Duncan Intelligence

650 Fuel Transfer Tube Damage

• *Joe Austin*

During a Phase 5 inspection, the Aileron dry bay panel is removed and items in the dry bay panel are inspected. We have often seen screws that are too long attaching the panel to the bottom of the wing in the area just below the gravity fuel transfer tube located inside each dry bay. Usually the screws cause tube damage beyond allowable limits in the Structural Repair Manual. In these cases, the tube must be replaced, and shorter screws installed to prevent this from occurring again. Placard number 6200181-154 (4 required, two per side) can be installed in the proper location to prevent improper screws being installed in these 4 locations. Citation VIIs and on should have this placard. We recommend that you install these placards in any 650 you operate at your earliest convenience.

APU Turbine Wheel Thermo Shock

• *Joe Austin*

According to Honeywell SIL# APU-78 if you operate a 650 with a GTCP36-100 or a 750 with a GTCP36-150, a change in operating procedures is suggested. SIL# APU-78 recommends that the APU be operated for two minutes before putting a bleed air load on it.

Honeywell also recommends that the APU be shut down with a bleed-air load on (if it was selected on).

Both of these actions will decrease the thermo shock to the turbine wheel thus reducing possible cracking to the base of the blades. Please contact Joe Austin for more information by email at Joe.Austin @DuncanAviation.com or call 800-525-2376 ex. 8422.

Hydrostats on Bottles

• *Joe Austin*

When an oxygen or nitrogen bottle is sent out for a hydrostat, only the bottle is tested. The hydrostating company removes the regulator, tests the bottle, then reinstalls the regulator. The regulator is not tested unless specifically requested, will have some additional cost and is then considered an overhauled unit. The DOT requires the bottles to be tested but does not require the regulators to be tested.

Uneven Tire Wear

• *Joe Austin*

The following models exhibit uneven tire edge wear: all of the 500s and 550s units 002 thru 459. Due to the design of the trunion and the actuator, the actuator cannot be adjusted in far enough to correct the tire wear.

To get longer life from your tires, you can rotate the tire so that the wear is opposite of the wheel. You must break down the wheel assembly and rotate the tire, you cannot just rotate the wheel and tire assembly to the other axle to correct the problem. Only you can decide if you want to spend the man-hours rotating the tire on the wheel to extend the life of the tire or just change the tires more frequently

Trivia Question

• *Joe Austin*

The previous question was: **What two functions is the speed sensor used for on the starter generator?**

The answer: There are actually three different functions. 1) It opens the start control relay and circuit (on everything but the Citation X.) 2) It shuts off the boost pump that is operating as soon as the start button is pushed. 3) It shuts off the ignition system that is activated when the throttle is moved to the "IDLE" position.

This edition's question is: **On the 650, is there any maintenance manual limitation for checking the same axle tire diameter or circumference when installing a new tire on a wheel assembly? (No reference, a reference (what is it), or change both main tires at the same time?)**

The first 10 callers with the correct answer will receive a small gift. Call 800.525.2376 and ask for Joe Austin.

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