pilot was not injured. The maintenance test flight was conducted under the provision of 14 Code of Federal Regulations Part 91.

According to the pilot, the flight departed runway 28 and during the initial climb, about 75 feet above ground level, the airplane pulled abruptly to the right. The pilot applied maximum power and left rudder in order to maintain control of the airplane. During the landing touchdown on runway 5, the airplane veered immediately to the right, departed the side of the runway, crossed a taxiway and a ditch, and then came to rest approximately 300 feet to the right of the runway.

According to photographs provided by the operator, the 66 inch midspan section of the fiberglass leading edge had separated along the gang channel. Approximately 18 inches remained at the accident location but was separated from the wing, and the remaining section was not located.

A Federal Aviation Administration inspector examined the airplane and noted that several of the 92 screws required to hold the midspan section exhibited signs of uneven torque and that two of the screws located on the top inboard corner, and several screws located underside of the leading edge were unable to be located.

According to the airplane maintenance records, the most recent 100-hour inspection was completed on August 17, 2011, and the recorded Hobbs time was 4,899.5 hours. The most recent logbook entry was dated October 6, 2011; the recorded Hobbs time was 4,994.5 hours. According to the operator, aerial spray equipment had just been installed; however, no entry for the installation was noted in the maintenance records.

Pilot Information

Certificate:	Commercial	Age:	61, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	October 7, 2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 24, 2011
Flight Time:	(Estimated) 30000 hours (Total, all aircraft), 5000 hours (Total, this make and model), 29700 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N59661
Model/Series:	PA-36-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	36-7760071
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	February 4, 2011 Annual	Certified Max Gross Wt.:	4400 lbs
Time Since Last Inspection:	280 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	7715 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney
ELT:	Not installed	Engine Model/Series:	PT6A-20
Registered Owner:	SOUTHER FIELD AVIATION INC	Rated Power:	550 Horsepower
Operator:	SOUTHER FIELD AVIATION INC	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	SUFG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ACJ,468 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:15 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.25 inches Hg	Temperature/Dew Point:	13°C / -6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Americus, GA (ACJ)	Type of Flight Plan Filed:	None
Destination:	Americus, GA (ACJ)	Type of Clearance:	None
Departure Time:	16:10 Local	Type of Airspace:	

Airport Information

Airport:	Jimmy Carter Regional Airport ACJ	Runway Surface Type:	Asphalt
Airport Elevation:	468 ft msl	Runway Surface Condition:	Dry
Runway Used:	05	IFR Approach:	None
Runway Length/Width:	6011 ft / 100 ft	VFR Approach/Landing:	Forced landing;Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.110553,-84.188888(est)

Administrative Information

Investigator In Charge (IIC):	Etcher, Shawn
Additional Participating Persons:	James D Nichols; FAA/FSDO; College Park, GA
Original Publish Date:	October 15, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=82981

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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](#).