National Transportation Safety Board
Aviation Accident Data Summary

Location:	Burns Flat, OK	**Accident Number:**	CEN16FA307
Date & Time:	08/06/2016, 0820 CDT	**Registration:**	N110PX
Aircraft:	WILSON BUGATTI-DEMONGE 100P	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Analysis

The airline transport pilot departed from a 13,500 ft long runway with a right quartering headwind present on a local test flight in an experimental, amateur-built, twin-engine airplane, which was a replica of a 1930s-era air racer. During the initial climb after takeoff , the airplane entered a right bank followed by a left bank. The left bank increased, and the airplane entered a nose-low descent that continued until it impacted terrain in an inverted attitude.

The airplane was equipped with several onboard cameras that captured video footage of the accident flight. The video revealed that the left/forward engine began surging after liftoff and reached its maximum operating speed (red line) twice during the short flight. Although the pilot attempted to control the forward engine rpm with the throttle lever, the throttle inputs had no apparent effect. Based on the design of the propeller drive train, it is a possibility that the forward engine clutch was slipping. The airplane's airspeed decreased below its design stall speed and the angle of attack increased; the airplane then rolled left and subsequently impacted the ground. A postaccident examination of the airplane did not reveal any preimpact flight control anomalies. Examination of the engines did not identify a reason for the surging of the forward engine or slipping of the clutch. The sequence of events as described by witness statements and the onboard video was consistent with a loss of airspeed following an engine anomaly and a subsequent aerodynamic stall.

Toxicological testing revealed alcohols were present in samples taken during the autopsy. Given the putrefaction of the samples, it is likely that all detected alcohols were the result of postmortem production.

Terrain from the accident site to one quarter mile north of the accident site was suitable for an emergency landing there.

Flight Events

Takeoff - Powerplant sys/comp malf/fail
Takeoff - 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 airspeed following an engine anomaly during the initial climb after takeoff, which resulted in the airplane exceeding its critical angle of attack and experiencing an aerodynamic stall. Contributing to the accident was an engine anomaly, the reason for which could not be identified during postaccident examination.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C
Aircraft-Aircraft power plant-(general)-(general)-Malfunction - F
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
Not determined-Not determined-(general)-(general)-Unknown/Not determined - F

Pilot Information

Certificate:	Airline Transport	**Age:**	66
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Instrument Rating(s):**	Airplane
Other Aircraft Rating(s):	None	**Instructor Rating(s):**	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	(Estimated) 10700 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	WILSON	**Registration:**	N110PX
Model/Series:	BUGATTI-DEMONGE 100P	**Engines:**	2 Reciprocating
Operator:	On file	**Engine Manufacturer:**	Suzuki
Operating Certificate(s) Held:	None	**Engine Model/Series:**	1300 cc
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	KCSM, 1922 ft msl	**Weather Information Source:**	Weather Observation Facility
Lowest Ceiling:	None	**Wind Speed/Gusts, Direction:**	9 knots, 40°
Temperature:	23°C	**Visibility**	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Burns Flat, OK (CSM)	**Destination:**	Burns Flat, OK (CSM)

Airport Information

Airport:	CLINTON-SHERMAN (CSM)	**Runway Surface Type:**	Concrete
Runway Used:	35L	**Runway Surface Condition:**	
Runway Length/Width:	13503 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	N/A	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Latitude, Longitude:	35.364167, -99.204444		

Administrative Information

Investigator In Charge (IIC):	Edward F Malinowski	**Adopted Date:**	12/11/2017
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=93776		