



Aviation Investigation Final Report

Location: Palm Springs, California Accident Number: WPR09CA134

Date & Time: February 28, 2009, 16:10 Local Registration: N118CK

Aircraft: Kreps Thorp T-18-C Aircraft Damage: Substantial

Defining Event: Sys/Comp malf/fail (non-power) **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot of the tailwheel-equipped experimental airplane had just touched down for a full-stop landing when the airplane started veering to the left. Although the pilot applied rudder and brake inputs to correct the airplane's alignment, the airplane did not respond. The pilot then added power to help correct the veering, but the airplane departed the left side of the runway and impacted a runway/taxiway sign. A postaccident inspection of the tubular steel left gear leg revealed that it had partially failed along a corroded weld line, and had bent backwards from its normal position. Corrosion/rust was present on about one inch of the fracture face, and along a wider area of the interior wall of the gear leg adjacent to the fracture. The fracture itself continued around about 70 percent of the circumference of the tubular leg.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of directional control due to the fatigue failure of a tubular steel gear leg along a corroded weld line.

Findings

Aircraft Tube - Fatigue/wear/corrosion

Aircraft Directional control - Attain/maintain not possible

Factual Information

History of Flight

Landing-landing roll	Sys/Comp malf/fail (non-power) (Defining event)
Landing-landing roll	Loss of control on ground
Landing-landing roll	Runway excursion

Pilot Information

Certificate:	Private	Age:	65,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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:	December 26, 2008
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	May 6, 2007
Flight Time:	652 hours (Total, all aircraft), 421 hours (Total, this make and model), 621 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Kreps	Registration:	N118CK
Model/Series:	Thorp T-18-C T-18-C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1275
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	October 1, 2008 Condition	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:	996 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	996 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-320-E2D
Registered Owner:	Glavans Rev Trust	Rated Power:	150 Horsepower
Operator:	George L. Avans	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:	PSP,477 ft msl	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Santa Barbara, CA (SBA)	Type of Flight Plan Filed:	None
Destination:	Palm Springs, CA (PSP)	Type of Clearance:	VFR
Departure Time:	14:00 Local	Type of Airspace:	

Airport Information

Airport:	Palm Springs Intl PSP	Runway Surface Type:	Asphalt
Airport Elevation:	477 ft msl	Runway Surface Condition:	Dry
Runway Used:	13L	IFR Approach:	None
Runway Length/Width:	4952 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.816665,-116.511108

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Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	Ron Gonzales; FAA-RAL-FSDO; Riverside, CA
Original Publish Date:	June 11, 2009
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=73414

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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