



# Aviation Investigation Final Report

<b>Location:</b>	Wall, South Dakota	<b>Accident Number:</b>	GAA19CA217
<b>Date &amp; Time:</b>	April 14, 2019, 09:30 Local	<b>Registration:</b>	N277E
<b>Aircraft:</b>	Vans VANS RV-12	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	1 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, during takeoff from a snow- and slush-covered runway, he decided to stay on the right half of the runway. He added that, as the airplane began to rotate and the nose landing gear lifted off the runway, the left main landing gear encountered some slush. The airplane veered left about 15° and exited the runway to the left, the nose landing gear collapsed, and the airplane then nosed over.

The airplane sustained substantial damage to the fuselage and both wings.

The pilot reported that there were no preaccident mechanical failures or malfunctions 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 improper decision to depart from a slush-covered runway, which resulted in a loss of directional control, a runway excursion, and a subsequent nose-over.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Environmental issues</b>	Snow/slush/ice covered surface - Decision related to condition
<b>Environmental issues</b>	Snow/slush/ice covered surface - Effect on operation

## Factual Information

### History of Flight

Takeoff	Miscellaneous/other
Takeoff	Loss of control on ground (Defining event)
Takeoff	Runway excursion
Takeoff	Landing gear collapse
Takeoff	Nose over/nose down

### Pilot Information

Certificate:	Sport Pilot	Age:	57,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Sport pilot	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 9, 2018
Flight Time:	(Estimated) 195.3 hours (Total, all aircraft), 190.8 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Vans	<b>Registration:</b>	N277E
<b>Model/Series:</b>	VANS RV-12 No Series	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2014	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	120206
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 12, 2018 Condition	<b>Certified Max Gross Wt.:</b>	1320 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1062 Hrs at time of accident	<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	912ULS
<b>Registered Owner:</b>		<b>Rated Power:</b>	100 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KPHP, 2212 ft msl	<b>Distance from Accident Site:</b>	28 Nautical Miles
<b>Observation Time:</b>	14:55 Local	<b>Direction from Accident Site:</b>	84°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	130°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	29.71 inches Hg	<b>Temperature/Dew Point:</b>	0°C / -3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Rapid City, SD (RAP )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Wall, SD (6V4 )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	WALL MUNI 6V4	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	2812 ft msl	<b>Runway Surface Condition:</b>	Slush covered;Snow
<b>Runway Used:</b>	30	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3499 ft / 60 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor, 1 None	<b>Latitude, Longitude:</b>	43.999443,-102.254722(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Benhoff, Kathryn
<b>Additional Participating Persons:</b>	Kenneth East Jr.; FAA; Rapid City, IA
<b>Original Publish Date:</b>	November 6, 2019
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=99300">https://data.nts.gov/Docket?ProjectID=99300</a>

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