



# Aviation Investigation Final Report

<b>Location:</b>	JACKSONVILLE, Florida	<b>Accident Number:</b>	ATL00LA010
<b>Date &amp; Time:</b>	November 10, 1999, 17:30 Local	<b>Registration:</b>	N310GC
<b>Aircraft:</b>	Cessna 310Q	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot had completed a local personal flight and was on taxiway 'C,' and was returning to the parking ramp, when without warning the left main landing gear collapsed. Examination of the airplane and the landing gear assembly showed that the left main landing gear down-lock end fitting assembly and the retention bolt had broken. The landing gear examination of the locking linkage failed to establish installation specification prior to the accident. A visual examination of the failed bolt assembly also failed to disclose pre-existing cracking in the bolt structure. A review of the maintenance logbooks revealed that recent maintenance had been performed on the landing gear assembly 18 hours before the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the left main landing gear down locking mechanism for undetermined reasons.

### Findings

Occurrence #1: GEAR COLLAPSED  
Phase of Operation: TAXI

#### Findings

1. (C) LANDING GEAR, GEAR LOCKING MECHANISM - FAILURE
2. (C) REASON FOR OCCURRENCE UNDETERMINED



## Factual Information

On November 10, 1999, at 1730 eastern standard time, a Cessna 310Q, N310GC, collided with the taxiway after the landing gear down-lock bolt failed at Craig Field in Jacksonville, Florida. The personal flight was operated by the pilot under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage, and the private pilot was not injured. The flight departed Jacksonville, Florida, at 1635.

The pilot had completed a local personal flight and was on taxiway "C," returning to the parking ramp, when without warning the left main landing gear collapsed.

Examination of the airplane and the landing gear assembly showed that the left main landing gear down-lock end fitting assembly and the retention bolt had broken. The landing gear examination of the locking linkage failed to establish installation specification prior to the accident. A visual examination of the failed bolt assembly also failed to disclose pre-existing cracking in the bolt structure. A review of the maintenance logbooks revealed that recent maintenance had been performed on the landing gear assembly 18 hours before the accident.

### Pilot Information

<b>Certificate:</b>	Airline transport; Commercial	<b>Age:</b>	50, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	September 29, 1999
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4500 hours (Total, all aircraft), 200 hours (Total, this make and model), 75 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N310GC
<b>Model/Series:</b>	310Q 310Q	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	310Q-838
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	August 31, 1999 Annual	<b>Certified Max Gross Wt.:</b>	4600 lbs
<b>Time Since Last Inspection:</b>	10 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	4100 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TIO-520-MB
<b>Registered Owner:</b>	ROBERT J. KLEINHANS	<b>Rated Power:</b>	310 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	CRG	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	17:30 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	19°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(CRG )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:35 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	CRAIG AIRPORT CRG	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	41 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	5	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4000 ft / 100 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	30.359985,-81.510902(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Powell, Phillip
<b>Additional Participating Persons:</b>	ALAN NEMCIK; ORLANDO , FL
<b>Original Publish Date:</b>	November 30, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=47739">https://data.ntsb.gov/Docket?ProjectID=47739</a>

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