



Aviation Investigation Final Report

Location:	KANSAS CITY, Kansas	Accident Number:	MKC88LA097
Date & Time:	May 24, 1988, 12:30 Local	Registration:	N7011L
Aircraft:	CESSNA 310K	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

DURING A LNDG ROLL SUBSEQUENT TO LANDING, THE NOSE LANDING GEAR COLLAPSED. A POST-IMPACT INSPTN OF THE GEAR INDICATED THAT A BOLT (WHICH RETAINS THE RETRACT ARM TO THE BELLCRANK) HAD SHEARED. THE BOLT WAS ALSO DISCOVERED TO HAVE BEEN INSTALLED IN THE WRONG DIRECTION, NOT IN ACCORDANCE WITH THE MANUF'S MANUAL. GEAR RETRACTION TESTS DURING THE PREVIOUS ANNUAL INSPTN WERE IN NRML TOLERANCE.

Probable Cause and Findings

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

Findings

Occurrence #1: NOSE GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - FAILURE,TOTAL
2. (C) MAINTENANCE - IMPROPER - OTHER MAINTENANCE PERSONNEL

Factual Information

Pilot Information

Certificate:	Private	Age:	58, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	June 2, 1987
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	670 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N7011L
Model/Series:	310K 310K	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310K0111
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-470-V
Registered Owner:		Rated Power:	260 Horsepower
Operator:	R.E. DAVIS	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:	Day
Observation Facility, Elevation:	MKC ,1064 ft msl	Distance from Accident Site:	
Observation Time:	11:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3800 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ST. JOSEPH , MO	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:00 Local	Type of Airspace:	

Airport Information

Airport:	KANSAS CITY DOWNTOWN MKC	Runway Surface Type:	Asphalt
Airport Elevation:	758 ft msl	Runway Surface Condition:	Dry
Runway Used:	1	IFR Approach:	Visual
Runway Length/Width:	7001 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.090431,-94.57933(est)

Administrative Information

Investigator In Charge (IIC):	Thorpe, Clint
Additional Participating Persons:	ART DESALME; KANSAS CITY , MO
Original Publish Date:	November 7, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=34575

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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](#).