



# **Aviation Investigation Final Report**

Location: Umatilla, Florida Accident Number: ERA12CA140

Date & Time: January 7, 2012, 14:00 Local Registration: N77859

Aircraft: Luscombe 8A Aircraft Damage: Substantial

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

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot stated that upon touchdown on the runway, the tailwheel-equipped airplane drifted to the left. The pilot applied right rudder to correct, but the airplane continued to travel to the left and departed the left side of the runway. The airplane contacted a ditch and nosed over and came to rest inverted, resulting in substantial damage to the vertical stabilizer and left wing. Postaccident examination revealed that the left main landing gear leg had collapsed and exhibited severe corrosion and evidence of a preexisting crack. The pilot also reported that the main gear strut failed because of cracks and corrosion.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A failure of the left main landing gear due to a preexisting crack and corrosion, which resulted in a loss of directional control during landing.

#### **Findings**

Aircraft Main landing gear - Failure

Aircraft Main gear strut/axle/truck - Fatigue/wear/corrosion

# **Factual Information**

### **History of Flight**

Landing-landing roll	Landing gear collapse (Defining event)	
Landing-landing roll	Runway excursion	
Landing-landing roll	Collision with terr/obj (non-CFIT)	
Landing-landing roll	Nose over/nose down	

### **Pilot Information**

Certificate:	Private	Age:	73,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 23, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 7, 2010
Flight Time:	1666 hours (Total, all aircraft), 469 hours (Total, this make and model)		

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

Aircraft Make:	Luscombe	Registration:	N77859
Model/Series:	8A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3586
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	February 2, 2011 Annual	Certified Max Gross Wt.:	1260 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3362 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	A&C65 SERIES
Registered Owner:	WHEELER JOHN W	Rated Power:	65 Horsepower
Operator:	WHEELER JOHN W	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	VVG,88 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	13:55 Local	Direction from Accident Site:	270°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	5 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	24°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	DeLand, FL (DED )	Type of Flight Plan Filed:	None
Destination:	DeLand, FL (DED )	Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	

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# **Airport Information**

Airport:	Umatilla Municipal Airport X23	Runway Surface Type:	Asphalt
Airport Elevation:	107 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	2500 ft / 60 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:	28.921112,-81.651107(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Al Kimball; FAA/FSDO; Orlando, FL
Original Publish Date:	April 24, 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=82635

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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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