



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety

Eastern Region

AIRFRAME EXAMINATION

CASE NUMBER: ERA21LA152

AIRCRAFT: Cessna 421B -N80056

EXAMINATION PARTICIPANTS:

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National Transportation Safety Board

SUMMARY

Examination of the airframe was conducted on 4/12/2022 at the Macon County Airport, North Carolina.

The pilot said that after a normal runup he initiated the takeoff roll from the 5,000-ft-long, asphalt runway. He reported that the airplane's acceleration "lagged," and the airplane reached a

maximum airspeed of 92 knots. He said all the instruments were in the green but noticed that the runway length was decreasing. He elected to abort the takeoff with about 1,500 ft of remaining runway, pulled both throttles to idle and applied maximum braking. The pilot stated that he did not sense the airplane slowing down but observed tire marks on the runway postaccident that were consistent with braking.

AIRFRAME EXAMINATION

An examination of the airplane revealed that the entire cockpit and cabin area was destroyed by fire. All flight instruments and controls were unreliable due to fire damage. The pitot system was destroyed by fire. Although the cockpit was damaged by fire, the parking brake control was found in the off position.

All hydraulic brake lines were destroyed by fire and the main landing gear sustained fire and impact damage. A review of the maintenance logbooks revealed that the braking and wheel systems were rebuilt two months prior to the accident. Due to the extensive fire and impact damage to the braking system an examination of the system could not be performed. According to the airplane manufacturer (Cessna), "Accelerated Stop Distances" were not required to be published in the POH in 1974. As a result, testing was not accomplished in 1974.

ENGINE EXAMINATION

Examination of the left and right engine revealed that both engines were heavily fire damaged. Valve train rotational continuity could not be established due to impact and fire damage. The accessories on both engines were fire damaged. Catastrophic failure was not observed on the case halves of both engines. Both propeller assemblies remained attached to the propeller hubs on both engines. The propeller blades on both engine exhibited fire and impact damage.

MAINTENANCE RECORD REVIEW

A review of excerpts of the maintenance records revealed the braking and wheel systems were rebuilt two months prior to the accident.