

Joshua Young
Air Safety Investigator
AS-ERA

Date: 5/5/2025

Subject: ERA25LA211, Maintenance Shop Troubleshooting

Contact: Bill Turley, Aircraft Engineering, Inc.

The maintenance shop that performed the maintenance on the accident airplane was contacted by the IIC on April 17, 2025, via electronic mail and asked the following:

"Did you all ever pull the avionics data cards and look at the logged data the aircraft had been recording during any of the inspections you performed?"

The shop responded on April 18, 2025, stating:

"Bill said no. He had just put in an Garmin 1000 and there was no engine monitoring system when we did the last annual."

A review of logbook records showed that the shop had done 2 annual inspections and an exam after a reported engine issue after the date the avionics, including the engine monitor, were installed. The IIC responded stating this fact and with the following questions on May 1, 2025:

"Why was an airplane with known engine issues released for flight without checking the available engine data?

Why was there no trend monitoring taking place with an airplane that had known and persistent engine troubles?"

The shop responded on May 5, 2025, with the following:

"He said when we did the annual, cylinder #1 had a loose valve guide and we replaced the cylinder assembly. Everything else was normal and there were no other indications after a 1.5 hour test flight. When the engine had trouble, it came straight in for the annual and we felt the cylinder was the issue and replaced the whole assembly."

The IIC responded on the same day with the following:

"Thank you, while that answered one of the questions, I asked it does not answer the question about why trend monitoring was not taking place. It also brings about another question.

You said that cylinder #1 was replaced but the logbook entry (and work order) states that cylinder #2 was replaced (see entry attached) can you confirm whether it was the #1 cylinder or #2 cylinder that was replaced."

The shop responded the same day stating the following:

"Ok, it was cylinder #1 that was replaced. Cylinder #2 as stated in the logbook entry is a typo. We don't normally look at engine monitoring, if we do, the customer has provided it to us."