



Building the Stabilizer skeleton.



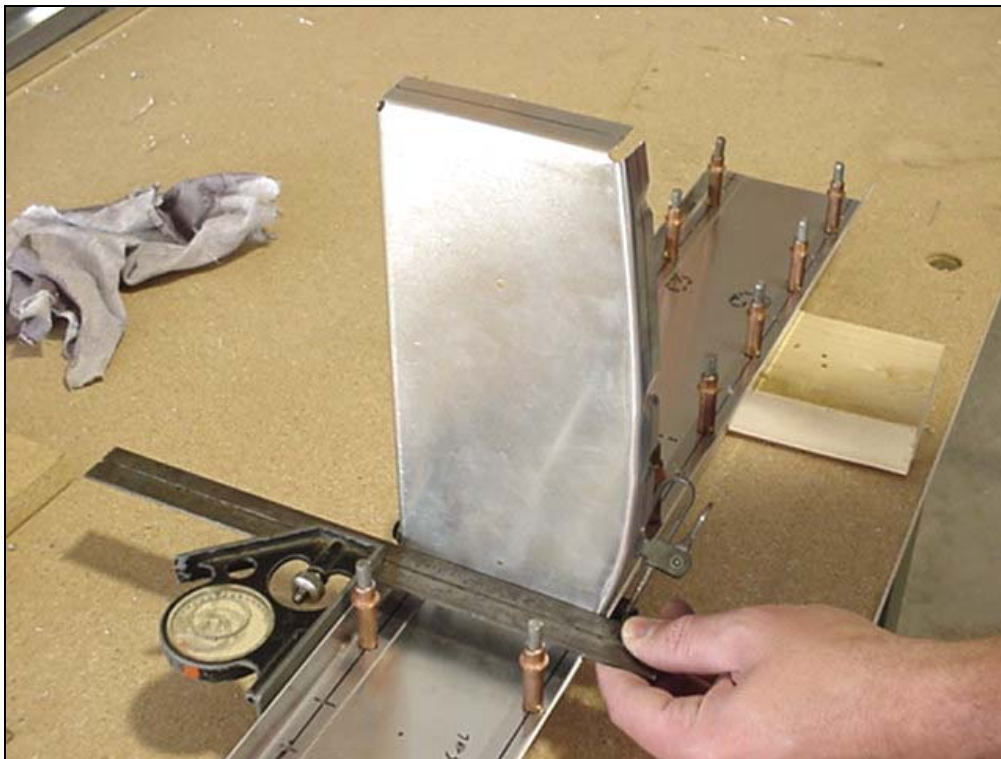
**7H2-1 Front Spar
7H2-3 Upper Doubler
7H2-4 Front Lower
Doubler**

Position the upper and lower doublers to the spar. Mark the centerline, rib location and brackets (7H1-3, 7H1-4, 7H2-6). Then layout the rivet pitch in between the ribs (A4 Pitch 40mm). Measurements are taken from the centerline (7H1-3 60mm to the right, 7H1-4 160mm).



**7H2-1 Front Spar
7H2-3 Upper Doubler
7H2-4 Rear Lower
Doubler**

Drill and cleco the doublers to the spar. Pilot drill the holes for the ribs.



7H1-4 Rear Ribs

Clamp 7H1-4 and 7H1-3 to the spar using a square (7H1-3 60mm right side of center line, 7H1-4 160mm).



**7H1-4 Rear Ribs
7H1-3 Nose Rib**

Drill and cleco ribs to the spar.



'L' Angle

Note useful clamps:

Type: Toggle clamps
(one inch grip)

From: US industrial Tool
(www.ustool.com)

Part Number: TP 176A

Quantity: 4 - 6

Cut and trim two L Angles. Position the 'L' Angles on 7H2-1. Clamp to the front side of 7H2-1 spar, drill and cleco.



7H2-6 Front Bracket

Cut 7H2-6 10mm off the top to clear the skin, and 35mm off the bottom (7H3 drawing).



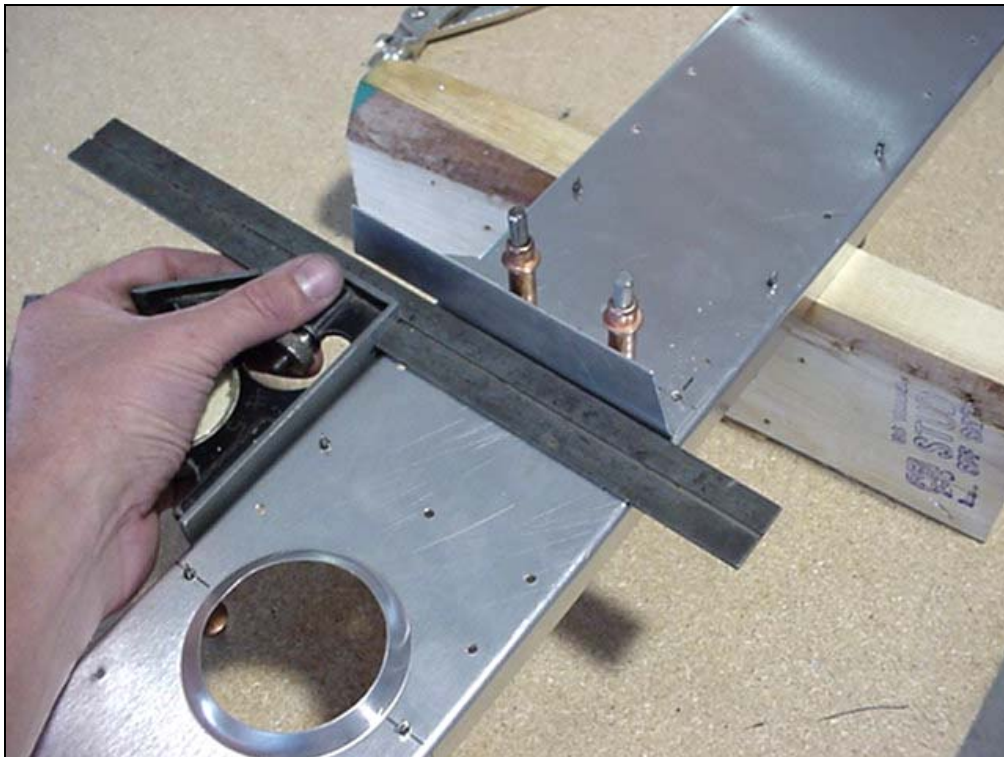
7H2-6 Front Bracket

Layout two lines 126mm from the centerline on 7H2-1 for 7H2-6. Clamp a block or extrusion to the spar to facilitate positioning. Make sure to square the blocks to the spar.



7H2-6 Front Bracket
positioned on front of
7H2-1

Drill and cleco five A5 rivets.



7H2-6 Front Bracket

Note: Make sure that the brackets are square before drilling.



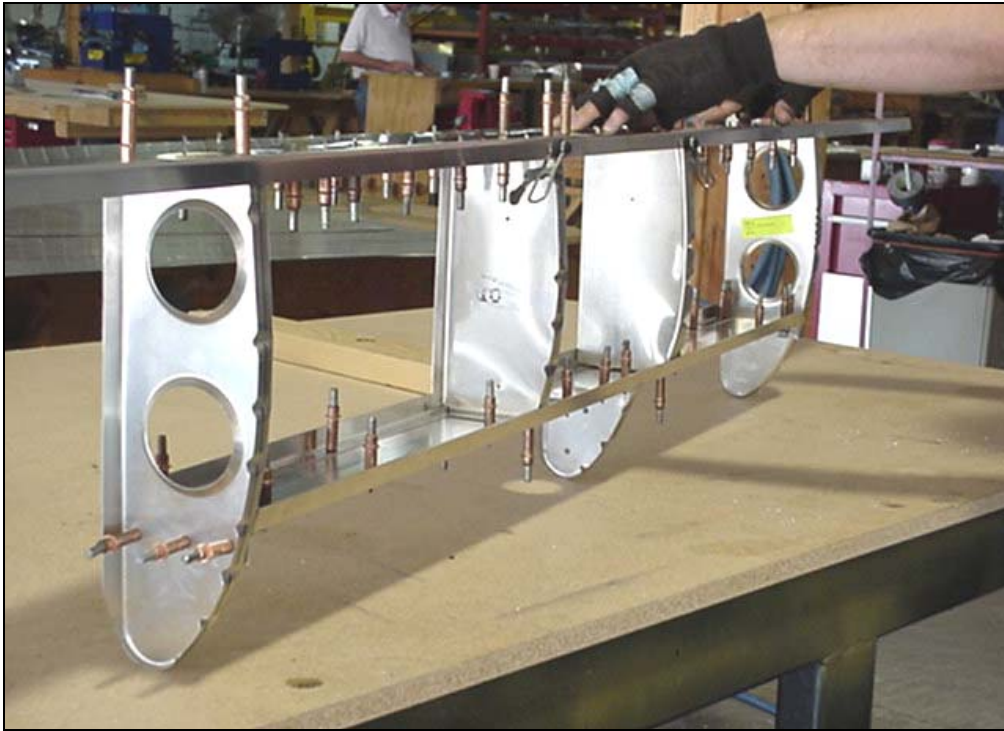
**7H2-2 Rear Spar
7H2-3 Upper Doubler
7H2-5 Lower Doubler**

Position the upper and lower doublers to the Spar. Mark the centerline and rib location (7H1-4 is 160mm from the center line). The first rivet from the centerline is 120mm. The area between is drilled later when installing 7H2-7 Rear Bracket. Pitch 40mm between the Ribs.



7H2-2 Rear Spar

Position, clamp, drill and cleco the ribs to the rear spar.



7H1-2 Full Rib

Note: In this position, the three nose ribs touch the table.

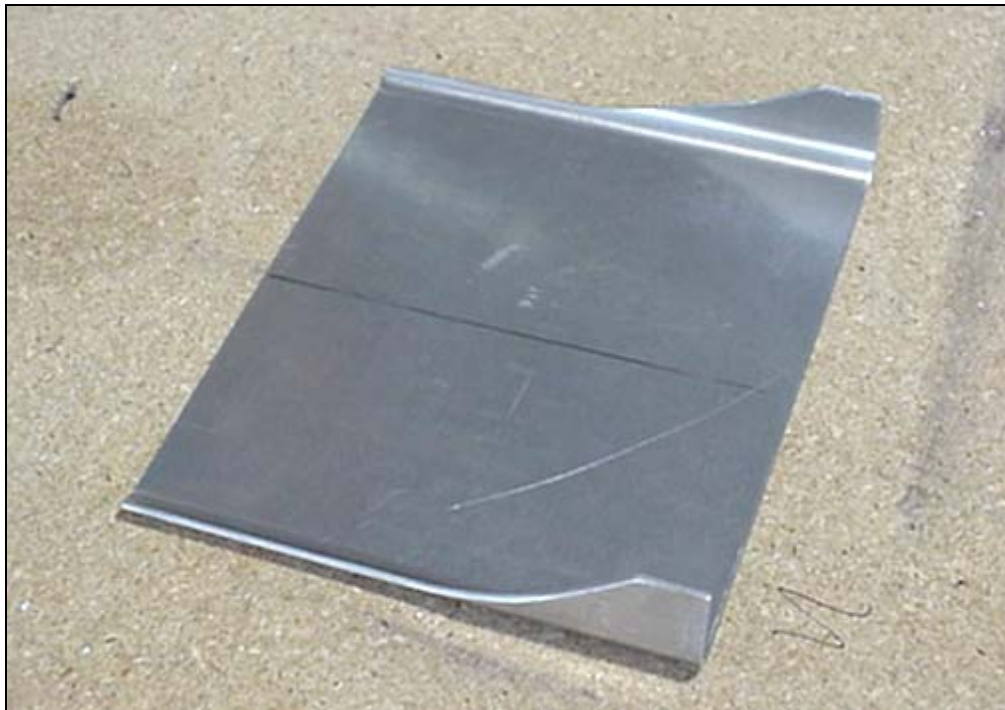
Make sure that all three-nose ribs are the same length before drilling the L Angles to full ribs (7H1-2).



7H1-1 Tip Rib

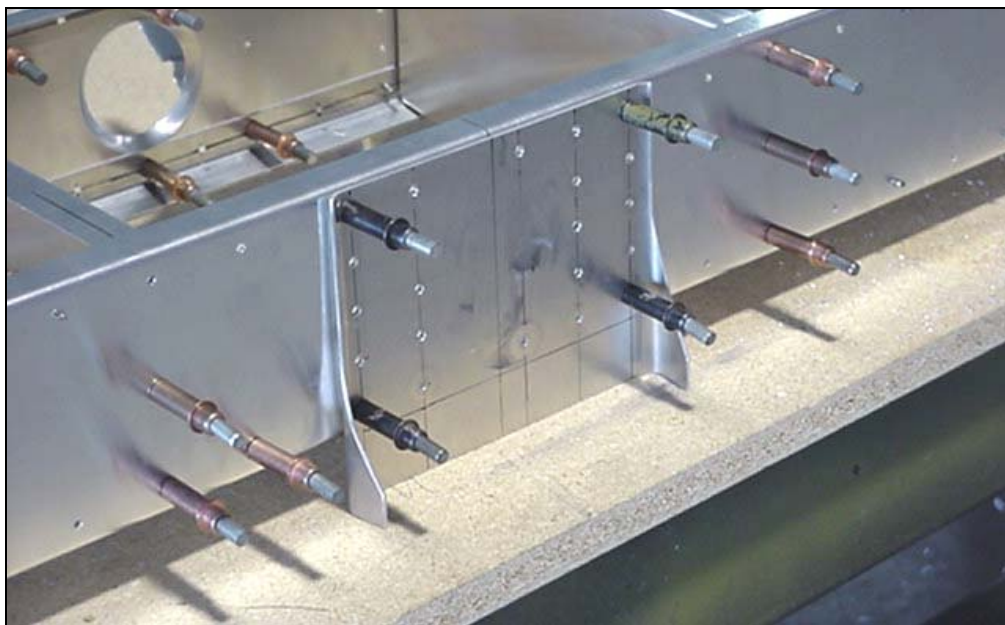
Note: Stabilizer is upside-down in this picture.

Drill and cleco the tip rib to the rear spar (7H2-2).



7H2-7 Rear Bracket

Cutout the side flanges on the bracket (7H2-7). To make room for the elevator leading edge. Mark the centerline on rear spar and part 7H2-7.



**7H2-7 Rear Bracket
7H2-2 Rear Spar**

Layout the rivet line on 7H2-7 and pilot drill. Position the bracket to 7H2-2 matching the two centerlines. Clamp and drill #20 drill. Debur, corrosion protect and then rivet the skeleton assembly together.

Note: Do not rivet the Attachment Brackets until after the Skin has been drilled.