



# Aviation Investigation Final Report

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<b>Location:</b>	Soldotna, Alaska	<b>Accident Number:</b>	ANC09CA020
<b>Date &amp; Time:</b>	February 16, 2009, 16:00 Local	<b>Registration:</b>	N418SP
<b>Aircraft:</b>	Beech 65-A90-1	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of visual reference	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The airline transport pilot was making a personal cross-country flight under Title 14, CFR Part 91. The pilot said when he arrived at the destination airport there was 3-4 inches of new snow, and that the overcast and low light condition made everything look gray. He said the visual approach slope indicator (VASI) lights were inoperative, and the appropriate notice to airman (NOTAM) was issued. He said he turned on the runway lights, identified what he thought was the runway surface, and lined up the runway edge lights on his left. After the airplane touched down he said he realized that he landed to the right of the runway surface, with the right side runway edge lights on his left. The pilot said the airplane settled into deep snow, and impacted a snowbank, collapsing the landing gear. In a written statement the pilot wrote that given the snow and light conditions, using the wide area augmentation system (WAAS) instrument flight rules (IFR) approach would have aligned the airplane with the runway surface. The pilot said there were no known mechanical problems with the airplane prior to the accident. The airplane sustained structural fuselage damage during the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misidentification of the runway surface during landing. Contributing to the accident were the snow-covered terrain, and low-light conditions.

## Findings

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<b>Personnel issues</b>	Identification/recognition - Pilot
<b>Personnel issues</b>	Visual illusion/disorientation - Pilot
<b>Environmental issues</b>	Snow/slush/ice covered surface - Not specified
<b>Environmental issues</b>	Low light - Effect on personnel

## Factual Information

### History of Flight

<b>Landing</b>	Loss of visual reference (Defining event)
<b>Landing-flare/touchdown</b>	Landing gear collapse

### Pilot Information

<b>Certificate:</b>	Airline transport; Flight instructor	<b>Age:</b>	52, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	November 27, 2007
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	February 14, 2008
<b>Flight Time:</b>	14000 hours (Total, all aircraft), 1730 hours (Total, this make and model), 13500 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N418SP
<b>Model/Series:</b>	65-A90-1	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	LM-138
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	9
<b>Date/Type of Last Inspection:</b>	November 10, 2008 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	10200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Turbo prop
<b>Airframe Total Time:</b>	11807 Hrs at time of accident	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	PT6A-20
<b>Registered Owner:</b>	MISSIONARY AVIATION REPAIR CENTER	<b>Rated Power:</b>	550 Horsepower
<b>Operator:</b>	MISSIONARY AVIATION REPAIR CENTER	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PASX	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	15:16 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 8000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 9000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.5 inches Hg	<b>Temperature/Dew Point:</b>	1°C / -1°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Wasilla, AK (PAWS)	<b>Type of Flight Plan Filed:</b>	Company VFR
<b>Destination:</b>	Soldotna, AK (PASX)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:15 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Soldotna PASX	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Snow
<b>Runway Used:</b>	07	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5000 ft / 130 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>	1 None	<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>	60.474998,-151.038055

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lewis, Lawrence
<b>Additional Participating Persons:</b>	Silvia Villa; FAA; Anchorage, AK
<b>Original Publish Date:</b>	May 12, 2009
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=73354">https://data.nts.gov/Docket?ProjectID=73354</a>

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