



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	SARANAC LAKE, NY	<b>Accident Number:</b>	IAD98LA023
<b>Date &amp; Time:</b>	01/20/1998, 2030 EST	<b>Registration:</b>	N854CA
<b>Aircraft:</b>	Beech 1900D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	12 None

**Flight Conducted Under:** Part 121: Air Carrier - Scheduled

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## Analysis

During the night landing on a snow covered runway, the twin-turboprop airplane drifted left into deeper snow, struck a snow bank and came to a stop. The flightcrew had been informed that the runway was cleared to its full width of 150 feet, with 1/4 inch of snow over patches of ice. Post-accident observation of the runway revealed that there were snow banks 2 to 4 feet high on both sides, and snow extended from both sides inward for about 20 feet, at a depth of 4 to 6 inches. A snow bank also extended out from a taxiway approximately 20 feet onto the runway.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadequate snow removal from the runway by airport personnel which left a snow bank extending onto the runway.

## Findings

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Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

### Findings

1. LIGHT CONDITION - DARK NIGHT
2. (C) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - SNOWBANK
3. (C) AIRPORT SNOW REMOVAL - INADEQUATE - AIRPORT PERSONNEL

## Factual Information

On January 20, 1998, approximately 2030 eastern standard time, a Beech 1900D, N854CA, operated by Champlain Enterprises and doing business as US Airways Express flight 4479, was substantially damaged while landing at the Adirondack Regional Airport (SLK), Saranac Lake, New York. The certificated airline transport captain, first officer and 10 passengers were not injured. Instrument meteorological conditions prevailed for the scheduled passenger flight. An instrument flight rules flight plan was filed for the flight conducted under 14 CFR Part 121.

The flight crew was released from Albany, New York, with a Notice To Airman (NOTAM) which stated that the runway at the Adirondack Regional Airport was plowed full length and width. The runway description stated, "patches of ice covered with 1/4 inch of snow, braking action poor." The flight departed Albany at 1945.

According to statements, the flight crew performed an ILS approach to runway 23.

The captain stated:

"...The approach was normal and we obtained visual contact of the runway, 600ft above DA and approximately 5.5 DME. Approach speeds were normal and we had visual contact with the runway edge lights. We observed continuous snow banks down both sides of the runway. A proper crosswind correction was used during the landing phase. However, upon touchdown the aircraft began to drift to the left side of the runway. We also experienced significant gusting above 320/7 knots that was not reported. Further correction was applied but still had no effect. The aircraft continued toward the left side of the runway. However, at a point after that we began to track straight and parallel to the left runway edge. As we continued, we felt two sudden bumps and the aircraft began to slide to the left and came to rest perpendicular to the runway...."

The first officer stated:

"...Throughout the approach we encountered light to moderate chop. As we got closer to the runway, we could see it was snow covered and there were high levels of snow on both edges. Upon touchdown some of the runway edge lights became partially obscured. The aircraft started to drift left and the captain began to use more crosswind correction. At first, the corrections had no effect on the aircraft's ground track. We continued down the runway with a leftward track. The left mains entered deep snow which pulled us further to the left. At a certain point the leftward track began to moderate and aircraft began to parallel the left edge of the runway. Just before crossing taxiway 'BRAVO' we stuck a large pile of snow, making the aircraft skid to the left. The aircraft came to a stop perpendicular to the runway...."

The Federal Aviation Administration (FAA) Inspector, who arrived on scene hours after the accident, stated that snow banks located at the edges of the runway were 2 to 4 feet high. He also reported that snow approximately 4 to 6 inches in depth, extended from the edges of the runway, inward 20 feet from both sides of the runway. Taxiway Bravo, located between the 2,000 and 3,000 foot markers of runway 23, had a 2 to 4 foot snow bank, which extended approximately 20 feet out onto the runway.

According to the FAA Inspector, tracks on the runway leading to where the airplane came to rest, began left of center line, about 1,000 feet beyond the approach end of the runway.

The tracks were straight, but angled left. At approximately the 2,000 foot marker, the airplane's left main tire entered the 4 to 6 inch deep snow. The tracks continued through the snow bank that protruded out from taxiway Bravo, and then further left through the 2 to 4 foot snow bank along the edge of the runway. The right propeller contacted a runway light along the edge of the runway, tearing off the governor and two blades. The airplane came to a stop about 200 feet past the 3,000 foot marker.

The ground agent stated:

"...At 1900, airport employee...came into the terminal. I immediately asked him for a field conditions report. He replied that he hadn't checked them (the field conditions) and that I should put in my report the same conditions as were last reported. He then asked me what the last report stated the field conditions to be. I replied that the airport had reported one quarter inch of dry snow over hard packed snow and ice, braking action reported as poor. He again told me to make the same report and sat down to watch television...."

Examination of the flight data recorder revealed the airplane touched down with the wing flaps at approach. About 2 seconds after touchdown, the heading changed about 1.5 degrees nose right, and then returned to the touchdown heading over the next several seconds. About 9 seconds after touchdown, the heading changed about 4 degrees right followed by a change to the left of 38 degrees over 6 seconds, after which the recording ended.

## Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	27, Male
<b>Airplane Rating(s):</b>	Multi-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last Medical Exam:</b>	08/11/1997
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	2989 hours (Total, all aircraft), 2213 hours (Total, this make and model), 912 hours (Pilot In Command, all aircraft), 128 hours (Last 90 days, all aircraft), 58 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Beech	Registration:	N854CA
Model/Series:	1900D 1900D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	UE-60
Landing Gear Type:	Retractable - Tricycle	Seats:	21
Date/Type of Last Inspection:	01/14/1998, Continuous Airworthiness	Certified Max Gross Wt.:	16950 lbs
Time Since Last Inspection:	49 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	9433 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A-67D
Registered Owner:	CHAMPLAIN ENTERPRISES	Rated Power:	1279 hp
Operator:	CHAMPLAIN ENTERPRISES	Air Carrier Operating Certificate:	Commuter Air Carrier (135)
Operator Does Business As:	COMMUTAIR	Operator Designator Code:	JJBA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	SLK, 1663 ft msl	Observation Time:	2015 EST
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	-6° C / -7° C
Lowest Ceiling:	Overcast / 800 ft agl	Visibility	7 Miles
Wind Speed/Gusts, Direction:	7 knots, 320°	Visibility (RVR):	0 ft
Altimeter Setting:	30 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:	ALBANY, NY (ALB)	Type of Flight Plan Filed:	IFR
Destination:	(SLK)	Type of Clearance:	IFR
Departure Time:	1945 EST	Type of Airspace:	Class G

## Airport Information

Airport:	SARANAC LAKE ADIRONDACK (SLK)	Runway Surface Type:	Asphalt
Airport Elevation:	1663 ft	Runway Surface Condition:	Ice; Snow--dry
Runway Used:	23	IFR Approach:	ILS
Runway Length/Width:	6573 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	10 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	12 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	JIM CAIN	Adopted Date:	06/22/2000
Additional Participating Persons:	VINCENT W MORRIS; ALBANY, NY		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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