



Aviation Investigation Final Report

Location: Clear Lake, Minnesota Accident Number: CHI05LA097

Date & Time: April 13, 2005, 09:00 Local Registration: N3622D

Aircraft: Cessna 310 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The airplane was damaged when the nose landing gear collapsed during landing and the airplane nosed over. Investigation revealed that a cotter pin on the nose landing gear door had been removed by the pilot and was not replaced. During the flight, the nose landing gear failed to retract and subsequently collapsed during the landing. The airplane's most recent annual inspection had been performed 13 months prior to the accident and no special flight authorization had been granted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The collapse of the nose landing gear as a result of the pilot performing improper maintenance on the airplane due to his failure to properly safety the nose landing gear door.

Findings

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

Phase of Operation: CRUISE

Findings

1. (C) DOOR, LANDING GEAR - NOT SAFETIED

2. (C) MAINTENANCE - IMPROPER - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING

Findings

3. (C) LANDING GEAR, NOSE GEAR - COLLAPSED

4. MAINTENANCE, ANNUAL INSPECTION - NOT COMPLIED WITH - PILOT IN COMMAND

Occurrence #3: NOSE OVER Phase of Operation: LANDING

Findings

5. TERRAIN CONDITION - GROUND

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Factual Information

On April 13, 2005, about 0900 central daylight time, a Cessna 310, N3622D, piloted by an airline transport pilot, sustained substantial damage during landing on runway 18 (3,000 feet by 150 feet, asphalt), at the Leaders/Clear Lake Airport, Clear Lake, Minnesota. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions without a flight plan. The pilot was not injured. The flight originated from the St. Cloud Regional Airport, St. Cloud, Minnesota, at 0845.

According to a Federal Aviation Administration Inspector that responded to the accident, the pilot had removed a cotter pin from the nose landing gear door link prior to the flight so that he could gain access to the nose landing gear compartment. The cotter pin was not replaced. During the flight, the nose gear failed to retract and subsequently, the nose landing gear collapsed during the landing and the airplane nosed over. Review of the airplane maintenance records showed that the most recent annual inspection was performed on March 9, 2004, 13 months prior to the accident. No special flight authorization had been granted for the accident flight.

Pilot Information

irline transport; Commercial	Age:	67,Male
ingle-engine land; Single-engine ea; Multi-engine land	Seat Occupied:	Left
one	Restraint Used:	
irplane	Second Pilot Present:	No
irplane multi-engine; Instrument irplane	Toxicology Performed:	No
lass 2 With waivers/limitations	Last FAA Medical Exam:	January 1, 2004
0	Last Flight Review or Equivalent:	
i e i i	ngle-engine land; Single-engine ea; Multi-engine land one rplane rplane multi-engine; Instrument rplane ass 2 With waivers/limitations	ngle-engine land; Single-engine a; Multi-engine land one Restraint Used: rplane Second Pilot Present: rplane multi-engine; Instrument rplane ass 2 With waivers/limitations Last FAA Medical Exam:

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3622D
Model/Series:	310	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	35322
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	March 1, 2004 Annual	Certified Max Gross Wt.:	4600 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	5313 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	0-470
Registered Owner:	LVH AIRCRAFT INC	Rated Power:	240 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	STC,1031 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	08:55 Local	Direction from Accident Site:	315°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.25 inches Hg	Temperature/Dew Point:	6°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ST CLOUD, MN (STC)	Type of Flight Plan Filed:	None
Destination:	Clear Lake, MN (8Y6)	Type of Clearance:	None
Departure Time:	08:45 Local	Type of Airspace:	

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Airport Information

Airport:	LEADERS CLEAR LAKE 8Y6	Runway Surface Type:	Asphalt
Airport Elevation:	990 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3000 ft / 150 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:	45.444442,-93.971107

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Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	Scott Krueger; FAA; Minneapolis, MN
Original Publish Date:	August 29, 2006
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61433

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.

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