



Aviation Investigation Final Report

Location:	DURANGO, Colorado	Accident Number:	DEN99LA138
Date & Time:	August 7, 1999, 23:59 Local	Registration:	N4835F
Aircraft:	Cessna TU206A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	5 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While landing at the completion of a cross-country flight the airplane departed the side of the runway onto loose gravel during landing roll, and the nose wheel assembly separated. Examination of the airplane disclosed that the nose wheel steering assembly was worn, and improper parts had been substituted. As a result, steering control was diminished.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A worn landing nose gear steering system that diminished the ability to steer the airplane. Factors were improper maintenance by unknown persons, and loose gravel.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,STEERING SYSTEM - WORN
 2. (F) MAINTENANCE - IMPROPER - UNKNOWN
 3. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND
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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - LOOSE GRAVEL/SANDY

Occurrence #3: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Factual Information

On August 7, 1999, at 2359 mountain daylight time, a Cessna TU206A, N4835F, sustained substantial damage when it departed the left side of runway 01 during landing roll at Animas Air Park, Durango, Colorado. The commercial pilot and his four passengers were not injured. Visual meteorological conditions prevailed for this personal flight operating under Title 14 CFR Part 91 and no flight plan was filed. The flight originated from Window Rock, Arizona, at 2100.

Weather at the time was clear skies with wind from 350 degrees at four knots.

According to the pilot, the aircraft had traveled a short distance following a normal touchdown on runway centerline when the aircraft pulled hard to the left and exited the left side of the runway onto a gravel covered area. He said that as the aircraft decelerated through an estimated 10 miles per hour, the nose wheel broke off.

Examination of the aircraft by a mechanic employed by Greg's Flying Service, in Durango, provided evidence that the left wing, propeller, and nose landing gear has sustained damage. The mechanic also found that one of the nose wheel steering arm roll pins was missing and a piece of safety wire was substituted, and the other roll pin and roll pin receptacles were worn beyond limits. (See attached diagram.)

According to the flying service mechanic, this would cause the nose wheel steering to be sloppy and slow to respond to pilot input.

When the nose wheel steering had work performed on it is unknown.

Pilot Information

Certificate:	Commercial	Age:	50, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	May 6, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1700 hours (Total, all aircraft), 103 hours (Total, this make and model), 1538 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4835F
Model/Series:	TU206A TU206A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	U206-0535
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	May 16, 1999 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3779 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO520-HCC
Registered Owner:	DEBORAH L. LANGFORD, TRUSTEE	Rated Power:	285 Horsepower
Operator:	CLARK D. CAMPBELL	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:	Night/dark
Observation Facility, Elevation:	DRO ,6684 ft msl	Distance from Accident Site:	
Observation Time:	23:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	12°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WINDOW ROCK , AZ (RQE)	Type of Flight Plan Filed:	None
Destination:	(5C00)	Type of Clearance:	None
Departure Time:	20:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	ANIMAS AIR PARK 5C00	Runway Surface Type:	Asphalt
Airport Elevation:	6684 ft msl	Runway Surface Condition:	Dry
Runway Used:	1	IFR Approach:	None
Runway Length/Width:	5010 ft / 50 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	37.269668,-107.879333(est)

Administrative Information

Investigator In Charge (IIC):	Wiemeyer, Norman
Additional Participating Persons:	ROBERT D LESITSKY; SALT LAKE CITY , UT
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=47005

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