



# **Aviation Investigation Final Report**

Location:	Bushnell, Florida	Accident Number:	ERA15CA122
Date & Time:	January 31, 2015, 10:42 Local	Registration:	N40EV
Aircraft:	EVOLUTION AIRCRAFT INC REVO	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

# Analysis

The pilot of the special light sport weight shift aircraft stated that he was attempting to land at a private airstrip for a breakfast fly-in. The pilot had to perform two go-arounds due to other traffic in the airport traffic pattern. During the third attempt, while on final approach to runway 9, the pilot extended his glidepath due to another aircraft back-taxiing on the 3,415-foot-long turf runway. The pilot intended to land further down the runway; however, the airspeed decreased when he extended the glidepath. There was also a wind shift when the aircraft was about 15 feet above the runway, which caused it to stall and impact the runway. The aircraft subsequently came to rest inverted on the runway. Examination of the wreckage by a Federal Aviation Administration inspector revealed substantial damage to both wings. The inspector did not observe any preimpact mechanical malfunctions, nor did the pilot report any. The pilot added that the wind was variable at 9 knots, gusting to 12 knots. The recorded wind information at an airport located about 17 miles from the accident site was similar, indicating variable wind from 020 to 090 degrees at 8 knots.

# **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 airspeed during approach in variable wind, which resulted in the airplane exceeding its critical angle of attack and experiencing an aerodynamic stall.

# Findings

Personnel issues	Aircraft control - Pilot	
Aircraft	Airspeed - Not attained/maintained	
Environmental issues	Variable wind - Effect on operation	

# **Factual Information**

### History of Flight

Approach-VFR pattern final	Aerodynamic stall/spin (Defining event)	
Uncontrolled descent	Collision with terr/obj (non-CFIT)	

#### **Pilot Information**

Certificate:	Flight instructor; Private; Sport Pilot	Age:	64
Airplane Rating(s):	None	Seat Occupied:	Rear
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:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 31, 2013
Occupational Pilot:	No Last Flight Review or Equivalent:		
Flight Time:	1200 hours (Total, all aircraft), 1200 hours (Total, this make and model), 1200 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	EVOLUTION AIRCRAFT INC	Registration:	N40EV
Model/Series:	REVO	Aircraft Category:	Weight-shift
Year of Manufacture:	2012	Amateur Built:	
Airworthiness Certificate:	Special light-sport (Special)	Serial Number:	1013
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1160 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	40 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	912ULS
Registered Owner:	EVOLUTION AIRCRAFT INC	Rated Power:	100 Horsepower
Operator:	Allen Gadoury	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LEE,76 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	60°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.31 inches Hg	Temperature/Dew Point:	17°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Zephyrhills, FL (ZPH )	Type of Flight Plan Filed:	None
Destination:	Bushnell, FL (9FL1)	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	

### **Airport Information**

Airport:	Flying W Airranch 9FL1	Runway Surface Type:	
Airport Elevation:	58 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	09	IFR Approach:	None
Runway Length/Width:	3415 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	28.68361,-82.157501(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	William Edwards; FAA/FSDO; Orlando, FL
Original Publish Date:	June 1, 2015
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=90695

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