



# Aviation Investigation Final Report

<b>Location:</b>	CHANDLER, Arizona	<b>Accident Number:</b>	LAX87LA277
<b>Date &amp; Time:</b>	July 22, 1987, 16:00 Local	<b>Registration:</b>	N252W
<b>Aircraft:</b>	CESSNA A185F	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE CFI INDICATED THAT THE TAILWHEEL BEGAN TO SHIMMY DURING ROLLOUT. AS FORWARD CONTROL YOKE PRESSURE WAS APPLIED THE SHIMMY WENT AWAY, HOWEVER, AS THE ACFT BEGAN TO SLOW DOWN, THE TAILWHEEL WAS LOWERED AND BEGAN TO SHIMMY AGAIN. AS THE ACFT CONTINUED TO SLOW IT VEERED TO THE RIGHT. THE CFI APPLIED LEFT RUDDER. INITIALLY THE ACFT CONTINUED TO THE RIGHT. SUBSEQUENTLY IT ROLLED LEFT, DRAGGING ITS LEFT WING AND COLLAPSING THE LEFT MAIN LANDING GEAR. INVESTIGATION REVEALED THAT THE RETENTION BOLT FOR THE LEFT LANDING GEAR SPRING ASSEMBLY WAS BENT AND DISPLAYED ROTATIONAL SCORING AT ITS MID-POINT. THE THREADS OF BOTH THE BOLT AND ITS ASSOCIATED NUT WERE FOUND STRIPPED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

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

#### Findings

1. (C) LANDING GEAR,MAIN GEAR ATTACHMENT - LOOSE
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

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Occurrence #2: MAIN GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	23, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical—w/ waivers/lim	<b>Last FAA Medical Exam:</b>	February 9, 1987
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1160 hours (Total, all aircraft), 56 hours (Total, this make and model), 804 hours (Pilot In Command, all aircraft), 275 hours (Last 90 days, all aircraft), 104 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N252W
<b>Model/Series:</b>	A185F A185F	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18503687
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	March 18, 1987 Annual	<b>Certified Max Gross Wt.:</b>	3350 lbs
<b>Time Since Last Inspection:</b>	100 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	920 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-D
<b>Registered Owner:</b>	DOWNEY CONSTRUCTION, INC.	<b>Rated Power:</b>	300 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>	P19 ,1175 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	16:00 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 6000 ft AGL	<b>Visibility</b>	30 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	350°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	37°C / 6°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	CHANDLER (P19 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	STELLAR AIRPARK P19	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1175 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	17	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4005 ft / 55 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 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>	2 None	<b>Latitude, Longitude:</b>	33.320518,-111.870346(est)

## Administrative Information

**Investigator In Charge (IIC):** Wilcox, Thomas

**Additional Participating Persons:** DANNY G LEER; SCOTTSDALE ,AZ

**Original Publish Date:** June 16, 1989

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=25646>

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