

# **Aviation Investigation Final Report**

Location: Lexington, Texas Accident Number: CEN18LA271

Date & Time: July 14, 2018, 14:00 Local Registration: N22GL

Aircraft: Steen Skybolt Aircraft Damage: Substantial

**Defining Event:** Sys/Comp malf/fail (non-power) **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

After landing and while taxiing to the hangar, the bottom of the airplane's fuselage began to drag on the ground. Realizing that something was wrong, the pilot stopped the airplane and turned the engine magneto switch to off. Postaccident examination revealed that a fatigue failure of the main landing gear (MLG) truss had occurred, which allowed the MLG to spread apart.

### **Probable Cause and Findings**

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

The fatigue failure of the main landing gear (MLG) truss, which resulted in the MLG spreading apart.

# **Findings**

Aircraft	Main landing gear - Failure
Aircraft	Main landing gear - Fatigue/wear/corrosion

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### **Factual Information**

### **History of Flight**

Taxi-from runway	Sys/Comp malf/fail (non-power) (Defining event)	
Taxi-from runway	Landing gear collapse	

On July 14, 2018, about 1400 central daylight time, a Leake Steen Skybolt biplane, N22GL, was substantially damaged when the main landing gear failed while it was taxiing from landing at Cotton Patch Airport (TA75), Lexington, Texas. The pilot was not injured, but the airplane sustained substantial damage. The airplane was registered to and operated by the pilot as a Title 14 *Code of Federal Regulations* Part 91 personal flight. Visual meteorological conditions existed at the accident site at the time of the accident, and no flight plan had been filed. The local flight originated from TA75 about 1300.

According to the pilot, he flew to Taylor, Texas, to refuel his airplane. He then flew back to TA75 and landed. While taxiing to the hangar, the bottom of the airplane's fuselage began to drag on the ground. Realizing that something was wrong, the pilot stopped the airplane and turned the engine magneto switch to off.

Postaccident examination revealed the main landing gear had failed, allowing it to spread apart. The pilot later reported there was a fatigue failure in the landing gear truss.

#### **Pilot Information**

Certificate:	Private	Age:	68,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 28, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 22, 2018
Flight Time:	818 hours (Total, all aircraft), 429 hours (Total, this make and model), 818 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

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# **Aircraft and Owner/Operator Information**

Aircraft Make:	Steen	Registration:	N22GL
Model/Series:	Skybolt	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	GL-1
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 25, 2018 Condition	Certified Max Gross Wt.:	1850 lbs
Time Since Last Inspection:	4 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1511 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	IO-320-B1A
Registered Owner:	On file	Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GYB,484 ft msl	Distance from Accident Site:	
Observation Time:	13:55 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Scattered / 4500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	32°C / 21°C
Precipitation and Obscuration:			
Departure Point:	Taylor, TX (T74)	Type of Flight Plan Filed:	None
Destination:	Lexington, TX (TA75)	Type of Clearance:	None
Departure Time:	13:35 Local	Type of Airspace:	Class G

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# **Airport Information**

Airport:	Cotton Patch TA75	Runway Surface Type:	Grass/turf
Airport Elevation:	430 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/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:	30.391666,-97.108329(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	Michael Costallos; FAA Flight Standards District Office; Houston, TX
Original Publish Date:	February 5, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97795

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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