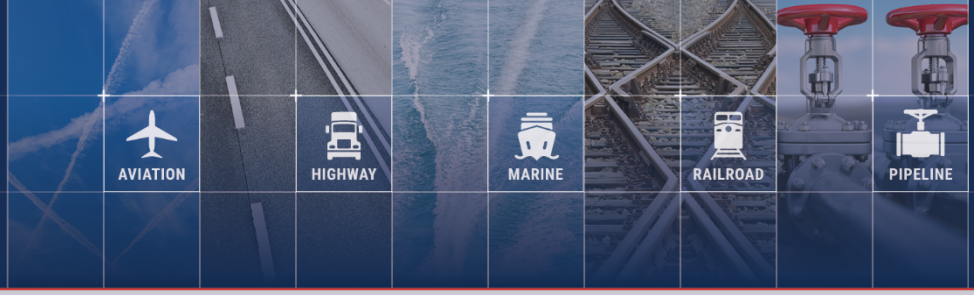

Aviation Investigation Final Report

Location:	Raymond, Mississippi	**Accident Number:**	ERA17LA314
Date & Time:	September 5, 2017, 18:35 Local	**Registration:**	N16KR
Aircraft:	RUDDER DWIGHT K KITFOX IV 1200 SPDST	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that, after takeoff, the engine lost partial power at an altitude about 250 ft above ground level. He attempted to restore power by adjusting the throttle but was unsuccessful. Shortly thereafter, the engine lost all power and the pilot performed a forced landing to a field. During the landing roll, the airplane impacted a log and nosed over, resulting in substantial damage to the left wing and fuselage. Postaccident examination and test run of the engine revealed no evidence of preimpact failure or malfunction that would have precluded normal operation. Atmospheric conditions at the time of the accident were conducive to light carburetor icing at cruise or descent power; however, the airplane was operating at takeoff power at the time of the power loss. Thus, the reason for the loss of engine power could not be determined based on the available information.

Probable Cause and Findings

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

A total loss of engine power during initial climb for undetermined reasons.

Findings

Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Initial climb	Off-field or emergency landing

On September 5, 2017, about 1835 central daylight time, an experimental amateur-built Kitfox IV 1200 Speedster, N16KR, was substantially damaged during a forced landing in Raymond, Mississippi. The sport pilot was not injured. Day visual meteorological conditions prevailed at the time, and no flight plan was filed for local flight that departed a private airport about 1830. The personal flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91.

According to the pilot, during the initial climb at an altitude of about 250 ft, the engine lost partial power. He attempted to restore power by adjusting the throttle and was unsuccessful. A few seconds later the engine lost all power. He then performed a successful forced landing to a field. During the landing rollout, the airplane struck a log and flipped over.

Examination of the airplane by a Federal Aviation Administration inspector revealed substantial damage to the left wing, outboard of the wing strut, and buckling of the fuselage about midway between the rear window and the vertical stabilizer. During the examination, no mechanical discrepancies were noted with the airframe or engine that would have prevented normal operation. In addition, there were no anomalies noted with the fuel in the airplane and there was no debris in the fuel filter. Following the examination, the engine was started and responded to multiple throttle inputs without anomaly.

According to the airplane maintenance logbook, the most recent condition inspection was performed August 22, 2017, about 3 flight hours prior to the accident. At that time, the floats were replaced in both carburetors. The last maintenance entry, dated September 1, 2017, read "replaced fuel line at fuel cut off valve."

At 1835, the weather reported at John Bell Williams Airport (JVW), Raymond, Mississippi, about 9 miles north of the accident site, included a temperature of 29°C and a dew point 26°C. The calculated relative humidity at this temperature and dewpoint was about 84 percent. Review of the icing probability chart contained within Federal Aviation Administration Special Airworthiness Information Bulletin CE-09-35 revealed the atmospheric conditions at the time of the accident were "conducive to light icing at cruise or descent power."

Pilot Information

Certificate:	Sport Pilot	**Age:**	68,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Sport pilot Without waivers/limitations	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	October 10, 2015
Flight Time:	(Estimated) 2100 hours (Total, all aircraft), 176 hours (Total, this make and model), 2100 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RUDDER DWIGHT K	**Registration:**	N16KR
Model/Series:	KITFOX IV 1200 SPDST	**Aircraft Category:**	Airplane
Year of Manufacture:	1994	**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	LBS084
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	August 22, 2017 Condition	**Certified Max Gross Wt.:**	1200 lbs
Time Since Last Inspection:	3 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	607 Hrs as of last inspection	**Engine Manufacturer:**	Rotax
ELT:	C91A installed, activated, did not aid in locating accident	**Engine Model/Series:**	912 UL
Registered Owner:	On file	**Rated Power:**	80 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	JVW,247 ft msl	**Distance from Accident Site:**	9 Nautical Miles
Observation Time:	18:35 Local	**Direction from Accident Site:**	25°
Lowest Cloud Condition:		**Visibility**	8 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.87 inches Hg	**Temperature/Dew Point:**	29°C / 26°C
Precipitation and Obscuration:	In the vicinity - Thunderstorm -		
Departure Point:	Raymond, MS (PVT)	**Type of Flight Plan Filed:**	None
Destination:	Raymond, MS (PVT)	**Type of Clearance:**	None
Departure Time:	18:25 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Private PVT	**Runway Surface Type:**	
Airport Elevation:	207 ft msl	**Runway Surface Condition:**	Vegetation
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	32.174999,-90.482498(est)

Administrative Information

Investigator In Charge (IIC):	Brazy, Douglass
Additional Participating Persons:	Albert L McCray; FAA/FSDO; Jackson, MS
Original Publish Date:	December 3, 2020
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=95965