

# DUNCAN INTELLIGENCE

• Edited by Doug Donahue & Tim Klenke • Fall 2003

## Main Landing Gear Sponson Rib/Horizontal Stabilizer Hinge Fitting Repairs

By Jim Overheul

The Gulfstream maintenance manual requires inspection of the main landing gear sponson rib fwd and aft lugs (main gear support structural inspection) each time the main landing gear is removed, unless it has been done within the last 2000 landings. Horizontal stabilizer pivot bearings are replaced during the horizontal stabilizer hinge fitting inspection which usually occurs at the 5000 landing inspection or a subsequent 4000 landing inspection.

If the parts have to be oversized due to corrosion, specialized equipment is required to perform any necessary repairs. Corrosion is often found and oversizing is often needed in the horizontal stabilizer pivot fittings and landing gear forward and aft lugs. Identifying early corrosion in the main landing gear sponson rib fwd lug and making the necessary repairs may save you a sponson rib assembly replacement in the future.

If you have questions about this repair, please contact Jim Overheul at [jim.overheul@duncanaviation.com](mailto:jim.overheul@duncanaviation.com) or 800.525.2376, ext. 8477.

## Upper Wing Plank Corrosion

By Jim Overheul

Loose screws that attach the wing leading edges to the upper wing plank can be contributing factors to corrosion at the nutplates on the lower surface of the upper wing plank. This seems to be the case at the gang channels more than the single nutplates.

A good time to check for this type of corrosion is during the wing gap band inspection rather than waiting for a leading edge removal which usually occurs at 5000 landings or 2000 landing recurring inspections.

If left untreated or undetected, severe corrosion can result which may require an extensive repair and an extended downtime.

For more information about this issue or other Gulfstream technical tips, contact Jim Overheul at [jim.overheul@duncanaviation.com](mailto:jim.overheul@duncanaviation.com) or 800.525.2376, ext. 8477.

## ARTU Failure Rate

By Jim Wheaton

Do you have a Magnastar with a high failure rate of the ARTU? Teledyne has detected and corrected an issue in the ARTU which affects reliability. ARTU part number 724855-801 with a serial number of MSA 2293 and below, and ARTU part number 724855-802 with a serial number MSA 5703 and below are suspect.

For more information, contact Jim Wheaton at 800.525.2376.

## The Rule is Final

By Dave Pleskac

According to the final Domestic RVSM rules published October 27, the FAA will adhere to the proposed January 20, 2005 DRVSM implementation date. The entire RVSM altitude range (FL290-410) will be implemented simultaneously.

All aircraft operating in DRVSM airspace (FL290-FL410) must have RVSM-capable altimetry systems and, in addition, all TCAS II-equipped aircraft operating in DRVSM airspace must have software version 7.0. Only the following exemptions will apply: lifeguard flights, certain military flights, aircraft climbing to FL430 or above (with ATC clearance), aircraft certification flights and aircraft sales demo flights.

The FAA estimates that 2000 U.S.-registered aircraft still require RVSM certification. If you have questions about RVSM, please contact us at 800.228.4277 or [RVSM@DuncanAviation.com](mailto:RVSM@DuncanAviation.com).

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*Our Gulfstream Team consists of technicians with hundreds of combined years of experience. Need technical advice? Call Duncan's Gulfstream Tech Reps Jim Overheul, at 269.969.8477, or Tim Garity at 402.479.1546.*

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