



# Aviation Investigation Final Report

<b>Location:</b>	MEMPHIS, Tennessee	<b>Accident Number:</b>	ATL88LA209
<b>Date &amp; Time:</b>	July 3, 1988, 14:00 Local	<b>Registration:</b>	N1576D
<b>Aircraft:</b>	CESSNA 195A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PLT REPORTED THAT THE LEFT WHEEL SEPARATED FROM THE AIRPLANE DURING LDG ROLLOUT ON RWY 27, ALLOWING THE LEFT GEAR TO DRAG ON THE RWY. THE AIRPLANE THEN BOUNCED, VEERED TO THE RIGHT, AND SKIDDED TO A STOP. THE LEFT LDG GEAR COLLAPSED AS THE ACFT STOPPED. THE PLT SAID THAT THE LDG WAS NOT HARD AND THAT THE WINDS WERE LIGHT & VARIABLE. EXAMINATION OF THE LEFT LDG GEAR REVEALED THAT THE AXLE SPINDLE HAD FRACTURED AND SEPARATED. METALLURGICAL EXAMINATION REVEALED OVERSTRESS FRACTURES AND EVIDENCE OF EXCESSIVE SIDELOADS. THE AIRPLANE ALSO SUSTAINED DAMAGE TO THE LEFT WING TIP, AILERON, THE LEFT HORIZ STAB AND ELEVATOR. THE ARPT WINDS WERE REPORTED FROM 360 DEG AT 6 KTS, A FEW MINUTES AFTER THE ACCIDENT.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

#### Findings

1. (F) WEATHER CONDITION - CROSSWIND

2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

-----

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: LANDING - ROLL

Findings

4. LANDING GEAR, AXLE - FRACTURED
5. LANDING GEAR - OVERLOAD

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	31, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1300 hours (Total, all aircraft), 300 hours (Total, this make and model), 1200 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N1576D
<b>Model/Series:</b>	195A 195A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	7798
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	June 6, 1988 Annual	<b>Certified Max Gross Wt.:</b>	3350 lbs
<b>Time Since Last Inspection:</b>	30 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2200 Hrs	<b>Engine Manufacturer:</b>	JACOBS
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	R-755-B2
<b>Registered Owner:</b>	CONTINENZA, STEPHEN A.	<b>Rated Power:</b>	275 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MEM ,332 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	14:04 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 3000 ft AGL	<b>Visibility</b>	6 miles
<b>Lowest Ceiling:</b>	Overcast / 25000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	NASHVILLE , TN (BNA )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	MEMPHIS INTERNATIONAL MEM	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	332 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	8936 ft / 150 ft	<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	35.169738,-89.860702(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Strickland, Scott
<b>Additional Participating Persons:</b>	CONRAD B HOUSE; MEMPHIS , TN
<b>Original Publish Date:</b>	September 11, 1989
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=7785">https://data.nts.gov/Docket?ProjectID=7785</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).