



Aviation Investigation Final Report

Location:	Comanche, Oklahoma	Accident Number:	GAA15CA165
Date & Time:	July 4, 2015, 13:00 Local	Registration:	N317MA
Aircraft:	AVIAT AIRCRAFT INC A-1C-180	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he was attempting a wheel landing in a tailwheel airplane at his private grass air strip. During the landing touchdown, the airplane bounced once, settled back to the runway, and then suddenly nosed forward and came to rest inverted. The pilot reported that he did not know why the airplane nosed over, but suspected the pilot rated passenger in the rear seat may have manipulated the flight controls in some manner.

During a postaccident interview, the pilot rated passenger seated in the rear seat stated that he remained clear of the rudder pedals and flight controls for the entire flight. The passenger also reported that he observed the flight controls move abruptly to the full aft position just prior to the nose over.

The pilot stated there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation. During a post-flight examination, the rudder and right wing were found to be substantially damaged.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain proper pitch control during touchdown, which resulted in a nose over and impact with terrain.

Findings

Personnel issues

Aircraft control - Pilot

Aircraft

Pitch control - Not attained/maintained

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact
Landing-flare/touchdown	Nose over/nose down (Defining event)
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private; Recreational	Age:	62
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	June 30, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 21, 2015
Flight Time:	(Estimated) 600 hours (Total, all aircraft), 44 hours (Total, this make and model), 600 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	5-point
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	AVIAT AIRCRAFT INC	Registration:	N317MA
Model/Series:	A-1C-180 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	2013	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3185
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 18, 2014 Annual	Certified Max Gross Wt.:	2250 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	80 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1P
Registered Owner:	On file	Rated Power:	180 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:	KDUC, 1114 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	17:55 Local	Direction from Accident Site:	10°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	34°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Comanche, OK (None)	Type of Flight Plan Filed:	None
Destination:	Comanche, OK (None)	Type of Clearance:	None
Departure Time:	12:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Wildlife Ranch (Pvt.) None	Runway Surface Type:	Grass/turf
Airport Elevation:	986 ft msl	Runway Surface Condition:	Dry
Runway Used:	03	IFR Approach:	None
Runway Length/Width:	3800 ft / 180 ft	VFR Approach/Landing:	Full stop;Straight-in

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:	34.313331,-97.996391(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Mike Kout; Oklahoma City FSDO (FAA); Oklahoma City, OK
Original Publish Date:	September 11, 2015
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.nts.gov/Docket?ProjectID=91516

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