



National Transportation Safety Board Aviation Accident Final Report

Location:	Prospect Heights, IL	Accident Number:	GAA16CA280
Date & Time:	06/02/2016, 2010 CDT	Registration:	N126RG
Aircraft:	STAUDACHER AIRCRAFT INC S 300	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot of the tailwheel-equipped airplane reported that he landed hard and bounced. The pilot further reported that after the bounce, he knew that the left main landing gear had collapsed, and he held the left wing off of the runway until the airplane slowed and the wing stopped producing lift. Subsequently, the airplane veered off the runway to the left and collided with runway signs, which resulted in substantial damage to the horizontal stabilizer.

The pilot reported that the "1/2 inch fine thread bolt" on the left main landing gear failed during the bounced landing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's incorrect pitch control during the landing, which resulted in a hard bounced landing, and subsequent left main landing gear collapse, a runway excursion, and a collision with a runway sign.

Findings

Aircraft	Main landing gear - Capability exceeded
Personnel issues	Aircraft control - Pilot (Cause)
Environmental issues	Taxiway markings/signage - Contributed to outcome

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event) Landing gear collapse Runway excursion
Landing	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	69, Male
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Single
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	12/18/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	06/27/2015
Flight Time:	(Estimated) 1764 hours (Total, all aircraft), 193 hours (Total, this make and model), 1764 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	STAUDACHER AIRCRAFT INC	Registration:	N126RG
Model/Series:	S 300 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	26
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	08/02/2015, Conditional	Certified Max Gross Wt.:	1900 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	478.5 Hours	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	IO-540
Registered Owner:	PETERSEN, ALFRED C.	Rated Power:	300 hp
Operator:	PETERSEN, ALFRED C.	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KPWK, 646 ft msl	Observation Time:	0052 UTC
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	0°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	21°C / 11°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	7 knots, 60°	Visibility (RVR):	
Altimeter Setting:	30.02 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Prospect Heights, IL (PWK)	Type of Flight Plan Filed:	None
Destination:	Prospect Heights, IL (PWK)	Type of Clearance:	VFR
Departure Time:	1929 CDT	Type of Airspace:	Class D

Airport Information

Airport:	CHICAGO EXECUTIVE (PWK)	Runway Surface Type:	Asphalt
Airport Elevation:	646 ft	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	4415 ft / 75 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Adam M Gerhardt	Adopted Date:	08/03/2016
Additional Participating Persons:	Robert Stack; FAA; Dupage, IL		
Publish Date:	08/03/2016		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93318		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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