



# Aviation Investigation Final Report

<b>Location:</b>	CULBERTSON, Montana	<b>Accident Number:</b>	SEA96LA179
<b>Date &amp; Time:</b>	August 5, 1996, 18:30 Local	<b>Registration:</b>	CGYYF
<b>Aircraft:</b>	Stinson 108-3	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

While attempting to land in strong, gusty crosswinds, the pilot was unable to keep the aircraft from departing the runway. After it departed the runway, the pilot attempted to complete the roll-out on the grassy area that ran along the side of the runway, but the aircraft was hit by a strong gust and nosed over.

## 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 wind conditions, which resulted in a loss of directional control; and her inadequate remedial action for gusty winds after the aircraft departed the runway. Factors relating to the accident were: the strong and gusty crosswinds.

## Findings

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

### Findings

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

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Occurrence #2: NOSE OVER  
Phase of Operation: LANDING - ROLL

Findings  
7. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND

## Factual Information

On August 5, 1996, approximately 1830 mountain daylight time, a Stinson 108-3, C-GYYF, registered to and being flown by a Canadian private pilot, was substantially damaged during a loss of control and subsequent nose over during the landing roll at the Culbertson Airport, Culbertson, Montana. The pilot was uninjured. Visual meteorological conditions existed and a VFR flight plan had been filed. The flight, which was personal in nature, was to have been operated under 14CFR91, and originated from Oshkosh, Wisconsin.

The pilot reported that on the leg from Wahpeton, North Dakota, to Poplar, Montana, she encountered strong headwinds and turbulence, and therefore decided to return to Culbertson to land. Upon arrival at Culbertson, she encountered strong, gusty wind conditions. While landing on runway 26, the aircraft was hit by the gusty crosswinds and departed the runway. While the pilot was attempting to complete the roll-out on the grassy area that ran along the side of the runway, the aircraft was hit by another gust and nosed over.

Strong, gusty winds prevailed throughout northeastern Montana at the time of the accident, and according to the pilot, the winds at Culbertson were gusting to 40 knots at the time of her landing.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	47, 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>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	June 17, 1996
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	372 hours (Total, all aircraft), 193 hours (Total, this make and model), 304 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 33 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Stinson	<b>Registration:</b>	CGYYF
<b>Model/Series:</b>	108-3 108-3	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	108-4516
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	January 11, 1996 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	89 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1000 Hrs	<b>Engine Manufacturer:</b>	Franklin
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	6A4-165-B3
<b>Registered Owner:</b>	SMITH, SELINA, B.	<b>Rated Power:</b>	165 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>		<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>	24 knots / 40 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	27°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	WAHPETON , ND (BWP )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	(S85 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	BIG SKY FIELD S85	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1953 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	26	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3800 ft / 60 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 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>	1 None	<b>Latitude, Longitude:</b>	48.080219,-104.560653(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mccreary, Steven
<b>Additional Participating Persons:</b>	KEN KANTOLA; HELENA , MT
<b>Original Publish Date:</b>	May 23, 1997
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=42437">https://data.ntsb.gov/Docket?ProjectID=42437</a>

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