



# Aviation Investigation Final Report

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<b>Location:</b>	ERIE, Colorado	<b>Accident Number:</b>	DEN91LA021
<b>Date &amp; Time:</b>	November 25, 1990, 16:50 Local	<b>Registration:</b>	N4557E
<b>Aircraft:</b>	GULFSTREAM AA-5B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

THE PRIVATE PILOT WAS FLYING TWO PASSENGERS ON A ROUND TRIP CROSS COUNTRY FLIGHT. ACCORDING TO THE PILOT, HE HAD THE BRAKES REPAIRED AT EL PASO, TEXAS, AND WAS DISTRACTED BY WORRY OVER THE BRAKES ABILITY TO STOP ON THE DOWN HILL RUNWAY. HE REPORTED THAT HE MADE A NORMAL APPROACH TO RUNWAY 27, AND FLARED HIGH BECAUSE OF THE DARKNESS, RESULTING IN A HARD LANDING. THE PLANE BOUNCED BACK INTO THE AIR, THE PILOT ADDED POWER AND MADE A GO-AROUND. HE SAID THE ENGINE VIBRATED BADLY, AND HE ASSUMED THE PROPELLER STRUCK THE RUNWAY, EITHER DURING THE HARD LANDING OR AS HE ADDED POWER. ON THE SECOND APPROACH, AT TOUCHDOWN, THE NOSE GEAR COLLAPSED, THE PLANE DEPARTED THE RUNWAY, SHEARED THE MAIN GEAR AND CAME TO REST NOSE DOWN. THE RIGHT WING WAS BENT BACK, BOTH WING SPARS, THE FUSELAGE AND TAIL SECTION WERE DAMAGED. THE INVESTIGATION REVEALED THE MAIN LANDING GEAR LEGS WERE OVER STRESSED AND THE LOWER FUSELAGE WAS CRUSHED INWARD.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER FLARE BY THE PILOT, WHICH RESULTED IN A HARD LANDING. A REALTED FACTOR WAS: LOW LIGHT CONDITION AT DUSK.

## Findings

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Occurrence #1: HARD LANDING

Phase of Operation: LANDING - ABORTED

Findings

1. (F) LIGHT CONDITION - DUSK
2. (C) FLARE - IMPROPER - PILOT IN COMMAND

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Occurrence #2: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. LANDING GEAR - OVERLOAD

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Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING

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Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING

Findings

4. TERRAIN CONDITION - SOFT

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	26, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	May 22, 1990
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	85 hours (Total, all aircraft), 9 hours (Total, this make and model), 45 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GULFSTREAM	<b>Registration:</b>	N4557E
<b>Model/Series:</b>	AA-5B AA-5B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	AA-5B-1230
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	0 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-360-A4K
<b>Registered Owner:</b>	DONALD S. MEINEN	<b>Rated Power:</b>	180 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>	Dusk
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	-18°C / -18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	TRINIDAD , CO (TAD )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:30 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	TRI COUNTY 48V	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	5151 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3800 ft / 60 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	40.020362,-105.0391 (est)

## Administrative Information

**Investigator In Charge (IIC):** Collins, Robert

**Additional Participating Persons:** AL WESTBROOK;

**Original Publish Date:** February 12, 1993

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=18056>

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