



RECORD OF EMAIL

Samantha Link
Aviation Accident Investigator
Western Pacific Region

Date: November 21, 2019
Person Contacted: Mr. Bart Hauger (Federal Aviation Administration)
NTSB Accident Number: WPR20LA009

Narrative:

In an email Mr. Hauger shared the following engine examination summary:

Narrative – On 11/20/2019, an engine teardown was conducted on Lycoming IO-540-AC1A5, S/N RL681748E at the San Joaquin Sheriff's department hangar facility (SCK) Stockton, CA. FAAIIC Bart Hauger was present and provided oversight and direction to a local, NTSB contracted AMT. Condition, and findings are as follows:

IGNITION

- Ignition leads inspected and found without anomalies. With power on, all leads produced spark with normal impulse coupling operation.
- Spark plugs showed evidence of a rich/ low power condition prevalent on electrode and base. Excessive oil residue on lower number 1, 5 and 6 cylinder plugs.
 - Suspect due to post accident attitude of the engine.

VALVES

- Rocker covers removed.
- Valve Train continuity confirmed w/ signs of normal operational wear.
- Cylinder number 2, 4 and 6 present evidence of carbon deposit particles.
- Cylinder compression (negative/positive) confirmed w/thumb pressure.

FUEL

- #1 Cylinder – injector at cylinder head disconnected. (**Low**) pressure/volume noted w/ fuel pumps on.
- #2 Cylinder – injector at cylinder head disconnected. (**Low**) pressure/volume noted w/ fuel pumps on.
- Fuel Line – disconnected at Fuel Injection Servo "out" to flow divider. (**Low**) fuel volume/pressure noted w/fuel pumps on.

- Fuel (Main Inlet) Line – disconnected at Fuel Injection Servo. (**Normal**) fuel volume/pressure observed w/ fuel pumps on.
- Fuel Injection Servo – inlet “finger” filter removed and inspected. No evidence of debris.
- Fuel Pumps – Electric driven pump (only). Ops check normal.
- Gascolator – Filter and bowl removed and inspected. No evidence of debris.

OIL

- Oil Pump – Assumed operational, due to pilot statements and the circumstances of this event. Unable to confirm.

INTAKE

- Manifold – Evidence of oil residue. Suspect piston ring wear “blow-by”.
- Intake Tubes - #1 and #2 intake tubes removed and found dry.
- Intake Duct – from air filter to Fuel Intake Servo, found with partial obstruction of scat duct.

END.

Submitted by Samantha Link