



National Transportation Safety Board Aviation Accident Final Report

Location:	Waterville, ME	Accident Number:	IAD02LA027
Date & Time:	01/24/2002, 1930 EST	Registration:	N8RQ
Aircraft:	Cessna 208B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

Snow fell as the pilot attempted a takeoff from the snow-covered runway. The reported wind was 130 degrees from the right at 16, gusting to 24 knots. The pilot selected the runway, in part, because of a 1.2 percent downslope. The pilot rotated the nose of the airplane at 80 knots, and the airplane "pulled" to the left. The pilot lowered the nose and reduced power, but the airplane continued to "slide" to the left, off the runway, and into 6 to 8 inches of snow. It then nosed over, and came to rest inverted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper decision to attempt a takeoff from a snow-covered runway with a quartering tailwind.

Findings

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

Findings

1. WEATHER CONDITION - TAILWIND
2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ABORTED

Findings

4. TERRAIN CONDITION - SNOW COVERED

Factual Information

On January 24, 2002, at 1930 eastern standard time, a Cessna 208B, N8RQ, was substantially damaged during an aborted takeoff at Waterville Robert LaFleur Airport (WVL), Waterville, Maine. The airplane was operated by Teleford Aviation, Incorporated, doing business as United Parcel Service. The certificated commercial pilot received minor injuries. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the flight to Manchester Airport (MHT), Manchester, New Hampshire. The cargo flight was to be conducted under 14 CFR Part 135.

According to the pilot, he flew the airplane to Waterville earlier in the day to position it for the cargo flight. The airplane was de-iced in a heated hangar, then cold-soaked for 1.5 hours prior to the flight.

The pilot obtained a weather briefing, and loaded the airplane with 1,597 pounds of cargo, which he reported was 60 percent of the airplane's useful load.

The pilot received an IFR clearance from Portland Clearance Delivery at 1928, and performed a final contamination check.

At 1930, the pilot taxied for takeoff and listened the AWOS (Automated Weather Observation System). He then decided to take off from runway 23 "because it was snowing, but not heavily, quartering winds did not exceed 10 knots, and there appeared to be less than 1 inch of snow on the runway." The pilot knew there would be considerable drag due to the snow, and took that information into account, as well as the direction of the wind. However, he decided that runway 23 was his best choice because it had a slight downhill slope, which would afford him "better speed" for takeoff.

The pilot also noted that if the runway had not been contaminated, the circumstances might have prompted him to make a different decision, but because of the snow cover, a runway 23 takeoff seemed the logical choice.

The pilot commenced the takeoff, and at 80 knots lifted the nose of the airplane. The airplane "pulled" to the left, so he set the nose back down, and cut the power. The airplane continued to "slide" to the left, and hit a snow bank. The airplane then flipped over at an angle between the nose and the left wing, and landed on its roof.

During a follow-up interview, the pilot stated that there were no mechanical anomalies with the airplane. He also noted that during the initial takeoff roll, he held the nose of the airplane down. Nearing takeoff speed, he started to raise the nose, but felt it go to the left. "I pushed the nose back over, and pulled the power back a little to get her straightened back out. I didn't dare bring it off, so I cut the power and tried to get it straight, but it wouldn't get straight. So I pulled the power right off, and it continued to go left."

As the airplane continued left, the left tire hit a snow bank. "I didn't see the snow bank, but the tire did hit the snow bank."

The pilot was asked if he had trouble staying oriented on the runway. "I could see the runway lights. It was snowing at the time, but I felt like I was in the center of the runway."

The pilot was also asked to describe the performance and handling of the airplane. According to the pilot, "the airplane was performing fine. I made an earlier flight to reposition and the

airplane was performing fine. There were no problems with the plane whatsoever."

A Federal Aviation Administration (FAA) inspector reported that approximately 800 feet "after takeoff roll," the airplane went left of centerline. The left main landing gear wheel went off the pavement about 1,200 feet, and into snow 6- to 8-inches deep. The airplane continued to travel the edge of the runway for another 250 feet, when the right main landing gear left the pavement. There were no nose wheel ruts in the snow at that point. The airplane traveled "slightly left" for another 50 feet, when the left wing dug into the ground, and the airplane flipped over and came to rest inverted.

Runway 23 was 5,500 feet long and 100 wide, with a 1.2 percent downslope.

The pilot held a commercial pilot certificate with ratings for airplane single-engine land, multi-engine land, and instrument airplane. His most recent second-class medical certificate was issued on May 15, 2001.

The pilot reported 3,400 hours of flight experience, 1,600 hours of which were in the Cessna 208.

At 1855, the winds reported at Waterville Airport were from 360 degrees at 16, gusting to 23 knots. At 1935, the winds were from 360 degrees at 16, gusting to 24 knots. There was an overcast ceiling at 100 feet, and 3/4 mile visibility.

Pilot Information

Certificate:	Commercial	Age:	46, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last Medical Exam:	05/15/2001
Occupational Pilot:		Last Flight Review or Equivalent:	12/03/2001
Flight Time:	3230 hours (Total, all aircraft), 1600 hours (Total, this make and model), 3107 hours (Pilot In Command, all aircraft), 92 hours (Last 90 days, all aircraft), 62 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N8RQ
Model/Series:	208B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0363
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	12/28/2001, AAIP	Certified Max Gross Wt.:	8950 lbs
Time Since Last Inspection:	38.6 Hours	Engines:	1 Turbo Prop
Airframe Total Time:	3151.1 Hours	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	114A
Registered Owner:	Telford Aviation Inc	Rated Power:	675 hp
Operator:	Telford Aviation Inc	Air Carrier Operating Certificate:	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	WVL, 333 ft msl	Observation Time:	1935 EST
Distance from Accident Site:		Direction from Accident Site:	
Lowest Cloud Condition:		Temperature/Dew Point:	0°C / -2°C
Lowest Ceiling:	Overcast / 100 ft agl	Visibility	0.75 Miles
Wind Speed/Gusts, Direction:	16 knots/ 24 knots, 360°	Visibility (RVR):	
Altimeter Setting:	29.55 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Waterville, ME (WVL)	Type of Flight Plan Filed:	IFR
Destination:	Manchester, NH (MAN)	Type of Clearance:	IFR
Departure Time:	EST	Type of Airspace:	Unknown

Airport Information

Airport:	Waterville Robert Lafleur (WVL)	Runway Surface Type:	Asphalt
Airport Elevation:	333 ft	Runway Surface Condition:	Snow--wet
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	5500 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	44.533333, -69.683333

Administrative Information

Investigator In Charge (IIC): Brian C Rayner **Adopted Date:** 08/26/2003

Additional Participating Persons: Raymond R Cloutier; Portland, ME

Publish Date:

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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