Aviation Investigation Final Report

Location:	Edinburg, Texas	**Accident Number:**	CEN21LA233
Date & Time:	October 30, 2020, 14:15 Local	**Registration:**	N76933
Aircraft:	Cessna 140	**Aircraft Damage:**	Substantial
Defining Event:	Landing gear collapse	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he had performed three uneventful takeoffs and landings in the tailwheel airplane. During the fourth landing he used a wheel landing technique, and touched down about 45-50 mph. He stated that the touchdown was normal, but the airplane suddenly veered right and did not respond to corrective rudder or brake inputs. The airplane exited the runway and the left main landing gear detached; the left wing and fuselage sustained substantial damage. After the accident, a mechanic examined the airplane and found no preimpact mechanical deficiencies that would have precluded normal operations. The pilot reported that the landing gear was not fractured and that the retaining bolt was not found. Attempts to contact the mechanic to discuss whether the bolt was available for examination were unsuccessful and, therefore, the bolt could not be evaluated.

Probable Cause and Findings

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

The collapse of the airplane's left main landing gear for a reason that could not be determined based upon the available evidence.

Findings

Aircraft	Main landing gear attach sec - Failure
Aircraft	Main landing gear attach sec - Unknown/Not determined

Factual Information

History of Flight

Landing	Loss of control on ground
Landing	Landing gear collapse (Defining event)

On October 30, 2020, about 1415 central daylight time, a Cessna 140 airplane, N76933, was substantially damaged when it was involved in an accident at South Texas International Airport, Edinburg, Texas. The pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that during the flight he had performed three uneventful takeoffs and landings in the tailwheel airplane. On the fourth landing, he touched down about 45-50 mph and used a wheel landing technique. The airplane suddenly veered to the right and did not respond to rudder or brake input. The airplane left the paved surface of the runway and traveled into the soft grass covered dirt, at which time the left main landing gear separated from the airplane.

The airplane incurred substantial damage to the left wing. The separated landing gear leg was not broken, and the pilot reported that the attachment bolt was not found near the airplane wreckage or on the runway.

A mechanic examined the airplane after the accident and found no preimpact mechanical deficiencies but did not elaborate about the retaining bolt. Attempts to contact the mechanic to discuss the retaining bolt were unsuccessful and therefore it could not be evaluated.

Pilot Information

Certificate:	Private	**Age:**	60,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	May 15, 2020
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	June 27, 2020
Flight Time:	850 hours (Total, all aircraft), 27 hours (Total, this make and model), 750 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 2.5 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N76933
Model/Series:	140	**Aircraft Category:**	Airplane
Year of Manufacture:	1946	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	11375
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	April 12, 2020 Annual	**Certified Max Gross Wt.:**	1450 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	4757 Hrs as of last inspection	**Engine Manufacturer:**	CONT MOTOR
ELT:	C91 installed, not activated	**Engine Model/Series:**	O-200
Registered Owner:	On file	**Rated Power:**	100 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:	EBG	**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:	9 knots / 12 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	340°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.22 inches Hg	**Temperature/Dew Point:**	29.4°C
Precipitation and Obscuration:			
Departure Point:	Edinburg, TX	**Type of Flight Plan Filed:**	None
Destination:	Edinburg, TX	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class E

Airport Information

Airport:	SOUTH TEXAS INTL AT EDINBURG EBG	**Runway Surface Type:**	Asphalt
Airport Elevation:	75 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	14/32	**IFR Approach:**	None
Runway Length/Width:	5000 ft / 75 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	26.441667,-98.122222

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	Jeffrey Hamilton; FAA; San Antonio, TX
Original Publish Date:	July 7, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=103139