

# **Aviation Investigation Final Report**

Location:	CUT BANK, Montar	a	Accident Number:	SEA96LA095
Date & Time:	May 19, 1996, 10:10	0 Local	<b>Registration:</b>	N9808K
Aircraft:	Stinson	108-2	Aircraft Damage:	Substantial
Defining Event:			Injuries:	3 None
Flight Conducted Under:	Part 91: General av	iation - Personal		

#### **Analysis**

After flying over the airport to determine wind direction, the pilot decided to land on runway 31. He reported that the winds were favoring runway 31 during his approach. As he landed and rolled out, the winds shifted to a left crosswind and were gusting. The airplane veered off the edge of the runway onto soft terrain. The right main landing gear collapsed and the right wing was bent. No preimpact mechanical malfunctions were reported. The reported wind conditions at the airport near the time of the accident were: wind direction from a magnetic bearing of 300 degrees at a speed of 16 knots, gusting to 23 knots.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for the wind conditions during the landing roll, which resulted in a loss of directional control and an inadvertent ground swerve. Factors relating to the accident were: the unfavorable wind conditions (crosswind and gusts), and rough terrain.

#### Findings

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

Findings 1. (F) WEATHER CONDITION - CROSSWIND 2. (F) WEATHER CONDITION - GUSTS 3. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
4. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
5. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: LANDING - ROLL

Findings 6. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Occurrence #3: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings 7. LANDING GEAR, MAIN GEAR - OVERLOAD

#### **Factual Information**

On May 19, 1996, at 1010 mountain daylight time, a Stinson 108-2 airplane, operated by the owner/pilot, collided with terrain during landing roll in Cut Bank, Montana, and was substantially damaged. The private pilot and his two passengers were not injured. Visual meteorological conditions prevailed and no flight plan had been filed. The personal flight departed from Lethbridge, Canada, and was conducted under 14 CFR 91.

The pilot stated that after flying over the Cut Bank Municipal Airport to determine wind direction, he decided to land on runway 31. The winds were favoring runway 31 during his approach. As he landed and rolled out, the winds "apparently shifted to the left" and were gusting. The airplane "weathervaned" and veered off the edge of the runway onto soft terrain. The right main landing gear collapsed and the right wing was bent. No pre-impact mechanical malfunctions were reported. The reported wind conditions at the airport near the time of the accident were: wind direction from a magnetic bearing of 300 degrees at a speed of 16 knots, gusting to 23 knots.

Certificate:	Private	Age:	45,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	June 21, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	168 hours (Total, all aircraft), 74 hours (Total, this make and model), 82 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 32 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

#### **Pilot Information**

### Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N9808K
Model/Series:	108-2 108-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2808
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	May 15, 1996 Annual	Certified Max Gross Wt.:	2230 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3756 Hrs	Engine Manufacturer:	Franklin
ELT:	Installed, not activated	Engine Model/Series:	6A4-165-B8
Registered Owner:	DREYER, ROBERT E.	Rated Power:	165 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	CTB ,3854 ft msl	Distance from Accident Site:	
Observation Time:	10:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	16 knots / 23 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	14°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LETHBRIDGE (CYQL)	Type of Flight Plan Filed:	None
Destination:	(CTB )	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class G

#### **Airport Information**

Airport:	CUTBANK MUNICIPAL CTB	Runway Surface Type:	Asphalt
Airport Elevation:	3854 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	5300 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	48.649765,-112.840576(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Guzzetti, Jeffrey	
Additional Participating Persons:	DONALD PAUL; HELENA , MT	
Original Publish Date:	February 28, 1997	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=42367	

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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 <u>here</u>.