



U.S. Department
of Transportation
**Federal Aviation
Administration**

Forrest G. Dodd
Aviation Safety Inspector

South Florida Flight Standards District Office 19
[REDACTED]
Miramar, FL 33027

Juan C. Garcia FAA, IIC
Inspectors Statement/Accident Investigation

Registration: N2960K
Make: 1947 LUSCOMBE
Model: 8E
Serial Number: 5687
SAS Task Code: TSO19FY210516
SAS Activity Code: SO19202105620
ATQA No.: ASO1921034
NTSB No.: ERA21FA142
AFTT: 973.67
Tach Time: 973.67
Last 100/Annual: 02/16/2020 Aircraft out of Annual

When: 02/28/2021

Where: Tailwinds Airport (FD15) Jupiter, Florida - 26°58'42" North 80°12'42" West

What: Part 91 operator, operating 1947 Luscombe, Model 8E, serial number 5687 and registration number N2960K. Two pilots on board take off from Tailwinds Airport (FD15) runway 09 crashing 650 feet 45° degrees Northeast off the end of runway 270. The left seat pilot deceased and right seat pilot with serious injuries. The 1947 Luscombe, N2960K owned by DC Aircraft Enterprises, [REDACTED], Jupiter Florida. Aircraft destroyed from accident. Pilots are father and son with father a fatality.

Who:

PIC Pilot:

Larry Keith Carpenter (**Fatality**)

[REDACTED]

Kenai, AK 99611-9300

FAA Certificate Number: [REDACTED]

Last FAA Medical Examination: 05/29/2019

SIC Pilot:

David James Carpenter (**Server Injuries**)

[REDACTED]

Jupiter, FL 33478-1943

FAA Certificate Number: [REDACTED]

Last FAA Medical Examination: 05/29/2019

Witness Statements:

Mr. Albert Barnes states he was on his golf cart (near the runway) on his way to visit a friend in the neighborhood when he witnessed NC2960K on the runway. He said there was a strong head wind and he noticed the aircraft engine running rough and that it didn't sound right. He also noticed the engine cowling was flapping around prior to takeoff. Mr. Albert states as the aircraft took off it wasn't climbing, banked left at the end of the runway then he heard a loud crash. He said his wife contacted 911 to notify them of the accident after he located it in the trees and brush. Mr. Albert did not know the status of the passengers after discovering the wreckage.

Albert Arnold Barnes (Retired Air Force, Retired American Airlines Pilot)

Certificate Number [REDACTED]

Phone [REDACTED]

Mr. Lawrence Burrell states he was watching N2960K as it taxied down the runway. He noticed the engine cowling flapping up and down during take-off. He states it sounded like the engine quit 2 times but gained power in between quitting as it took off. Mr. Burrell said he thought the aircraft and pilot were in trouble as they banked sharp left at the end of the runway towards the trees. Shortly after, he heard a loud crash. Mr. Burrell was accompanied by Mr. Charles Bennett and concurred with his story with nothing else to add.

Lawrence Marvin Burrell Jr. (Aviation Lawyer)

Certificate Number [REDACTED]

Phone [REDACTED]

Inspector Summary of Aircraft Damage and Engine [REDACTED]

The aircraft crashed into a wooded area, with the right wing leading edge first impacting a large tree with a diameter 30 inches. The impact with the tree also sheared the right wing support strut in half. The right aileron was torn off during impact with tress found 50 feet from the wreckage and one section of the torn wing support strut around 100 feet from wreckage. The impacted area had multiple tree branches tree sections laying on the wooded area ground with diameters of 1 inch thru 20 inches from aircraft impact. The left wing leading edge also impacted a large tree with an estimated diameter 25 inches, but the left wing remained attached to the aircraft fuselage.

The fuselage came to a rest wedged between two large trees with the aircraft nose pointing around 280° with the right wing torn from fuselage and fuselage resting on the right side at a 90° degrees angle. The right wing was resting with wing underside facing upwards next to the fuselage but leading edge pointing around 110° degrees. The crash site did not smell of aircraft fuel nor did the ground indicate any type of fuel spill. The fuel recovered from the right wing measured 62 ounces around .48 gallons of fuel. The fuel recovered from the left wing measured 2 ounces. The main landing gear sustained heavy damage but still attached to fuselage.

The fuselage and empennage indicated multiple areas of crushing, the tail section was torn but still attached was resting against empennage. The vertical stabilizer and rudder damaged but still attached and intact. The horizontal stabilizer and elevators heavily damaged but still attached and intact.

The engine was found intact with minor damage and just torn from aircraft firewall. The two bladed propeller had minor bends and engine still had rotation. Gascolator glass casing indicated half full with no indication of the fuel contamination.

During interviews, review of aircraft maintenance records and pilot flight logs it was discovered the aircraft owner preformed maintenance on N2960K and is not a certificated airframe/powerplant mechanic, the owner died in the crash. Review of the owner's son's pilot flight logs indicated a 1.0 hour test flight on January 21st 2021 for (test flight new carburetor), but N2960K maintenance records indicate no replacement or maintenance with the carburetor. Interview with friend and certificated mechanic whom worked with N2960K stated the owner preformed his own maintenance on his aircraft and supervised the owner preforming maintenance on his aircraft. Interview with a neighbor stated on Saturday February 27th 2021, N2960K was parked outside the owner's hanger with the engine being powered up and down for about hour. Interview with N2960K owner's friend and his mechanic stated he did not touch N2960K, but the owner was trouble shooting fuel flow issues with the new carburetor the owner installed. Interview with second pilot (Son), he stated the aircraft was filled with 30 gallons of fuel Saturday February 27th 2021 and that his father's friend (mechanic) replaced the carburetor and that there was an issue with fuel flow.

Video was provided of N2960K taking off before the accident with the video showing N2960K in flight and left engine cowling door open and flapping up and down. The pilot then pulled the power back [REDACTED]

[REDACTED] The aircraft sank a little with the pilot applied power again and a shallow banking turn to the left before aircraft disappeared behind trees and video coming to an end. The video sound of the aircraft N2960K engine did not indicate any type engine issue or malfunction. N2960K engine was started at recovery facility with a normal start and no issues operating.

[REDACTED]

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