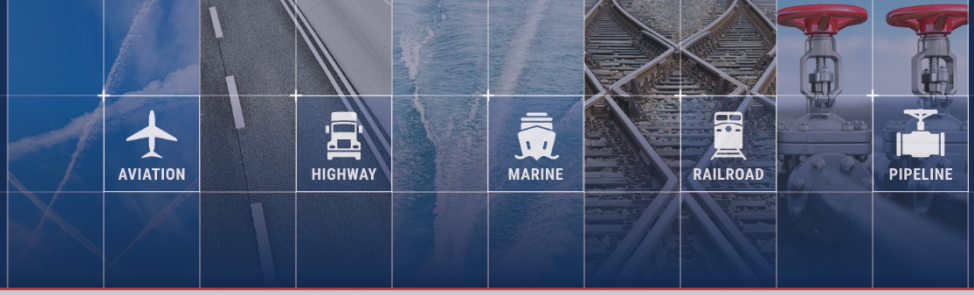

Aviation Investigation Factual Report

Location:	Fulshear, Texas	**Accident Number:**	CEN17LA011
Date & Time:	October 3, 2016, 18:00 Local	**Registration:**	N83WR
Aircraft:	Fokker DR-1	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (partial)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Flight test		

Factual Information

On October 3, 2016, about 1800 central daylight time, a Fokker DR-1 airplane, N83WR, experienced a loss of engine power and the pilot made a forced landing near Fulshear, Texas. The airline transport rated pilot was not injured and the airplane sustained substantial damage. The airplane was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a test flight. Visual meteorological conditions prevailed and no flight plan was filed. The local flight had just departed the Covey Trails Airport, Fulshear, Texas.

The responding Federal Aviation Administration (FAA) inspector reported that the airplane's construction had just been completed by the owner and the accident flight was the airplane's first test flight. The owner asked the accident pilot to conduct the test flight. Prior to the accident flight the owner secured the airplane to a fixed object and completed a full power engine run with no anomalies noted. The airplane was then subjected to eight high-speed taxi runs conducted. A few small oil leaks were observed from the rocker box covers; the gaskets were replaced and the oil leaks were resolved. Later, the pilot departed from X09 and experienced a partial loss of engine power during the initial climb and the airplane was not able to maintain altitude. The pilot made a forced landing into a tree nursery about one mile from X09. The spars on all three right wings were damaged.

The owner reported that the Rotex R3600 engine was received new with 0 hours on March 31, 2016. The engine was installed on the airplane and had accumulated about 4 hours of tests runs prior to the accident flight.

The FAA inspector conducted a postaccident examination of the engine and fuel system. The examination revealed that the fuel filter and gascolator were clear of contaminants and the engine was unremarkable. The fuel pressure regulator and throttle body injector were disassembled and no anomalies were noted. The mechanical fuel pump was disassembled and housing screws were slightly loose and the fuel screen was not seated properly.

The engine manufacturer stated that their products are experimental and there is no standard installation for the engine, only guidelines. This leaves the owner free to experiment with the engine and fuel system installation.

Pilot Information

Certificate:	Airline transport; Commercial; Flight engineer	**Age:**	65,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Single
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	February 1, 2016
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	23000 hours (Total, all aircraft), 0 hours (Total, this make and model), 18850 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Fokker	**Registration:**	N83WR
Model/Series:	DR-1	**Aircraft Category:**	Airplane
Year of Manufacture:	2015	**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	103
Landing Gear Type:		**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Rotec
ELT:	Not installed	**Engine Model/Series:**	R3600
Registered Owner:	On file	**Rated Power:**	150 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:	KTME,168 ft msl	**Distance from Accident Site:**	9 Nautical Miles
Observation Time:	17:55 Local	**Direction from Accident Site:**	341°
Lowest Cloud Condition:	Few / 6000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.86 inches Hg	**Temperature/Dew Point:**	29°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fulshear, TX (X09)	**Type of Flight Plan Filed:**	None
Destination:	Fulshear, TX (X09)	**Type of Clearance:**	None
Departure Time:	18:00 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	COVEY TRAILS X09	**Runway Surface Type:**	Grass/turf
Airport Elevation:	130 ft msl	**Runway Surface Condition:**	Dry;Vegetation
Runway Used:	17	**IFR Approach:**	None
Runway Length/Width:	3352 ft / 100 ft	**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:**	29.652221,-95.842498(est)

Administrative Information

Investigator In Charge (IIC):	Lindberg, Joshua
Additional Participating Persons:	Rick Bolton; Federal Aviation Administration; Houston, TX
Report Date:	January 18, 2017
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=94159