



# **Aviation Investigation Factual Report**

Location: Stockton, California Accident Number: LAX07LA119

Date & Time: April 1, 2007, 11:00 Local Registration: N3424Q

Aircraft: Cessna 320E Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Factual Information**

On April 1, 2007, at 1100 Pacific daylight time, a Cessna 320E, N3424Q, collapsed the right main landing gear while exiting runway 29L at Stockton Metropolitan Airport (SCK), Stockton, California. The pilot/owner operated the airplane under the provisions of 14 CFR Part 91 as a personal flight. The airplane sustained substantial damage. The pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed for the local area flight that departed SCK about 1000. No flight plan had been filed.

According to the pilot, this was the first flight after an annual inspection. He had flown to Calaveras County-Maury Rasmussen Field Airport (CPU), San Andreas California, refueled, and then flew back to SCK. The pilot noted no mechanical problems with the airplane during the flight until he reached SCK. He stated that the landing and landing rollout were normal. While slowing down to exit the high speed taxiway, he engaged the left rudder to turn to the left, and the right main landing gear collapsed. The right wing struck the runway, and right propeller and right horizontal stabilizer were also damaged. The pilot reported that he exited onto the taxiway at 20 miles per hour (mph). He further reported that during the annual inspection the landing gear had been rerigged.

Reported winds at the time of the accident were variable at 3 knots.

#### **TEST AND RESEARCH**

According to a Federal Aviation Administration (FAA) inspector, the right main landing gear bellcrank (part number 0841225-10) strut attachment bolt (AN4-25A) sheared. This placed an increased load on the remaining main strut attachment clevis ears, which caused the ears to fail and the down lock link assembly to collapse. The FAA inspector stated that his inspection was not able to ascertain whether or not the landing gear had been rigged improperly.

The pilot had the landing gear independently inspected. According to the inspection report, the right side main landing gear fork bolt was deformed in an outward direction at the fork-to-bolt junction. The right main landing gear down indicator switch had been rigged to a point where it made contact at the "earliest possible moment during landing gear extension." The right main landing gear fork bolt had been adjusted to what appeared to be its full outboard limit. The right main landing gear outboard push pull tube rod ends had been adjusted to their shortest possible length. The right landing gear lock link end fitting and the right main landing gear bellcrank were sent to a metallurgical laboratory that reported that the components had failed in overload.

The aircraft logbook entry indicated that the annual inspection had been completed and returned to service in an airworthy condition on April 1, 2007. The entry stated in part that the

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landing gear had been rigged in accordance with Cessna's service manual.

## **Pilot Information**

Certificate:	Airline transport; Commercial; Flight instructor	Age:	55,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 multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 1, 2006
Flight Time:	4046 hours (Total, all aircraft), 23 hours (Total, this make and model), 2959 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N3424Q
Model/Series:	320E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	0024
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	April 1, 2007 Annual	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:	0.9 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	4128.4 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-B
Registered Owner:	Pechan Family Trust	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	None

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## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SCK,33 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	10:55 Local	Direction from Accident Site:	0°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	21°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	San Andreas, CA (CPU)	Type of Flight Plan Filed:	None
Destination:	Stockton, CA (SCK)	Type of Clearance:	VFR
Departure Time:	10:45 Local	Type of Airspace:	

# **Airport Information**

Airport:	STOCKTON METROPOLITAN SCK	Runway Surface Type:	Asphalt
Airport Elevation:		<b>Runway Surface Condition:</b>	Dry
Runway Used:	29L	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Traffic pattern

# 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:	37.883335,-121.241668

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#### **Administrative Information**

Investigator In Charge (IIC): Cornejo, Tealeye

Additional Participating Persons: Timothy L Jarrard; Federal Aviation Administration; Oakland, CA

Report Date: June 11, 2008

Last Revision Date: Investigation Class: Class

Note: Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=65532

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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.

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