

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



ERA24LA341

WRECKAGE EXAMINATION

August 27, 2024

TABLE OF CONTENTS

A. ACCIDENT.....	3
B. WRECKAGE EXAMINATION.....	3
C. SUMMARY.....	3
D. DETAILS OF THE EXAMINATION.....	3
1.0 AIRFRAME EXAMINATION.....	3
1.1 Fuselage.....	3
1.2 Empennage	5
1.3 Aircraft Wings.....	9
1.4 Landing Gear.....	14
1.5 Cockpit.....	16
1.6 Survivability.....	19
1.7 Fuel/Fuel System.....	19
2.0 ENGINE EXAMINATION	22
2.1 Induction and Exhaust System	22
2.2 Magnetos	24
2.3 Ignition System.....	26
2.4 Fuel System.....	26
2.5 Lubrication System	27
2.6 Vacuum Pump/System	29
3.0 PROPELLER EXAMINATION	30

A. ACCIDENT

Location: Jacksonville, FL
Date: August 7, 2024
Time: 1544 EDT
1944 UTC
Airplane: N2376L; Beech 23

B. WRECKAGE EXAMINATION

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C. SUMMARY

On August 7, 2024, about 1544 eastern daylight time, a Beech 23, N2376L, was substantially damaged when it was involved in an accident near Jacksonville, Florida. The pilot and pilot-rated passenger were not injured. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

The pilot reported that he had recently observed a trace amount of oil in the cowling. He intended to fly in the airport traffic pattern to bring the engine to operating temperature, land, and check the cowling for oil to identify if there was an oil leak. After a preflight inspection and engine run-up, the pilot took off, performed one circuit in the airport traffic pattern, overflying the airfield; as he was preparing for landing the engine rpm dropped to about idle and "everything seemed to get quiet." About 20 ft above ground level the airplane "seemed to just drop like a rock" impacting the ground which separated the left main landing gear. The airplane skidded off the left side of the runway and came to rest.

D. DETAILS OF THE EXAMINATION

1.0 Airframe Examination

1.1 Fuselage

The fuselage remained intact, and the left side of the fuselage exhibited some wrinkling to the skin near the tail. The right side of the fuselage was undamaged. The rotating beacon on the bottom of the airplane was impact damaged.



Photo 1: View of the left side of the fuselage.



Photo 2: View of damage to the left side of the fuselage.



Photo 3: View of the right side of the fuselage.

1.2 Empennage

The stabilator, rudder, and stabilator trim tab all remained attached at all of their respective attachment points. The vertical stabilizer, rudder and stabilator were undamaged. The stabilator trim tab exhibited slight damage to the trailing edge about 8 inches to the right of the centerline. Control continuity was confirmed from all three flight control surfaces to their respective controls in the cockpit.



Photo 4: View of the left stabilator.



Photo 5: View of the left stabilator trim tab.



Photo 6: View of the rudder and vertical stabilizer.



Photo 7: View of the right stabilator with trim tab, rudder, and vertical stabilizer.



Photo 8: View of damage to the trailing edge of the right stabilator trim tab.

1.3 Aircraft Wings

The right wing remained attached to the fuselage at all attachment points and was undamaged. The right flap and aileron remained attached to the wing at their respective attachment points and were undamaged. Continuity of the right aileron was confirmed from the flight control surface to the flight controls in the cockpit. The right flap was found in the UP position.



Photo 9: View of the right wing.



Photo 10: View of the right flap.



Photo 11: View of the right aileron.

The left wing remained attached to the fuselage at all attachment points. The left wing exhibited wrinkling of the skin near the wing root. The leading edge and wing tip of the left wing exhibited impact damage. The left flap and aileron remained attached at their respective attachment points. Control continuity was confirmed from the left aileron to the flight controls in the cockpit. The left flap was found in the UP position.



Photo 12: Overview of the left wing.



Photo 13: View of damage to the left wing.



Photo 14: View of damage to the left wing.



Photo 15: View of damage to the left wing tip.



Photo 16: View of the left flap and aileron.

1.4 Landing Gear

The nose and right main landing gear remained attached to the fuselage. The left main landing gear was sheared off during the accident sequence.



Photo 17: View of the right main and nose landing gear.



Photo 18: View of the sheared left main landing gear.

1.5 Cockpit

The flap handle was in the flaps UP position and the stabilator trim was set to about neutral. No circuit breakers were popped out. The throttle, mixture, and carburetor heat were all in the full forward position.



Photo 19: View of a portion of the instrument panel.



Photo 20: View of the six primary flight instruments.



Photo 21: View of the communications stack and throttle quadrant.



Photo 22: View of a portion of the instrument panel.



Photo 23: View of circuit breakers and switches.

1.6 Survivability

The seats remained installed on the seat tracks and the seat belts functioned as designed.

1.7 Fuel/Fuel System

The right and left fuel tank caps were secure in place on their respective wings. The right wing fuel tank was opened, and fuel was present that exhibited the appearance of 100LL aviation fuel. The right wing fuel tank was sumped and about 1.5 tablespoons of water were found. The left wing fuel tank was opened, and fuel was present that exhibited the appearance of 100LL aviation fuel. The left wing fuel tank was sumped and no water was found. The fuel strainer was sumped and no water was found. The fuel selector in the cockpit was selected to the right fuel tank. The fuel selector moved smoothly from the right to the left detent and back again.



Photo 24: Right wing fuel cap seated in place.



Photo 25: View of the inside of the right wing fuel tank.



Photo 26: View of the left wing fuel cap seated in place.



2024/08/27 09:46

Photo 27: View of the inside of the left wing fuel tank.



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Photo 28: View of the fuel selector.

2.0 Engine Examination

The engine exhibited no holes in the crankcase and was undamaged. Crankshaft continuity was established by rotating the propeller by hand. Compression and suction were exhibited on all cylinders when the propeller was rotated by hand. The throttle, mixture, and carburetor heat all moved from stop to stop when actuated in the cockpit.



Photo 29: View of the engine.

2.1 Induction and Exhaust System

The induction and exhaust system were undamaged. The air intake filter was removed and examined and was not obstructed.



Photo 30: View of the air intake filter in place in the nose.



Photo 31: View of the unobstructed air intake filter.



Photo 32: View of the undamaged exhaust.

2.2 Magnetos

Both magnetos were secure in their respective attachment points and were undamaged.



Photo 33: View of the right magneto secure in the accessory case.



Photo 34: View of the left magneto secure in the accessory case.

2.3 Ignition System

The ignition leads were undamaged. The top spark plugs were removed and exhibited normal wear when compared to the Champion Aerospace Aviation Check-A-Plug chart.



Photo 35: View of the 1-4 top spark plugs.

2.4 Fuel System

The engine driven fuel pump remained attached to the accessory case and was undamaged.



Photo 36: View of the engine driven fuel pump secure in the accessory case.

2.5 Lubrication System

The oil sump was undamaged. The oil filter remained attached to the accessory case and was undamaged. The oil dipstick was removed and exhibited about 6 quarts of oil.



Photo 37: View of the oil filter secure with safety wire on its mount.



Photo 38: View of the oil dipstick.

2.6 Vacuum Pump/System

The vacuum pump remained attached to the accessory case and was undamaged.



Photo 39: View of the vacuum pump secure in the accessory case.

3.0 Propeller Examination

The propeller remained attached to the crankshaft propeller flange and was undamaged.



Photo 40: View of the propeller.

Submitted by:

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