

DUNCAN INTELLIGENCE

New Alert Service Bulletin

•Mike Healzer

Alert service bulletin TFE731-A72-3700, Inspection of Specific Low Pressure First Stage (A5) Turbine (LPT1) Nozzles/Turbine Interstage Transition (ITT) Ducts, is applicable to several variations of TFE731-2 and -3 engines. We have received several calls from customers, asking if this service bulletin applies to their engines.

This bulletin was prompted by three events of LPT1 disc failure due to high cycle fatigue, in which a portion of the failed disc exited the engine (uncontained failure). All events occurred within 500 hours of an adjustment of the LPT1 (A5) nozzle.

The bulletin provides a description of what to look for in the maintenance records to determine applicability. The part most people have questions about is NAPOLI. NAPOLI is a computer program that Honeywell Authorized Service Centers (including Duncan Aviation) use to confirm their A5 nozzle adjustment is acceptable, which is a required part of the adjustment. After adjustments are made, throat opening dimensions of each vane are entered in the NAPOLI program, which confirms whether the adjustments are within limits.

The NAPOLI data sheet, if attached to the component maintenance card of the A5 nozzle, does NOT have the word NAPOLI on it. It is a standard size 8½ x 11 sheet that lists the engine serial number, nozzle serial number, nozzle part number, LPT1 disc serial number, service center facility, and date at the top of the page. Five columns of vane numbers and throat opening dimensions are shown below. The maximum delta throat opening and measured airflow are written below these columns. Below this, the word PASS appears, with instructions to staple the sheet to the maintenance/modification record card. The

bottom half of the sheet contains the inspector signature, and a statement that the data contains information that is property of Honeywell, and cannot be duplicated or disclosed without Honeywell's permission.

Bulletin Guidelines

Since all failures have occurred with less than 500 hours of an A5 adjustment, if the engine has over 500 hours since A5 adjustment, the bulletin can be signed off on that engine.

If the A5 nozzle has been adjusted, and a NAPOLI data sheet exists for the most recent adjustment (it should be attached to the A5 component maintenance/modification record card), the bulletin can be signed off on that engine.

If it can be determined the A5 nozzle has not been adjusted since manufacture, the bulletin can be signed off on that engine. Typically, adjustments to the A5 nozzle are recorded on the component maintenance/modification record card.

You may need to call the service center that last serviced the A5 nozzle to confirm whether the bulletin applies. All warranty and MSP engines have been maintained at authorized service centers and should be in full compliance with this service bulletin.

Our experts are always ready to assist you. Please contact our TFE731 Technical Representatives for assistance with this or any other technical issue.

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