



Aviation Investigation Final Report

Location:	EAU CLARE, Wisconsin	Accident Number:	CHI99LA068
Date & Time:	December 30, 1998, 18:30 Local	Registration:	N731YY
Aircraft:	Cessna P210N	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The airplane came to rest on the runway with the nose landing gear extended, and the main landing gear retracted. During an interview, the pilot reported that he did not use a written checklist to perform the before landing checks. An aircraft mechanic at the airport reported that he found the nose wheel landing gear was in the down position with the main landing gear in their gear wells, with the landing gear handle in the down position. The airplane was placed on jacks, and when the master switch was placed into the 'ON' position, the red gear in transit light illuminated, the landing gear extended and the green gear down light illuminated. The gear was then cycled approximately six times and operated normally. The mechanic attributed the failure of the gear warning horn to a stiff cable which was to be replaced in accordance with a 1981 service letter, but was never complied with.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the delayed gear extension by the pilot. Contributing factors were the checklist not used by the pilot, the inoperative gear warning, and the maintenance replacement of the throttle control/gear warning interconnect cable not performed by company/operator management as recommended by the manufacturer's service letter.

Findings

Occurrence #1: WHEELS UP LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) GEAR EXTENSION - DELAYED - PILOT IN COMMAND
2. (F) CHECKLIST - NOT USED - PILOT IN COMMAND
3. (F) SAFETY SYSTEM(OTHER) - INOPERATIVE
4. (F) MAINTENANCE,REPLACEMENT - NOT PERFORMED - COMPANY/OPERATOR MANAGEMENT

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

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On December 30, 1998, at 1830 central standard time, a Cessna P210N, N731YY, piloted by a commercial pilot, received substantial damage on impact with terrain during landing on runway 04 (7,301 feet by 150 feet, concrete) at the Chippewa Regional Airport, Eau Claire, Wisconsin. The 14 CFR Part 91 business flight was operating on an instrument flight plan. Night visual meteorological conditions prevailed at the time of the accident. The pilot and three passengers reported no injuries. The flight originated from the Kalamazoo/Battle Creek International Airport, Kalamazoo, Michigan, at 1615, en route to Chippewa Regional Airport.

In a written statement, the pilot reported, "The approach to landing went normal with the pre-landing checklist completed and all gauges indicating normal. On short final I rechecked to make sure the gear was down-and-locked by looking out the left window to check the position of the gear (it was down), and double checking that the "green light" was on, to indicate that the gear was locked (it was on). Touchdown was at 80 KIAS [knots indicated airspeed] and very smooth. I decided to keep the weight off the nose gear as long as possible, because of a shimmy in earlier flights, and the aircraft became airborne again, rising a few feet off the runway. I then added a little power to keep the aircraft from stalling and continued the flair. Suddenly the aircraft nosed down and the nose wheel gently bounced off the runway. I brought the nose back up and the plane then settled smoothly onto the runway. On rollout the plane wanted to pull to the left making me think that the left tire was flat. Around the last five feet of the roll out the aircraft slowly tilted to the left and came to a stop about 15 feet right of centerline and about half way down the runway. As the plane came to a rest, I thought that the left landing gear was collapsing, due to the tilt of the aircraft."

During an interview, the pilot reported that he did not use a written checklist to perform the before landing checks. He also stated that the outside mirror (used to check the landing gear position) only shows the position of the nose landing gear.

An aircraft mechanic at the airport reported that he found the nose wheel landing gear was in the down position with the main landing gear in their gear wells with the landing gear handle in the down position. The aircraft was placed on jacks and when the master switch was placed into the "ON" position, the red gear in transit light illuminated, the landing gear extended and the green gear down light illuminated. The gear was then cycled approximately six times and operated normally. The mechanic attributed the failure of the gear warning horn to a stiff cable which is to be replaced in accordance with a 1981 service letter which was never complied with.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	32, 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):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 27, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2976 hours (Total, all aircraft), 1060 hours (Total, this make and model), 2826 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N731YY
Model/Series:	P210N P210N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	00564
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	April 21, 1998 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	355 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3551 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-P
Registered Owner:	DADCO DIVERSIFIED INC	Rated Power:	310 Horsepower
Operator:		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/bright
Observation Facility, Elevation:	EAU ,907 ft msl	Distance from Accident Site:	
Observation Time:	17:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	Broken / 9500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-20°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KALAMAZOO , MI (AZO)	Type of Flight Plan Filed:	IFR
Destination:	(EAU)	Type of Clearance:	IFR
Departure Time:	16:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	CHIPPEWA VALLEY REGIONAL EAU	Runway Surface Type:	Concrete
Airport Elevation:	907 ft msl	Runway Surface Condition:	
Runway Used:	4	IFR Approach:	
Runway Length/Width:	7301 ft / 150 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	44.820407,-91.490699(est)

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	CATHERINE C VUKSANOVIC; MILWAUKEE , WI
Original Publish Date:	June 22, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=45616

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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](#).