



# Aviation Investigation Final Report

<b>Location:</b>	BELVIDERE, Illinois	<b>Accident Number:</b>	CHI87LA020
<b>Date &amp; Time:</b>	November 8, 1986, 07:30 Local	<b>Registration:</b>	N6096C
<b>Aircraft:</b>	CESSNA 310R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

DURING TAKEOFF ROLL, THE ACFT DOOR POPPED OPEN AT A POINT TOO LATE TO ABORT THE TAKEOFF. THE PIC TRIED TO HOLD THE DOOR CLOSED WHILE THE SECOND PLT FLEW THE ACFT AROUND THE TRAFFIC PATTERN. JUST PRIOR TO TOUCHDOWN, THE DOOR OPENED WIDER AND THE PIC REACHED TO TRY TO CLOSE IT. THE ACFT ROLLED TO THE RIGHT HITTING THE RWY WITH THE RIGHT MAIN FUEL TANK AND PROPELLER. WINDS WERE REPORTED FROM 220 DEGS AT 15 KTS GUSTING TO 25 KTS.

## Probable Cause and Findings

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

### Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: TAKEOFF

Findings  
1. (F) DOOR - OPEN  
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (F) WEATHER CONDITION - CROSSWIND
3. (F) WEATHER CONDITION - GUSTS
4. (C) COMPENSATION FOR WIND CONDITIONS - POOR - DUAL STUDENT
5. (F) DIVERTED ATTENTION - PILOT IN COMMAND(CFI)

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Occurrence #3: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
7. (F) DIVERTED ATTENTION - DUAL STUDENT
8. (C) REMEDIAL ACTION - NOT PERFORMED - PILOT IN COMMAND(CFI)

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport; Flight instructor	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	April 22, 1986
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8600 hours (Total, all aircraft), 265 hours (Total, this make and model), 8200 hours (Pilot In Command, all aircraft), 182 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N6096C
<b>Model/Series:</b>	310R 310R	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	310R1263
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	100 hour	<b>Certified Max Gross Wt.:</b>	5500 lbs
<b>Time Since Last Inspection:</b>	82 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	2808 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-M
<b>Registered Owner:</b>	RICHARD GLASER	<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	MST AVIATION	<b>Operating Certificate(s) Held:</b>	On-demand air taxi (135)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	CHOA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	RFD ,736 ft msl	<b>Distance from Accident Site:</b>	14 Nautical Miles
<b>Observation Time:</b>	07:50 Local	<b>Direction from Accident Site:</b>	240°
<b>Lowest Cloud Condition:</b>	Scattered / 10000 ft AGL	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	Overcast / 25000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots / 25 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	220°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	8°C / -3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:25 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	BELVIDERE LTD C77	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	850 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	30	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3877 ft / 50 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	42.249317,-88.84095(est)

## Administrative Information

**Investigator In Charge (IIC):** Dinwiddie, Carl

**Additional Participating Persons:** SUSAN M TROKA; DES PLAINES , IL  
GLENN CHANEY; DES PLAINES , IL

**Original Publish Date:**

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=13688>

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