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September 27, 2021

Jennifer Rodi
Deputy Regional Chief
National Transportation Safety Board
4760 Oakland Street, Suite 500
Denver, CO

Re: Piper PA-31T Cheyenne, Registration N42CV
Location: Lafayette, LA
Date of Accident; December 28, 2019
NTSB File No. CEN20MA044

Dear Dr. Rodi:

Thank you for the opportunity to make a submission following the Technical Review of the referenced accident. As a Party Member to the investigation, Hartzell Propeller Inc. submits the following findings and conclusion to the factual information provided in the Technical Review and posted on the accident docket.

SUMMARY

On December 28, 2019, about 0921 central standard time, a Piper PA 31T airplane, N42CV, was destroyed when it was involved in an accident near Lafayette Regional Airport/Paul Fournet Field (LFT), Lafayette, Louisiana. The commercial pilot and four passengers were fatally injured. One passenger sustained serious injuries. Two individuals inside a nearby building sustained minor injuries and one individual in a car sustained serious injuries. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

FINDINGS

Hartzell Propeller has reviewed the accident investigation information in the NTSB public docket and identified the following findings:

1. Residential security cameras recorded noise of the aircraft flying over/near their location with both propellers rotating at a stable RPM of approximately 2000-2100 RPM. There were no abnormal propeller sounds noted in either audio recording.
2. The aircraft Performance Memo dated May 21, 2020 in the docket documents estimated aircraft performance based on ADS-B data. The calculated horsepower per engine was between 300-600 Hp for the majority of flight. During the initial climb calculated horsepower was between 500-600 Hp and is consistent with maximum torque of 1480 ft-lbs. at 2000 RPM (~564 Hp).
3. Per the Performance Memo, at approximately 5 seconds before impact the estimated horsepower dropped which is consistent with an intentional power reduction on both

engines. This drop in power occurs at approximately the time the aircraft descended through the cloud bases.

4. The as-found left engine torque gage indication was fixed at 525 ft-lbs. At 2000-2100 RPM this torque level equates to 200-210 Hp which is consistent with an intentional power reduction during the last 5 seconds of flight.
5. There were no discrepancies noted during the left and right propeller exams that would prevent or degrade normal propeller operation prior to impact with terrain. All damage was consistent with high impact forces. Impact signatures indicated blade angles were in the normal range of operation and the propellers impacted terrain while rotating with power in the lower range of normal operation.

CONCLUSIONS

Hartzell Propeller believes the evidence supports the conclusion that both left and right propellers were operating normally during the entire flight and until impact with terrain.

Sincerely,


Les Doud
Air Safety Investigator
Hartzell Propeller Inc.
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Piqua, OH 45356
