



Aviation Investigation Final Report

Location:	CALEXICO, California	Accident Number:	LAX98LA229
Date & Time:	June 19, 1998, 11:32 Local	Registration:	N6994L
Aircraft:	Cessna 310K	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, prior to the accident, there was a preexisting problem with the right main landing gear indication light. When the gear was extended, the right main landing gear down light would not illuminate. He stated that an adjustment to the right main landing gear switch was conducted, and 2 days later he left for a flying vacation. No discrepancies were noted with the airplane on the month-long trip. On the return flight, at an intermediate stop prior to the intended destination, the right main landing gear down indication light did not illuminate. The pilot recycled the landing gear, and the right main landing gear down indication light still did not illuminate. The pilot continued the landing with no discrepancies noted. He then flew the airplane to the accident airport. Prior to landing the pilot extended the landing gear, but did not receive a gear down indication from the right main landing gear. He recycled the gear, but the right main landing gear down light did not illuminate. He continued with the landing, and on the landing rollout the right main landing gear collapsed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's continued operation of the aircraft with known deficiencies in the landing gear indicating system. A contributing factor to the accident was the pilot's expectation that the gear would be extended and locked irrespective of the indicator lights due to his prior experience with the malfunctioning indicator system.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) LANDING GEAR, GEAR INDICATING SYSTEM - INOPERATIVE
2. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
3. (C) GEAR DOWN AND LOCKED - NOT VERIFIED - PILOT IN COMMAND
4. (F) EXPECTANCY - PILOT IN COMMAND
5. MAINTENANCE, INSPECTION - INADEQUATE - OTHER MAINTENANCE PERSONNEL

Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

6. LANDING GEAR, MAIN GEAR - UNLOCKED

Factual Information

On June 19, 1998, at 1132 hours Pacific daylight time, a Cessna 310K, N6994L, collapsed the right main landing gear after touchdown at the Calexico, California, airport. The airplane, owned and operated by the pilot under 14 CFR Part 91, sustained substantial damage. The commercial pilot/owner and one passenger were not injured. Visual meteorological conditions existed for the personal flight and no flight plan was filed. The flight's point of origin was Loreto, Mexico, and was landing at Calexico to clear U.S. customs.

In his written statement, the pilot reported that the landing gear mechanism had a history of problems. The pilot stated that on March 22, 1998, work had been done on the nose landing gear. Review of the maintenance record entry disclosed that the landing gear doors for all three gear were replaced, in addition to the nose gear up-lock torque tube. The entry notes only the rerigging of the nose gear. Following the repair, 10 takeoffs and landings were conducted to test the system, with no discrepancies noted.

On a May 4, 1998 local flight, the right main landing gear down indication light did not illuminate. The pilot recycled the landing gear, and the right main landing gear down light functioned. The aircraft was flown to the repair station that had worked on the airplane in March 1998 to be inspected. When the landing gear was extended for landing, the right main landing gear light did not illuminate. The pilot reported that he recycled the landing gear, but the right main landing gear light did not illuminate. He stated that he made a normal landing. The inspection of the right main landing gear revealed that an adjustment to the proximity switch needed to be made. The pilot stated that 2 days later, after the adjustment had been made on the landing gear, he left on a flying vacation. No discrepancies were noted on the month-long trip, until the return landing at the Loreto airport. He stated that the right main landing gear light did not illuminate on the initial or attempted recycle of the landing gear. The pilot stated that the landing was uneventful.

The pilot reported that he then flew the airplane to the accident airport. He stated that the right main landing gear light did not illuminate after extension of the landing gear. He recycled the landing gear, but still did not receive a gear down light. He continued with the landing, and on the landing rollout the right main landing gear collapsed.

The damage to the airplane was originally classified as minor and no inspection of the aircraft was conducted by either the Federal Aviation Administration or the Safety Board to determine the condition or operational capability of the landing gear down locks. The damage to the airplane was determined to be substantial on July 10, 1998.

Pilot Information

Certificate:	Commercial	Age:	66, 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):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 1, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	6000 hours (Total, all aircraft), 300 hours (Total, this make and model), 5800 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N6994L
Model/Series:	310K 310K	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310K0094
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	November 16, 1997 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3989 Hrs	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	IO-470
Registered Owner:	HBJ LLC	Rated Power:	260 Horsepower
Operator:	HAROLD C. HOLMES	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	35°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LORETO , OF (MLLT)	Type of Flight Plan Filed:	VFR
Destination:	(CXL)	Type of Clearance:	VFR
Departure Time:	08:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	CALEXICO INTERNATIONAL CXL	Runway Surface Type:	Asphalt
Airport Elevation:	4 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	4507 ft / 75 ft	VFR Approach/Landing:	Full stop

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:	32.689456,-115.510818(est)

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	DERON KONG; SAN DIEGO , CA
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=43185

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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](#).