



Aviation Investigation Final Report

Location:	ANCHORAGE, Alaska	Accident Number:	ANC99LA024
Date & Time:	January 13, 1999, 14:35 Local	Registration:	N9190D
Aircraft:	Piper PA-22-160	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The student pilot reported that he intended to do a few touch-and-go landings. He stated that during the initial takeoff roll, the airplane pulled to the left, and continued off the left side of the runway. He said that the main landing gear contacted soft snow, and the airplane nosed over. An FAA airworthiness inspector inspected the airplane at the accident site. He said that an inspection revealed that the brake assembly had an accumulation of ice that restricted the left wheel from rotating. He added that as soon as the ice melted, the wheel rotated freely.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A frozen brake.

Findings

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

Findings
1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - FROZEN

Occurrence #2: NOSE OVER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

2. TERRAIN CONDITION - SNOW COVERED

Factual Information

On January 13, 1999, about 1435 Alaska standard time, a wheel equipped Piper PA-22-160 airplane, N9190D, sustained substantial damage when it went off the left side of runway 31 during takeoff from the Lake Hood Airstrip, Anchorage, Alaska. The airplane was being operated as a local, visual flight rules (VFR) personal flight under Title 14, CFR Part 91, when the accident occurred. The solo student pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed.

During a telephone conversation with the National Transportation Safety Board investigator-in-charge on January 14, the pilot reported that he intended to do a few touch-and-go landings. The pilot noted that during the initial takeoff roll, the airplane pulled to the left, and continued off the left side of the runway. He stated that the main landing gear contacted soft snow, and the airplane nosed over.

A Federal Aviation Administration (FAA) airworthiness inspector, Anchorage Flight Standards District Office (FSDO), inspected the airplane at the accident site. He reported that the airplane's left brake assembly appears to have been either locked or frozen. The FAA inspector reported that a later inspection revealed that the brake assembly had an accumulation of ice that restricted the left wheel from rotating. He added that as soon as the ice melted, the wheel rotated freely.

The airplane sustained substantial damage to the right wing, and right wing lift struts.

Pilot Information

Certificate:	Student	Age:	43,U
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	October 15, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	18 hours (Total, all aircraft), 18 hours (Total, this make and model), 4 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9190D
Model/Series:	PA-22-160 PA-22-160	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-6248
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	March 14, 1998 Annual	Certified Max Gross Wt.:	1840 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-320
Registered Owner:	ROBERT K. SNIDER	Rated Power:	160 Horsepower
Operator:	JESS SNIDER	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAL ,73 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	6500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Unknown / 0 ft AGL	Visibility (RVR):	0 ft
Wind Speed/Gusts:	0 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	28 inches Hg	Temperature/Dew Point:	0°C / -5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:31 Local	Type of Airspace:	Class D

Airport Information

Airport:	LAKE HOOD STRIP Z41	Runway Surface Type:	Gravel
Airport Elevation:	73 ft msl	Runway Surface Condition:	Snow
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	2200 ft / 70 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:	61.160572,-149.989852(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	MICHAEL J ZARR (FAA); ANCHORAGE , AK
Original Publish Date:	April 20, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=45706

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).