

DUNCAN INTELLIGENCE

Gulfstream GIV Clothespin Fittings

•*Jim Overheul*

Several recent Attachment Fitting-Inspection/Checks have revealed unserviceable clothespin fittings (FS452, BL33 LH/RH). These clothespin fittings were pitted beyond blend limits, which required replacement. All clothespin fittings noted were the older round style. In these cases it was also noted that the rusting/pitting was in the areas where the clothespin plating and finish was not present. The Gulfstream GIV maintenance manual has a caution: to use a non metallic tool and extreme care to remove fillet seals so that clothespin and plank finishes are not damaged. Any damaged areas must be refinished. The Gulfstream maintenance manual also calls out to prepare the clothespins and doubler surfaces for fillet sealing by removing corrosion inhibiting compound and scuff-sanding clothespin teflon in areas for sealant application. The intent here is to lightly rough the finish with out completely removing the finish. If the finish is removed it must be refinished. This issue highlights the importance of preserving and maintaining the protective finishes.

Vertical Stabilizer Attach Fitting-Alternative Inspection

•*Jim Overheul*

While doing this inspection it is a good idea to dimensionally inspect the bushing housing holes for being oversized beyond standard tolerances.

This is especially important for aircraft that may have had attach fitting holes oversized prior to the release of SE05455904 STD REPAIR-VERTICAL FIN ATTACH FITTINGS.

A recent inspection revealed an aircraft with this situation. One of the attach fitting holes was oversized, but not to the increments called out in the repair drawing, which left it very close to the standard size. The customer elected to oversize the fitting per the SE05455904 drawing. Since the bushing housing hole can be so close to the

standard hole size it may be possible for a standard bushing to be installed during this inspection, allowing it to be out of the bushing to fitting tolerance. Also there may be some additional downtime required to procure this specialized bushing or vertical stabilizer removal to repair.

Finally, it is a good idea to identify any oversized bushing, bolt, etc. for easy visual identification. We are still seeing some aircraft with the CRES bushings and hardware being installed where the low-alloy steel bushing and hardware should be installed.

New GPS Leading You Astray?

•*Trent Fuller*

Recently, our avionics repair HSI specialists have fielded several calls from customers whom, after installing a panel-mounted GPS (either new or repaired), received consistently inaccurate HSI course readings. The HSIs functioned properly prior to the GPS installation, but troubleshooting pointed to the HSI and unit-swapping reduced the errors.

So what caused the errors? One critical step: the "initial alignment" or "test set-up." For help with this process, contact us at 800.LOANERS.

Intelli-Conference May 15 in Battle Creek, Michigan

Our Intelli-Conferences will continue this year as we unveil our expansion in Battle Creek. These symposiums are a natural extension of the Duncan Intelligence publications and are your chance to discuss aviation issues with knowledgeable industry professionals in a face-to-face forum.

The May 15, 2007, event will feature six unique sessions, four of which are approved for IA renewal credit. We will be giving tours of the remodeled and expanded facility and will wrap up the event with our signature dinner experience. Look for more information on our website and in the mail soon!

