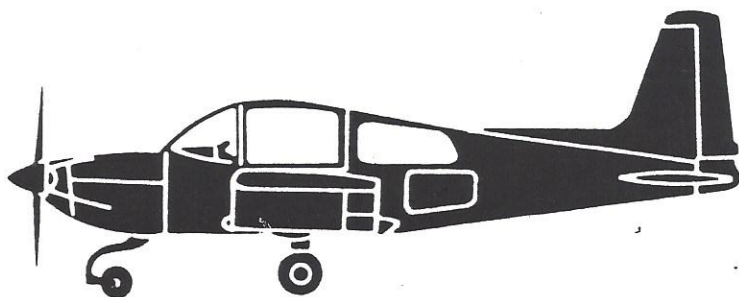


SINGLE ENGINE AIRCRAFT SERVICE KIT NO. 150

SUBJECT: FLIGHT CONTROLS (ATA NO. 27) AILERON,
MODIFICATION OF

[illegible]

August 3, 1979



Gulfstream American

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GULFSTREAM AMERICAN SINGLE ENGINE AIRCRAFT SERVICE KIT NO. 150

SUBJECT: Flight Controls (ATA No. 27) Aileron, Modification of.

PURPOSE/DISCUSSION: The purpose of this service kit is to modify the aileron to prevent possible oscillation during flight.

DESCRIPTION: This service kit consist of removing the trailing edge of the aileron, installing rivets at the new trailing edge and relocating the aileron trim tab. Aircraft with autopilot installed require deactivation of the autopilot system.

SPECIAL TOOLS/
EQUIPMENT REQUIRED: None.

EFFECTIVITY: This change is effective on the following aircraft.

<u>MODEL</u>	<u>SERIAL NUMBER</u>
AA5	All AA5 Aircraft
AA5A	1 through 879
AA5B	1 through 1246

WEIGHT AND BALANCE: Negligible — Control system mass balance change not required.

PRICE: Refer to Service Bulletin 165

MODIFICATION INSTRUCTIONS:

- A. Prepare the aircraft for safe ground maintenance as follows.
- A-1 Insure that the Master Switch is OFF and all aircraft System Switches are OFF.
 - A-2 Insure aircraft is grounded.
 - A-3 Comply with all safe maintenance practices as recommended in the Maintenance Manual and FAA Regulations.
- B. Rework Instructions
- B-1 Block the ailerons to prevent aileron movement.
 - B-2 Remove the aileron trim tab. Retain for reinstallation. Drill .097 - .100 dia holes in aileron rear spar in-board end and the top outboard end per Figure 1 and install CCR274SS-3-1 rivets. Installation of rivets is to prevent corners from spearating.
 - B-3 Remove aileron trailing edge skin flush with the rear spar on the left and right hand aileron. See Figure 1.

CAUTION

When cutting the trailing edge, make initial cut well away from the bond line and use care on final cut to prevent delamination to bond line. Leave .03 to .05 extention for final filing, to prevent damage to rear spar.

- B-4 Smooth skin edges flush with rear spar, using strokes toward center line or parallel to trailing edge. See Figure 1.

NOTE

After removal of the trailing edge, inspect for delamination of bondline. If delamination is found, repair as called out in Service Kit No. 125A.

- B-5 Drill .097 - .100 dia holes in top and bottom of the aileron trailing edge as shown in Figure 1.

CAUTION

Use care in locating and drilling holes to insure proper location in spar flanges.

- B-6 Install CCR274SS-3-1 rivets in the trailing edge of the aileron as shown in Figure 1. Dip rivets in CS3204A2 Polysulfide sealant before installing.
- B-7 Apply a smooth consistent layer of Polysulfide sealant to the exposed bondline at the top and bottom of the aileron trailing edge.
- B-8 Remove excess sealant and allow to cure for a minimum of 8 hours prior to flying aircraft.
- B-9 Apply zinc chromate primer to repair area prior to repainting.
- B-10 Turn the aileron trim tab up side down and install on bottom surface as shown in Figure 2 using 1601-0410 rivets.
- B-11 Make a general inspection of the aileron control system. Check the aileron support bearings and cable tension.
- B-12 Deactivate the autopilot system by disconnecting plug CD47 at autopilot aileron servo located under the right forward console.
- B-13 Tyrap servo end of cable around DK clamp at the bottom of the servo bracket. Tyrap the other end of the cable to wire bundle.

NOTE

Check for any possible interference with control system.

- B-14 Install "autopilot deactivated" placard as shown in Figure 3.

NOTE

Clean area with isopropyl alcohol prior to installing placard.

- B-15 Test Fly Aircraft, adjust aileron trim tabs as required.

C. Record compliance in the aircraft log book.

D. Return aircraft to flight status

Parts Required Per Aircraft.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
* CCR274SS-3-1	Rivet	70
1601-0410	Rivet	14
CS3204A2	Polysulfide Sealant	½ pt. kit.
5803007-138	Placard	1
TY23M	Tyrap	2

* CCR274CS-3-1 and BSP-3-2 may be used in place of CCR274SS-3-1.

Service Kit prepared by Gulfstream American Corporation P.O. Box 2206, Travis Field, Savannah, Georgia 31402.

FAA Approval of this Service Kit has been granted.

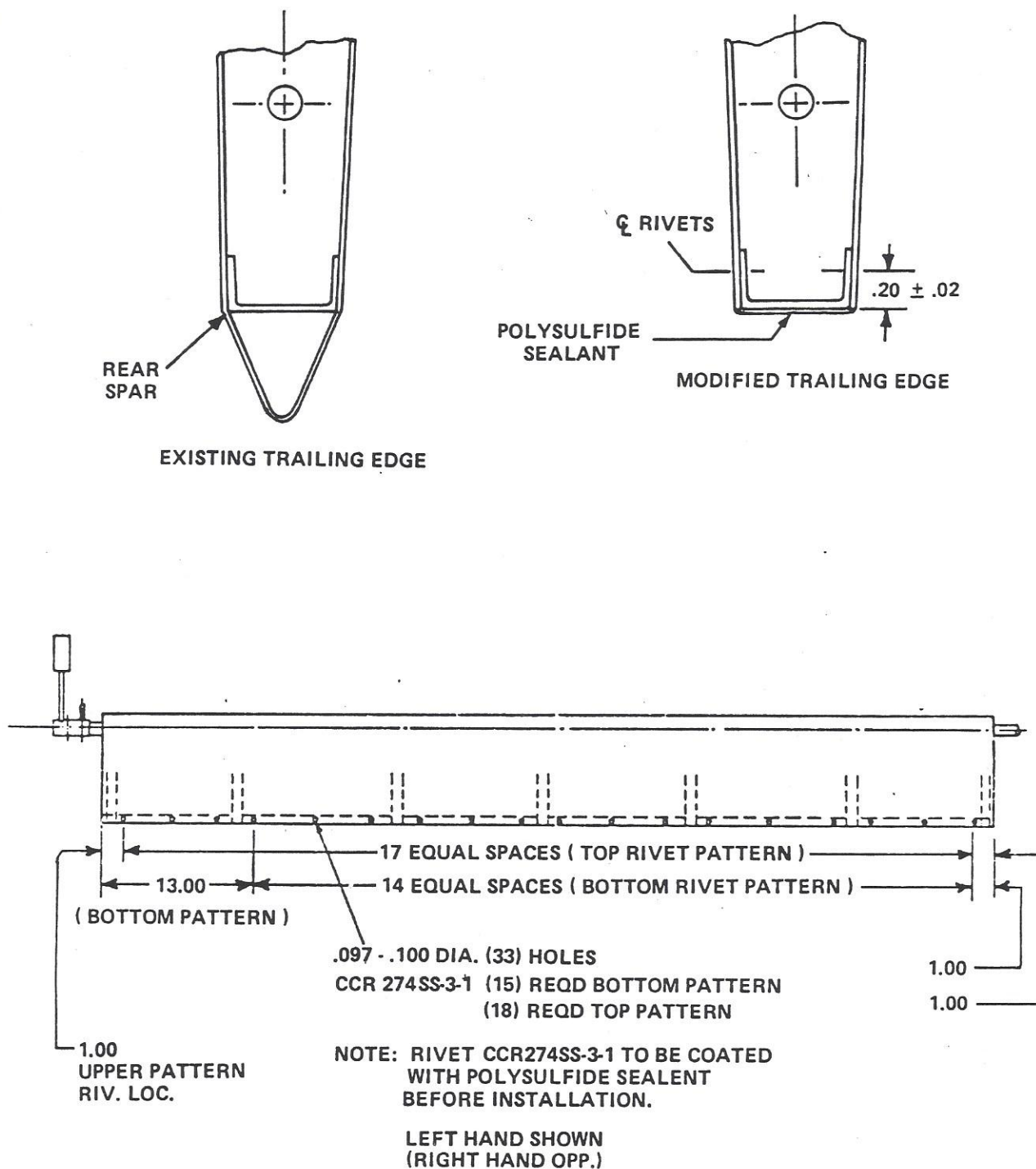
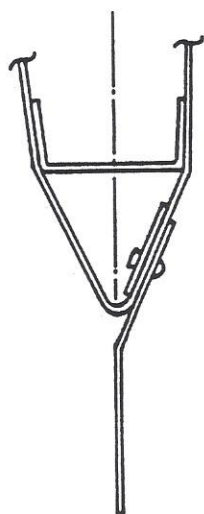
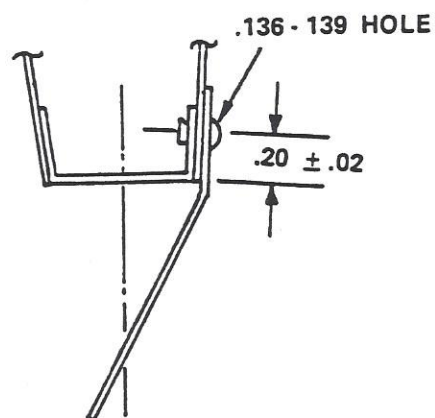


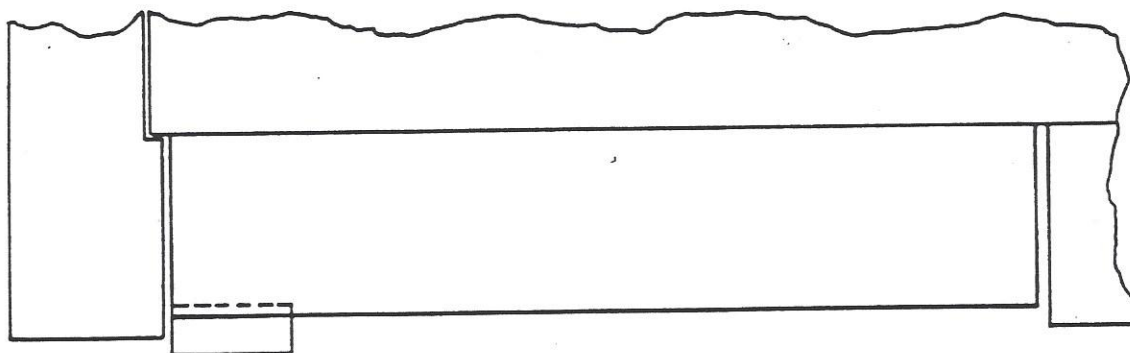
FIGURE 1



(TYP) TRIM TAB ON
EXISTING AILERON



(TYP) TRIM TAB INSTALLATION
AFTER ALTERATION
TAB INSTALLED
BOTTOM



5202036-1 TAB (REF)
1601-0410 RIVET (7) PLACES

TOP VIEW
LEFT HAND SHOWN
(RIGHT HAND OPP)

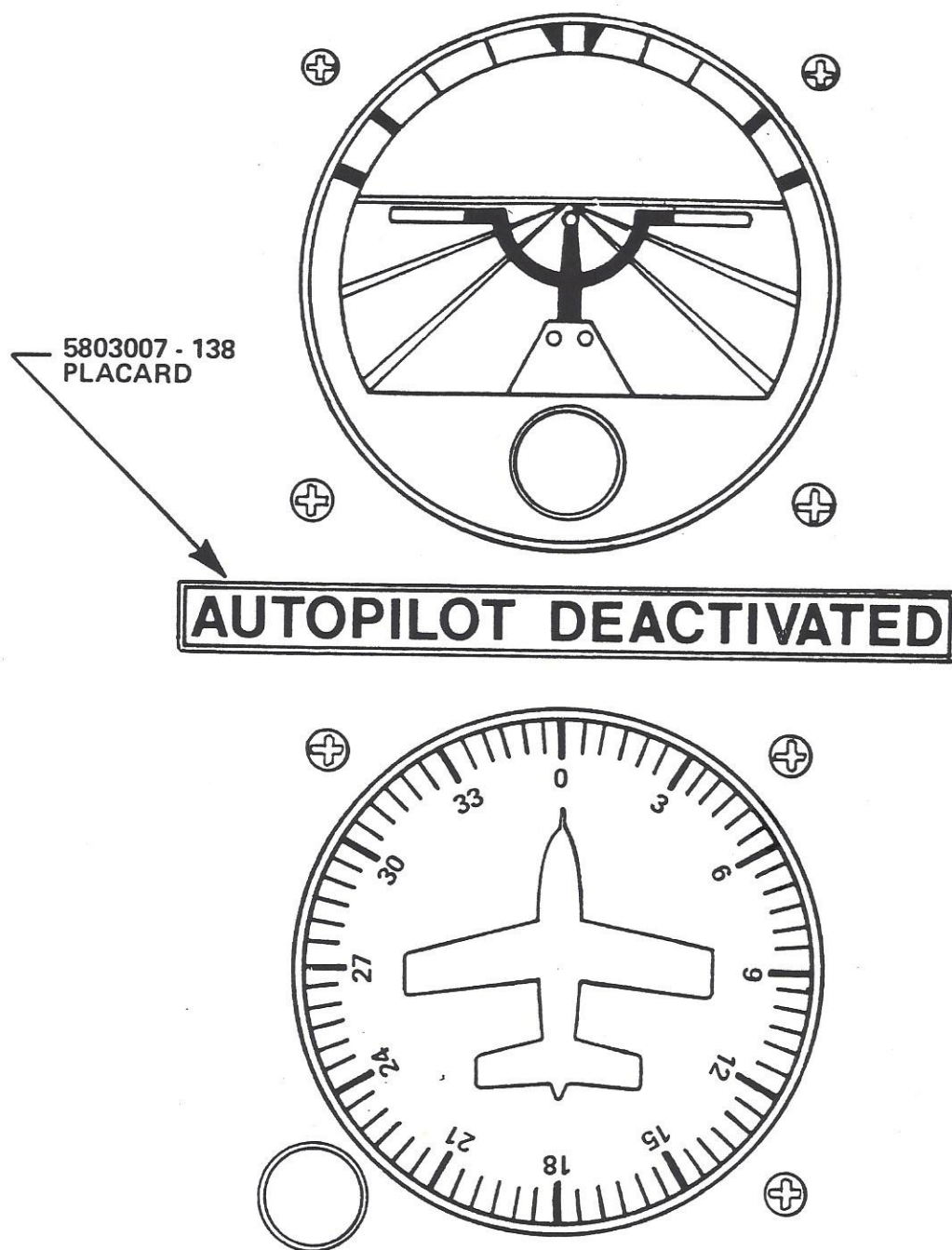


FIGURE 3