

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN24LA096

EXAMINATION SUMMARY

February 20-21, 2024

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A. ACCIDENT

Location: Liberty Hill, Texas
Date: January 21, 2024
Time: 1320 CDT
Airplane: AirCam, N1230R

B. EXAMINATION SUMMARY

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C. SUMMARY

On January 20, 2024, about 1320 central standard time, a Lockwood Air Cam airplane, N1230R, sustained substantial damage when it was involved in an accident near Liberty Hill, Texas. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot and passenger were returning to Fly Navy Airport, Liberty Hill, Texas (TA60). According to the pilot, while turning to make a final approach to the runway, he reduced power and noticed both engines had quit producing power. The pilot made a forced landing toward the runway and impacted a berm. The airplane sustained substantial damage to the left wing and fuselage. The fuel tanks were not compromised during impact and contained usable fuel.

The airplane is equipped with two Rotax 912 ULS (version 2) engines, each is supplied with fuel from independent fuel tanks.

The wreckage was retained for further examination.

D. DETAILS OF THE EXAMINATION

1.0 Engine Examination

Both engines were still attached to the air frame. The propellers were still attached to the engines and appeared intact. The data plates confirmed the engine serial

numbers were 6783807 (left) and 6783806 (right). The amphibious floats, horizontal stabilizer, elevator, and outboard sections of the wings were removed for recovery.

Right Engine

The right engine had an aftermarket (Zipper) big bore kit installed.

The right engine throttle levers exhibited full range of simultaneous travel on both carburetors, however the outboard lever exhibited wear and rubbing (Figure 1.) The inboard lever would intermittently become momentarily stuck slightly open as the throttle was moved to idle. The lever was assisted to the idle position by spring tension after about two seconds. The throttle lever did not inhibit normal operation of the engine while in its stuck position.



Figure 1: Right engine outboard throttle lever and rubbing.

The engine was equipped with an aftermarket carburetor heat system that utilized engine coolant routed through a water jacket housing attached between the intake manifolds and carburetors. The system functioned when tested with no anomalies found.

The carburetor bowls were full of clean fuel consistent with 91 octane ethanol free automotive fuel. Both sets of right engine carburetor floats were within weight specifications and functioned normally. The idle nozzles were free of debris.

The crossover tube between the two intake manifolds was modified. The tube inside diameter was increased with the modification. There were visible fuel stains at the threaded hose connectors, however, the induction system did not leak when tested.

The right engine started and ran with no anomalies found.

Left Engine

The left engine had an aftermarket (Zipper) big bore kit installed.

The left engine throttle levers exhibited full range of simultaneous travel on both carburetors.

The engine was equipped with an aftermarket carburetor heat system that utilized engine coolant routed through a water jacket housing attached between the intake manifolds and carburetors. The system functioned when tested with no anomalies found.

The carburetor bowls were full of clean fuel consistent with 91 octane ethanol free automotive fuel. Both sets of left engine carburetor floats were within weight specifications and functioned normally. The idle nozzles were free of debris.

The crossover tube between the two intake manifolds was modified. The tube inside diameter was increased with the modification. There were visible fuel stains at the threaded hose connectors, however, the induction system did not leak when tested.

The left engine started and ran with no anomalies found.

2.0 Flight Data Recorders

Two Dynon SV-D1000T units were sent to the NTSB vehicle recorders laboratory for data download. No anomalies were found within the data to explain the simultaneous loss of power to both engines.

SUMMARY

There were no indications of any pre-impact mechanical anomalies to any of the engine components that would have precluded normal engine operation.

Submitted by:

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