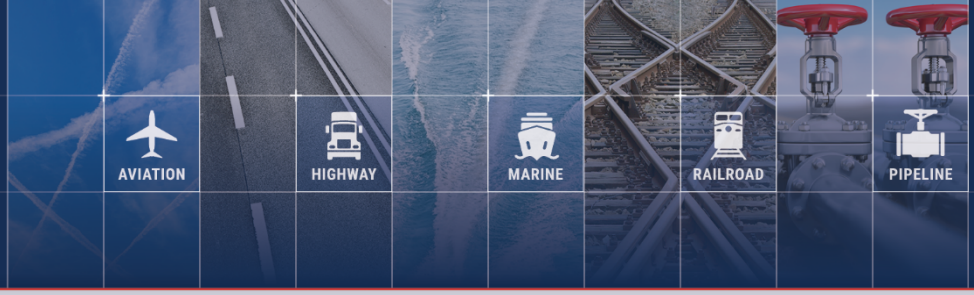

Aviation Investigation Final Report

Location:	Waller, Texas	**Accident Number:**	CEN17LA366
Date & Time:	September 24, 2017, 17:00 Local	**Registration:**	N91904
Aircraft:	EMERSON Kitfox	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The commercial pilot reported that, after he climbed the non-certificated, experimental airplane to 300 to 400 ft above ground level after takeoff, there was a partial loss of engine power. The engine continued to operate but was unable to produce adequate power to sustain flight. The pilot attempted to land in a field near a residential area and the airplane impacted a fence, which resulted in substantial damage to the wings and fuselage. The fuel in the airplane had not been changed for about 12 months before the accident; however, a limited examination of the wreckage determined that the fuel onboard the airplane tested negative for water. The airplane was manufactured in 2001 and never received an airworthiness certificate. The postaccident examination was limited and the reason for the loss of power was not determined.

Probable Cause and Findings

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

A partial loss of engine power for reasons that could not be determined based on the available information.

Findings

Aircraft	(general) - Not specified
Not determined	(general) - Unknown/Not determined

Factual Information

History of Flight

Initial climb	Loss of engine power (partial) (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

On September 24, 2017, about 1700 central daylight time, an experimental, amateur-built Emerson Kitfox airplane, N91904, collided with terrain following a loss of engine power after takeoff from the Skydive Houston Airport (37XA), Waller, Texas. The pilot was not injured, and the airplane sustained substantial damage. The airplane was registered to a private individual and was being operated by the pilot as a 14 *Code of Federal Regulations* Part 91 personal flight. Visual meteorological conditions existed near the accident site at the time of the flight, and a flight plan had not been filed. The flight was departing 37XA on a local flight.

The pilot reported he did a preflight and engine run-up and it appeared the airplane was operating normally. He decided to takeoff and fly around the traffic pattern. The airplane climbed to 300 to 400 ft above ground level when there was a partial loss of engine power. He stated that the engine continued to operate but did not develop enough power to sustain flight. The pilot attempted to land in a field near a residential area, and the airplane impacted a fence which resulted in substantial damage to the wings and fuselage. The pilot purchased the airplane in October 28, 2016, and the fuel in the airplane had not been changed since at least October 2016.

The airplane was manufactured in 2001 but had never received an airworthiness certificate. The pilot did not have a current medical certificate.

The wreckage was examined by a FAA operations inspector who performed a limited inspection of the airplane. The inspector determined there was fuel at the scene and there was no evidence of water in the fuel. No further examination into the cause of the loss of engine power was conducted.

Pilot Information

Certificate:	Commercial	**Age:**	68,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	None Unknown	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	4000 hours (Total, all aircraft), 7 hours (Total, this make and model), 6 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	EMERSON	**Registration:**	N91904
Model/Series:	Kitfox	**Aircraft Category:**	Airplane
Year of Manufacture:	2001	**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	61
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	850 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	24 Hrs at time of accident	**Engine Manufacturer:**	ROTAX
ELT:	Not installed	**Engine Model/Series:**	503 UL DCDI
Registered Owner:	On file	**Rated Power:**	52 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:	TME	**Distance from Accident Site:**	11 Nautical Miles
Observation Time:	17:08 Local	**Direction from Accident Site:**	170°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 9000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	120°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.82 inches Hg	**Temperature/Dew Point:**	30°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Waller, TX (37XA)	**Type of Flight Plan Filed:**	None
Destination:	Waller, TX (37XA)	**Type of Clearance:**	None
Departure Time:	17:00 Local	**Type of Airspace:**	

Airport Information

Airport:	Skydive Houston Airport 37XA	**Runway Surface Type:**	
Airport Elevation:	235 ft msl	**Runway Surface Condition:**	Unknown
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:**	29.984722,-95.931114

Administrative Information

Investigator In Charge (IIC):	Silliman, James
Additional Participating Persons:	Beau Young; FAA Houston FSDO; Houston, TX
Original Publish Date:	March 18, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=96082