



National Transportation Safety Board Aviation Accident Data Summary

Location:	Ama, LA	Accident Number:	CEN15FA426
Date & Time:	09/26/2015, 1222 CDT	Registration:	N401
Aircraft:	JONES RALPH D ZODIAC CH 601 HD	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot was conducting a local flight in the experimental, amateur-built airplane. GPS data indicated that, during the takeoff roll, the airplane had a maximum groundspeed of 84 knots. The groundspeed varied between 45 and 96 knots as the airplane turned to a southwesterly heading after departure. About 1 minute 18 seconds after takeoff, the airplane made a right turn toward the northwest. The last recorded data point showed the airplane at an altitude of 66 ft and a groundspeed of 15 knots. When the airplane failed to return to the airport, a search was initiated. The wreckage was found the next day. The airplane impacted terrain in a thickly wooded area in an 80°-nose-down attitude. The airplane's nose section was skewed to the right, the right wing was leading, the left wing was trailing, and the empennage was bent down to the left, consistent with the airplane being in a left spin following an aerodynamic stall.

Examination of the propeller assembly revealed indications of little or no rotation at impact. An engine examination revealed no mechanical malfunctions or failures that would have precluded normal operation. The weather conditions were conducive to serious icing at glide power, but the airplane was operating at takeoff power. Therefore, it cannot be said with certainty that the carburetor accumulated ice and caused a loss of engine power. Based on the GPS data and wreckage examination, it is likely that the pilot failed to maintain adequate airspeed and exceeded the airplane's critical angle of attack following a loss of engine power for reasons that could not be determined based on available evidence, which resulted in an aerodynamic stall and subsequent left spin.

The pilot's autopsy identified significant coronary artery stenosis and evidence of a previous heart attack. The pilot's previous heart attack and significant coronary artery stenosis placed him at risk for an acute cardiac event such as an arrhythmia or ischemia that would have caused chest pain, shortness of breath, palpitations, or fainting. If such an event occurred, the acuteness of the accident would have precluded identifying evidence of it at autopsy. Although acute incapacitation could have occurred, this investigation was unable to determine whether the pilot's cardiovascular disease contributed to the accident. Additionally, the evidence of a loss of engine power does not support a medically incapacitating event.

Flight Events

Initial climb - Loss of control in flight
Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause

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

The pilot's failure to maintain adequate airspeed and his exceedance of the airplane's critical angle of attack following a loss of engine power for reasons that could not be determined based on available evidence, which resulted in an aerodynamic stall and left spin.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Angle of attack-Capability exceeded - C

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Personnel issues-Physical-Health/Fitness-Predisposing condition-Pilot

Environmental issues-Conditions/weather/phenomena-Temp/humidity/pressure-Conducive to carburetor icing-Effect on equipment

Not determined-Not determined-(general)-(general)-Unknown/Not determined - C

Pilot Information

Certificate:	Private	Age:	56
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	Gyroplane	Instructor Rating(s):	None
Flight Time:	170 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	JONES RALPH D	Registration:	N401
Model/Series:	ZODIAC CH 601 HD	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	Lycoming
Operating Certificate(s) Held:	None	Engine Model/Series:	O-235-C1
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KMSY, 4 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 12000 ft agl	Wind Speed/Gusts, Direction:	9 knots / , 30°
Temperature:	27° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ama, LA (LS40)	Destination:	Ama, LA (LS40)

Airport Information

Airport:	ST CHARLES (LS40)	Runway Surface Type:	Grass/turf
Runway Used:	17	Runway Surface Condition:	Dry
Runway Length/Width:	3900 ft / 125 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	29.944444, -90.285278 (est)		

Administrative Information

Investigator In Charge (IIC):	Thomas Latson	Adopted Date:	07/12/2017
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=92063		

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