



Aviation Investigation Final Report

Location:	Roswell, New Mexico	Accident Number:	DFW08CA099
Date & Time:	April 11, 2008, 17:47 Local	Registration:	N7935Q
Aircraft:	Cessna 310Q	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot initiated a left turn while taxiing to the parking area, and the right main landing gear collapsed, resulting in substantial damage to the airplane's right wing and horizontal stabilizer. A Federal Aviation Administration (FAA) inspector did an on scene investigation, and determined that the landing gear was not properly reassembled after maintenance was performed. The certified airframe and powerplant mechanic left out a bushing on the right main landing gear side link lower attach point. The incorrect reassembly allowed the downlock tension to fall below allowable limits during subsequent cycles of the landing gear system, resulting in the gear collapse.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The airframe and powerplant mechanic's incorrect reassembly of the landing gear.

Findings

Aircraft

Main landing gear attach sec - Incorrect service/maintenance

Personnel issues

Installation - Maintenance personnel

Factual Information

History of Flight	
Landing-landing roll	Landing gear collapse
Taxi-from runway	Landing gear collapse (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	52,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	March 1, 2008
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 1, 2007
Flight Time:	4300 hours (Total, all aircraft), 300 hours (Total, this make and model), 4100 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7935Q
Model/Series:	310Q	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310Q-0667
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	April 1, 2008 Continuous airworthiness	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	7928 Hrs at time of accident	Engine Manufacturer:	Teledyne Continental
ELT:	Installed, not activated	Engine Model/Series:	10-470-V0
Registered Owner:	D + A INVESTMENTS LLC	Rated Power:	275 Horsepower
Operator:	Aero Charter and Transport, Inc.	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Aero Charter and Transport, Inc.	Operator Designator Code:	N3BA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KROW,3671 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	17:51 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	19 knots / 30 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	19°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hobbs, NM (KHOB)	Type of Flight Plan Filed:	Unknown
Destination:	Roswell, NM (KROW)	Type of Clearance:	None
Departure Time:	17:10 Local	Type of Airspace:	

Airport Information

Airport:	Roswell International Air Cent KROW	Runway Surface Type:	Asphalt
Airport Elevation:	3671 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	9999 ft / 100 ft	VFR Approach/Landing:	Unknown

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:	33.301387,-104.530555

Administrative Information

Investigator In Charge (IIC):	Gamble, William	
Additional Participating Persons:	Walter P Tidmore; FAA FSDO; Alburqueque, NM	
Original Publish Date:	June 30, 2008	
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=67824	

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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.