

Flight Design CTSW 2006 / 2007
MANDATORY
TRIM TAB REINFORCEMENT PROCEDURE



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2 General Information

The purpose of this retrofit procedure is to provide basic instructions for the modification of the stabilator trim tab in the area of the trim tab control bracket.

Scope:

CTSW 2006 \ CTSW 2007 serial No. **06-07-15** to serial No. **07-05-18** inclusive, equipped with the full span stabilator trim tab.

Reason:

The stabilator trim tabs of the affected aircraft are susceptible to de-bonding in the area where the trim tab control bracket attaches. This can lead to a lack of rigidity in the control system that causes vibration feed-back through the control system to the control stick.

Action:

By Safety Directive No. 15 Flight Design is mandating a procedure to reinforce the trim tab bracket attach point. This document provides the instructions to perform this task. Qualifications of the maintenance personnel will be as required by local regulations.

The modification should be performed within the next 25 hours, or at the next maintenance interval, whichever occurs first.

2.1 Tools Required

Wrench 8x10	1 pcs
Hex-nut wrench 4	1 pcs

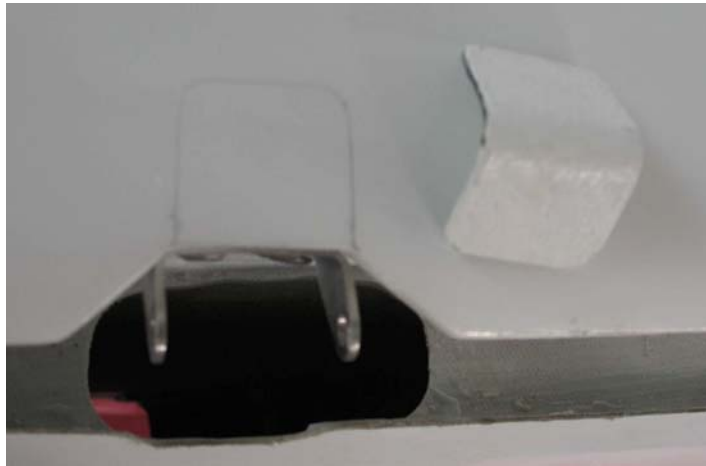
2.2 Parts and Materials Required

Reinforcement angle (WA 3011011)	1 pcs
Self-locking nut DIN 985-M5 regular	2 pcs
Resin L-285	50 gr
Hardener H-285	20 gr
Cotton flocks	

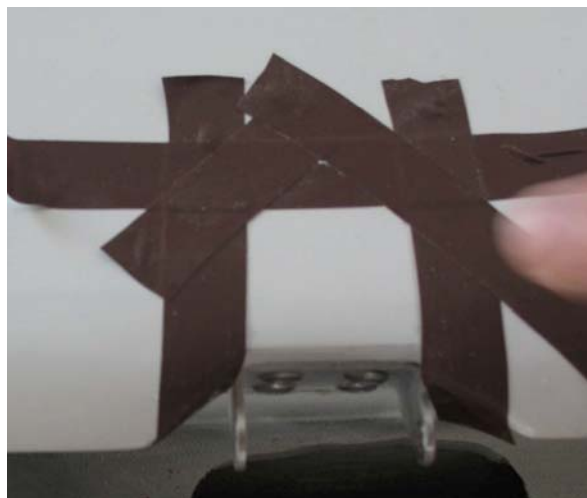


2.3 Procedure

1. Remove stabilator from the airplane in accordance with the current maintenance manual. Note: The pictures shown in this document depict the stabilator upside down, lying on a table.
2. If necessary for accessibility, cut out the gap sealing tape on the lower surface in the area of the control rod attachment point.
3. Remove trim tab control rods accordance with the maintenance manual. Mark position of the control rods for later re-installation.
4. Position the composite reinforcement angle and mark contact area to the lower trim tab surface. Remove reinforcement angle.

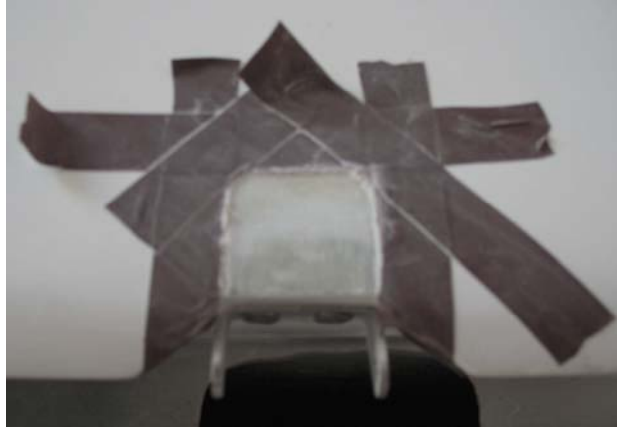


5. Cover the paint area around the reinforcement angle with tape to prevent scratches to the finish.





6. Carefully sand away the paint from the marked area in preparation for the bonding. Take special care not to damage the fibre layers.



7. Carefully sand the contact area of the metal control rod attachment fitting with the reinforcement angle. Take special care to not damage the rivet heads.



8. Peel away the ply layer from the inside of the reinforcement angle.





9. Wet all gluing surfaces carefully with Epoxy resin L285 with hardener H285.

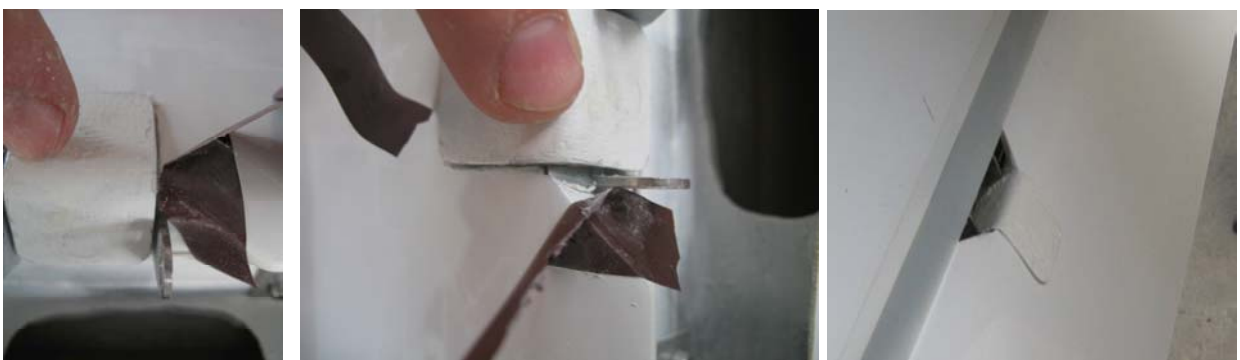


10. Glue the reinforcement angle to the bracket and lower trim tab surface using thickened resin L285 with hardener H285 and cotton flocks.



11. Carefully remove all surplus resin, as this will affect the final appearance of the work area.

12. After the resin cures, remove the protective tape from around the work area.



13. Post-cure the repair by heating the area to a minimum of 60°C (140° F) for 12 hours.

Take care not to overheat the repair.

14. Re-install the trim tab control rods according to maintenance manual.



15. Re- install the stabilator according to the maintenance manual and cross-check the trim tab deflections. With the control rods re-installed in the same position as removed, there should be no change in deflection.

2.4 Reporting of Completion

Flight Design is mandating that a report be sent immediately upon completion of the procedure back to Flight Design or its representative listing:

Date

Location

Serial number

Total time in service

Name and qualifications of the person performing the procedure



3 Revisions

Revision No.	Date released	Affected chapters	Affected pages	Approved by
Original Issue	23-Jun-2007	N/A	N/A	