



# Aviation Investigation Final Report

<b>Location:</b>	MOUNTAIN HOME, Idaho	<b>Accident Number:</b>	SEA00LA111
<b>Date &amp; Time:</b>	June 20, 2000, 18:35 Local	<b>Registration:</b>	N8865K
<b>Aircraft:</b>	Stinson 108-1	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot took off without first performing the calculations that would determine if the aircraft could out-climb the surrounding terrain under the ambient conditions. Because of the gusty winds, turbulence, downdrafts, and high density altitude, it became evident soon after takeoff that the aircraft might sink into the unfavorable terrain along the departure route. The pilot therefore elected to make a precautionary landing in an open field. During the landing roll on the rough/uneven terrain, one main gear collapsed and the aircraft sustained substantial damage.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to takeoff in unfavorable weather conditions without first calculating takeoff performance data. Factors include gusty winds, downdrafts, terrain-induced turbulence, and rough/uneven terrain where the pilot elected to make the precautionary landing.

## Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

### Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

2. (C) PERFORMANCE DATA - NOT CALCULATED - PILOT IN COMMAND
3. (F) WEATHER CONDITION - GUSTS
4. (F) WEATHER CONDITION - DOWNDRAFT
5. (F) WEATHER CONDITION - TURBULENCE, TERRAIN INDUCED
6. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
7. (F) TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

On June 20, 2000, approximately 1835 mountain daylight time, a Stinson 108-1, N8865K, experienced a gear collapse during a precautionary landing just after takeoff from Mountain Home Municipal Airport, Mountain Home, Idaho. The private pilot received minor injuries, but his passenger was not injured. The aircraft, which was owned and operated by the pilot, sustained substantial damage. The flight, which was in the process of departing for Evergreen field, Vancouver, Washington, was being operated in visual meteorological conditions. No flight plan had been filed. The ELT, which was activated during the accident sequence, was turned off at the scene.

The pilot, who had not calculated takeoff performance data prior to the attempted departure, was departing in strong, gusty winds, with a temperature of 78 degrees Fahrenheit. When the aircraft reached about 75 feet above the ground, it encountered moderate turbulence and sinking air. Because it appeared that the aircraft might not out-climb the unfavorable terrain along the planned departure route, the pilot elected to make a precautionary landing in an open field. He reported that the touchdown was successful, but during the landing roll, one of the main gear encountered rough/uneven terrain and folded over.

Based on a field elevation of 3,164 feet, a temperature of 78 degrees Fahrenheit, and a barometric pressure of 30.05 inches of Mercury, the density altitude at the time of departure was approximately 5,100 feet.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	66, 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>	October 8, 1999
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	265 hours (Total, all aircraft), 105 hours (Total, this make and model), 214 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Stinson	<b>Registration:</b>	N8865K
<b>Model/Series:</b>	108-1 108-1	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	108-1865
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 16, 2000 Annual	<b>Certified Max Gross Wt.:</b>	2230 lbs
<b>Time Since Last Inspection:</b>	38 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1581 Hrs	<b>Engine Manufacturer:</b>	Franklin
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	6A4-165-B3
<b>Registered Owner:</b>	HENRY D. WILMES	<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>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	20 knots / 30 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	270°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	26°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	MOUNTAIN HOME , MT (U76 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	VANCOUVER , WA (59S )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:33 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Precautionary landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor, 1 None	<b>Latitude, Longitude:</b>	43.360351,-115.519737(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Anderson, Orrin
<b>Additional Participating Persons:</b>	PAT DARLING;
<b>Original Publish Date:</b>	May 18, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=49482">https://data.ntsb.gov/Docket?ProjectID=49482</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](#).