



## **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Aviation Safety

Western Pacific Region

February 21, 2019

### **Field Report**

**WPR19FA086**

This document contains 15 embedded photos.

## **ACCIDENT:**

Location: Stallion Springs, CA

Date: 02/21/2019

Aircraft: Beech D55, Registration Number: N533Q, Serial #: TE-616

NTSB IIC: Jack Vanover

## **EXAMINATION PARTICIPANTS:**

Jackie Vanover  
Aviation Accident Investigator  
National Transportation Safety Board  
Federal Way, WA 98003

Andrew Hall  
Senior Air Safety Investigator  
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Wichita, Kansas 67215

Mike Council  
Air Safety Investigator  
Continental Motors Group  
Mobile, AL 36615

## **HISTORY OF FLIGHT**

On February 21, 2019, about 1645 Pacific standard time, a Beech D55 airplane, N533Q, impacted terrain near Stallion Springs, California. The commercial pilot and both passengers were fatally injured, and the airplane was destroyed. The airplane was registered to a private individual and operated by the pilot as a Title 14 Code of Federal Regulations Part 91, cross country flight. The flight originated from San Luis County Regional Airport (SBP), San Luis Obispo, California, at 1600 and was destined for Whiteman Airport (WHP), Los Angeles, California.

According to a telephone conversation with the son of the pilot on March 6, 2019, his father was asked by a longtime family friend (30 years) to fly two lawyers up to see his client in SBP. He stated that the flight was not for compensation or hire.

In a telephone conversation on March 24, 2019 with the airplane owner; he stated that he was not aware that the mechanic/pilot had taken the airplane. He also stated that he had asked the pilot to list out all of the airplane's equipment in order to get it ready to sell. When asked about the mechanic taking the airplane without his knowledge, he stated, "it's just what he [pilot] does".

On February 21, 2019, about 2116 PST, I received the ALNOT from the FAA ROC for the accident airplane. The remarks section of the ALNOT stated the following: Family concerned, ETA 220100Z. AT SBP, ACI Jet services saw aircraft depart about 0000Z.

According to the Kern County Search and Rescue, they found the airplane on February 22, 2019, about 1200 PST by using a ground ELT location device.

The Rescue Coordination Centers (RCCs) was contacted and they reported that they did not receive an ELT hit on the accident airplane.

### **PERSONNEL INFORMATION**

The pilot, age 74, held a private pilot certificate for airplane multi-engine land with a restriction of visual flight rules only. He also held an airframe and powerplant certificate and was an authorized inspector. He was issued a third-class airman medical certificate on November 24, 2014, with the following limitation: Must have available glasses for near vision. The pilot's medical expired for all classes on November 30, 2016. According to the FAA, he completed the BasicMed Comprehensive Medical Examination Checklist (CMEC) on May 8, 2017 and the Basic Med Course on May 13, 2017.

### **AIRCRAFT INFORMATION**

The six-seat, twin-engine, low-wing, retractable landing gear airplane was manufactured in 1968 and was equipped with two Continental Motors IO-520, 285-horsepower engines. STC SA773CE was found in the airworthiness file, which replace the two bladed McCauley propellers with two three bladed Hartzell propellers (Serial Numbers PHC-C3YF-2NF and PHC-C3YF-2NF).

## Airframe Log Entry

Beechcraft D55 S/N TE-616  
HOBBS 0618.9 TTAF 4965.7

N533Q

April 4<sup>th</sup>, 2018

1. Complied with 100 hour inspection IAW 14 CFR part 43 appendix D.
2. I certify that the ELT has been inspected IAW the requirements of FAR 91.207 (d) and found to be in satisfactory condition. Battery replacement due September 2019.
3. Removed and replaced the following: (2) p/n RA2J4-7, (2) air filters p/n BA-6205, (1) nose gear tow pin p/n RA60-820029-1.
4. Removed brake assemblies, cleaned and inspected, reinstalled with new piston o-rings p/n M528775-222. Replaced (4) brake hose assemblies, (2) on each side with new assemblies manufactured by Aviall hose shop, p/n 111417-450172, & 450164, (1) rework assembly p/n 111-130-156-193. Bled and serviced brakes per AMM. No defects noted.
5. Removed all (4) Shaw Aero Device fuel caps, cleaned and inspected. Disassembled and installed new fluoro-silicone o-rings p/n M25988-1-338 and -010 per assembly.
6. Performed normal and emergency gear swing operations, found indications and operations normal.
7. Complied with AD 2007-08-08 by performing action (4) of this AD IAW Beechcraft SI no. 0448-211 R1, no defects noted. Repetitively lubricate thereafter at intervals not to exceed 100 hours TIS.
8. Complied with AD 89-05-02 by inspection per paragraph (b) IAW Beechcraft SB 2242 R1, no defects noted. Due every 100 hours TIS.
9. Complied with AD 76-07-12 Bendix Switches by functional test, no defects noted.
10. Applicable airframe airworthiness directives have been complied with through 2011-27-04. See compliance checklist for details.

I certify that this AIRFRAME has been inspected in accordance with a 100 hour inspection and has been determined to be in airworthy condition.

  
Michael Fuller A&P 

## Airframe Log Entry

Beechcraft D55 S/N TE-616  
HOBBS 0618.9 TTAF 4965.7

N533Q

April 4<sup>th</sup>, 2018

I certify that this AIRFRAME has been inspected in accordance with an annual inspection and has been determined to be in airworthy condition.

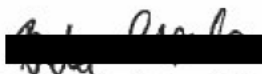

  
Beia Csonka A&P  A.

Figure 1: View of Airframe Annual Entry

### Left Engine Log Entry

Continental IO-520-C15B S/N 287461-R  
HOBBS 0618.9 TSN 653.9

N533Q

April 4<sup>th</sup>, 2018

11. Complied with 100 hour inspection (AW 14 CFR part 43 appendix D).
12. Drained oil and removed filter, installed Champion oil filter p/n CH48109-1 and serviced with (12) qts of Aeroshell 100W engine oil. Took oil sample and sent for analysis.
13. Engine compression: #1: 68/80 #2: 70/80 #3: 73/80 #4: 66/80 #5: 73/80 #6: 70/80
14. Removed injectors and installed after cleaning.
15. Replaced spark plug copper gaskets with new p/n AN4027-1
16. AD 2014-05-29 does not apply, affected cylinder assemblies not installed.
17. AD 2016-16-12 does not apply, affected cylinder assemblies not installed.
18. Applicable engine airworthiness directives have been complied with through 2016-16-12. See compliance checklist for details. Ran engine and leak checked, OK.

I certify that this ENGINE has been inspected in accordance with a 100 hour inspection and has been determined to be in airworthy condition.

  
Michael Fuller A&P 

### Left Engine Log Entry

Continental IO-520-C15B S/N 287461-R  
HOBBS 0618.9 TSN 653.9



N533Q

April 4<sup>th</sup>, 2018

I certify that this ENGINE has been inspected in accordance with an annual inspection and has been determined to be in airworthy condition.

  
Ge'ia Gzonka A&P  A.

Figure 2: View of left engine annual entry.

<p><b>Right Engine Log Entry</b></p> <p>Continental IO-520-C S/N 240456-R  HOBBS 0618.9 TSMOH 1374.0 TSN 3422.2</p>	<p><b>N533Q</b></p> <p>April 4<sup>th</sup>, 2018</p>
<ol style="list-style-type: none"> <li>1. Complied with 100 hour inspection IAW 14 CFR part 43 appendix D.</li> <li>2. Drained oil and removed filter, installed Champion oil filter p/n CH48109-1 and serviced with (12) qts of Aeroshell 100W engine oil. Took oil sample and sent for analysis.</li> <li>3. Engine compression: #1: 76/80 #2: 77/80 #3: 79/80 #4: 69/80 #5: 76/80 #6: 78/80</li> <li>4. Removed injectors and installed after cleaning.</li> <li>5. Replaced spark plug copper gaskets with new p/n AN4027-1</li> <li>6. AD 2014-05-29 does not apply, affected cylinder assemblies not installed.</li> <li>7. AD 2016-16-12 does not apply, affected cylinder assemblies not installed.</li> <li>8. Applicable engine airworthiness directives have been complied with through 2016-16-12. See compliance checklist for details. Ran engine and leak checked, OK.</li> </ol>	
<p>I certify that this ENGINE has been inspected in accordance with a 100 hour inspection and has been determined to be in airworthy condition.</p>	
<p style="text-align: right;">   Michael Fuller A&amp;P  </p>	

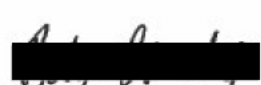

<p><b>Right Engine Log Entry</b></p> <p>Continental IO-520-C S/N 240456-R  HOBBS 0618.9 TSMOH 1374.0 TSN 3422.2</p>	<p><b>N533Q</b></p> <p>April 4<sup>th</sup>, 2018</p>
<p>I certify that this ENGINE has been inspected in accordance with a 100 hour inspection and has been determined to be in airworthy condition.</p>	
<p style="text-align: right;">   Sela Csonka A&amp;P .A. </p>	

Figure 3: View of right engine annual entry.

## Right Propeller Log Entry

Hartzell PHC-C3YF-2UF/FC7663-2R S/N EB4535A  
HOBBS 0618.9 TSN 319.9

N533Q

April 4<sup>th</sup>, 2018

1. Complied with 100 hour inspection IAW 14 CFR part 43 appendix D.
2. Serviced accumulators to specifications.
3. Dressed and painted propeller.
4. Applicable propeller airworthiness directives have been complied with through 2008-13-28. See compliance checklist for details.

I certify that this PROPELLER has been inspected in accordance with a 100 hour inspection and has been determined to be in airworthy condition.

  
Michael Fuller A&P 

## Right Propeller Log Entry

Hartzell PHC-C3YF-2UF/FC7663-2R S/N EB4535A  
HOBBS 0618.9 TSN 319.9

N533Q

April 4<sup>th</sup>, 2018

I certify that this PROPELLER has been inspected in accordance with an annual inspection and has been determined to be in airworthy condition.

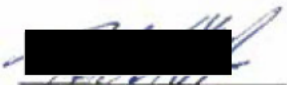
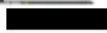
  
Bela Csonka A&P  A.

Figure 4: View of right propeller annual entry.

**Left Propeller Log Entry** **N533Q**  
Hartzell PHC-C3YF-2UF/FC7663-2R S/N EB4536A April 4<sup>th</sup>, 2018  
HOBBS 0618.9 TSN 319.9

1. Complied with 100 hour inspection IAW 14 CFR part 43 appendix D.
2. Serviced accumulators to specifications.
3. Dressed and painted propeller.
4. Applicable propeller airworthiness directives have been complied with through 2008-13-28. See compliance checklist for details.

I certify that this PROPELLER has been inspected in accordance with a 100 hour inspection and has been determined to be in airworthy condition.

  
Michael Fuller A&P 

**Left Propeller Log Entry** **N533Q**  
Hartzell PHC-C3YF-2UF/FC7663-2R S/N EB4536A April 4<sup>th</sup>, 2018  
HOBBS 0618.9 TSN 319.9

I certify that this PROPELLER has been inspected in accordance with an annual inspection and has been determined to be in airworthy condition.

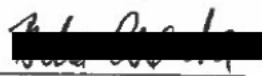

  
Bela Csonka A&P  I.A.

Figure 5: View of left propeller annual entry.



Preflight Briefing - a search of the FAA Automated Flight Service Station (AFSS) provider Leidos indicated that they had no requests from the pilot for a weather briefing, or to file a flight plan, and no other contact with him. A similar search with ForeFlight also came up with no contact for any weather briefing information. It is therefore unknown what the pilot reviewed to familiarize himself with reported and forecast conditions prior to flight.

## **AIDS TO NAVIGATION**

No ATC services were provided.

## **COMMUNICATIONS**

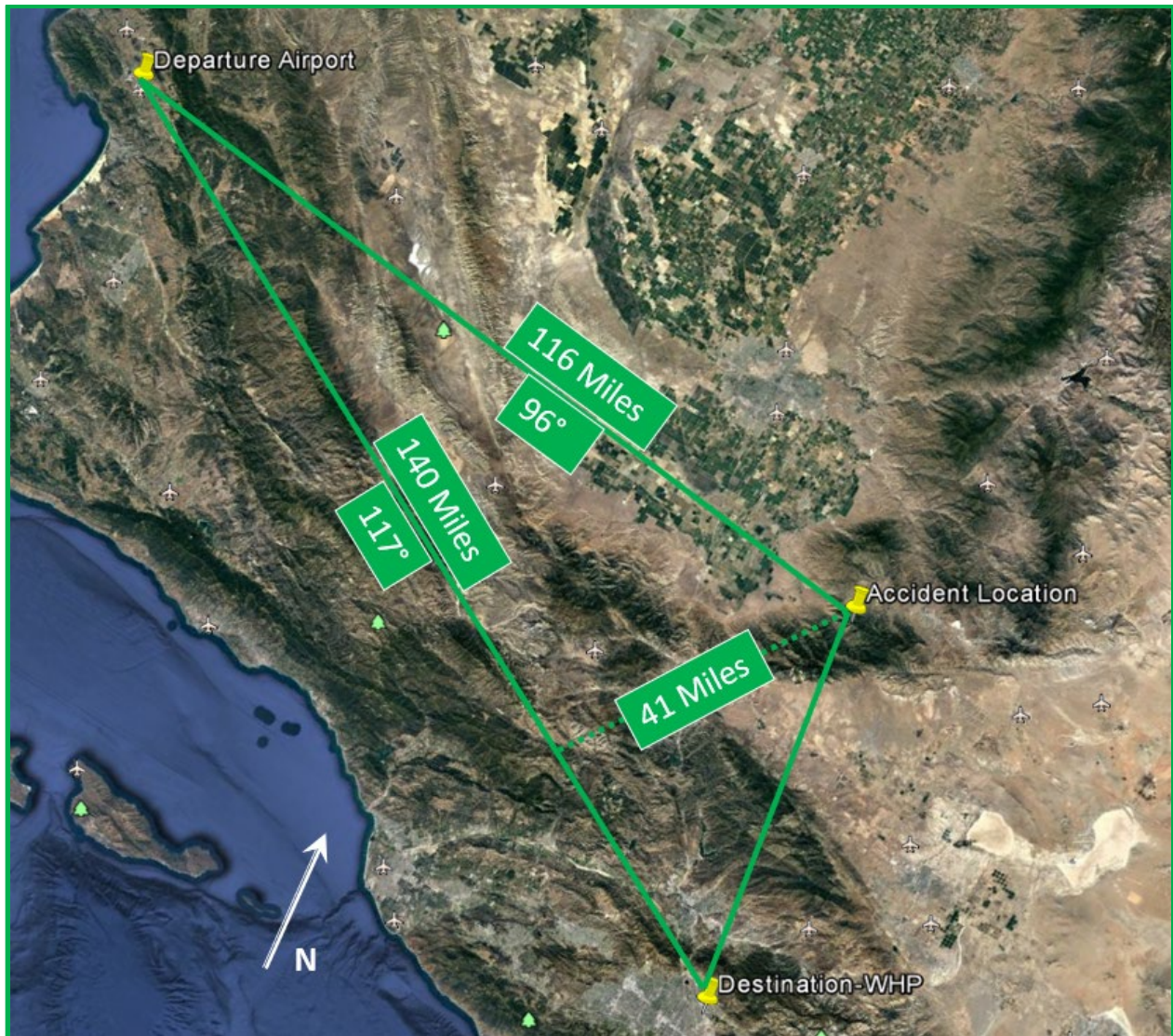
Leidos Flight Services and third-party vendors utilizing the LFS system had no contact with N533Q on 2/21/19.

## **WRECKAGE AND IMPACT INFORMATION**

The airplane impacted rising terrain about 3 miles southeast of Stallion Springs, California.



A review of the flight route revealed that the pilot deviated from his course about 41 miles east.



The initial impact point (IIP) was identified as a tree about 30 ft high. The top of the tree had recently been broken. A second tree that appeared to have been topped (broken) was identified about 20 ft from the IIP in the direction of travel. The first identified piece of wreckage was a fragment of the left elevator tip, which was about 140 ft in the direction of travel from the second tree that was topped.



Figure 6: View of left elevator tip.

The empennage was separated from the fuselage and was found in the first grouping of wreckage in the debris path. All pieces of the empennage were found within about 20 ft of each other. The vertical stabilizer (VS) showed leading edge dents about midpan. About 4 inches of the top of the VS was displaced to the right. The bottom aft section of the VS was crushed upward.

The rudder was found separated from the empennage within a group of large oak trees.

The right wing was found separated from the fuselage and broken into two main pieces. Both pieces were found within 10 feet of one another. The outboard section of the wing was found at the base of a large oak tree and displayed extensive leading-edge impact damage. The inboard section of the wing was located just past the outboard section and consisted of the wing area from the right engine outboard to about wing station (WS) 122. The flap and aileron separated and where both found within the debris path. The fuel bladder was found destroyed. The fuel cap was found in place.

The left wing was separated from the fuselage and was found within the debris path. The leading edge showed circumferential impact marks. The flap and aileron separated and where both found within the debris path. The fuel bladder was found destroyed.

The fuselage split into two main pieces. The aft fuselage was found about 100 ft north of the forward fuselage/cockpit and consisted of the area from about fuselage station (FS) 100 aft to about FS 257. The ELT was found connected inside the fuselage.



The cockpit area was the last piece of wreckage found in the debris path. The cockpit consisted of the fuselage area forward of FS 100.



### **COCKPIT/CABIN OBSERVATIONS**

The following observations were made regarding the cockpit

- Key in ignition and set to on
- Left and right magnetos set to Both
- The Prop/Throttle/Mixture control arms where found full forward.
- Flap handle was found in the up position.
- The transponder was set to 1200 and was on standby
- Fuel selector position could not be determined onsite because the selector and plate was separated from valve assembly.
- Avionics Master-On
- Pitot Heat-Off
- HTR IGN-Off
- Heater-Off

### **LIGHTS**

- Beacon-On

- Nav-On
- Ice-off
- Taxi-Off
- Landing-Off
- Pulselite-Off
- Left and Right Cowl Flaps-closed
- Landing gear handle found in up position
- Trim switch-On
- LTDS Heat-Off
- Auto Pilot switch-off
- The only circuit breaker that appears to be open is the stall warning horn.
- Door Seal Power-On
- Door Seal Alternate-On (ASI-19-AG-038)

### **Instruments**

Altimeter-Kollsman window indicated 29.59

Turn Coordinator-Nothing significant

HSI

- Glass face broken
- Heading select bug set to 162°
- course selector pointer set to 210°

Attitude indicator

- Face Broken
- Gyro tumbled

VOR (Photo ASI-19-AG-022)

- Shows 110° on the top
- Indicates slightly to the right of course

### **ENGINE**

The right engine

All cylinders remained attached to the case. Extensive damage was noted on most of the cooling fans and rocker box covers. The top left side of the engine case had a hole caused from impact damage. Both magnetos, alternator, and instrument air pump separated and were not located at the wreckage site.

The left engine

Cylinder No. 6 head was separated and not found at the wreckage site. Cylinder No's 2 and 4 displayed extensive impact damage. The propeller governor was separated from the wreckage and not located. Both magneto distributor caps were damaged and impact damage was noted to the ignition harness and primary ignition leads.

#### **WRECKAGE DISPOSITION**

The wreckage was not recovered from the accident site.