



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Chandler, Arizona	Accident Number:	GAA19CA171
Date & Time:	March 9, 2019, 15:45 Local	Registration:	N732SJ
Aircraft:	Cessna T210	Aircraft Damage:	Substantial
Defining Event:	Landing gear not configured	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the retractable-landing gear equipped-airplane reported that, while in the traffic pattern, he was distracted while looking for other aircraft and failed to continue the landing checklist, but he assumed it was completed. During the approach, he reduced power and did not hear the landing gear warning horn. The pilot then landed the airplane with the landing gear retracted.

The pilot added that, during the recovery process with a tow truck, they attempted to troubleshoot the landing gear warning system, but they still did not hear the landing gear warning horn.

The airplane sustained substantial damage to the left wing.

Postaccident examination by a Federal Aviation Administrator inspector revealed that the landing gear audible warning horn switch on the bulkhead (engine compartment) was improperly rigged, and the horn did not sound when tested. He added that the airplane was equipped with a mirror on the right wing, which the pilot could have used to visually check if the landing gear were extended.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's distraction while looking for other aircraft in the traffic pattern, which resulted in his failure to follow a prelanding checklist and to extend the landing gear before landing. Contributing to the accident was the improperly rigged landing gear warning switch, which prevented an audible warning sound.

Findings

Personnel issues	Forgotten action/omission - Pilot
Aircraft	Gear extension and retract sys - Not used/operated
Personnel issues	Task monitoring/vigilance - Pilot
Personnel issues	Use of checklist - Pilot
Aircraft	Gear extension and retract sys - Incorrect service/maintenance

Factual Information

History of Flight

Landing	Landing gear not configured (Defining event)
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Pilot Information

Certificate:	Private	Age:	66,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	May 15, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 16, 2017
Flight Time:	(Estimated) 1121 hours (Total, all aircraft), 196 hours (Total, this make and model), 1047 hours (Pilot In Command, all aircraft), 49 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N732SJ
Model/Series:	T210 M	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	21061735
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 7, 2018 Annual	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3492.2 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	C126 installed, not activated	Engine Model/Series:	TSIO-520-R9B
Registered Owner:		Rated Power:	285 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCHD,1243 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	22:47 Local	Direction from Accident Site:	250°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	18°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Maricopa, AZ (A39)	Type of Flight Plan Filed:	None
Destination:	Chandler, AZ (CHD)	Type of Clearance:	VFR;Traffic advisory
Departure Time:	13:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	CHANDLER MUNI CHD	Runway Surface Type:	Asphalt
Airport Elevation:	1243 ft msl	Runway Surface Condition:	Dry
Runway Used:	22L	IFR Approach:	None
Runway Length/Width:	4870 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.270832,-111.806945(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	George Burgher; FAA; Scottsdale, AZ
Original Publish Date:	November 6, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99140

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).