

7F2-2 Side Skin

IMPORTANT: See drawing 7F2-2 to identify the topside of the skin, also clearly mark the side that will be on the inside of the fuselage (if possible choose the side with the manufacture identification marking for the inside).

ORIENTATION of 'L' ANGLES: The bend is towards the front.

Place the 'L' Angle on the Side Skin in the same manner as the Bottom Skin

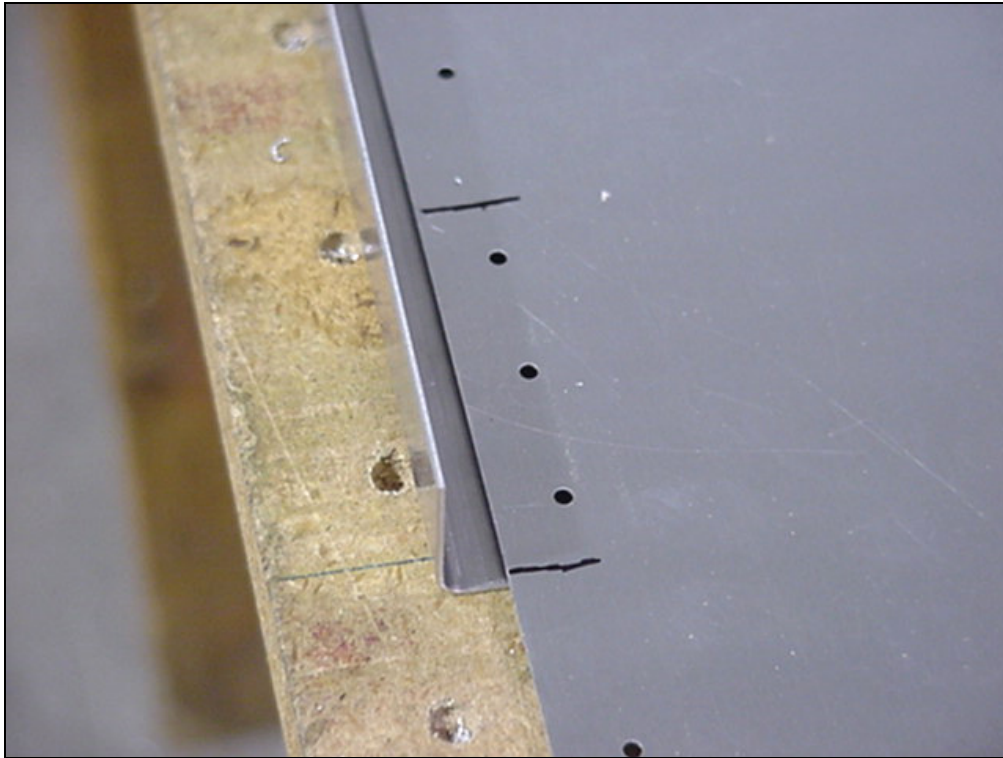
Trim the sides of the skin to the line. Check for proper edge distance, approximately 9 to 10mm from the center of the pre-drilled pilot holes to the edge of the skin.



7F2-2 Side Skin

A4 PITCH 50
2nd hole 30mm from Longeron
(Middle of drawing 7-F-3)

Drill and cleco the 'L' to the Side Skin. Mark and cut the 'L' angle.

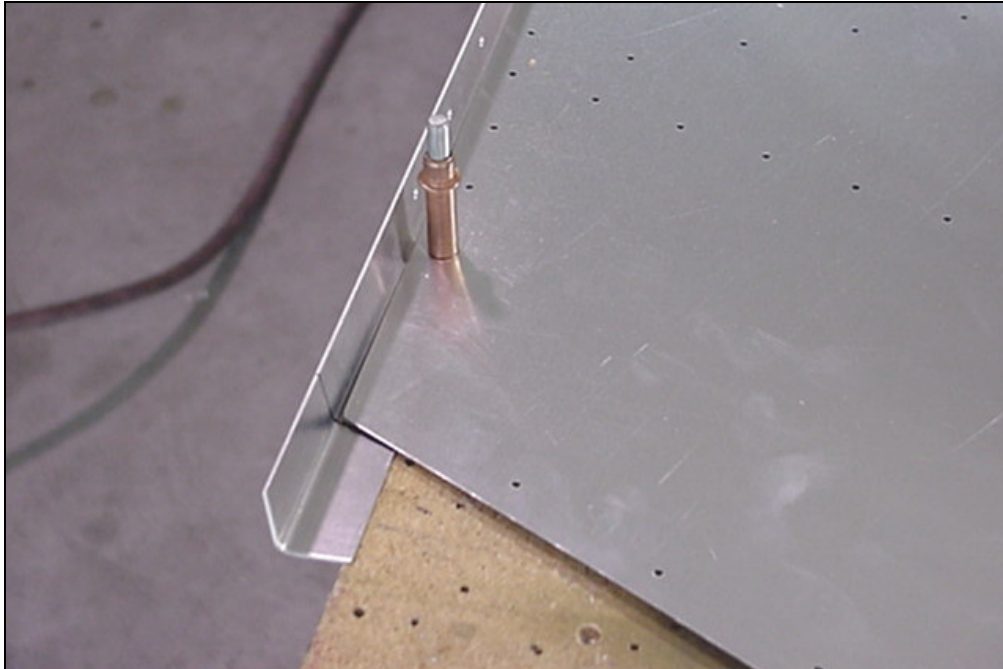


**7F3-1 Rear Fuselage
Longerons
7F2-2 Side Skin**

First install the upper
Longerons 7F3-1 along
the top edge of the
Fuselage Side Skin 7F2-2

Detail of Rear Longeron
Splice (see drawing 7-F-4
and 7-F-6)

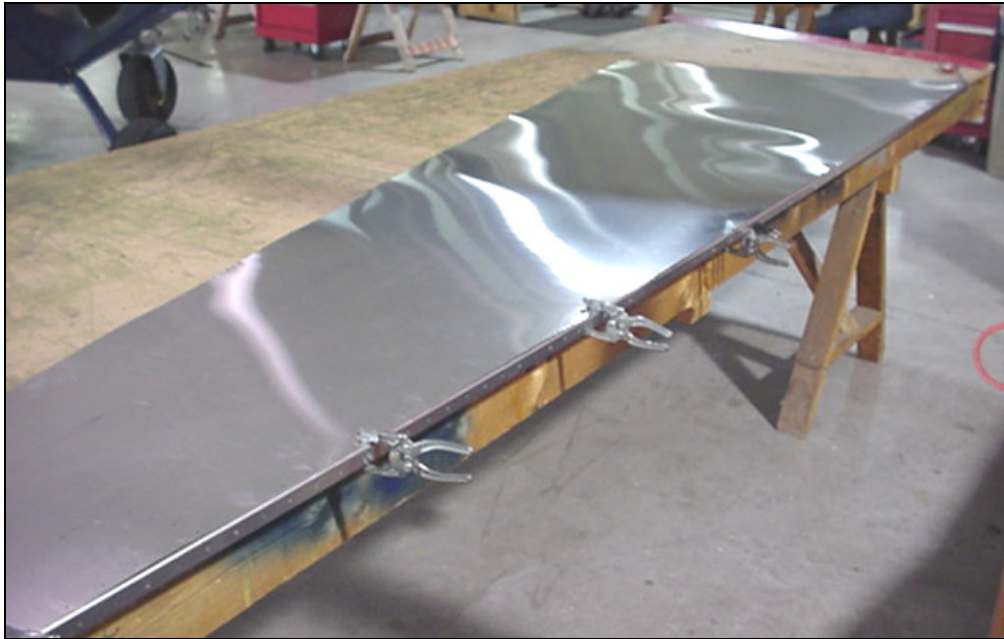
When positioning the top Longeron to the Side Skin, use the same techniques as the Bottom Skin.



3 RIVETS A5
Rear Longeron Splice

A4 PITCH 40
Drawing 7-F-6

Drill and Cleco the Longerons 7F3-1 to the Skin 7F2-2



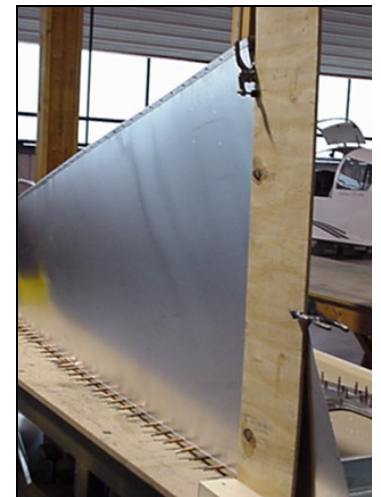
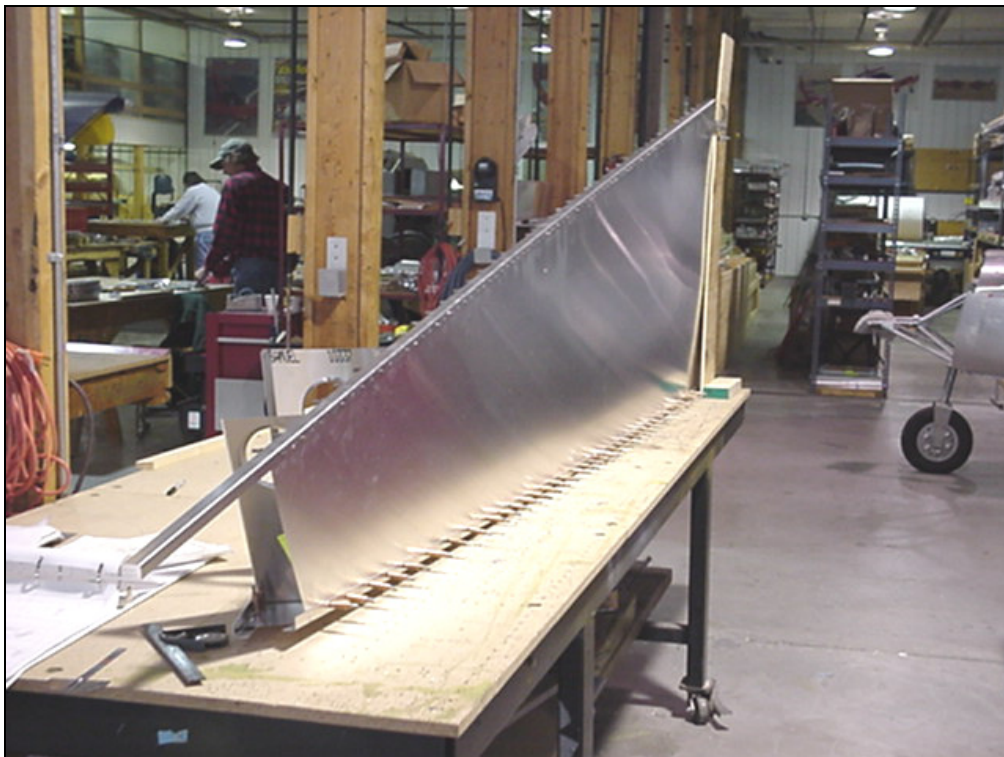
It is very important to correctly position the lower Longerons to the Side Skin, so if in doubt recheck before drilling.

CHECK: The rivet lines for the HT Frames must line up, the front bottom edge lines up with the front edge of the Bottom Skin.

3 RIVETS A5
Rear Longeron Splice

A4 PITCH 40
Drawing 7-F-6

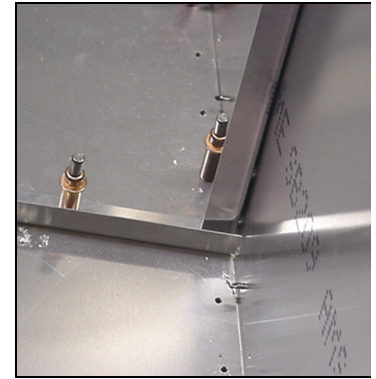
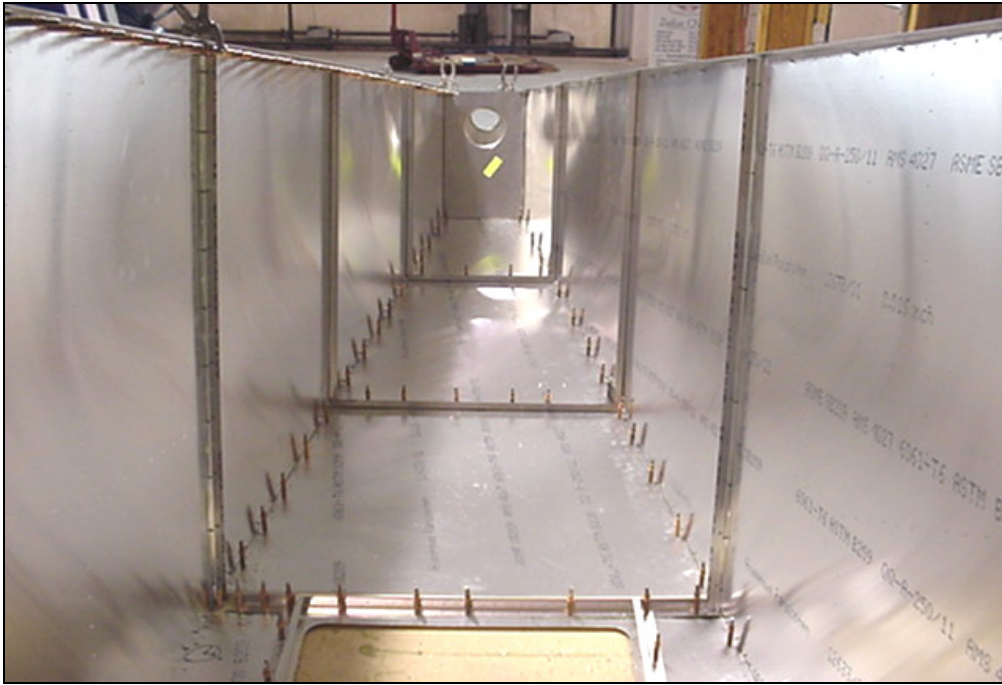
LOWER LONGERONS: The best way to install the lower Longerons on the Side Skin is to take them off the Bottom Skin and clamp the Longerons to the Side Skin. Make sure to use a reference point when doing so. Reference the tail frame position and the front and back edge of the Bottom Skin. Then transfer these points to the Longerons, and clamp them to the Side Skin. Clamp and drill the Longerons to the Side Skin



SUPPORT: Using a vertical board to support the Side Skin is very helpful.

Cleco the Longeron to the Bottom Skin and Side Skin.

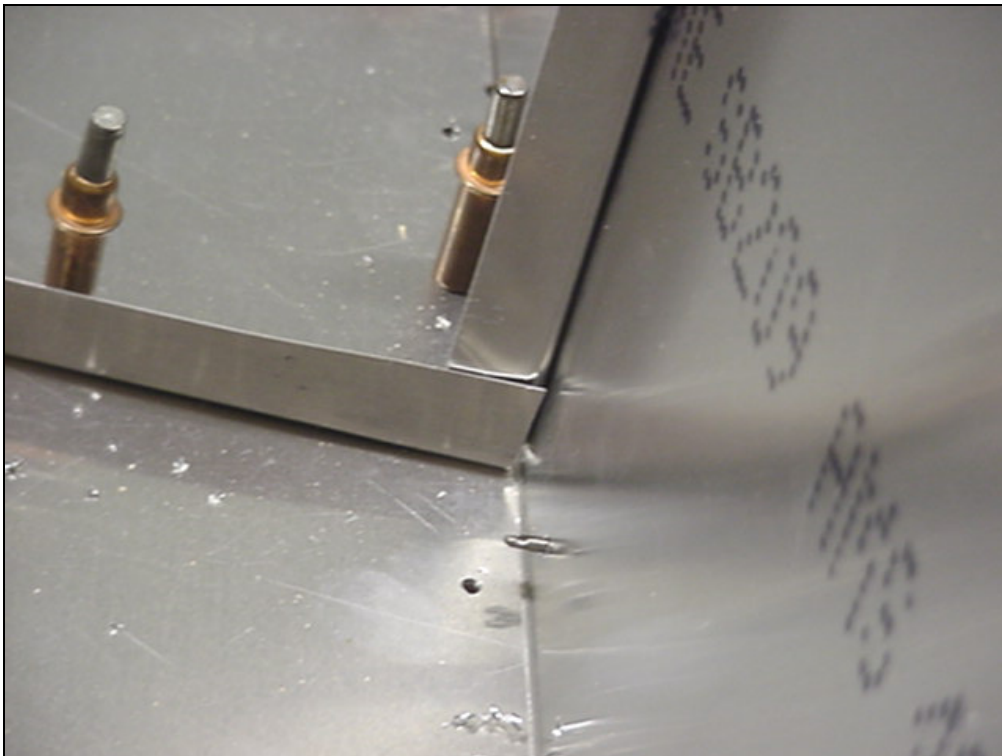
Do not worry about the length of the Longerons at this stage; they will be trimmed later.



If the bottom 'L' Angle and the side 'L' Angle do not match the same angle they will have to be bent to fit proper at this section.

Cleco the 'L' Angle to the Side Skin.

Prepare and install the second Fuselage Side Skin.



Bend the 'L' Angle like so.
Ref: Text on top left on drawing

The two angles have been bent to match each other.



A view of the 'L' Angle against the 'Z'.



Drill and cleco



Clamp the Rear Tail Frame to the Side Skin. Line up the Tail Frame with the predrilled holes.

A4 PITCH 30
(top left drawing 7-F-3)



Diagonal 'L' Angle

Position the diagonal 'L' Angle between the two Rear H.T. Frames. Drill and cleco.



Cut two 'L' Angles; each the width of the respective Tail Frames.

'L' Angle along the top of the HT Frames.
Ref: Bottom right diagram on 7-F-3

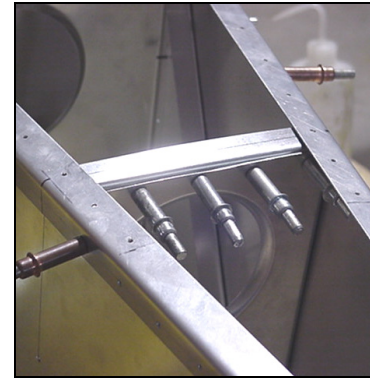
A4 Pitch 35

'L' Angle into 7F1-3 and 7F1-4

First clamp the 'L' Angle to the Longerons, then clamp the 'L' to the frame.
Drill & Cleco



The diagonal and 'L' Angles in position.



'L' Angle along top of 7F1-3 Rear Horizontal Tail Frame

On the Rear Frame the 'L' may have to be notched out in the middle where the flange-lightening hole is located.



Placing the Rear Longerons on the Top Skin in the same manner as the Side Skin works very well. Mark a reference spot on the Longerons and Un-cleco from the Side Skin. Line up the Longerons on the Top Skin using the same reference point. A good reference point is the Rear Frames and the slice area.

Drill and cleco the Top Skin to the Longeron and cleco the Longerons to the Side Skins.

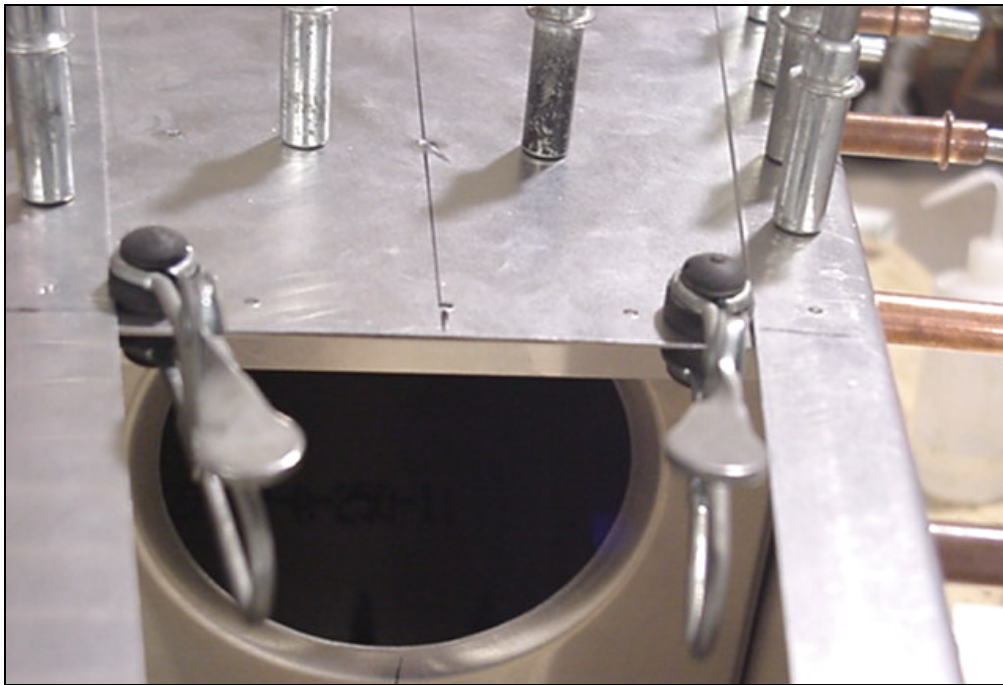
7F2-1 Top Skin

LAYOUT: mark the aircraft centerline along the full length of the top skin (both sides).

IMPORTANT: The pre-drilled holes along the front edge for 7F5-2SP must be in line with the pre-drilled holes for 7F5-3SP in the Fuselage Side Skin 7F2-2

CHECK: The pre-drilled holes for the HT Frame in the top skin line up with the pre-drilled holes in the Side Skin.

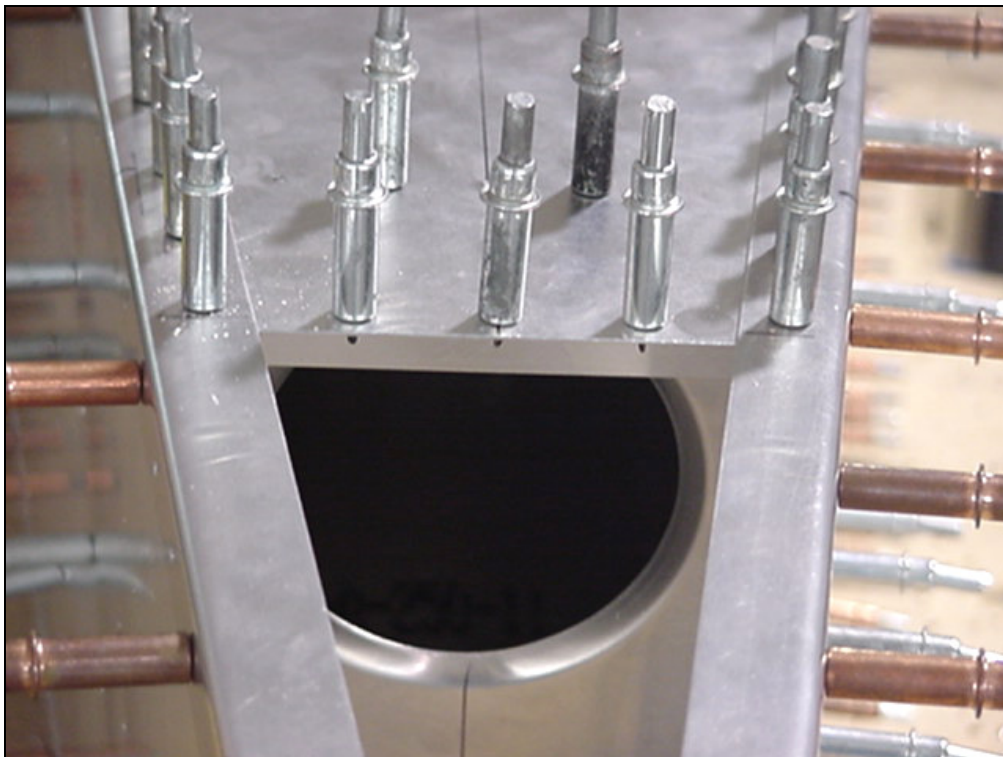
NOTE: The front edge of the top skin overhang 20mm past the front edge of the side skin Ref. 7-F-3



A4 PITCH 30
Top left diagram 7-F-6

CHECK: Use a plumb line to check that the aircraft center line on the Top Skin is in line with the aircraft centerline on the Bottom Skin.

Drill & cleco the top skin to the 'L' Angles riveted along the top of the front and rear HT Frames.

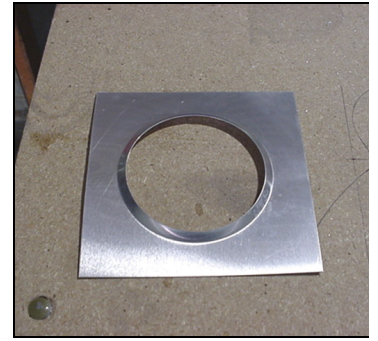
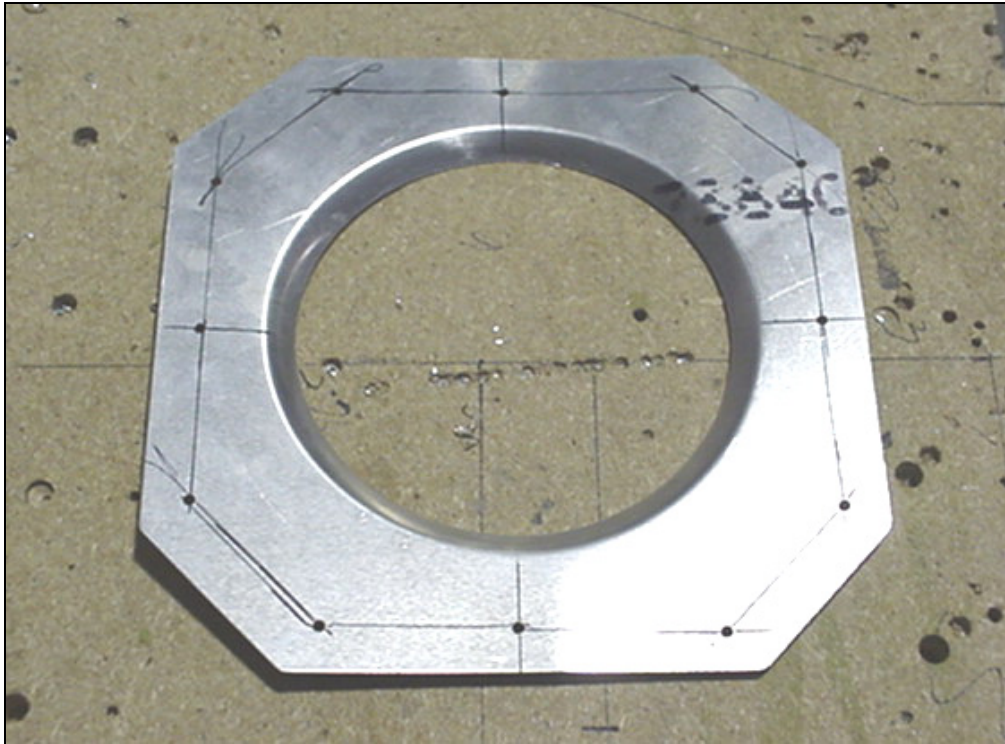


'L' Angle

8 RIVETS A4
(left diagram 7-F-4)

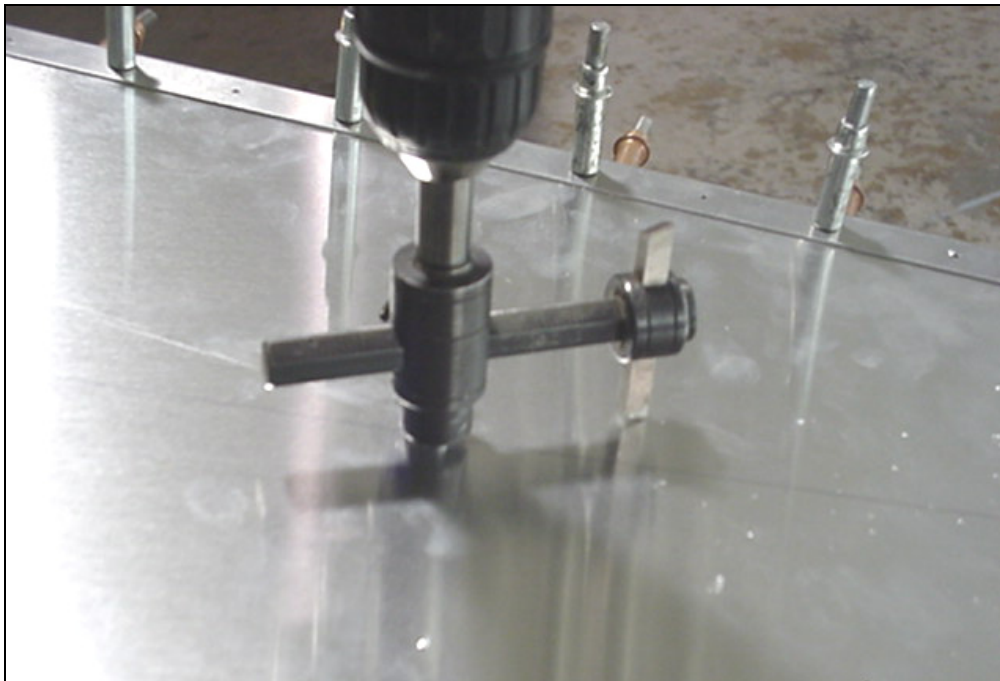
Cut and position 'L' along the aft edge of the Top Skin 7F2-1.

First clamp, then drill and cleco the 'L' Angle to the Skin and Longerons (Ref right middle diagram on 7-F-4)



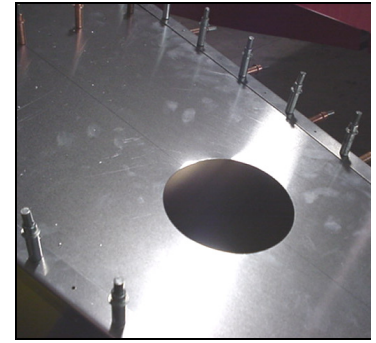
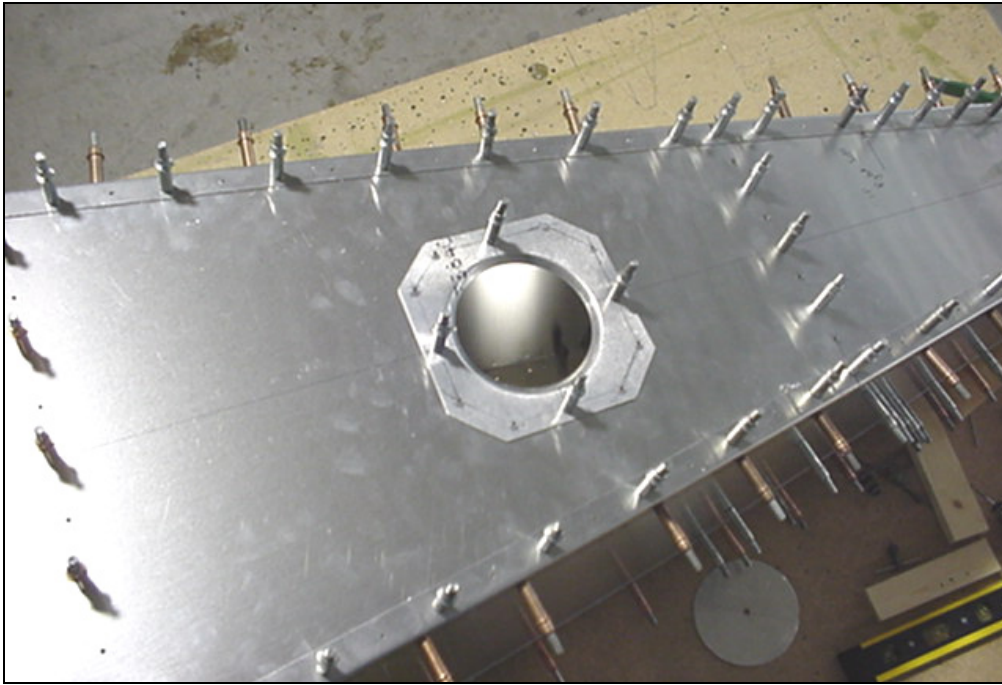
7F4-4 Top Skin Doubler

Cut and trim the corners off the Top Skin Doubler. Layout 12 A4 and predrill the Doubler.



See 7F2-1 Top Skin

Locate the Top Skin Doubler on the Top Skin. The location is 500mm from the rear on the Top Skin. The size of the hole is 112mm in diameter. It can be cut with hand snips, but works better with a fly cutter in a hand drill.



Debur the hole.

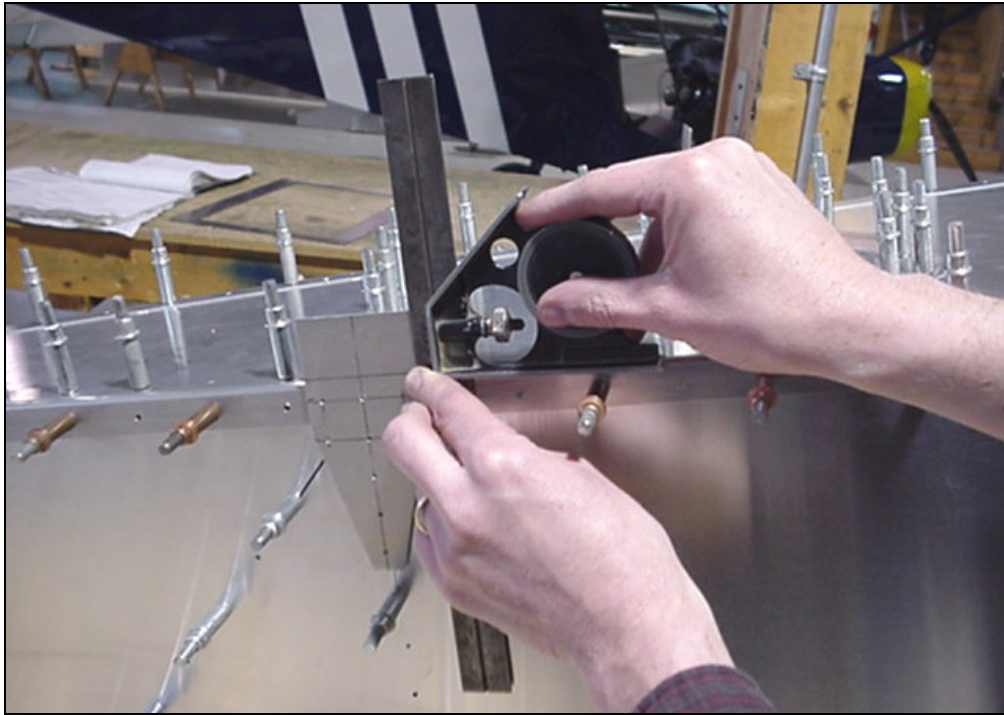
12 RIVETS A4 pitch 40
Middle diagram 7-F-4

Position the Top Skin Doubler 7F4-4 on the Top Skin 7F2-1. Drill and cleco.



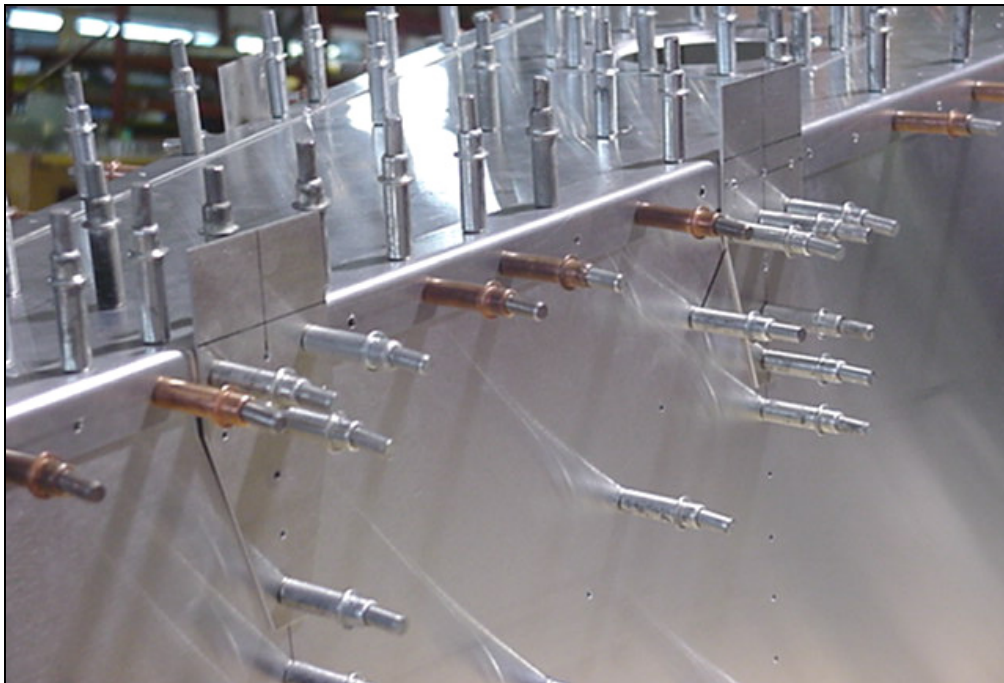
7F3-4 Horizontal Tail Attachment

Layout and predrill the Bracket. Before drilling check to make sure the layout will work on the Rear Fuselage.



7F3-4 Horizontal Tail Attachment

The Brackets are located on each side of the rear H.T. Frames. Square the Bracket off the top edge of the fuselage. Drill and cleco A5.

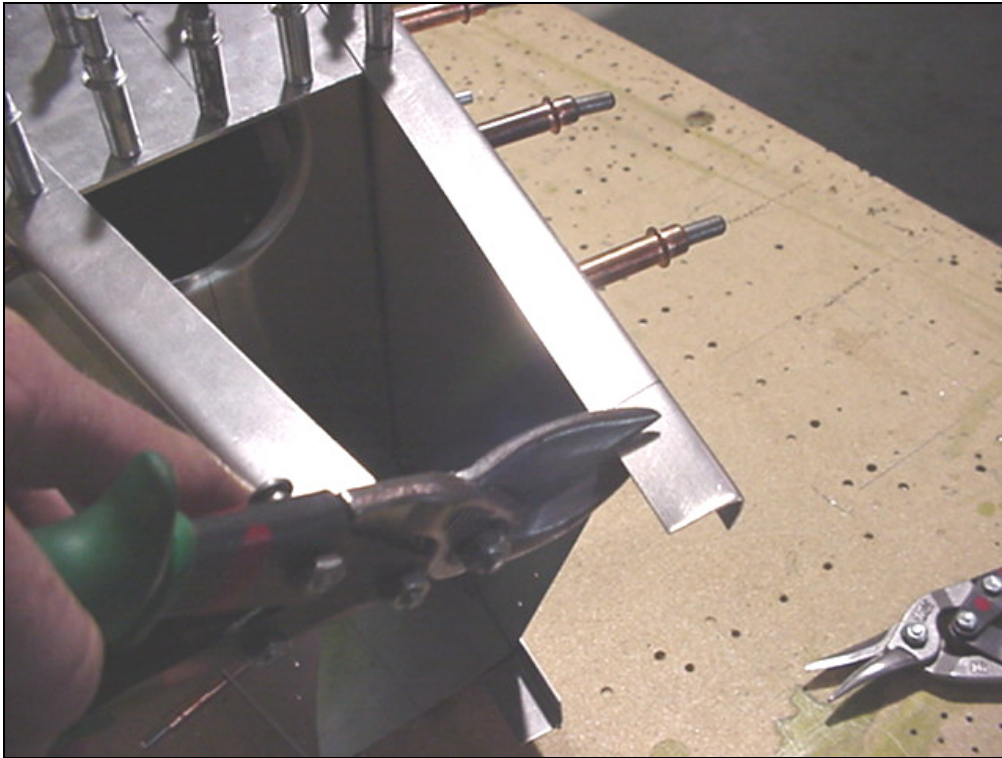


7F3-4 Horizontal Tail Attachment

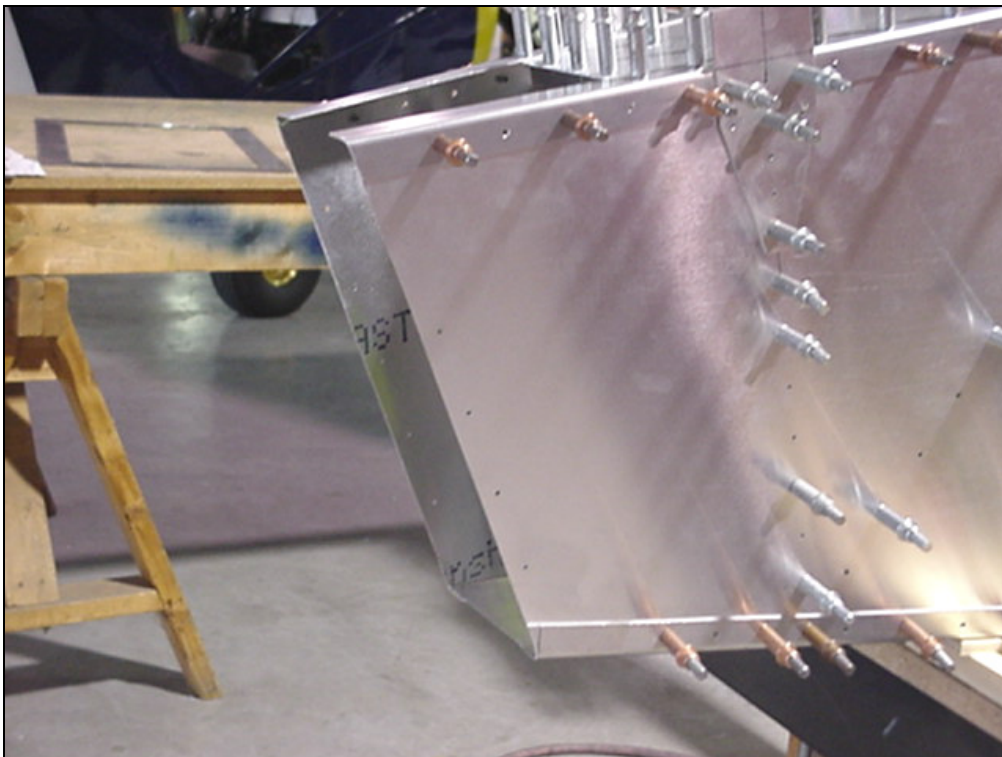
9 RIVETS A5

Also see 7-C-5

Do not rivet the Bracket to the Fuselage until the tail is mounted.



The aft end of the Longerons can be marked and trimmed at this time.



The Longerons are trimmed flush with the aft edge Sides and Bottom Skins.