



National Transportation Safety Board Aviation Accident Factual Report

Location:	Cleburne, TX	Accident Number:	CEN19LA159
Date & Time:	05/30/2019, 1100 CDT	Registration:	N2514F
Aircraft:	Lancair LC41	Aircraft Damage:	Substantial
Defining Event:	Powerplant sys/comp malf/fail	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Business		

On May 30, 2019, about 1100 central daylight time, a Lancair LC41 airplane, N2514F, conducted a forced landing near the Cleburne Regional Airport (CPT), Cleburne, Texas. The pilot was not injured, and the airplane sustained substantial damage. The airplane was registered to and operated by Van Bortel Aircraft, Inc under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a maintenance test flight. Visual meteorological conditions prevailed for the local flight at the time of the accident.

The flight was conducted to break-in the engine's No. 5 cylinder, which had just been replaced. During the flight, the pilot noticed the oil pressure warning light illuminate, followed by a low oil temperature indication. The pilot attempted to divert to CPT; however, the engine experienced a loss of power and he conducted a forced landing. During the landing, the airplane collided with trees and came to rest upright and partly submerged in a small pond about one mile from CPT.

Inspection of the airplane revealed substantial damage to the wings, and water submersion damage to the airplane. The airplane's Hobbs meter read 1,090.1 hours.

The airplane was recovered to a secure facility for further examination. The examination was conducted by the NTSB Investigator-in-Charge, a representative from Van Bortel Aircraft, and technical representatives from the engine and airframe manufacturers. The examination noted the engine case had a hole above the No. 4 cylinder, and when the propeller was rotated by hand, the engine had limited rotation and internal binding was noted. A light, oil film was noted on the bottom of the airplane. The exam also found an oil pressure switch separated in two pieces. The threaded section remained to its mating joint; the other section rested on an exhaust tube and attached by its wire connector as seen in Figure 1.



Figure 1: Oil Pressure Switch Photo Continental

A visual inspection of the switch noted that the switch had separated at a manufacturing joint between the body and threaded section.

The switch was removed and sent to Textron Aviation, Inc, Materials Laboratory for a detailed examination of the switch. Textron's examination noted the switch failed at the swaged joint between the threaded section and the base cap section of the switch. The examination was not able to determine how the joint failed, since there were no physical indications as to how the swaged joint failed.

Pilot Information

Certificate:	Airline Transport; Commercial; Flight Engineer	Age:	58
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last FAA Medical Exam:	02/25/2019
Occupational Pilot:		Last Flight Review or Equivalent:	05/05/2019
Flight Time:	20019 hours (Total, all aircraft), 165 hours (Total, this make and model), 233 hours (Last 90 days, all aircraft), 73 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Lancair	Registration:	N2514F
Model/Series:	LC41 550FG	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	41093
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	Reciprocating
Airframe Total Time:	1090.1 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-550-C(5)
Registered Owner:	Van Bortel Aircraft, Inc	Rated Power:	310 hp
Operator:	Van Bortel Aircraft, Inc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KCPT	Distance from Accident Site:	
Observation Time:	0955 CDT	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	26 °C / 17 °C
Precipitation and Obscuration:	No Precipitation		
Departure Point:	Arlington, TX (GKY)	Type of Flight Plan Filed:	None
Destination:	Arlington, TX (GKY)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.390278, -97.433611 (est)

Administrative Information

Investigator In Charge (IIC):	Craig Hatch
Additional Participating Persons:	Gavin Hill; FAA FSDO; Irving, TX Mike Council; Continental Aerospace Technologies; Mobile, AL Henry Soderlund; Textron Aviation, Inc; Wichita, KS Darryl Taylor; Van Bortel Aircraft, Inc; Arlington, TX
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=99516