

DUNCAN INTELLIGENCE

Dedicated to "Perfecting the Craft" • Edited by Cecil Sloan • Fall '98

IMPORTANT

Alert SB TFE731-72-3636 For HP Compressor Impellers

This Alert SB was mailed to all TFE731 operators on Sept. 10, 1998. The bulletin affects all TFE731-2/-3/-4/-5 engines. It requires review of the engine log book to determine the part number of the impeller installed. Depending on the part number installed and the current cycles on your impeller, there may be a work sheet that needs to be filled out and faxed to AlliedSignal.

The reason for this SB stems from a TFE-3 engine that had an uncontained impeller failure earlier this year. The failure occurred during take off roll and the take off was aborted. There was minimal damage to the aircraft; no injuries occurred. The portion of the impeller that departed the engine was recovered and AlliedSignal is working to determine the cause of the failure.

The FAA has directed that a study be made on approximately 10 impellers with more than 6,500 cycles. The data received from the Alert SB will determine which engines need to be entered on an unscheduled basis. AlliedSignal will provide financial participation to any non-MSP operator who participates in the retrieval of the 10 impeller study.

To provide increased crack detection capability above the level of fluorescent penetrant inspection, AlliedSignal is in the process of

developing an eddy current and ultra-sonic inspection for impellers at CZI and for any impeller with more than 2,600 cycles at unscheduled events. The results of the impeller study will determine if any further action will be required in addition to the inspections mentioned here.

Do You Have An MPI Due In 1999?

Duncan Aviation will give away coupons worth \$4,000 at the NBAA this year to six operators who have a TFE 731 engine with an MPI coming due between now and the end of 1999. The coupons will be redeemable at either the Lincoln or Battle Creek locations. For MSP or JSSI customers, the coupon can be used for work performed in conjunction with an MPI. (One registration per event is allowed.)

Duncan Aviation will give away coupons worth \$2,000 at the NBAA this year to six operators who have a JT15D engine with an HSI or overhaul coming due between now and the end of 1999. The coupons will be redeemable at either the Lincoln or Battle Creek locations. (One registration per event is allowed.)

To register for the drawing, stop by Duncan's booth #7564 during the NBAA or call your Service Marketing Rep, Jon Dodson or Cecil Sloan at 1.800.228.4277. You do not need to be present at the NBAA to win.

Revision to SB TFE731-72-3494 Turbine Blade Marking & Life Limits

Turbine blade failures continue to be a problem, particularly in the TFE731-2 and TFE731-5BR family of engines. In an effort to reduce the chance of a blade failure, AlliedSignal has made a revision to SB 72-3494. Revision #3 of this SB was released in April 1998. There are two important revisions in this bulletin. The first is the reduction in the hour life limits of HPT blade part numbers 3072455 and 3072712 that are installed in TFE731-2-IC/-2B/-3B engines. The second is the reduction on the life limits for the first stage LPT blade part numbers 3074746 and 3075428 that are installed in the TFE731-5BR engine; this revision reduces the hour life limit of these blades to 3,000 hours.

AlliedSignal recommends that these blades be replaced if the blade life limit will be exceeded prior to the next scheduled MPI. All other turbine blades have the benefit of the over/under rule, which allows them to be returned to service even though the life limit will be exceeded prior to the next scheduled MPI. AlliedSignal has also pro-rated the cost of these blades to maintain the same cost per hour.

For TFE731 technical info, we have the experts with whom you should s

Our 731 Engine Teams consist of technicians with hundreds of combined years of exper

Need technical advice? Call Duncan's 731 Tech Rep, Doug Alleman, at 402.479.1689

In Lincoln, contact Cecil Sloan or Jon Dodson In Battle Creek, contact Dan Arrick at

at 402.4752611 or 1.800.228.4277

616.969.8400 or 1.800.525.2376

Stop At Duncan's NBAA Booth # 7564 Oct. 19-21 in Las Vegas.

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