Aviation Investigation Final Report

Location:	Denver, Colorado	**Accident Number:**	CEN15LA144
Date & Time:	February 15, 2015, 22:45 Local	**Registration:**	N297AT
Aircraft:	Beech 58	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control in flight	**Injuries:**	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot reported that, after the cargo was loaded onto the airplane for the night flight, he performed a contamination check of the airplane, and the airplane was free of contamination. After performing the run-up checks, the pilot activated the anti-ice systems and taxied onto the runway; he noted that air traffic control had reported about an hour before the accident that about 1/2 inch of wet snow had accumulated on the runway and that the runway surface was unplowed and "slushy." He started the takeoff roll and, as the airplane rotated, slush from the runway hit the windshield, and the pilot lost all forward visibility. Once airborne, the airplane drifted left, and the pilot attempted to abort the takeoff. The pilot reported that he "had difficulty maintaining directional control" and that he tried to land the airplane back on the runway, but it impacted the side of the runway and struck a runway light. Once the airplane was stopped on the runway, he taxied it back to the hangar. The examination of the airplane revealed that the right wing sustained substantial damage. The pilot reported no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

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 airplane control during a rejected takeoff from a slush-covered runway at night.

Findings

Aircraft	Directional control - Not attained/maintained
Aircraft	Flight compartment windows - Not specified
Personnel issues	Aircraft control - Pilot
Environmental issues	Dark - Effect on personnel
Environmental issues	Snow/slush/ice covered surface - Contributed to outcome

Factual Information

History of Flight

Takeoff-rejected takeoff	Loss of control in flight (Defining event)
Takeoff-rejected takeoff	Collision with terr/obj (non-CFIT)

On February 15, 2015, about 2245 mountain standard time, a Beech 58, N297AT, sustained substantial damage to the right wing during a rejected takeoff from runway 17L (10,001 feet by 100 feet, asphalt) at the Centennial Airport (APA), Denver, Colorado. The commercial pilot was not injured. The airplane was owned and operated by GTA Air Inc. under the provisions of the 14 Code of Federal Regulations Part 135 as a cargo flight. Night instrument meteorological conditions prevailed at the time of the accident and an instrument flight rules flight plan was filed. The intended destination was the Spirit of St. Louis Airport (SUS), Chesterfield, Missouri.

The pilot reported that the airplane was put into a heated hangar prior to the cargo arriving at the hangar. Once the cargo arrived about 2219, the airplane was towed onto the ramp where the 192 pounds of cargo was loaded onto the airplane. The pilot performed a contamination check of the airplane, and he reported that the airplane was free of contamination. He stated that air traffic control was reporting that about 1/2-inch of wet snow had accumulated on the runway surfaces. After performing the run-up checks, the pilot activated the anti-ice systems and taxied onto runway 17L.

The pilot reported that the runway surface was unplowed and "slushy." He applied power and started the takeoff roll. He reported that as the airplane rotated, slush from the runway hit the windshield, and he lost all forward visibility. Once airborne, the airplane drifted left, and he attempted to abort the takeoff. The pilot reported that he "had difficulty maintaining directional control" and he tried to land back on the runway, but the airplane impacted the side of the runway and struck a runway light. Once the airplane was stopped on the runway, he taxied back to the hangar. The examination of the airplane revealed that the right wing sustained substantial damage and the left wing had minor damage. The pilot reported no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

At 2150, the airport issued a Notice to Airmen that indicated that runway 17L had 1/2-inch of wet snow, and the braking action was fair.

The surface weather observation at APA at 2200 was: wind calm; visibility 1 mile; light snow and mist; ceiling broken 500 feet, overcast 1,400 feet; temperature -3 C; dew point -3 C; and altimeter 30.12 inches of mercury.

Pilot Information

Certificate:	Commercial	**Age:**	38
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	October 23, 2014
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	5465 hours (Total, all aircraft), 699 hours (Total, this make and model), 228 hours (Last 90 days, all aircraft), 86 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N297AT
Model/Series:	58	**Aircraft Category:**	Airplane
Year of Manufacture:	1982	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TH1349
Landing Gear Type:	Retractable - Tricycle	**Seats:**	2
Date/Type of Last Inspection:	October 29, 2014 AAIP	**Certified Max Gross Wt.:**	5400 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	12851 Hrs as of last inspection	**Engine Manufacturer:**	CONT MOTOR
ELT:		**Engine Model/Series:**	IO-520-CB41B
Registered Owner:	GTA Air Inc	**Rated Power:**	285 Horsepower
Operator:	GTA Air Inc	**Operating Certificate(s) Held:**	On-demand air taxi (135)
Operator Does Business As:		**Operator Designator Code:**	XGNA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	APA,5885 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	22:00 Local	**Direction from Accident Site:**	0°
Lowest Cloud Condition:		**Visibility**	1 miles
Lowest Ceiling:	Broken / 500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.12 inches Hg	**Temperature/Dew Point:**	-3°C / -3°C
Precipitation and Obscuration:	N/A - None - Mist		
Departure Point:	Denver, CO (APA)	**Type of Flight Plan Filed:**	IFR
Destination:	Chesterfield, MO (SUS)	**Type of Clearance:**	IFR
Departure Time:	22:19 Local	**Type of Airspace:**	

Airport Information

Airport:	Centenial Airport APA	**Runway Surface Type:**	Asphalt
Airport Elevation:	5885 ft msl	**Runway Surface Condition:**	Slush covered;Snow;Wet
Runway Used:	17L	**IFR Approach:**	None
Runway Length/Width:	10001 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	39.569999,-104.849441(est)

Administrative Information

Investigator In Charge (IIC):	Silliman, James
Additional Participating Persons:	Mark Schmidt; FAA Denver FSDO; Denver, CO
Original Publish Date:	August 11, 2015
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=90730