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1. Event Summary

Location: Newport, Oregon Date: December 23, 2017 Aircraft: AirCam Registration: N959M NTSB Number: WPR18LA055

2. Equipment Summary

The airplane was equipped with two Rotax 912ULS engines, and two J.P. Instruments Inc model EDM-700 engine monitors. The EDM-700 is a panel mounted instrument that the operator can use to monitor and record parameters related to engine operation. These parameters vary as a function of the installation: The devices contain non-volatile memory for data storage. The rate at which the data is stored is operator selectable. The data can be downloaded by the operator using the J.P. Instruments software. The EDM records timestamped data based on the internal clock setting. This setting is input by the operator/pilot. No attempts were made to correlate device times with local time.

The following devices were found installed in the airplane:

Left engine device serial number: 27272

Right engine device serial number: 27273

Both devices were successfully downloaded, using the JPI EZTrends software version 2.2.21.75. Both devices contained data from the accident flight. Data sample rate was 10 samples/minute. Recorded parameters included exhaust gas and cylinder head temperatures (EGT & CHT) for each of the four cylinders, fuel flow, fuel used, and battery voltage. None of these parameters provide a direct measure of engine rpm or power.

3. Left Engine Device and Information

The device appeared to be undamaged, but when functionally checked some of the LED display bars on the instrument face were inoperative. This did not preclude download of the data. The device memory contained 36 power cycles; each power cycle typically, but not always, represents a discrete flight. The first power cycle was auto-assigned by the device as #983, dated 8/4/2017. The last power cycle (the accident flight) was #1018, dated 12/23/2017.

The accident flight duration, as determined by the device, was 1.83 hours, and began at a device time of 20:56:48. Parameter plots are presented in Section 6 of this report.



Figure 1 - JPI EDM 700 (Left Engine)

4. Right Engine Device and Information

The device appeared to be undamaged, but when functionally checked some of the LED display bars on the instrument face were inoperative. This did not preclude download of the data. The device memory contained 37 power cycles; The first power cycle was #984, dated 8/4/2017. The last power cycle (the accident flight) was #1020, dated 12/23/2017.

The accident flight duration, as determined by the device, was 1.83 hours, and began at a device time of 21:46:04. Parameter plots are presented in Section 6 of this report.



Figure 2 - JPI EDM 700 (Right Engine)

5. Tabular Data

Tabular data for the final recording is included as Attachments 1 (Left engine) and 2 (Right engine). These attachments are provided in electronic comma-delimited (.CSV) format.

6. Data Plots- See following pages











