



# Aviation Investigation Final Report

<b>Location:</b>	Columbus, Ohio	<b>Accident Number:</b>	CEN17LA104
<b>Date &amp; Time:</b>	February 14, 2017, 13:30 Local	<b>Registration:</b>	N88EB
<b>Aircraft:</b>	Beech D55	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (partial)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The two multiengine-rated pilots departed in the multiengine airplane for a local personal flight in gusting crosswinds. The left seat pilot reported that he wanted to get current on his takeoffs and landings and that he performed the taxi and takeoff procedure. During the climbout, the left engine began to lose power. The left seat pilot gave the right seat pilot control of the airplane, and the right seat pilot conducted the landing. The left main landing gear struck the runway hard, which resulted in the collapse of the gear. A postaccident examination of the left engine and the fuel system revealed no anomalies that would have prevented normal operation.

## Probable Cause and Findings

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

The partial loss of left engine power during takeoff and initial climb, which led to a hard landing in gusting crosswind conditions. The reason for the loss of engine power could not be determined because postaccident examination of the left engine revealed no anomalies that would have precluded normal operation.

## Findings

<b>Not determined</b>	(general) - Unknown/Not determined
<b>Environmental issues</b>	Crosswind - Effect on operation

## Factual Information

### History of Flight

<b>Takeoff</b>	Loss of engine power (partial) (Defining event)
<b>Emergency descent</b>	Off-field or emergency landing
<b>Landing</b>	Hard landing
<b>Landing</b>	Sys/Comp malf/fail (non-power)

On February 14, 2017, about 1330 eastern standard time, a Beech D55 airplane, N88EB, impacted runway 22 at the Bolton Field Airport (TZR), near Columbus, Ohio, following a loss of left engine power during takeoff. The pilot and pilot rated passenger were uninjured. The airplane sustained substantial fuselage and wing damage when the left main landing gear collapsed. The airplane was registered to Absten Aviation LLC and was operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Day visual meteorological conditions prevailed for the flight, which did not operate on a flight plan. The local flight was originating from TZR at the time of the accident.

According to information provided by a Federal Aviation Administration Inspector, the pilot seated in the left seat reported that he wanted to get current on his takeoffs and landings. He performed the taxi and takeoff procedure. The left seated pilot stated that after rotation, the airplane began to climb. About 50 feet above ground level, the left engine began to lose power and its rpm began dropping to around 1,700 rpm. He told the right seated pilot that he was giving him control of the airplane. The right seated pilot tried to land the airplane within the remaining runway. The left main landing gear struck hard on the runway. The right seated pilot was able to stop the airplane on the prepared runway surface. The pilots thought the tire had blown during the hard landing. However, the left main landing gear had collapsed.

According to the pilot in command's accident report, seconds after rotation when the airplane was about 12 feet above ground level and at minimum controllable airspeed (Vmc) "plus 3" the left engine had a "power loss." As emergency procedures were performed, the airplane drifted left of the runway where it reached a maximum height of 24 feet at a maximum speed of Vmc "plus 6." During a forced landing to last 1,500 feet of runway at 30-degree descent angle, the airplane sustained a hard landing. The airplane was steered on the ground back to the runway centerline. Upon brake application, the left upper strut housing failed and the left engine sustained a propeller strike. The airplane then skidded to stop on the centerline about 500 feet from the runway end with no fire or fluid leaks.

At 1349, the recorded weather at TZR was: Wind 260 degrees at 13 knots gusting to 24 knots; visibility 10 statute miles; sky condition clear; temperature 11 degrees C; dew point -2 degrees C; altimeter 29.81 inches of mercury.

A Federal Aviation Administration Inspector and an Air Safety Investigator from the engine manufacturer examined the wreckage. During the examination of the left engine, top spark plugs were removed and they exhibited dark combustion deposits with normal wear. All cylinders were inspected

with a lighted bore scope and no anomalies noted. A thumb compression was obtained on all six cylinders when the engine was rotated. Additionally, engine continuity was established. No fuel was found in the engine fuel lines that were disconnected. The fuel supply line to the fuel manifold valve was disconnected and the left engine fuel boost pump pumped fuel from the left main fuel tank and the right main fuel tank in cross feed to the manifold valve. No anomalies were observed that would have prevented normal operations.

## Pilot Information

<b>Certificate:</b>	Airline transport; Commercial; Flight engineer; Flight instructor; Military	<b>Age:</b>	58, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 With waivers/limitations	<b>Last FAA Medical Exam:</b>	November 14, 2016
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	November 4, 2016
<b>Flight Time:</b>	16300 hours (Total, all aircraft), 380 hours (Total, this make and model), 12000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft)		

## Pilot-rated passenger Information

<b>Certificate:</b>	Private	<b>Age:</b>	63, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	May 19, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 3234 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N88EB
<b>Model/Series:</b>	D55	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1968	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	TE-611
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	May 2, 2016 Annual	<b>Certified Max Gross Wt.:</b>	5300 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	5356 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO 520C
<b>Registered Owner:</b>		<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KTZR,905 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	13:49 Local	<b>Direction from Accident Site:</b>	110°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	13 knots / 24 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	260°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.8 inches Hg	<b>Temperature/Dew Point:</b>	11°C / -2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	COLUMBUS, OH (TZR)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	COLUMBUS, OH (TZR)	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	13:30 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	BOLTON FIELD TZR	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	904 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	22	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5500 ft / 100 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	39.901111,-83.136947(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Malinowski, Edward
<b>Additional Participating Persons:</b>	Thomas Sheckler; Federal Aviation Administration; Columbus, OH Chris Lang; Continental Motors; Mobile, AL
<b>Original Publish Date:</b>	May 25, 2017
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=94727">https://data.nts.gov/Docket?ProjectID=94727</a>

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).