



# **Aviation Investigation Final Report**

Location: Cedar Valley, Utah Accident Number: WPR09LA313

Date & Time: June 25, 2009, 12:40 Local Registration: N800JM

Aircraft: ROLLADEN-SCHNEIDER OHG LS3- Aircraft Damage: Minor

**Defining Event:** Dragged wing/rotor/float/other **Injuries:** 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The glider was being towed aloft by a tow-plane. Takeoff procedures for the glider required that the flaps be set at 0 degrees until aileron effectiveness, and then the flaps should be set at 10 degrees. The pilot had 0 degrees of flaps selected, and during the ground roll, the left wing was dragging on the ground surface. He attempted to align the glider with the runway and removed his hand from the flap handle and placed it on the tow release handle, intending to abort the takeoff. He leveled the wings and the glider lifted from the runway. The pilot gained control of the glider and intended to extend the flaps 10 degrees; however, his hand was still on the tow release handle and he unintentionally pulled the tow release at 75 to 100 feet above ground level. During the forced landing, the pilot misjudged the flare, the glider landed hard, and the pilot sustained serious spinal injuries.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot inadvertently applied the tow release handle.

#### **Findings**

Personnel issues Incorrect action selection - Pilot

Aircraft Aerial tow equipment section - Incorrect use/operation

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#### **Factual Information**

#### **History of Flight**

**Takeoff** Dragged wing/rotor/float/other (Defining event)

Initial climb Attempted remediation/recovery

Emergency descent Off-field or emergency landing

Landing Hard landing

On June 25, 2009, at 1240 mountain daylight time, N800JM, a Rolladen-Schneider OHG LS3-A glider, landed in a field shortly after takeoff from West Desert Airpark, Cedar Valley, Utah. The pilot owned the glider and was operating it under the provisions of 14 Code of Federal Regulations Part 91. The glider sustained minor damage and the private pilot was seriously injured. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot submitted a written statement. He reported that he was departing from runway 17 through an aero-tow behind a Cessna 182. The wind was from 080 degrees at less than 10 knots. Normal aero-tow requirements state that flaps should be kept at 0 degrees until aileron effectiveness. The flaps should then be set to 10 degrees. The pilot's left hand was on the flap handle and the flaps were set to 0 degrees at the beginning of the takeoff. The pilot stated that the left wing was set too low and then dropped during the takeoff. As the left wing was scraping along, the nose of the glider was yawing to the left. He applied full right rudder, attempting to stay straight down the runway. The pilot then took his left hand off the flap handle and placed it on the tow release handle, intending to abort the takeoff. Before pulling the release, he made an attempt to level the wings with an abrupt roll motion with the stick. The glider banked to the right and then lifted off, drifting high and to the right of the runway and the tow-plane. As the tow-plane climbed, the pilot gained control of the glider and gradually positioned it behind the tow-plane using a sideslip and forward stick pressure. As he maneuvered the glider into position, the pilot moved his hand back to extend the flaps 10 degrees. However, his left hand was still holding the tow release handle and not the flap handle, and he unintentionally pulled the tow release at 75 to 100 feet above ground level.

The pilot further reported that he followed his emergency plan and lowered the nose slightly while turning in order to land in a field. The pilot felt that he focused too much on his aim point and not on the horizon, and that he had opened the spoilers too much and did not extend the flaps. He misjudged his flair and the glider impacted the ground in a nose down position and the pilot sustained a spinal injury.

The pilot felt that the accident was a result of a chain of mistakes due to the following:

- He should have aborted the takeoff while still on the ground.
- He was trained not to put his hand on the release handle until fully intending to release.

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- He was trained not to fixate on the aim point but to look down the runway at the horizon when nearing the ground so as to time the flare properly. According to the pilot, the lack of time to stabilize the approach as well as not having a runway to line up with likely aggravated this tendency.

#### **Pilot Information**

Certificate:	Private	Age:	51,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 25, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 25, 2008
Flight Time:	155 hours (Total, all aircraft), 20 hours (Total, this make and model), 62 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	ROLLADEN-SCHNEIDER OHG	Registration:	N800JM
Model/Series:	LS3-A	Aircraft Category:	Glider
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3325
Landing Gear Type:	Retractable - Tailwheel	Seats:	1
Date/Type of Last Inspection:	November 5, 2008 Annual	Certified Max Gross Wt.:	1040 lbs
Time Since Last Inspection:	20 Hrs	Engines:	0
Airframe Total Time:	1535 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Steven G Rathbun	Rated Power:	
Operator:	Steven G. Rathbun	Operating Certificate(s) Held:	None

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# **Meteorological Information and Flight Plan**

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PVU,4497 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	12:50 Local	Direction from Accident Site:	90°
<b>Lowest Cloud Condition:</b>	12000 ft AGL	Visibility	15 miles
Lowest Ceiling:	Broken / 12000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	31°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Cedar Valley, UT (UT99)	Type of Flight Plan Filed:	None
Destination:	Cedar Valley, UT (UT99)	Type of Clearance:	None
Departure Time:	12:55 Local	Type of Airspace:	

# **Airport Information**

Airport:	West Desert Airpark UT99	Runway Surface Type:	Gravel
Airport Elevation:	4902 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2600 ft / 40 ft	VFR Approach/Landing:	None

# Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	40.2425,-112.092781

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#### **Administrative Information**

Investigator In Charge (IIC): Dunks, Kristi

Additional Participating Persons: Bernard Connelly; Federal Aviation Administration; Salt Lake City, UT

Original Publish Date: November 9, 2009

Last Revision Date: Investigation Class: Class

Note: Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=74141

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