# NATIONAL TRANSPORTATIONS SAFETY BOARD Office of Aviation Safety Washington, DC 20594

## SUMMARY OF AIRPLANE EXAMINATION

### -- CEN22LA103 --

#### A. ACCIDENT

Aircraft: Cessna 120 (s/n: 9190); N90129

### B. PARTICIPANTS

Aaron Sauer Sr. Air Safety Investigator National Transportation Safety Board Denver, Colorado

Michael Brockel Aviation Safety Inspector Federal Aviation Administration Milwaukee, Wisconsin Andrew Hall Senior Air Safety Investigator Textron Aviation Wichita, Kansas

## C. ACCIDENT SUMMARY

See factual report

## D. DETAILS OF THE EXAMINATION

A post-recovery examination was conducted at the pilot's hangar, Sturtevant, Wisconsin, on January 26, 2022.

### E. SUMMARY OF AIRPLANE EXAMINATION

- The airplane was recovered to the pilot's hangar which was located adjacent to the accident location.
- The airplane sustained substantial damage to the forward fuselage, cabin, aft fuselage, and left wing.
- The engine was partially attached to the airframe, and the engine was displaced aft, down, and to the left.
- The two-blade fixed pitch propeller remained attached to the engine crankshaft, and the blades showed leading edge gouging and twist in the direction of rotation.

### **Summary of Airplane Examination**

- The two main landing gears were separated from the airframe (either by impact and/or recovery).
- The main landing gear brake hydraulic lines were broken/damaged which precluded a system brake test.
- The main wheels were free to rotate, and the brake pads and rotors for both wheels showed minimal wear.
- Flight control continuity was established from the cockpit controls to the ailerons, rudder, elevator, and steerable tail wheel.
- Both left and right control yoke shafts were cut during extrication efforts.
- The cockpit throttle was in the full forward position, and the airplane was not equipped with a mixture control.
- The cockpit throttle control was manipulated by hand and continuity was established to the throttle lever on the carburetor.
- The carburetor heat was found in the off position.
- The fuel selector was found in the "Both/On" position.
- The elevator trim tab was in the neutral position, and the cockpit manual trim wheel indicator was found in the takeoff position.
- The left and right seat restraints were lap belts, and both restraints were found unlatched (in the pilot's records for the airplane, a handwritten estimate was noted for the purchase of "Hooker Harness" restraints).
- No preimpact anomalies were noted during the airplane examination.

### F. SUMMARY OF FUEL TRUCK EXAMINATION

- The fuel truck was located in the same position as it was during the accident which was on a concrete (snow-covered) ramp area adjacent to a local sky dive company.
- The fuel truck driver cab, located on the left front of the vehicle, showed impact damage consistent with N90129. Crush damage was noted to the metal cab frame and door. Several of the cab glass windows were broken and shattered.

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