



National Transportation Safety Board Aviation Accident Data Summary

Location:	Fort Bridger, WY	Accident Number:	WPR14LA323
Date & Time:	08/01/2014, 1028 MDT	Registration:	N116GS
Aircraft:	RANS S-16	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Shortly after takeoff, experimental amateur-built airplane's engine lost all power. The pilot/owner performed a forced landing onto a road, and, during the landing flare, the main landing gear caught the edge of the road and collapsed. The airplane struck a pit and sustained substantial damage. The pilot had recently reinstalled the engine's fuel servo following the servo's overhaul, and this was the first flight since the installation. Postaccident examination revealed that the fuel line's B-nut fitting connecting the fuel servo to the fuel flow divider was about 1 1/3 turns loose. It is likely that the pilot had either forgotten to tighten the fitting or had not applied sufficient torque during reinstallation of the servo.

Flight Events

Takeoff - Loss of engine power (total)
Emergency descent - Off-field or emergency landing
Landing-landing roll - Collision during takeoff/land

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The fuel flow divider inlet line's B-nut coming loose during takeoff, resulting in a total loss of engine power. Contributing to the accident was the pilot's failure to adequately tighten the B-nut during recent maintenance.

Findings

Aircraft-Aircraft power plant-Engine fuel and control-Fuel divider-Incorrect service/maintenance - C
Personnel issues-Task performance-Maintenance-Repair-Pilot - F

Pilot Information

Certificate:	Private	Age:	36
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	147 hours (Total, all aircraft), 32 hours (Total, this make and model), 147 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	RANS	Registration:	N116GS
Model/Series:	S-16	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	Lycoming
Air Carrier Operating Certificate:	None	Engine Model/Series:	IO-320
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KBFR, 7038 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	4 knots, 360°
Temperature:	19° C / 8° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Bridger, WY (FBR)	Destination:	Fort Bridger, WY (FBR)

Airport Information

Airport:	FORT BRIDGER (FBR)	Runway Surface Type:	Asphalt
Runway Used:	22	Runway Surface Condition:	Dry
Runway Length/Width:	6404 ft / 75 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Eliott Simpson	Adopted Date:	01/14/2015
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89781		

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