



Aviation Investigation Final Report

Location:	AUBURN, Alabama	Accident Number:	MIA96LA076
Date & Time:	February 8, 1996, 17:20 Local	Registration:	N2201F
Aircraft:	Cessna 310L	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

During the landing roll, at about 40 knots, the left main landing gear collapsed. Examination of the landing gear showed that the side brace lock end fitting had failed allowing the gear to collapse. Metallurgical examination of the end fitting showed it failed due to overstress.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an overstress failure of the left main gear side brace lock end fitting for undetermined reasons.

Findings

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

Findings

1. (C) LANDING GEAR, GEAR LOCKING MECHANISM - OVERLOAD
2. LANDING GEAR, MAIN GEAR - COLLAPSED

Factual Information

On February 8, 1996, about 1720 central standard time, a Cessna 310L, N2201F, registered to Air Carriers Inc., experienced collapse of the left main landing gear during landing roll at the Auburn Opelika Airport, Auburn, Alabama, while on a 14 CFR Part 135 air taxi flight. Visual meteorological conditions prevailed at the time and an instrument flight rules flight plan was filed. The commercial-rated pilot was not injured and the airplane was substantially damaged. The flight had originated from Jacksonville, Florida, the same day about 1545.

The pilot stated that during landing on runway 18, the aircraft was rolling on all three landing gear and had slowed to 40 knots when the left main landing gear collapsed. The left wing tip tank struck the runway and the aircraft rotated around 160 degrees from runway heading, where it came to rest.

Postcrash examination of the aircraft was performed by FAA inspectors and company maintenance personnel. The left main gear side brace lock end fitting had failed, allowing the gear to collapse. Metallurgical examination of the failed end fitting was performed by the NTSB Material Laboratory, Washington, D.C. The end fitting failed due to overstress. See attached NTSB Metallurgist's Factual Report.

Pilot Information

Certificate:	Commercial	Age:	27, 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 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	July 18, 1995
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2765 hours (Total, all aircraft), 465 hours (Total, this make and model), 2587 hours (Pilot In Command, all aircraft), 226 hours (Last 90 days, all aircraft), 78 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2201F
Model/Series:	310L 310L	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310L0001
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	February 6, 1996 100 hour	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	11 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	6555 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-420-VO
Registered Owner:	AIR CARRIERS INC.	Rated Power:	260 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	DKBA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AUO ,776 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	17:36 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	17°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	JACKSONVILLE , FL (CRG)	Type of Flight Plan Filed:	IFR
Destination:	(AUO)	Type of Clearance:	IFR
Departure Time:	15:45 Local	Type of Airspace:	Class E

Airport Information

Airport:	AUBURN-OPELIKA AUO	Runway Surface Type:	Asphalt
Airport Elevation:	776 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3933 ft / 75 ft	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:	32.589084,-85.479698(est)

Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey
Additional Participating Persons:	GARY L SOLDWISCH; BIRMINGHAM , AL
Original Publish Date:	October 22, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=37979

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).