



Aviation Investigation Final Report

Location:	SUGAR GROVE, Illinois	Accident Number:	CHI91LA278
Date & Time:	September 20, 1991, 14:45 Local	Registration:	N300RA
Aircraft:	CESSNA 310J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A COMMERCIAL PILOT SELECTED GEAR DOWN FOR A PRACTICE LANDING, AND THE NOSE GEAR DID NOT EXTEND. THE PILOT ELECTED TO LAND ON THE MAIN GEAR AND SHUTDOWN ENGINES ON FINAL APPROACH. THE AIRPLANE LANDED HARD, AND THE NOSE FELL TO THE PAVEMENT. THE PROPELLERS STRUCK PAVEMENT AT FLIGHT PITCH. A GEAR DRIVE TUBE WAS FOUND BUCKLED IN COMPRESSION. THE LANDING GEAR HAD NOT BEEN INSPECTED AT THE INTERVAL RECOMMENDED BY THE MANUFACTURER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE BUCKLED NOSE LANDING GEAR RETRACTION/EXTENSION GEAR DRIVE TUBE. A FACTOR IN THE ACCIDENT WAS THE PILOT IN COMMAND NOT HAVING THE LANDING GEAR INSPECTED AT THE INTERVAL RECOMMENDED BY THE MANUFACTURER.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - JAMMED
2. (C) MAINTENANCE,INSPECTION - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. 2 ENGINES - SWITCHED OFF
4. (F) REMEDIAL ACTION - PREMATURE - PILOT IN COMMAND
5. PROPELLER FEATHERING - NOT ATTAINED - PILOT IN COMMAND
6. (C) FLARE - INADEQUATE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	35, 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:	Unknown Valid Medical—no waivers/lim.	Last FAA Medical Exam:	June 24, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	957 hours (Total, all aircraft), 500 hours (Total, this make and model), 796 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N300RA
Model/Series:	310J 310J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	310J0152
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	September 13, 1990 Annual	Certified Max Gross Wt.:	5100 lbs
Time Since Last Inspection:	190 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	5664 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-470-U
Registered Owner:	THOMAS W. CHERWIN	Rated Power:	260 Horsepower
Operator:	THOMAS W. CHERWIN	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	20 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:	21°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	14:15 Local	Type of Airspace:	

Airport Information

Airport:	AURORA MUNICIPAL ARR	Runway Surface Type:	Asphalt
Airport Elevation:	707 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	6500 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	41.760208,-88.449981(est)

Administrative Information

Investigator In Charge (IIC): Vallaster, J.

Additional Participating Persons: WYATT; WEST CHICAGO , IL

Original Publish Date: March 31, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=15172>

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](#).