

Q U I E T T E C H N O L O G Y A E R O S P A C E

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## **PRESS ANNOUNCEMENT** | for immediate release

Quiet Technology Aerospace Develops Proprietary Solution for Gulfstream GIV Engine Inlet Cowl Corrosion of Attachment Flange and Forward Fastener Line of the Inner Acoustic Barrel

**HOLLYWOOD, FLORIDA, February 22, 2017** - Quiet Technology Aerospace (QTA) has engineered a proprietary and terminating solution to a recently discovered problem of corrosion developing on the Inlet Cowl attachment Flange holes and the forward fastener line of the Inlets acoustic inner barrel.

### **Inlet Cowl Attachment Flange Corrosion**

QTA has developed a proprietary repair procedure in lieu of replacement which is very affordable as well as terminating any chance of corrosion returning.

Corrosion being discovered by MRO technicians is found on the inlet cowl flange attachment holes, particularly in the six o'clock area of the fastener. While standard bushing repair is available, it does not always clean up corrosion around the hole edge. QTA's proprietary repair both bushes the hole and eliminates corrosion along the edge. During the process, the flange is removed from the inlet and completely stripped. After the rework process, the flange is Alodine coated and primed to provide the best protection against further corrosion.



The bushings used are 15-5Ph so once the flange rework is completed, the corrosion does not return.

There are many advantages to QTA's proprietary corrosion rework procedure.

- Substantial cost savings over replacing the flange.
- Exchange or rental cowls are available.
- If corroded beyond repair, QTA can still replace with new.
- Both reworks can be done simultaneously.

Once completed, continued airworthiness inspections are required per the Gulfstream Maintenance Manual Chapter 5.

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### Forward Fastener Line of the Engine Inlet Cowl Inner Acoustic Barrel

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When corrosion is discovered, the dictated solution requires replacement of the **alloy** steel fasteners with **monel**; a group of nickel alloys, primarily composed of nickel (up to 67%) and copper, with small amounts of iron, manganese, carbon, and silicon that have high corrosion resistance.

In addition to the corrosion discussed, QTA engineering and DER staff has full capability for composite repairs on all GII/GIII/GIV and GV parts throughout the aircrafts systems. Composite specialties on Gulfstream aircraft for QTA include: Flight controls, Nacelles, Winglets, Fairings, Doors and Floorboards.

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#### ABOUT QUIET TECHNOLOGY AEROSPACE

QTA is a market leader in the application of advanced composites for noise attenuation and structures.

Since 1988, QTA companies have achieved 11 Supplemental Type Certificates (STCs) for Hush Kits on large transport aircraft, military transports and corporate business aircraft. QTA first introduced Carbon Graphite Composites on the DC8 hush kit certified in 1988, currently achieving 28 years of in-service experience with advanced composites.

The combination of advanced composite materials technology and acoustic engineering is now being applied to solve in-service corrosion issues with Inlet Cowls, replacing the original OEM aluminum honeycomb inner barrel with an advanced Carbon Graphite composite unit that will last the life of the aircraft.

FAA approval for Lear 60, Gulfstream G200 and Hawker 1000 aircraft has been received and is in production. In the fourth quarter of 2017, the same upgrades will be available for the Challenger 300 / 350 and Falcon 2000 LX/Easy.

QTA is located in Hollywood, FL and operates from a 30,000 square foot air conditioned facility with a 1,000 square foot clean room, two certified paint booths and associated equipment.

In Service support, QTA's FAA approved Part 145 Repair Station #Q9TR440N provides support for composite and structural repairs as well as thrust reversers on Gulfstream GIII and Lear 60 aircraft.