



Aviation Investigation Final Report

Location: GROSSE ILE, Michigan Accident Number: CHI96LA308

Date & Time: August 20, 1996, 09:45 Local Registration: N3607N

Aircraft: Piper J3C-65 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot said that right after takeoff at approximately 30 feet above ground level (AGL), the airplane entered a right turn. The airplane did not respond to the pilot's control inputs. The pilot reduced power and pitch. The airplane's right wing struck the ground followed by the right main landing gear. The airplane subsequently ground looped before coming to a stop. Examination of airplane showed that both ailerons were rigged improperly. The aileron control cables had been attached to the wrong side of the bellcranks. This flight on which the accident occurred was the first flight of the airplane following an annual inspection preformed on July 19, 1996.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: improper attachment of the flight control cables to the ailerons by the mechanic who performed the last annual inspection. A factor relating to this accident was the pilot's failure to perform an adequate check of the flight controls before takeoff.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FLT CONTROL SYST, AILERON CONTROL CABLE/ROD - MISROUTED

- 2. (C) MAINTENANCE, INSTALLATION IMPROPER OWNER/PILOT MECHANIC
- 3. (F) PREFLIGHT PLANNING/PREPARATION INADEQUATE PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

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Factual Information

On August 20, 1996, at 0945 eastern daylight time (edt), a Piper J3C-65, N3607N, operated by an airline transport pilot, sustained substantial damage when after takeoff it departed controlled flight. The airplane subsequently impacted the terrain. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR Part 91. A flight plan was not on file. The pilot reported no injuries. The local flight originated at Grosse Ile, Michigan, at 0945 edt.

In his written statement, the pilot said that right after takeoff at approximately 30 feet above ground level (AGL), the airplane entered a right turn. The airplane did not respond to the pilot's control inputs. The pilot reduced power and pitch. The airplane's right wing struck the ground followed by the right main landing gear. The airplane subsequently ground looped before coming to a stop.

The Federal Aviation Administration (FAA) inspector who examined the wreckage on the airport found the airplane's right wing, outboard of the strut attachment, bent upward approximately 10 degrees. There were numerous wrinkles in the upper surface of wing skin. The right wingtip was bent inward. The right main landing gear was bent upward. The tail wheel was bent over to the left. One blade of the propeller was bent back slightly. The front face of the blade and trailing edge showed scratches running 60 degrees to the longitudinal axis beginning at mid-span and going outward to the tip. Examination of the engine and engine controls revealed no anomalies.

Examination of the flight controls showed that both ailerons were rigged improperly. The aileron control cables had been attached to the wrong side of the bellcranks.

This flight on which the accident occurred was the first flight of the airplane following an annual inspection preformed on July 19, 1996.

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Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	48,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	August 15, 1995
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8000 hours (Total, all aircraft), 50 hours (Total, this make and model), 7750 hours (Pilot In Command, all aircraft), 85 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3607N
All Clait Wake.	ripei	Registration.	11300711
Model/Series:	J3C-65 J3C-65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22856
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 19, 1996 Annual	Certified Max Gross Wt.:	1220 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2449 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	A-65-8
Registered Owner:	JERE E. PEUDERGRASS	Rated Power:	65 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ONZ ,595 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	09:14 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Scattered / 600 ft AGL	Visibility	3 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	22°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	(ONZ)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:45 Local	Type of Airspace:	Class B

Airport Information

Airport:	GROSS ILE AIRPORT ONZ	Runway Surface Type:	Concrete
Airport Elevation:	595 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	None

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:	42.130935,-83.15039(est)

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Administrative Information

Investigator In Charge (IIC): Bowling, David

Additional Participating Persons:

Original Publish Date: December 16, 1996

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=10372

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.

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