



National Transportation Safety Board Aviation Accident Data Summary

Location:	Newark, OH	Accident Number:	IAD01LA035
Date & Time:	03/01/2001, 1255 EST	Registration:	N3738Y
Aircraft:	Cessna 210	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

During a descent the pilot noted "extreme pressure" was required to pull back on the controls to level the airplane. The pilot was unable to maintain altitude and continued on a straight-in approach for the airport. During the landing flare, the pilot could not pull the control yoke "far enough to roundout," and the airplane landed hard on the nosewheel, and came to rest off the side of the runway. A flight control check after the accident revealed that the flight controls could only be deflected aft to the "level flight" position. The horizontal situational indicator (HSI) was then removed from the instrument panel, and the flight controls could be deflected to their full aft position. Examination of the control stop on the control column tube, revealed significant chaffing marks and black paint transfer on its upper surface. Examination of the rear casing of the HSI revealed similar chaffing marks and an indentation consistent with the shape of the control column stop, on the lower edge of the instrument. Additionally, five shock mounts were installed on the instrument panel, of which the lower right and lower center shock mounts were broken, and the upper left shock mount was not attached. Examination of the shock mounts revealed they were fractured through their elastomeric center sections on one end of the mount, and large gaping cracks were noted on the opposite end of the mounts. A large number of smaller circumferential cracks were also observed through the center section of the mounts. The maintenance logbooks revealed that the HSI was installed in the airplane on August 17, 1994, by an avionics facility, to replace the original directional gyro (DG) instrument. According to the Cessna 210 Service Manual, "The service life of shock-mounted instruments is directly related to adequate shock-mounting of the panel. If removal of the shock-mounted panel is necessary, check mounts for deterioration and replace as necessary." Detailed examination of the shock mounts revealed they were the original shock mounts installed in the airplane in December 1963.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Improper maintenance, which resulted in the failure of the instrument panel shock mounts.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: DESCENT - NORMAL

Findings

1. FLIGHT CONTROL, ELEVATOR - OBSTRUCTED
2. FLIGHT/NAV INSTRUMENTS - SHIFTED
3. (C) MAINTENANCE - IMPROPER - OTHER MAINTENANCE PERSONNEL

Occurrence #2: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
4. FLARE - NOT POSSIBLE

Pilot Information

Certificate:	Private	Age:	42
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	736 hours (Total, all aircraft), 250 hours (Total, this make and model), 639 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3738Y
Model/Series:	210	Engines:	1 Reciprocating
Operator:	Julianne Hartlaub	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	None	Engine Model/Series:	IO-520
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	VTA, 884 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	17 knots / 22 knots, 260°
Temperature:	4° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Washington, DC (DCA)	Destination:	Newark, OH (VTA)

Airport Information

Airport:	Newark Heath Airport (VTA)	Runway Surface Type:	Asphalt
Runway Used:	27	Runway Surface Condition:	Dry
Runway Length/Width:	4648 ft / 75 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	40.024444, -82.461667		

Administrative Information

Investigator In Charge (IIC):	JILL M ANDREWS	Adopted Date:	05/13/2003
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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