



# Aviation Investigation Final Report

<b>Location:</b>	Crestview, Florida	<b>Accident Number:</b>	ERA18LA201
<b>Date &amp; Time:</b>	July 26, 2018, 09:50 Local	<b>Registration:</b>	N2705B
<b>Aircraft:</b>	Aero Commander 560	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing gear collapse	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Ferry		

## Analysis

The airplane had not operated for about 7 years and the pilot was relocating it from Texas to Florida for repairs under a special flight permit (ferry permit) issued by the Federal Aviation Administration (FAA). Before departing on the flight, both main landing gear bungs were replaced, and their replacement was documented during the FAA's pre-ferry flight inspection. During the third stop of the trip, the airplane's right main landing gear collapsed and the airplane veered off the side of the runway, resulting in substantial damage.

Postaccident examination revealed that the right landing gear bungs were missing; however, the airplane was removed from the accident site before the examination could take place, and whether the bungs separated before or after the accident could not be determined. No further testing or examination of the landing gear was performed, and the reason for the gear collapse was not determined based on the available information.

## Probable Cause and Findings

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

A collapse of the right main landing gear for reasons that could not be determined based on the available information.

## Findings

<b>Aircraft</b>	Gear extension and retract sys - Failure
<b>Not determined</b>	(general) - Unknown/Not determined

# Factual Information

## History of Flight

Landing-flare/touchdown	Landing gear collapse (Defining event)
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On July 26, 2018, about 0950 central daylight time, an Aero Commander 560, N2705B, was substantially damaged when it was involved in an accident near Crestview, Florida. The commercial pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 ferry flight.

The airplane had recently been purchased and was being relocated for additional maintenance. The Federal Aviation Administration (FAA) granted a Special Flight Permit (ferry permit) for the flight from Scottsdale Airport (SDL), Scottsdale, Arizona, to Gainesville Regional Airport (GNV), Gainesville, Florida.

The pilot departed SDL on July 24, but experienced right engine anomalies shortly after departure and returned to the airport. While approaching for landing, the right main landing gear light did not illuminate to indicate that it was down and locked; after troubleshooting and visually confirming that the right main gear was extended, the pilot landed uneventfully, although the gear warning horn sounded during the landing flare.

The pilot reported that after landing and additional troubleshooting with a mechanic, the engine issue was resolved. The right main gear light anomaly was determined to be the result of the dimmer being closed. The mechanic reported that the pilot did not mention the landing gear warning horn.

The following day, the pilot departed SDL, made one intermediate fuel stop, and then flew to Orange County Airport (ORG), Orange, Texas, with no anomalies. The pilot spent the night and departed the following morning. After an uneventful flight from ORG, while landing at Bob Sikes Airport (CEW), Crestview, Florida, to refuel, the nose landing gear settled onto the runway and the right main landing gear collapsed. The right side of the fuselage impacted the pavement and the airplane veered off the right side of the runway.

The airplane was manufactured in 1955 and was equipped with two Lycoming GO-480-B, 270-horsepower engines driving Hartzell, three-blade, constant-speed propellers. The airplane had accumulated about 6,727 hours total time as of the ferry permit inspection on July 17, 2018, and both engines had accumulated 1,255 hours total time since overhaul.

The maintenance records documented the replacement of 3 main landing gear bungs on July 13, 2018, and the FAA inspector who performed the pre-ferry flight inspection confirmed and documented their replacement. Before the accident flight, the airplane had not flown in about 7 years.

Examination revealed that the bottom right side of the fuselage, several feet aft of the nose landing gear, was torn open and several ribs and stringers were damaged. In addition, the right engine pylon suffered

damage. The FAA inspector who responded to the accident site reported that the right landing gear bungees were missing. It could not be determined if they were removed during recovery and stabilization of the landing gear down-lock system, as the airplane was recovered from the accident site before his examination.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	61, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 28, 2012
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	May 17, 2017
<b>Flight Time:</b>	1985 hours (Total, all aircraft), 345 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Aero Commander	<b>Registration:</b>	N2705B
<b>Model/Series:</b>	560 Undesignat	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1955	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Special flight (Special)	<b>Serial Number:</b>	205
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	7
<b>Date/Type of Last Inspection:</b>	July 17, 2018 Condition	<b>Certified Max Gross Wt.:</b>	6750 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	6727 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	GO-480-B
<b>Registered Owner:</b>		<b>Rated Power:</b>	270 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	CEW,213 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	09:53 Local	<b>Direction from Accident Site:</b>	0°
<b>Lowest Cloud Condition:</b>	Few / 2200 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 12000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	31°C / 23°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Orange, TX (ORG )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Crestview, FL (CEW )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	06:45 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	Bob Sikes CEW	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	213 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	17	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	8004 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	30.778888,-86.522224(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccarter, Lawrence		
<b>Additional Participating Persons:</b>	Todd Pryor; FAA FSDO; Birmingham, AL		
<b>Original Publish Date:</b>	June 10, 2021	<b>Investigation Class:</b>	3
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97903">https://data.nts.gov/Docket?ProjectID=97903</a>		

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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](#).