



National Transportation Safety Board Aviation Accident Data Summary

Location:	Revere, MN	Accident Number:	CEN12LA128
Date & Time:	01/05/2012, 1030 CST	Registration:	N330BL
Aircraft:	Sanderson Pitts Special SPS-1	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane had not been flown for over 6 months prior to the accident flight. Before departure, the pilot added about 3 gallons of fuel to the existing fuel on board the airplane. The pilot did not find contamination when he drained fuel from the main fuel tank sump drain. About 20 minutes after departure, during cruise flight, the airplane experienced a total loss of engine power that led the pilot to conduct a forced landing on a road. The airplane nosed over during the landing. An examination of the airplane revealed that the airplane was not equipped, nor was it required to be equipped, with a fuel sump drain(s) for the wing tank, which drained into the main fuel tank. Water contamination was present in the fuel line leading to the carburetor, but no water contamination was noted when the main fuel tank sump—the only available sump—was drained. Accordingly, water was likely in the wing tanks and fed into the main tank after it was sumped. The water then entered the fuel lines. The lack of sump drains in the wing tanks is an inadequate design because it does not allow a pilot to remove all water from the fuel system.

Flight Events

Enroute-cruise - Fuel contamination
Enroute-cruise - Loss of engine power (total)
Emergency descent - Loss of engine power (total)
Landing - Collision during takeoff/land

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The total loss of engine power during cruise flight due to fuel contamination and the inadequate design of the fuel system.

Findings

Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid condition - C
Aircraft-Aircraft systems-Fuel system-(general)-Design - C

Pilot Information

Certificate:	Commercial; Flight Engineer	Age:	63
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	
Other Aircraft Rating(s):		Instructor Rating(s):	None
Flight Time:	2652 hours (Total, all aircraft), 2 hours (Total, this make and model), 2418 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Sanderson	Registration:	N330BL
Model/Series:	Pitts Special SPS-1	Engines:	1 Reciprocating
Operator:	Pilot	Engine Manufacturer:	Lycoming
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-360
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KMML, 1183 ft msl	Weather Information Source:	Pilot
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	15 knots, 230°
Temperature:	7°C / -4°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Madison, SD (MDS)	Destination:	Faribault, MN (FBL)

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Adopted Date:	01/15/2013
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=82660		

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