



Aviation Investigation Final Report

Location:	Chandler, Arizona	Accident Number:	LAX07CA010
Date & Time:	October 15, 2006, 14:00 Local	Registration:	N501W
Aircraft:	Monocoupe 110 Special	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The 70-year-old antique airplane veered off the runway and nosed over when the left landing gear forward attach point failed on touchdown. The airplane nosed over when it encountered the soft sand next to the runway, resulting in substantial damage to the vertical stabilizer. The owner pilot reported that the gear's forward attach point that is located under a fairing appeared to have failed on touchdown. A Federal Aviation Administration inspector examined the failure point, but was unable to determine the mode of failure.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the forward left main landing gear attach point resulting in loss of control.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LANDING GEAR,MAIN GEAR STRUT - FAILURE

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

2. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. TERRAIN CONDITION - SOFT

Occurrence #4: NOSE OVER

Phase of Operation: LANDING - ROLL

Factual Information

On October 15, 2006, at 1400 mountain standard time, a Monocoupe 110 Special, N501W, veered off the runway after the left landing gear collapsed during the landing rollout at Chandler Municipal Airport (CHD), Chandler, Arizona. The owner/pilot was operating the airplane under the provisions of 14 CFR Part 91. The airline transport pilot, the sole occupant, was not injured; the airplane sustained substantial damage. The cross-country personal flight departed Eloy, Arizona, about 1330, with a planned destination of Chandler. Visual meteorological conditions prevailed, and no flight plan had been filed. The approximate global positioning system (GPS) coordinates of the primary wreckage were 33 degrees 16.05 minutes north latitude and 111 degrees 48.24 minutes west longitude.

The pilot reported that upon touchdown on runway 22L, the left landing gear forward tube failed "just below the mounting lugs" and the airplane skidded off the left side of the runway. The airplane nosed over when it contacted soft sand, and the vertical stabilizer sustained substantial damage.

The pilot reported that the last annual inspection occurred on February 3, 2006. At the time of the accident, the recorded airframe total time was 723 hours. The pilot indicated that the airplane was originally built in the 1930's. The landing gear forward attach point was located under a fairing.

A Federal Aviation Administration inspector examined the failure point but was unable to determine the exact mode of failure.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	62, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	June 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 1, 2006
Flight Time:	28500 hours (Total, all aircraft), 69 hours (Total, this make and model), 23500 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Monocoupe	Registration:	N501W
Model/Series:	110 Special	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5W47
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 1, 2006 Annual	Certified Max Gross Wt.:	1630 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	723 Hrs at time of accident	Engine Manufacturer:	Warner
ELT:	Installed, not activated	Engine Model/Series:	R550-3
Registered Owner:	On file	Rated Power:	185 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:	CHD,1243 ft msl	Distance from Accident Site:	
Observation Time:	13:47 Local	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	40 miles
Lowest Ceiling:	Broken / 15000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.7 inches Hg	Temperature/Dew Point:	23°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Eloy, AZ (E60)	Type of Flight Plan Filed:	None
Destination:	Chandler, AZ (CHD)	Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	

Airport Information

Airport:	Chandler Municipal Airport CHD	Runway Surface Type:	Asphalt
Airport Elevation:	1243 ft msl	Runway Surface Condition:	Dry
Runway Used:	22L	IFR Approach:	None
Runway Length/Width:	4870 ft / 75 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:	33.268054,-111.806663

Administrative Information

Investigator In Charge (IIC):	Jones, Patrick
Additional Participating Persons:	Randy Prine; Federal Aviation Administration; Scottsdale, AZ
Original Publish Date:	January 31, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64715

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