



Aviation Investigation Final Report

Location:	Weatherford, Texas	Accident Number:	CEN17LA182
Date & Time:	May 13, 2017, 18:20 Local	Registration:	N616NG
Aircraft:	PIPISTREL DOO AJDOVSCINA VIRUS SW	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot reported that, during departure for the planned local flight in a motorized glider, just as the nosewheel lifted off, a wind gust from the left pushed the motorized glider to the right. The pilot pulled back on the control stick to climb and simultaneously applied left rudder and aileron. The pilot added that the motorized glider became airborne, but the airspeed was insufficient, and it then entered a "stalled left spin."

An automated weather reporting facility located 7 nautical miles south of the accident site recorded that the wind was from 160° at 4 knots. The accident is consistent with the pilot failing to obtain adequate airspeed at takeoff, which resulted in the motorized glider entering an aerodynamic stall/spin immediately after takeoff.

Probable Cause and Findings

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

The pilot's failure to obtain adequate airspeed during takeoff, which resulted in an aerodynamic stall/spin.

Findings

Aircraft	Angle of attack - Capability exceeded
Aircraft	Airspeed - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Takeoff	Other weather encounter
Takeoff	Attempted remediation/recovery
Takeoff	Aerodynamic stall/spin (Defining event)
Takeoff	Collision during takeoff/land

On May 13, 2017, about 1820 central standard time, a Pipistrel Virus SW motorized-glider, N616NG, impacted terrain while departing the Driftwood Ranch Airport (XA86), Weatherford, Texas. The pilot and passenger were seriously injured. The motorized-glider was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which operated without a flight plan. The local flight was departing at the time of the accident.

According to a statement provided by the pilot, he was departing on runway 16, at XA86. After reaching rotation speed, the pilot rotated the motorized-glider and the nosewheel lifted off when a gust of wind from the left, pushed the motorized-glider to the right. The pilot added that he pulled back on the control stick to climb, and simultaneously added left rudder and aileron. As the motorized-glider got airborne, the pilot reported that the airspeed was insufficient, and the motorized-glider entered a stall-spin. After a quarter turn, the motorized-glider impacted terrain. The collision resulted in substantial damage to the glider's fuselage and wings.

At 1815, an automated weather reporting facility located 7 nautical miles south of the accident site recorded a wind from 160 degrees at 4 knots.

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	July 13, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	780 hours (Total, all aircraft), 231 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPISTREL DOO AJDOVSCINA	Registration:	N616NG
Model/Series:	VIRUS SW NO SERIES	Aircraft Category:	Glider
Year of Manufacture:	2015	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	742SWN100
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Rotax
ELT:		Engine Model/Series:	912ULS
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KGDJ,778 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	18:15 Local	Direction from Accident Site:	184°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	29°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Weatherford, TX (XA86)	Type of Flight Plan Filed:	None
Destination:	Weatherford, TX (XA86)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	DRIFTWOOD RANCH XA86	Runway Surface Type:	Asphalt
Airport Elevation:	711 ft msl	Runway Surface Condition:	
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	2975 ft / 40 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	32.566944,-97.807502(est)

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Michael Miles; FAA; Irving, TX
Original Publish Date:	June 5, 2018
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=95171

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).