



Aviation Investigation Final Report

Location:	LONGVIEW, Texas	Accident Number:	FTW93LA209
Date & Time:	July 7, 1993, 22:15 Local	Registration:	N3631L
Aircraft:	CESSNA 172G	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 Serious, 3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

FOLLOWING LANDING THE PILOT FELT VIBRATIONS IN THE AIRPLANE. HE DECIDED TO STOP ON THE TAXIWAY TO PERFORM AN INSPECTION. THE PILOT REPORTED THAT HE PULLED THE MIXTURE TO IDLE AND REMOVED THE MAGNETO KEY PRIOR TO EXITING THE AIRPLANE. AS THE PILOT BENT DOWN TO EXAMINE THE NOSE WHEEL, HE WAS STRUCK ON THE HEAD BY THE PROPELLER BLADE. AN EMPLOYEE OF THE FIXED BASE OPERATION REPORTED THAT HE REMOVED THE IGNITION KEY BY TURNING IT THREE CLICKS TO THE LEFT. EXAMINATION OF THE MAGNETO SYSTEM REVEALED NO ANOMALIES. A MECHANIC REPAIRING THE AIRPLANE REPORTED THAT THE WHEEL WAS EXTREMELY LOOSE, THE BEARINGS COULD BE HEARD RATTLING, THE AXLE BOLT WAS ONLY FINGER TIGHT, AND THE LOWER STRUT BOLT WAS BENT. HE FURTHER STATED THAT HE 'FOUND THE TUBE HAD A SMALL SPLIT, PROBABLY FROM AGE.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO FOLLOW PROCEDURES.

Findings

Occurrence #1: PROPELLER/ROTOR CONTACT TO PERSON
Phase of Operation: STANDING - ENGINE(S) OPERATING

Findings

1. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Factual Information

On July 7, 1993, at 2215 central daylight time, the pilot of a Cessna 172G, N3631L, sustained serious injuries from a propeller strike at Gregg County Airport, Longview, Texas. After departing the runway the pilot parked the airplane on the taxiway to perform an inspection of a flat nose gear tire.

During telephone interviews, conducted by the investigator in charge, with the pilot, and in a review of the enclosed written statements, the pilot reported that during the landing roll severe vibrations developed in the airplane. The pilot exited the runway onto the taxiway and advised the passengers to remain in the airplane while he investigated the source of the vibrations. He further stated that he pulled out the mixture, turned off the ignition switch, and put the keys in his pocket, prior to getting out to inspect the airplane. He reported that when he bent over to look at the nose gear strut, the propeller blade took a half turn and struck him in the head.

A student pilot rated passenger reported in the enclosed written statement that the pilot had stopped the engine prior to exiting the airplane.

A lineman at the fixed base operation reported in his enclosed statement that he was asked by a passenger to remove the key, which he found still in the magneto switch. The lineman further stated that the interior of the airplane was dark, but he had to turn the key a total of three clicks to the left before it came out of the magneto switch.

Examination of the airplane by Federal Aviation inspectors did not reveal any discrepancies with the magneto system. The ignition switch was checked and the key could only be removed when placed in the "OFF" position.

During disassembly of the nose gear assembly the mechanic reported that the wheel was extremely loose, the bearings could be heard rattling, the axle bolt was only finger tight, and the lower strut bolt was bent. He further stated that he "found the tube had a small split, probably from age."

Numerous attempts were made by the investigator in charge to obtain the Pilot/Operator Report(NTSB Form 6120.1/2). The report has not been received.

Pilot Information

Certificate:	Private	Age:	29, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 30, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	40 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N3631L
Model/Series:	172G 172G	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17253800
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	February 25, 1993 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4796 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320-E2D
Registered Owner:	RUNNELS, DAVID	Rated Power:	150 Horsepower
Operator:	TRIM AIRE AVIATION	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:	Night/dark
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:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TEAGUE , TX (68F)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	GREGG COUNTY GGG	Runway Surface Type:	Asphalt
Airport Elevation:	365 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Minor
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 3 None	Latitude, Longitude:	32.400695,-94.710632(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Joyce
Additional Participating Persons:	JOHN B COX; DALLAS , TX
Original Publish Date:	September 26, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=18790

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](#).