



Aviation Investigation Final Report

Location:	Poplar Grove, Illinois	Accident Number:	CHI08CA087
Date & Time:	February 23, 2008, 14:00 Local	Registration:	N3527V
Aircraft:	Cessna 140	Aircraft Damage:	Substantial
Defining Event:	Aircraft structural failure	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The certified flight instructor (CFI) reported that he was in a steep right turn when he heard a "thump" which seemed to come from the tail section of the airplane. He leveled the wings and realized that he was "holding extreme right rudder with the pedal depressed to about three-fourths of its full travel." The CFI flew back to the airport that was 10 miles away. During the final approach to landing, the CFI flew the tail wheel-equipped airplane to within 6 - 12 inches of the runway and let the airspeed bleed off prior to touchdown. He reported that he ran out of right rudder just as all three wheels touched down. The inspection of the airplane revealed that a large section of the left wing's fabric had separated from the airplane. Nine wing ribs plus the main and rear spars from wing station 58 to wing station 176 were visible as a result of the missing wing fabric. A review of the maintenance records indicated that on October 16, 2000, the left wing was repaired and a "fabric patch" was used to repair the wing's fabric.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The left wing skin "fabric patch" separated from the wing ribs and spars for an undetermined reason.

Findings

Aircraft

Plates/skins (on wing) - Failure

Factual Information

History of Flight

Enroute-cruise	Aircraft structural failure (Defining event)
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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	64, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	December 1, 2007
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1400 hours (Total, all aircraft), 200 hours (Total, this make and model), 30 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3527V
Model/Series:	140	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	14796
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	September 1, 2007 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	41 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4418 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	C90
Registered Owner:	Poplar Grove Airmotive	Rated Power:	
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Poplar Grove, IL (C77)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	

Airport Information

Airport:	Poplar Grove Airport C77	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	2 None	Latitude, Longitude:	42.322776,-88.836112

Administrative Information

Investigator In Charge (IIC): Silliman, James

Additional Participating Persons:

Original Publish Date: March 31, 2008

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=67625>

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