



# **Aviation Investigation Final Report**

Location: Vidalia, Louisiana Accident Number: CEN12CA272

Date & Time: April 27, 2012, 16:15 Local Registration: N4523

Aircraft: TUCKER-HURNI STARDUSTER SA300 Aircraft Damage: Substantial

**Defining Event:** Landing gear collapse **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

While on the landing roll in a grassy area with rough terrain, the airplane's right main landing gear broke and separated from the airplane. The pilot was then unable to maintain directional control of the airplane, which then nosed over and came to rest inverted with substantial damage to the upper wing and rudder. A postaccident examination of the airplane revealed that the right landing gear strut had a pre-existing fatigue fracture with interior corrosion, which was not discovered during a previous inspection.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the airplane's right main landing gear due to a pre-existing fatigue crack and corrosion.

#### **Findings**

Aircraft Main landing gear - Failure

Aircraft Main landing gear - Fatigue/wear/corrosion

### **Factual Information**

### History of Flight

Landing	Landing gear collapse (Defining event)

#### **Pilot Information**

Certificate:	Private	Age:	68,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	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 FAA Medical Exam:	September 1, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 12, 2011
Flight Time:	2761 hours (Total, all aircraft), 69 hours (Total, this make and model), 2690 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	TUCKER-HURNI	Registration:	N4523
All Claft Wake.	TOCKER-HORINI	Registration.	114323
Model/Series:	STARDUSTER SA-300	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	259
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 2, 2011 Condition	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	427 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Not installed	Engine Model/Series:	C-125-2
Registered Owner:	On file	Rated Power:	125 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KHEZ,272 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	16:15 Local	Direction from Accident Site:	70°
<b>Lowest Cloud Condition:</b>	Few / 4600 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Vidalia, LA (0R4)	Type of Flight Plan Filed:	None
Destination:	Vidalia, LA (0R4)	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	

### **Airport Information**

Airport:	CONCORDIA PARISH 0R4	Runway Surface Type:	
Airport Elevation:	55 ft msl	<b>Runway Surface Condition:</b>	Rough;Vegetation
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	3700 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

## 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:	31.561944,-91.506385(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	CHRIS HOUGHTON; FAA FSDO; BATON ROUGE, LA
Original Publish Date:	June 14, 2012
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=83552

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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