



National Transportation Safety Board Aviation Accident Final Report

Location:	Davenport, WA	Accident Number:	SEA05CA035
Date & Time:	01/03/2005, 1245 PST	Registration:	N310RA
Aircraft:	Cessna 310J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

The flight encountered light mixed icing during descent. The airplane was in icing conditions for about 15 minutes. The pilot used the de-icing boots during the icing encounter and cycled the boots for the last time on downwind leg for landing. During the landing flare, he reduced power over the threshold about 15 feet agl, and the airplane stalled at a higher than normal airspeed resulting in a hard landing. The pilot stated that the accident could have been prevented by keeping power and airspeed up until touchdown when landing an airplane which has encountered icing conditions and retained some airframe ice.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed during landing with airframe ice, which resulted in an inadvertent stall and hard landing. Factors were the icing conditions and the airframe ice.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - ICING CONDITIONS
2. (F) AIRFRAME - ICE
3. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
4. STALL - ENCOUNTERED - PILOT IN COMMAND
5. AIRCRAFT PERFORMANCE - DETERIORATED

Factual Information

Pilot Information

Certificate:	Private	Age:	62, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3	Last Medical Exam:	06/17/2004
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1830 hours (Total, all aircraft), 471 hours (Total, this make and model), 1699 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N310RA
Model/Series:	310J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	310J0119
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Teledyne Continental
ELT:	Not installed	Engine Model/Series:	IO-470U
Registered Owner:	Alldredge Aviation	Rated Power:	
Operator:	Richard W. Alldredge	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:		Temperature/Dew Point:	-7° C
Lowest Ceiling:	Overcast / 1700 ft agl	Visibility	5 Miles
Wind Speed/Gusts, Direction:		Visibility (RVR):	
Altimeter Setting:	30.18 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Auburn, WA (S50)	Type of Flight Plan Filed:	IFR
Destination:	Davenport, WA (68S)	Type of Clearance:	None
Departure Time:	1130 PST	Type of Airspace:	Class G

Airport Information

Airport:	Davenport Municipal (68S)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	05	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	2 None		

Administrative Information

Investigator In Charge (IIC):	Georgia R Struhsaker	Adopted Date:	03/30/2005
Additional Participating Persons:	; Seattle, WA		
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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