



National Transportation Safety Board

Aviation Accident Data Summary

Location:	Dillingham, AK	Accident Number:	DCA02MA003
Date & Time:	10/10/2001, 0926 AKD	Registration:	N9530F
Aircraft:	Cessna 208	Injuries:	10 Fatal
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Scheduled		

Analysis

The airplane was parked outside on the ramp the night before the accident and was subjected to rain, snow, and temperatures that dropped below 32 degrees F. Other pilots whose airplanes were also parked outside overnight stated that about 1/4 to 1/2 inch of snow/frost covered a layer of ice on their airplanes the morning of the accident. Because of these conditions, ramp personnel deiced the accident airplane with a heated mixture of glycol and water. The PenAir ramp supervisor who conducted the deicing stated that he believed the upper surface of the wing was clear of ice but that he did not physically touch the wing to check for the presence of ice. Investigators were unable to determine whether the accident pilot visually or physically checked the wing and tail surfaces for contamination after the accident airplane was deiced. However, the airplane's high-wing configuration would have hindered the pilot's ability to see residual clear ice on the surface of the wing after the deicing procedures. Company records indicate that the certificated commercial pilot completed his initial CE-208 flight training 2 months before the accident and had accumulated a total of 74 hours in this make and model of airplane. The airplane, with the pilot and nine passengers onboard, crashed shortly after takeoff from runway 01. A witness observed that the airplane's flight appeared to be normal until the airplane suddenly pitched up, rolled 90 degrees to the left, and yawed to the left. The airplane then descended nose-down until it disappeared from view. Data from the engine monitoring system revealed that the maximum altitude obtained during the accident flight was about 651 feet mean sea level. The airplane crashed in a level attitude. Investigators found no evidence of pre-impact failures in the structure, flight control systems, or instruments. Further, examination of the engine and propeller revealed no pre-impact failures and that the engine was running when the airplane hit the ground.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an in-flight loss of control resulting from upper surface ice contamination that the pilot-in-command failed to detect during his preflight inspection of the airplane. Contributing to the accident was the lack of a preflight inspection requirement for CE-208 pilots to examine at close range the upper surface of the wing for ice contamination when ground icing conditions exist.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CLIMB

Findings

1. WEATHER CONDITION - ICING CONDITIONS
2. ICE/FROST REMOVAL FROM AIRCRAFT - INADEQUATE - COMPANY MAINTENANCE PERSONNEL

3. (C) WING - ICE
 4. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
 5. (F) CHECKLIST - INFORMATION INSUFFICIENT - FAA(OTHER/ORGANIZATION)
 6. (F) CHECKLIST - INFORMATION INSUFFICIENT - MANUFACTURER
 7. (F) CHECKLIST - INFORMATION INSUFFICIENT - COMPANY/OPERATOR MANAGEMENT
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

8. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Pilot Information

Certificate:	Commercial	Age:	41
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	3100 hours (Total, all aircraft), 74 hours (Total, this make and model), 2800 hours (Pilot In Command, all aircraft), 271 hours (Last 90 days, all aircraft), 86 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9530F
Model/Series:	208	Engines:	1 Turbo Prop
Operator:	PENINSULA AIRWAYS INC	Engine Manufacturer:	Pratt & Whitney Canada
Operating Certificate(s) Held:	Air Cargo; Commuter Air Carrier (135); Flag carrier (121); Supplemental; On-demand Air Taxi (135)	Engine Model/Series:	PT6A-114
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Scheduled		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DLG, 86 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	5 knots / , 250°
Temperature:	-4° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Dillingham, AK	Destination:	King Salmon, AK (AKN)

Airport Information

Airport:	DILLINGHAM (DLG)	Runway Surface Type:	Asphalt
Runway Used:	01	Runway Surface Condition:	Unknown
Runway Length/Width:	6404 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	9 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Latitude, Longitude:

Administrative Information

Investigator In Charge (IIC): Joseph M Sedor Adopted Date: 01/23/2003

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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