



National Transportation Safety Board Aviation Accident Final Report

Location:	Valkaria, FL	Accident Number:	ERA16CA278
Date & Time:	07/31/2016, 0700 EDT	Registration:	N4367X
Aircraft:	TRICK TRIKES STORM	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot of the weight-shift-control aircraft reported that, during takeoff, he pitched upward excessively early for the aircraft's weight. Several feet above the ground, the aircraft descended and bounced off the runway. The pilot tried to regain control and take off again, but the aircraft came back down and bounced on the runway. The left main landing gear collapsed, and the aircraft slid down the runway about 75 ft before coming to rest. The pilot reported there were no preimpact mechanical malfunctions or anomalies with the aircraft that would have precluded normal operation. Examination of the wreckage revealed that the fuselage was substantially damaged.

Probable Cause and Findings

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

The pilot's premature rotation during takeoff, which resulted in an aerodynamic stall and a hard landing.

Findings

Aircraft	Airspeed - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause) Incorrect action selection - Pilot (Cause)

Factual Information

History of Flight

Takeoff	Aerodynamic stall/spin (Defining event) Abnormal runway contact
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Pilot Information

Certificate:	Sport Pilot	Age:	68, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Lap Only
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:	10/16/2014
Flight Time:	274 hours (Total, all aircraft), 274 hours (Total, this make and model), 205 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	TRICK TRIKES	Registration:	N4367X
Model/Series:	STORM NO SERIES	Aircraft Category:	Weight-Shift
Year of Manufacture:	2007	Amateur Built:	No
Airworthiness Certificate:	Experimental Light Sport	Serial Number:	TTS 020
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	03/19/2016, Annual	Certified Max Gross Wt.:	1186 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	ROTAX
ELT:	Not installed	Engine Model/Series:	582
Registered Owner:	On file	Rated Power:	65 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KMLB, 27 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	1053 UTC	Direction from Accident Site:	332°
Lowest Cloud Condition:	Clear	Visibility	6 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	24° C / 23° C
Precipitation and Obscuration:	Moderate - Mist; No Obscuration; No Precipitation		
Departure Point:	Valkaria, FL (X59)	Type of Flight Plan Filed:	None
Destination:	Valkaria, FL (X59)	Type of Clearance:	None
Departure Time:	0700 EDT	Type of Airspace:	Class E

Airport Information

Airport:	VALKARIA (X59)	Runway Surface Type:	Asphalt
Airport Elevation:	26 ft	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	27.961389, -80.559444 (est)

Administrative Information

Investigator In Charge (IIC):	Daniel P Boggs	Report Date:	04/10/2017
Additional Participating Persons:	Marco Grillo; FAA/FSDO; Orlando, FL		
Publish Date:	04/10/2017		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93719		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).