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Service Bulletin No. SB-AG-24

June 20, 1990

HORIZONTAL STABILIZER STRUT ATTACH INSPECTION

MODELS AFFECTED: **MODEL** **SERIAL NUMBER**
All models listed that have AYRES ESK 407 empennage version, or AYRES factory metal empennage installation.

S2R	1416R thru 2582R
S2R-R3S	R3S-001 thru R3S-011 R2S-001DC thru R3S-011DC
S2R-R1340	R1340-001 thru R1340-023 R1340-001DC thru R1340-023DC
S2R-R1820	R1820-001 thru R1820-034 R1820-001DC thru R1820-034DC
S2R-T11	T11-001 thru T11-005 T11-001DC thru T11-005DC
S2R-T15	T15-001 thru T15-023 T15-001DC thru T15-023DC
S2R-T34	T34-001 thru T34-149 T34-001DC thru T34-149DC
S2R-T65	T65-001DC
S2R-HGT65	T65-002DC thru T65-009DC

REASON FOR PUBLICATION:

This Service Bulletin is being issued to

- (A) Provide a procedure for inspection of the attach points for the horizontal stabilizer struts to determine if a crack exists.
- (B) A method to repair the crack if one is found.
- (C) Strengthen the attach point to prevent cracks in the future.
- (D) Provide a time limit for accomplishing the inspection and modification.

COMPLIANCE:

Visual inspection before next flight. If no crack exists, modification no later than next 100-hour inspection is required. If a crack is found, repair and modification before next flight is required.

BY WHOM WORK WILL
BE ACCOMPLISHED: A & P mechanic or equivalent

APPROVAL: FAA Approved

ESTIMATED AN HOURS: Inspection – Thirty minutes
 Inspection and modification – 2 to 3 hours

SPECIAL TOOLS: Welding equipment

**ACCOMPLISHMENT
INSTRUCTIONS:**

1. Inspect the lower aft fuselage at the stabilizer strut attach point and the area aft of this point for linseed oil stains and accumulation. If oil is present, there is immediate evidence of a crack and immediate repair is required before next flight.
2. If linseed oil stains or accumulation are not found, remove left and right fuselage side skins for access to this area; clean thoroughly.
3. Remove the 4 bolts on each side that hold the 2 (upper and lower) splice plates to the fuselage/strut attach tabs.
4. Slip a 10" or larger adjustable wrench or other suitable tool over the tab on the lower longeron and apply approximately 20 pounds of force downward while watching the weld bead where the strap (tab) joins the fuselage longeron. A springy feel obvious crack visible requires immediate repair and modification.
5. If tab is rigid and no crack is detected, the strut may be reinstalled and the aircraft returned to service. The modification may be delayed until the next 100-hour inspection, provided that close visual inspection is made prior to every flight until the modification is accomplished.
6. If a crack is present on either side, install part 10601-242 in accordance with 10601 ECN G-23 provided as page 4 of this service bulletin. Prior to welding, drill a small (1/16") hole in one of the diagonal members near the attach tab. This will prevent a build up pressure in the frame. Weld the hole closed when the repair is finished. Sand, prime and paint the repair. Pack the resulting triangular cove with zinc chromate putty to prevent a build up of chemical residue from accumulating.

RECORD COMPLIANCE: Make appropriate entry in aircraft maintenance records.

Example 1: AYRES SERVICE BULLETIN NO. SB-AG-24 COMPLIED WITH ON
_____ (date) _____ AND NO CRACKS WERE
FOUND. AIRCRAFT RETURNED TO SERVICE. TOTAL TIME
_____.

SIGNATURE, TITLE, DATE

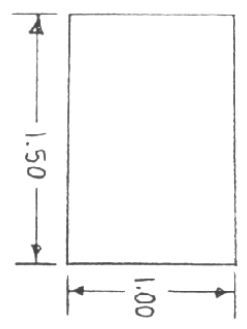
Example 2: AYRES SERVICE BULLETIN NO. SB-AG-24 COMPLIED WITH ON
_____ (date) _____ AND MODIFIED IN
ACCORDANCE WITH INSTRUCTIONS. TOTAL TIME
_____.

SIGNATURE, TITLE, DATE

7. After initial inspection and/or rework is completed, fill out the enclosed compliance card and return it to the factory.

TITLE		FRAME FUSELAGE	
REASON		TO STRENGTHEN STAB STRUT	
ATTACH POINT			
THIS ORDER TO BE USED AS PART OF DWG AND SUPERSEDES PARTS AS SHOWN IN			
REVISE P/D AND SW TO AGREE			
DWG REV		G	
L ETT/EM			
CHANGE EFFECTIVE ON		NOTED	
REV A			
REV B			
WAS		REQ	
CLASSIFICATION			
Alyes Corporation Albany, Georgia		10601	
MODEL		S2R	
DRAWING NUMBER		G-23	
EQU NUMBER			
CUSTOMER			
COMPANY			
REQUESTED BY			
VENDOR			

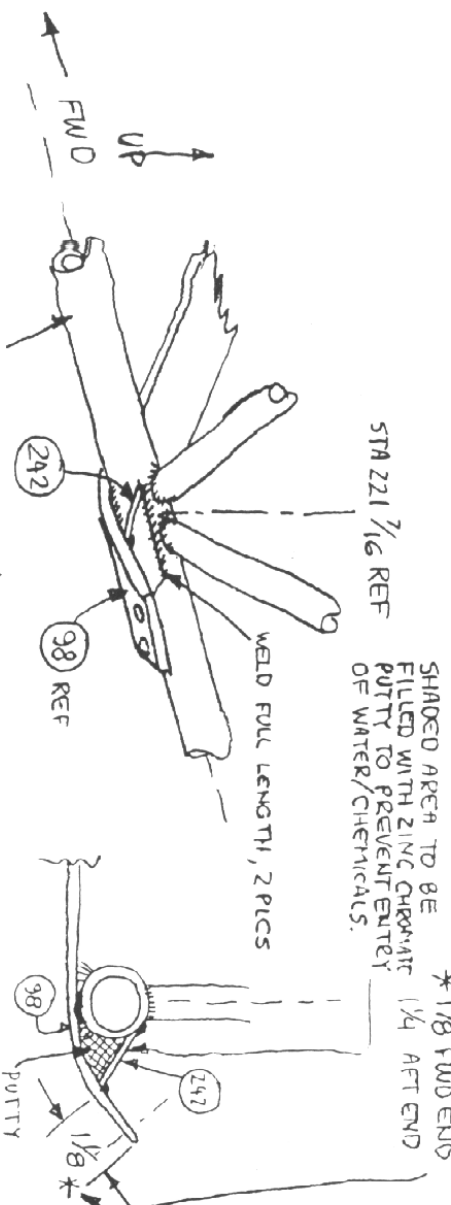
(1) CREATE ITEM -242 GUSSET, MATL 1/8" 4130 STEEL QTY REQD 2 PER FUSELAGE... PER VIEW.



-242 GUSSET

EFFECTIVITY:

- PRODUCTION
- 2583 R & UP, R1340-024 & UP
 - R35-011 DC & UP, R1820-035 DC & UP
 - T11-006 & UP, T15-024 & UP
 - T34-150 & UP, T45-001 & UP
 - T65-010 & UP



LOWER LEFT LONGERON (REF)
R/P/SI DE SANGE AS SHOWN

EFFECTIVITY FOR SPARES:
ALL S2R WITH ESK 407 METAL TAIL CONVERSION.

NEXT ASSEMBLY DRAWING AFFECTED		YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
PARTS DISPOSITION					
REVISIONS		A	B	A	B
PREPARED STOCK					
IN PROCESS					
FINISHED PARTS					
IN ASSEMBLY					
REWORK		A	B	A	B
SCRAP					
NOTED					
DRAWING CHANGED					
DY					
DWG REV					
CHECKED					
DATE					
ISSUE	DATE	BY	CHK	APP DATE	APPROVALS
FIRST	6-18-90	JTH	SPH	6-19-90	P. Nichols