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Subject: Memorandum for the Record CEN23FA113
Accident Site and Wreckage Examination

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Accident Site

The aircraft initially impacted a large tree. That tree exhibited two propeller 45° cuts from the left propeller. The left propeller separated from the left engine and came to rest approximately 56' down from the initial tree impact resting on the ground. The right propeller separated from the right engine and came to rest approximately 67' down from the initial tree impact point resting against two trees. The right wing, engine, and main landing gear came to rest to left and behind the two trees where the right propeller came to rest. The cockpit area came to rest directly behind the two trees where the right propeller came to rest. Down from the cockpit was the rest of the aircraft; cabin, left wing, left main landing, nose landing gear, section of the left engine, and the empennage. The left engine exhaust and reduction gear box section came to rest down the hill and on the access road approximately 167' from the initial tree impact point. The left engine 1st stage power turbine guide vane housing came to rest approximately 188' from the initial tree impact point. The debris path was orientated of an approximate magnetic heading of 154°. Mostly all of the airframe was consumed by a post-impact fire.



All primary (elevators, ailerons, and rudder) flight control surfaces with their appropriate trim tabs and flaps were accounted for at the wreckage examination. Continuity of all primary flight control cables were confirmed from the cockpit to their respective flight control surface. Continuity of the aileron, elevator, and rudder trim control cables were confirmed from the cockpit to their respective flight control trim surface. Continuity was confirmed by either visual and/or pulling the cable at one end to see the other same cable end and/or control surface move. One aileron flight control cable exhibited a cable separation signature consistent with tensile overload.

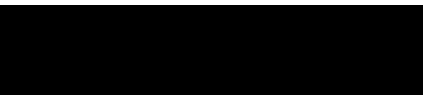
The left elevator trim actuator extension was measured and found to be approximately $2 \frac{7}{8}$ ", which corresponded to approximately 11° trim tab trailing edge up. The right elevator trim actuator extension was measured and found to be approximately $1 \frac{5}{8}$ ", which corresponded to approximately 7° trim tab trailing edge down. The rudder trim actuator extension was measured and found to be approximately $1 \frac{5}{8}$ ", which corresponded to approximately 17° rudder trim tab trailing edge right. The left aileron trim actuator extension was measured and found to be approximately $1 \frac{5}{8}$ ", which corresponded to approximately 11° trim tab trailing edge down. The mechanical landing gear position was undetermined due to the impact and thermal damage.

No airframe anomalies were found at the accident site.

All cockpit instrumentation had severe thermal and impact damage, and no information could be derived.

All engine instruments and left and right engine controls exhibited severe impact and thermal damage. The throttle quadrant/cockpit pedestal exhibited impact and thermal damage. The pedestal was found in the upright position with electrical wires and cables tangled within the control levers. The left engine was separated in three sections: accessory, gas generator, and power and exhibited impact and thermal damage. The right engine accessory section separated from the gas generator and was thermally damaged. The rest of the engine exhibited impact and thermal damage. The right and left propeller exhibited damage that included tip fractures, bending in the forward/thrust direction. The damages were consistent with rotation.

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