



MEMORANDUM FOR RECORD

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Subject: ERA17LA333 – Engine Examination

During the engine examination, the following was noted:

- The engine remained attached to the airframe through all engine mounts. The engine was removed to facilitate examination.
- Fluid similar to 100LL aviation fuel was drain from the gascolator.
- One propeller blade remained attached and exhibited impact damage. The other blade was impact separated.
- When the oil dip stick was examined, it noted 4 quarts of oil in the engine.
- A plaque on the right wing indicated that the right tank could hold up to 12 gallons of fuel.
- The rocker box covers were removed and rocker arm movement was noted on all cylinders when the propeller was rotated by hand.
- Compression and suction was noted on all cylinders.
- All spark plugs were removed and exhibited normal wear when compared to the Champion Check-A-Plug chart.
- The top spark plugs all exhibited corrosion.
- The gascolator was removed and water was noted in the fuel. Also, debris was noted in the fuel.
- The carburetor was removed and disassembled. Water was noted in the carburetor when tested with water finding paste.
- The carburetor inlet screen was removed and unobstructed.
- The right fuel tank fuel cap remained seated, was removed, and no cracks were noted in the seal.
- The left fuel tank fuel cap was impact separated and the tank was breached.
- The debris noted in the fuel was consistent with a substance that was dried on the interior of the left fuel tank.

- The magneto was removed, operated, and spark was noted on all towers.
- Corrosion was noted throughout the engine. It was noted at the base of the No. 2 connecting rod and all gears in the accessory section of the engine.
- 30 mL of water was noted in the gascolator and carburetor out of 100 mL of fluid.
- The right fuel tank contained fuel and was tested for water. The test came up negative. When water was poured over the right fuel tank cap while it was seated, then the cap was removed, the fuel in the right tank tested positive with water finding paste.
- The gascolator exhibited sediment around the opening. Furthermore, the sediment restricted the flow of fluid from the gascolator drain.
- The gascolator was initially opened and fuel and sediment was noted draining from it. Then, when the gascolator was removed, more fluid, which was fuel, water, and sediment was noted in the gascolator.
- A Dynon EFIS – 6A was retained for data download.