



Aviation Investigation Final Report

Location:	Llano, Texas	Accident Number:	CEN09LA384
Date & Time:	June 24, 2009, 11:30 Local	Registration:	N6939M
Aircraft:	Stinson 108-3	Aircraft Damage:	Substantial
Defining Event:	Part(s) separation from AC	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The student pilot was conducting his first solo flight. During the rollout after his third landing, the aircraft began to pull to the left. The pilot attempted to maintain directional control but the left main gear separated, causing the aircraft to nose over onto its back. The left main wheel and brake caliper were located several hundred feet behind the aircraft, along the rollout path. A mechanic who inspected the aircraft after the accident reported that the inner wheel half was broken around the brake disc mounting flange. The mechanic stated that there was no bluing from excessive heat or any signs that the bearings had failed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inability to maintain aircraft control due to the failure of the left main landing gear wheel, which resulted in the separation of the wheel from the aircraft.

Findings

Aircraft	Wheel/ski/float - Failure
Aircraft	(general) - Attain/maintain not possible

Factual Information

History of Flight

Landing-landing roll	Part(s) separation from AC (Defining event)
Landing-landing roll	Nose over/nose down

On June 24, 2009, approximately 1130 central daylight time, a Stinson 108-3, N6939M, registered to and operated by a student pilot, was substantially damaged when it nosed over on landing roll at Llano Municipal Airport (AQO), Llano, Texas. Visual meteorological conditions prevailed at the time of the accident. The instructional flight was being conducted under the provisions of Title 14 Code of Federal Regulations (CFR) Part 91 without a flight plan. The student pilot was not injured. The local flight originated from Llano approximately 1120.

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Student pilot Information

Certificate:	Student	Age:	36, Male
Airplane Rating(s):	None	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 Without waivers/limitations	Last FAA Medical Exam:	July 17, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	31 hours (Total, all aircraft), 31 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 31 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N6939M
Model/Series:	108-3	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-4939
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Franklin
ELT:	Not installed	Engine Model/Series:	64A--165-B3
Registered Owner:	On file	Rated Power:	165
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:	AQO,1102 ft msl	Distance from Accident Site:	
Observation Time:	11:25 Local	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:	29.97 inches Hg	Temperature/Dew Point:	34°C / 18°C
Precipitation and Obscuration:			
Departure Point:	Llano, TX (AQO)	Type of Flight Plan Filed:	None
Destination:	Llano, TX (AQO)	Type of Clearance:	None
Departure Time:	11:20 Local	Type of Airspace:	Class G

Airport Information

Airport:	Llano Municipal AQO	Runway Surface Type:	Grass/turf
Airport Elevation:	1102 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	3240 ft / 150 ft	VFR Approach/Landing:	Full stop

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:	30.783611,-98.661941

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	Thomas A Hennessee; San Antonion FSDO; San Antonio, TX
Original Publish Date:	September 10, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=74126

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