

# **Aviation Investigation Final Report**

Location: Chandler, Arizona Accident Number: GAA16CA190

Date & Time: April 12, 2016, 09:35 Local Registration: N501W

Aircraft: Monocoupe 110 Aircraft Damage: Substantial

**Defining Event:** Loss of control on ground **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Flight test

#### **Analysis**

According to the pilot of the tailwheel-equipped airplane, after performing an initial test flight, during the landing roll the airplane rapidly veered right and the left wing struck the ground. The pilot reported that he overcorrected by applying full left rudder and the airplane exited the left side of the runway and nosed over. The pilot affirmed that prior to the flight he performed maintenance on the airplane to include the tail wheel single bungee steering system. The pilot reported that he installed the bungee incorrectly. The airplane sustained substantial both wings, the windshield and the fuselage.

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

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

The pilot's incorrect installation of the tailwheel steering bungee, which resulted in a runway excursion and airplane nose over.

## Findings

Personnel issues Aircraft control - Pilot

Aircraft Directional control - Not attained/maintained

Aircraft Nose/tail landing gear - Incorrect service/maintenance

Personnel issues Installation - Pilot

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## **Factual Information**

## **History of Flight**

Landing-landing roll	Loss of control on ground (Defining event)	
Landing-landing roll	Runway excursion	
Landing-landing roll	Collision with terr/obj (non-CFIT)	

### **Pilot Information**

Certificate:	Airline transport; Commercial; Flight instructor	Age:	71,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
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 15, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 2, 2015
Flight Time:	(Estimated) 31500 hours (Total, all aircraft), 150 hours (Total, this make and model), 26000 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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

Aircraft Make:	Monocoupe	Registration:	N501W
Model/Series:	110 Special	Aircraft Category:	Airplane
Year of Manufacture:	1930	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5W47
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 11, 2016 Annual	Certified Max Gross Wt.:	1610 lbs
Time Since Last Inspection:	35 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	733 Hrs as of last inspection	Engine Manufacturer:	WARNER
ELT:	C91A installed, not activated	Engine Model/Series:	R550-3
Registered Owner:	WHITE JAMES L	Rated Power:	185 Horsepower
Operator:	WHITE JAMES L	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCHD,1243 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:47 Local	Direction from Accident Site:	264°
<b>Lowest Cloud Condition:</b>	Few / 8000 ft AGL	Visibility	30 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	19°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	Chandler, AZ (CHD )	Type of Flight Plan Filed:	None
Destination:	Chandler, AZ (CHD )	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class D

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## **Airport Information**

Airport:	CHANDLER MUNI CHD	Runway Surface Type:	Asphalt
Airport Elevation:	1243 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	04L	IFR Approach:	None
Runway Length/Width:	4401 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:	33.269165,-111.811111(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Dane L Guynn ; FAA; Scottsdale , AZ
Original Publish Date:	July 14, 2016
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=93002

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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