



National Transportation Safety Board Aviation Accident Final Report

Location:	Saint Louis, MO	Accident Number:	CEN13LA252
Date & Time:	05/01/2013, 0745 CDT	Registration:	N731NR
Aircraft:	CESSNA P210N	Aircraft Damage:	Substantial
Defining Event:	Landing gear not configured	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

While on left base of the traffic pattern, an air traffic controller instructed the pilot to make a "short approach" to avoid traffic. The pilot reported that he lowered the landing gear handle but that he was unsure if the landing gear down indicator light had illuminated, and he did not remember visually verifying that the gear was down during the approach. The pilot stated that, during the approach, he was distracted by an odd smell in the cockpit, which he thought may have been the air conditioner malfunctioning. The airplane touched down on the runway surface with the landing gear retracted. Examination of the landing gear system revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. Therefore, it is likely that the pilot was distracted by the odor in the cockpit and did not lower the landing gear or check that it was in the down position before landing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to extend the landing gear or check that it was in the down position before landing.

Findings

Personnel issues	Forgotten action/omission - Pilot (Cause) Use of checklist - Pilot (Cause)
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Factual Information

On May 1, 2013, about 0745 central daylight, a Cessna P210N airplane, N731NR, was substantially damaged during a gear up landing at Spirit of St. Louis Airport (SUS), St. Louis, Missouri. The pilot did not report any injuries. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Day visual meteorological conditions prevailed for the flight, which operated without a flight plan. The flight originated from St. Charles County Smartt Airport (SET), St. Charles, Missouri about 0700.

While on left base of the traffic pattern at SUS, the pilot was instructed by air traffic control to make a short approach for traffic avoidance. The pilot stated that he lowered the landing gear handle, but was unsure if the landing gear down indicator light had illuminated. He normally checked the landing gear visually, but did not remember doing so on the approach of the accident. He did not observe an audible landing gear warning horn during the approach. The pilot stated that he was distracted with testing his air conditioner and thought he noticed an odd smell in the cockpit, which he thought may have been the air conditioner malfunctioning. The airplane touched down on the runway surface with the landing gear retracted, resulting in substantial damage to the fuselage structure and engine.

During examination by maintenance and Federal Aviation Administration personnel, the landing gear was sequenced several times using both normal and emergency modes, with no abnormalities noted. The red gear up warning light, green gear down light and audible warning horn all functioned properly. The pilot stated that during the airplane's last annual inspection the audible warning system was noted to be out of adjustment. This issue was not duplicated during the examination. Examination of the landing gear system revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

History of Flight

Landing

Landing gear not configured (Defining event)

Pilot Information

Certificate:	Commercial; Private	Age:	71
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	09/04/2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	04/23/2012
Flight Time:	(Estimated) 5860 hours (Total, all aircraft), 2800 hours (Total, this make and model), 5860 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N731NR
Model/Series:	P210N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	P21000509
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	09/14/2011, Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3789 Hours	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520 SER
Registered Owner:	CRAWFORD EDWARD J	Rated Power:	300 hp
Operator:	CRAWFORD EDWARD J	Air Carrier Operating Certificate:	None
Operator Does Business As:	CRAWFORD EDWARD J	Operator Designator Code:	

Meteorological Information and Flight Plan

Observation Facility, Elevation:	SUS, 463 ft msl	Observation Time:	0754 CDT
Distance from Accident Site:	1 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	360°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	16° C / 13° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	30.04 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Saint Louis, MO (SME)	Type of Flight Plan Filed:	None
Destination:	Saint Louis, MO (SUS)	Type of Clearance:	None
Departure Time:	0700 CDT	Type of Airspace:	

Airport Information

Airport:	Spirit of St. Louis (SUS)	Runway Surface Type:	Concrete
Airport Elevation:	463 ft	Runway Surface Condition:	Dry
Runway Used:	08R	IFR Approach:	None
Runway Length/Width:	7484 ft / 150 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Michael J Folkerts	Adopted Date:	02/10/2014
Additional Participating Persons:	Louie Bettis; Federal Aviation Administration; St. Louis, MO		
Publish Date:	02/10/2014		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=86794		

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