

Gulfstream (Grumman) G1159 and G-IV Series Aeroplanes

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**AD/G1159/36                      Corrosion and Cracking Fuselage Station 452                      9/90**

Applicability:    Serial numbers:

001, 002, 003, 005, 006, 007, 008, 010, 011, 012, 013, 014, 015, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029, 031, 033, 034, 035, 037, 038, 039, 040, 041, 043, 044, 045, 046, 047, 049, 050, 051, 052, 053, 055, 056, 057, 059, 061, 063 & 065.

Requirement:

1. Perform a visual inspection to detect corrosion or cracks in the wing rear beam/upper cap angle, wing upper aft plank, and the “clothespin” attach fitting, part number 1159WM20016, located at Fuselage Station 452.
2. Inspect the lower cavity of the “clothespin” attach fitting, using a 4.9 mm or smaller flexible borescope through the existing drain hole. If no drain hole exists, prior to further flight, install a drain hole in accordance with Gulfstream G-II Customer Bulletin No 42, Section V, dated December 15, 1969.
3. Inspect the upper cavity of the “clothespin” attach fitting, using the borescope through the gaps where the “clothespin” mates with the fitting. If foam filler is present and this inspection cannot be accomplished, perform the inspection in accordance with a scheme approved by the Authority.
4. Inspect the wing upper aft plank adjacent to the clothespin fitting for corrosion or defects using pulse echo ultrasonic equipment. (**CAUTION:** A machined step in this area may be misinterpreted as material loss.)
5. Replace any cracked or corroded parts in accordance with a scheme approved by the Authority.

*Note: FAA Emergency AD 90-13-02 refers.*

Compliance:    Prior to 30 September 1990.

Background:

There have been reports of extensive corrosion and cracking in the area of the Fus Sta 452 “clothespeg” attachment fitting. This is attributed to foam being used to retain the fitting nuts during production and the lack of drain holes in the attach fitting area. Corrosion in this area will substantially reduce wing integrity.