



National Transportation Safety Board Aviation Accident Final Report

Location:	CLEVELAND, OH	Accident Number:	NYC92LA094
Date & Time:	06/01/1992, 2225 EDT	Registration:	N225SC
Aircraft:	CESSNA 310R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PILOT WAS EXECUTING A RIGHT TURN ONTO THE RUNWAY IN PREPARATION FOR DEPARTURE AND THE LEFT MAIN LANDING GEAR COLLAPSED. THE TOP OF THE MAIN GEAR STRUT HOUSING AND THE UPPER SIDE BRACE/DOWN LOCK LINK ASSEMBLY ATTACHMENT POINT WERE FOUND BROKEN OFF. THE AIRPLANE HAD JUST BEEN RETURNED TO SERVICE FOLLOWING THE COLLAPSE OF THE RIGHT MAIN LANDING GEAR 6 MONTHS EARLIER. BOTH MAIN LANDING GEARS WERE OVERHAULED AFTER THE PREVIOUS ACCIDENT, AND A 'SERVICEABLE UPPER STRUT HOUSING' WAS INSTALLED IN THE LEFT MAIN LANDING GEAR.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
A FAILURE OF THE LEFT MAIN GEAR'S UPPER STRUT HOUSING AND DOWN LOCK LINK ASSEMBLY ATTACH POINT.

Findings

Occurrence #1: MAIN GEAR COLLAPSED
Phase of Operation: TAXI - TO TAKEOFF

Findings

1. (C) LANDING GEAR,MAIN GEAR STRUT - FAILURE,TOTAL

Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	28, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/13/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4200 hours (Total, all aircraft), 300 hours (Total, this make and model), 4100 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N225SC
Model/Series:	310R 310R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	310R0189
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	05/26/1992, AAIP	Certified Max Gross Wt.:	5535 lbs
Time Since Last Inspection:	2 Hours	Engines:	2 Reciprocating
Airframe Total Time:	12933 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-520MB
Registered Owner:	F & V LEASING	Rated Power:	285 hp
Operator:	U.S. CHECK, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	BSYA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16 °C / 11 °C
Precipitation and Obscuration:			
Departure Point:	COLUMBUS, OH (CMH)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	
Departure Time:	1830 EDT	Type of Airspace:	

Airport Information

Airport:	CLEVELAND HOPKINS (CLE)	Runway Surface Type:	Asphalt
Airport Elevation:	792 ft	Runway Surface Condition:	Dry
Runway Used:	5	IFR Approach:	None
Runway Length/Width:	8998 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ALAN J YURMAN	Report Date:	09/14/1993
Additional Participating Persons:	KEN SHAUMAN; CLEVELAND, OH		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).