Aviation Investigation Final Report

Location:	CHALLIS, Idaho	**Accident Number:**	SEA96LA197
Date & Time:	August 12, 1996, 19:45 Local	**Registration:**	N7507D
Aircraft:	Piper PA-22-150	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he was landing to the south with the wind from the west. The aircraft drifted to the right and went off the runway. Subsequently, the left wing was damaged, and damage was found at the left landing gear cluster on the fuselage. The pilot stated that he believed that the landing gear may have sustained damage during his last departure. The departure airstrip was rough with broken bunch grass. The pilot said everything appeared fine until the aircraft touched down at the destination, where it was uncontrollable and ground-looped to the right. Examination revealed that three of the support tubes on the left main landing gear cluster were corroded and had preexisting bending and failures, which were attributed to a landing gear failure. Reportedly, the area was accessible for inspection.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: corrosion in the left main landing gear cluster, which resulted in a failure of the left main landing gear. Inadequate inspection by undetermined maintenance personnel was a related factor.

Findings

Occurrence #1: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,MAIN GEAR ATTACHMENT - CORRODED
2. (C) LANDING GEAR,MAIN GEAR - FAILURE
3. (F) MAINTENANCE,INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

Factual Information

On August 12, 1996, approximately 1945 mountain daylight time, a Piper PA-22-150 tailwheel-converted airplane, N7507D, sustained substantial damage when the pilot lost directional control in a crosswind during landing. The private pilot and his passenger were uninjured. No flight plan was filed for the flight, which had departed Magic Valley Reservoir, Idaho, about 1845. Visual meteorological conditions prevailed at the time of the accident.

In a telephone interview, the pilot stated that he was landing to the south, with the winds from the west. The aircraft drifted to the right and left the runway, impacting the left wingtip and damaging the left landing gear cluster on the fuselage. In a written statement, the pilot stated that he believed that the landing gear may have sustained damage during his departure from Magic Valley Reservoir, as that airstrip was rough with broken bunch grass. He said everything was fine until he touched down at Challis and found the airplane uncontrollable. He said the airplane ground-looped to the right side of the runway, damaging the left wing, left main landing gear and the propeller and crankshaft. When the aircraft was inspected by a mechanic, the mechanic determined that three of the support tubes of the left main landing gear cluster were corroded and had preexisting failures, which he attributed to causing the landing gear collapse. The area of preexisting damage is accessible for inspection.

Pilot Information

Certificate:	Private	**Age:**	43,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 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	January 30, 1995
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	450 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N7507D
Model/Series:	PA-22-150 PA-22-150	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22-5234
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	2000 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-320
Registered Owner:	JACKIE R. SHIPP	**Rated Power:**	150 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	100 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	270°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	29°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MAGIC VALLEY , ID	**Type of Flight Plan Filed:**	None
Destination:	(U15)	**Type of Clearance:**	None
Departure Time:	18:45 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	CHALLIS U15	**Runway Surface Type:**	Asphalt
Airport Elevation:	5080 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	16	**IFR Approach:**	None
Runway Length/Width:	4600 ft / 60 ft	**VFR Approach/Landing:**	Full stop

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:**	44.650592,-114.150444(est)

Administrative Information

Investigator In Charge (IIC):	Stockhill, Michael
Additional Participating Persons:	MIKE MISNICK; BOISE , ID
Original Publish Date:	February 28, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42450