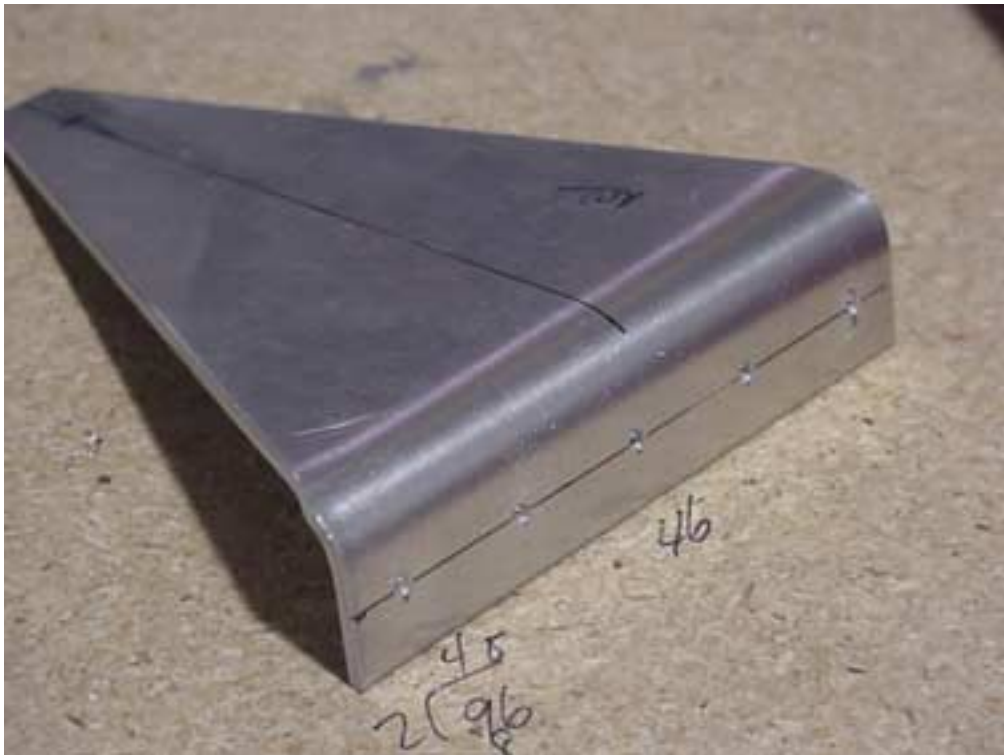


**7H3-3SP  
Center Hinge Bracket**

**IMPORTANT:** The Bracket 7H5-3SP is not symmetrical

Using a square helps layout and mark the perpendicular and the hinge hole.  
Note: Position of 1/4" hinge hole is 115.5mm from the table in photo above.



**7H3-3SP  
Center Hinge Bracket**

Note: While the perpendicular is centered at the tip of the bracket, it is off-center at the flange. (Bracket is NOT symmetrical)

See drawings: **7-H-3**

Layout of the perpendicular for the 1/4" hinge hole. Pre-drill the flange with number 40.



**7H2-7  
Stabilizer Rear Bracket**

From the centerline measure 1.5 mm to the left side of 7H2-7. This will indicate the position of 7H3-3SP.



**7H2-7 Stab Rear Bracket  
7H3-3SP Center Hinge**

Position the center hinge bracket. The rivet flange is facing to the left side. The bracket is flush with the top of the stabilizer rear spar 7H2-2.



**7H2-7 Rear Bracket  
7H3-3SP Center Hinge  
7H5-4 Center Hinge  
Gusset**

Layout and predrill the center hinge gusset 7H5-4. The gusset 7H5-4 is positioned with the predrilled holes on the centerline drawn on the hinge bracket 7H3-3SP. Drill and cleco the gusset to the hinge bracket and stabilizer rear bracket.



**7H3-3SP Center Hinge**

(See drawings: **7-H-3**)

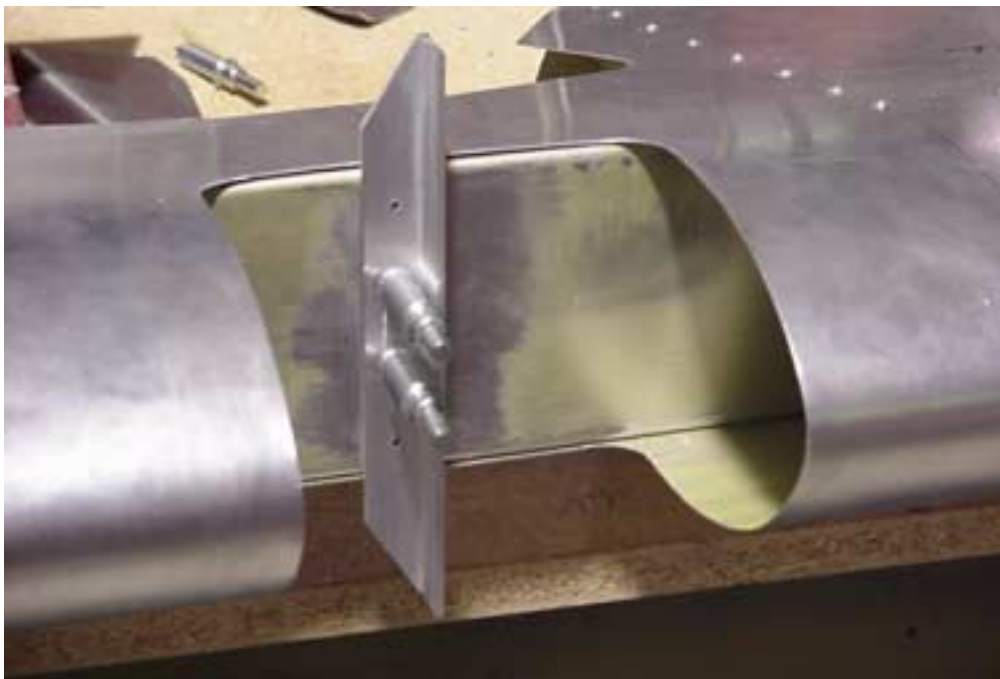
Drill and radius the center hinge bracket 7H3-3SP hinge holes. Drill the hole to 1/4 and open to 6.5mm to allow for bushing to be inserted. This will allow the bushing to move smoothly in the bracket. Just leave assembly Clecoed together at this time.





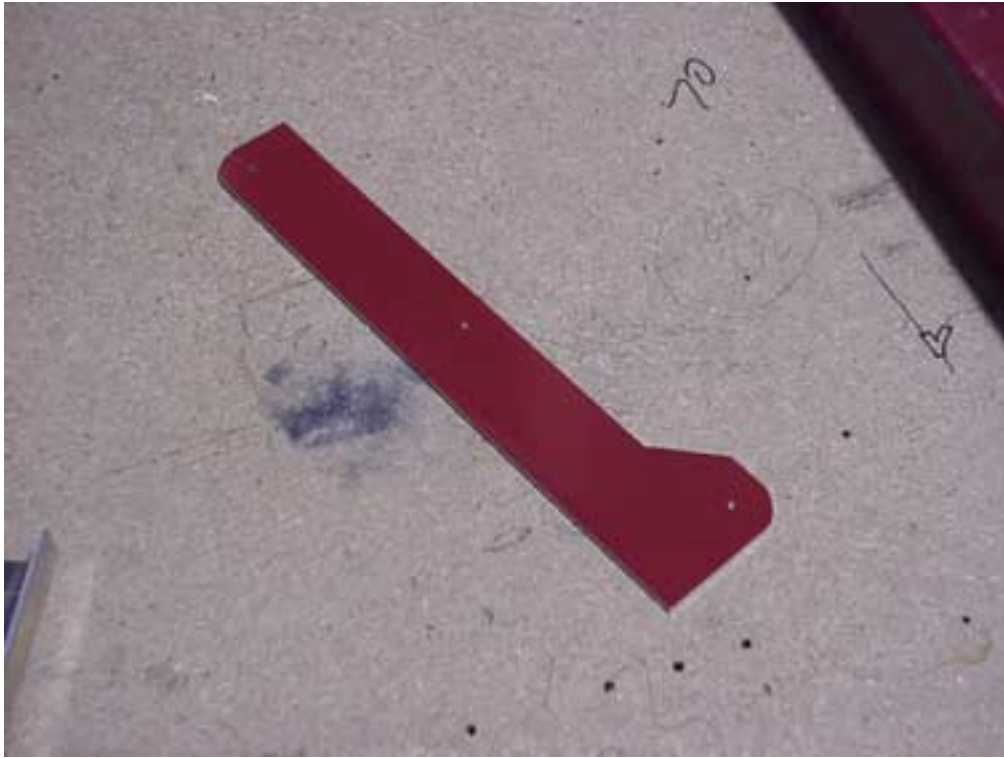
**7H5-3 Horn Angle**

Mark and cut the corners off the horn angle. Layout and predrill the rivet line and hinge hole with number 40.



**7H5-3 Horn Angle**

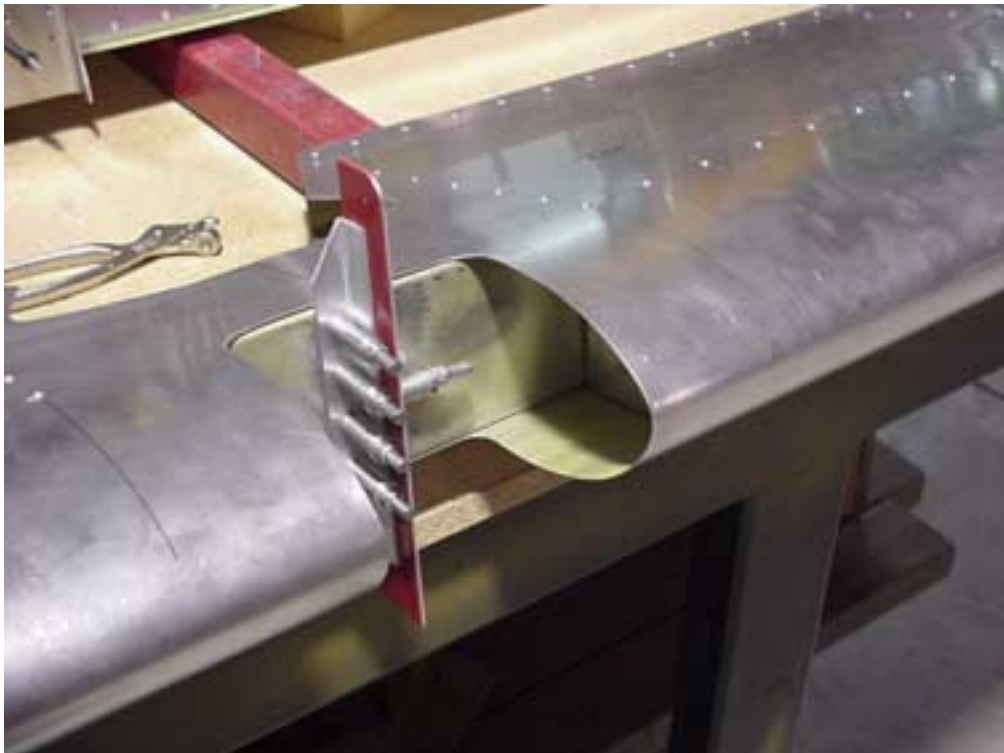
Layout the center line on the elevator spar and locate the center point. Position the horn angle on the spar with the hinge hole lined up with the center point on the spar. The edge of horn angle 7H5-3 is on centerline, drill and cleco.



Elevator Horn Cable Holes Positioning Template

Ref. Drawing 7-H-5

Cut and drill the elevator horn cable holes positioning template.



Elevator Horn Cable Holes Positioning Template

Cleco the template center hole to the center hole of 7H5-3 horn angle.



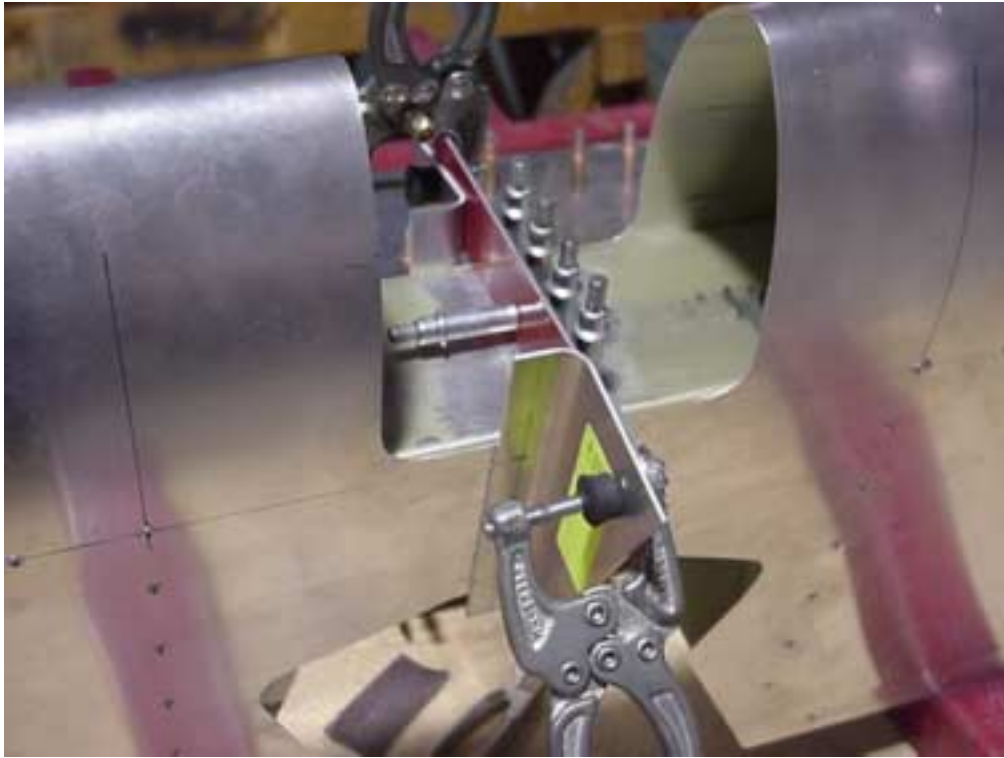
**7H5-1 Upper Elevator Horn**

Draw a 12mm line on 7H5-1 upper elevator horn. Position the horn so that line is seen through the template hole. Clamp and mark. Unclamp and predrill the rivet flange line and cable hole.

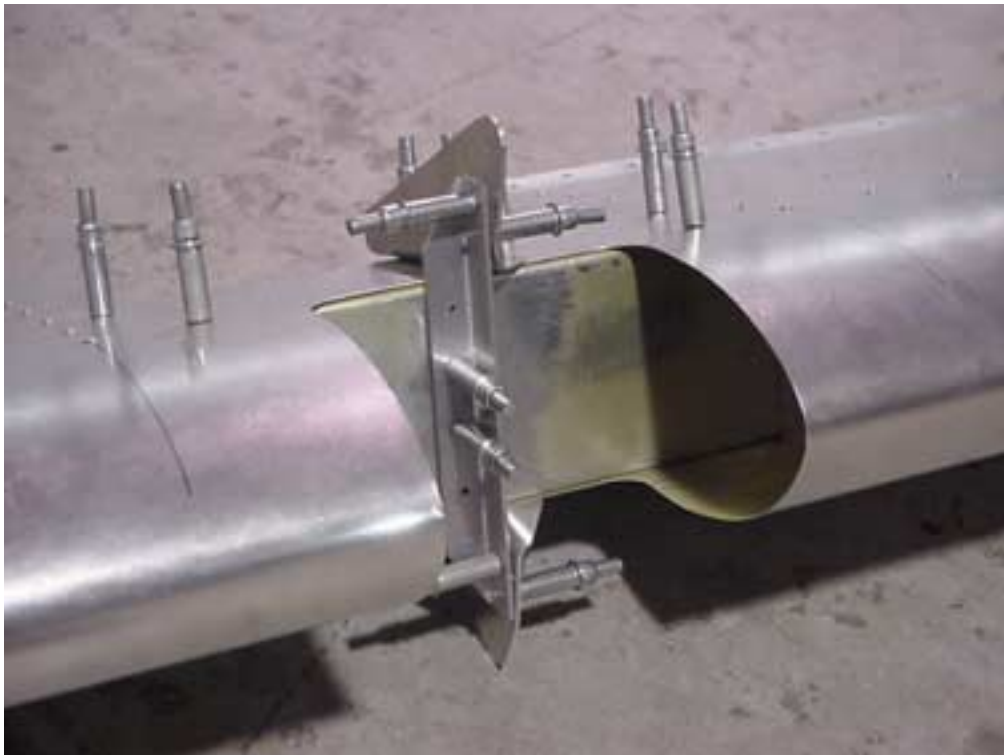


**7H5-2 Lower Elevator Horn**

Clamp and mark the lower elevator horn 7H5-2 and predrill.

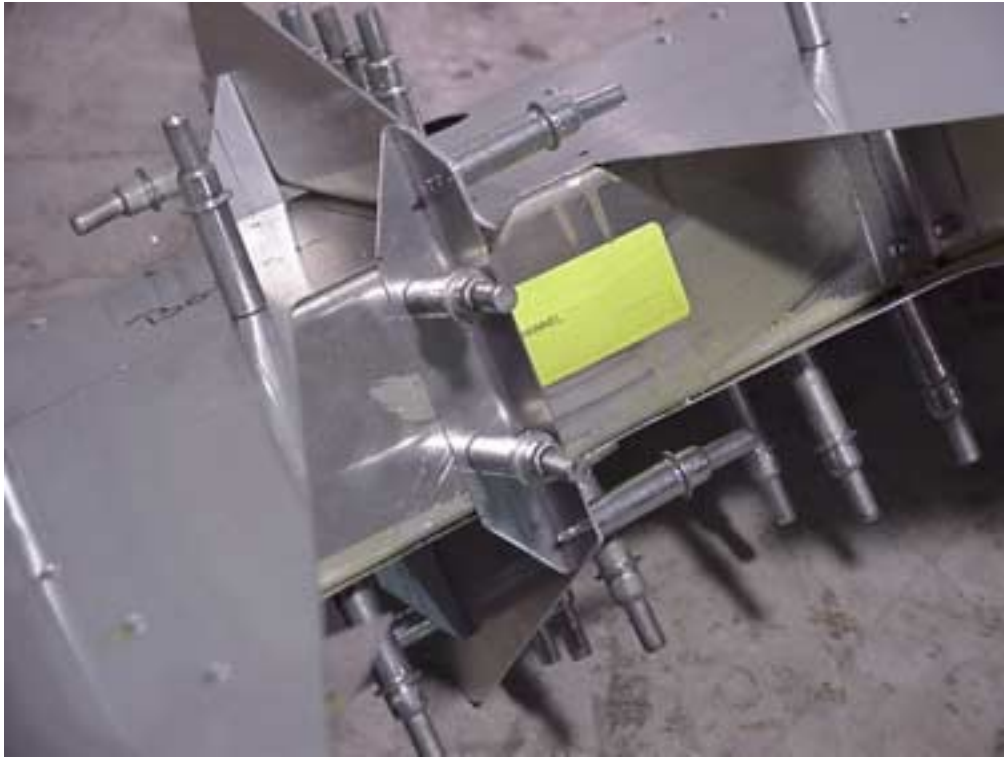


The upper and lower elevator horns clamped with the template.



Drill the elevator horn to the elevator and cleco.





'L' Angle

Cut, chamfer and position a piece of std. 'L' 120mm long. Drill and cleco.



'L' Angle

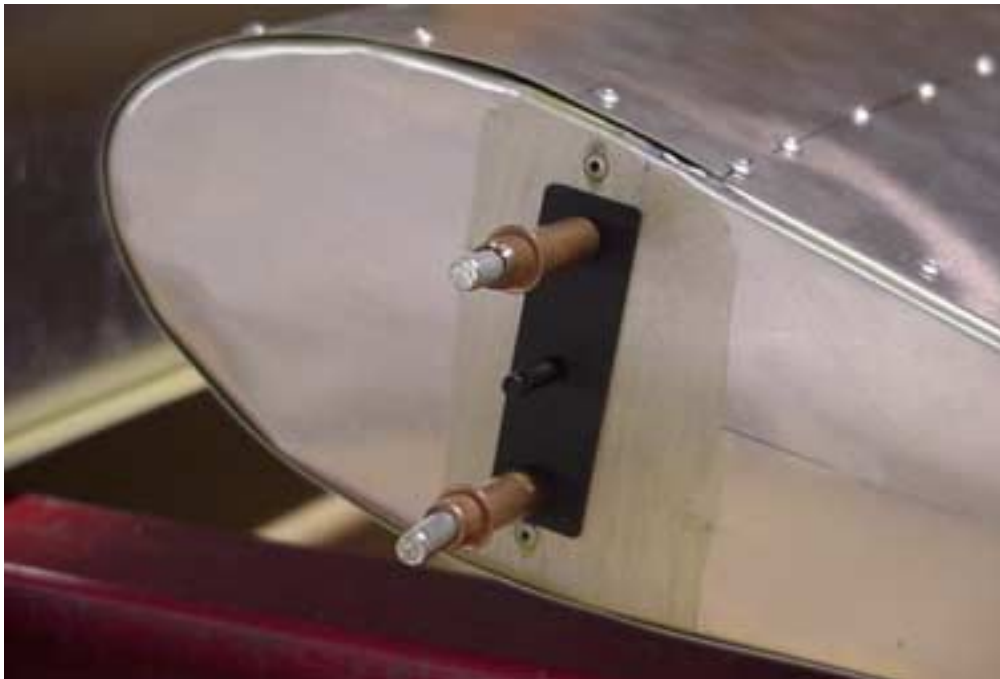




**7H1-5 Elevator Tip Rib**

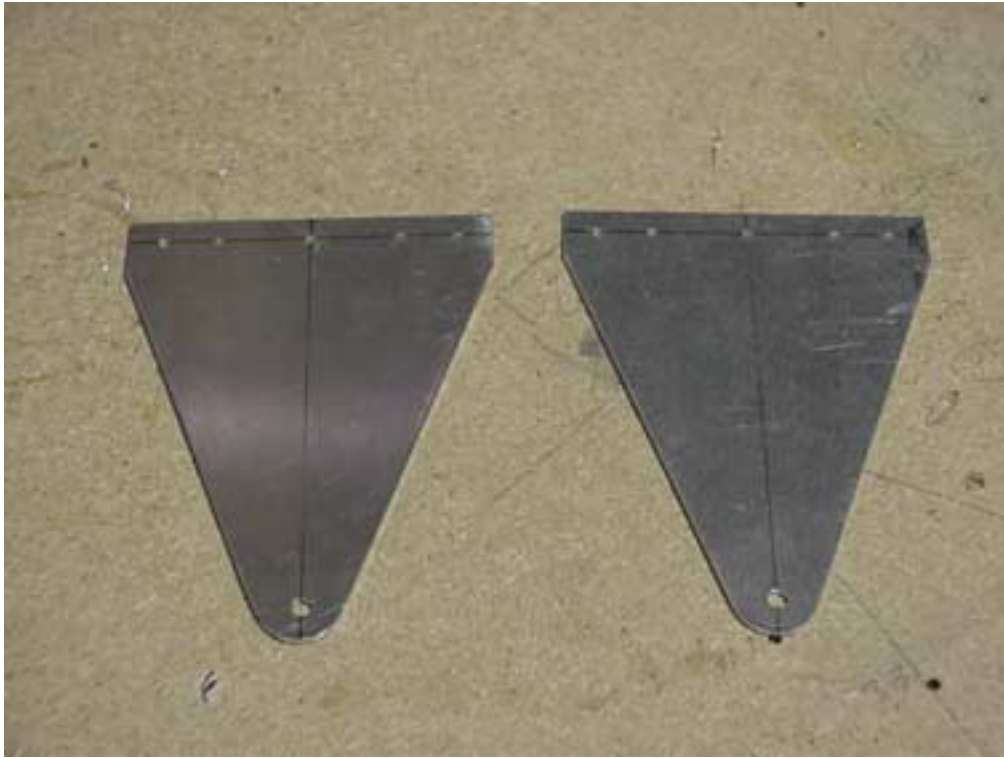
Laying out and positioning the outboard hinge-pins (**7H3-2**)

Drill out the center hole to allow for the weld of the hinge-pin to sit recessed in the hole. This will let the hinge-pin plate sit flat on the elevator tip rib.



**7H3-2 Outboard Hinge Pins**

Drill the outboard hinge-pins to the elevator tip ribs. Cleco together.



**7H3-1 Outboard Hinge Plates**

Note: parts are symmetrical

Layout the center lines and position the hinge holes. Drill to number 40 and open to 3/16. Layout the rivet lines and predrill.



**7H3-1 Outboard Hinge Plates**

Position the outboard hinge plates on the hinge pins. Drill the 1/16 hole in the outboard hinge pins and add the washers and cotter pins AN380-2-2.



Stabilizer

Turn the Stabilizer upside down and level it.



7mm Spacer

Place a 7mm spacer at each end of the stabilizer, this will allow 117mm from 7H2-2 to the center of outboard hinge pins 7H3-2 (plus or minus 1mm) shown on 7-H-3 drawing.





With the horizontal tail supported, slide the elevator into position up against the spacer blocks. Support the elevator in a neutral position.



**7H3-1 Outboard Hinge Plates**

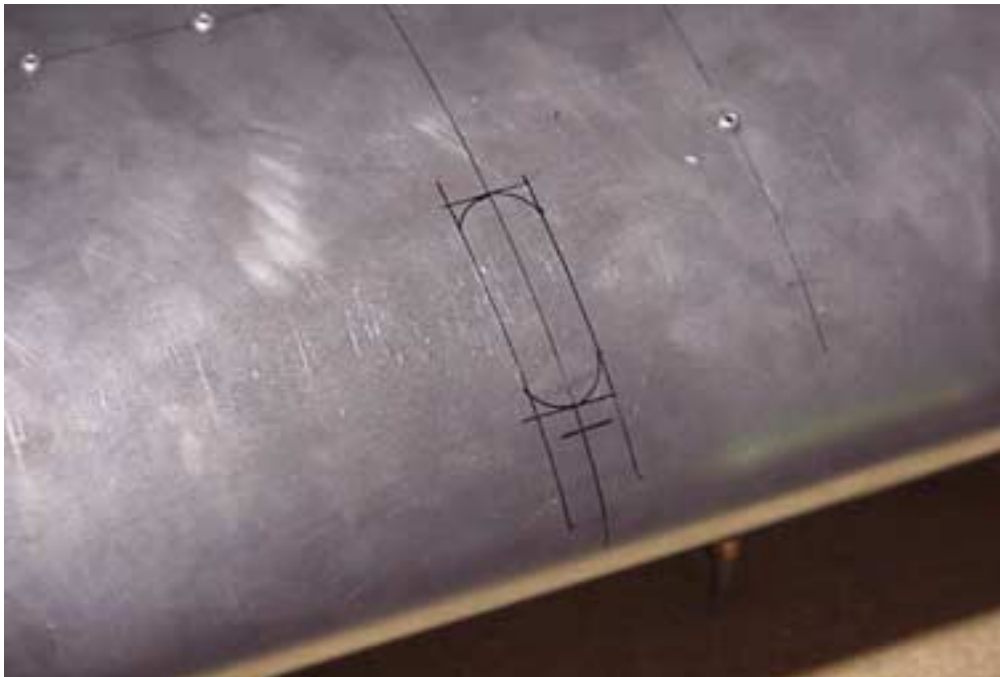
Mark the hinge line 50mm down from the topside of the stabilizer on the tip rib 7H1-2 (in the above photo, the stabilizer is shown upside down). Line up the outboard hinge plate with the hinge line. Tape the hinge plates to the rib and check for proper edge distance before drilling. Drill and cleco.





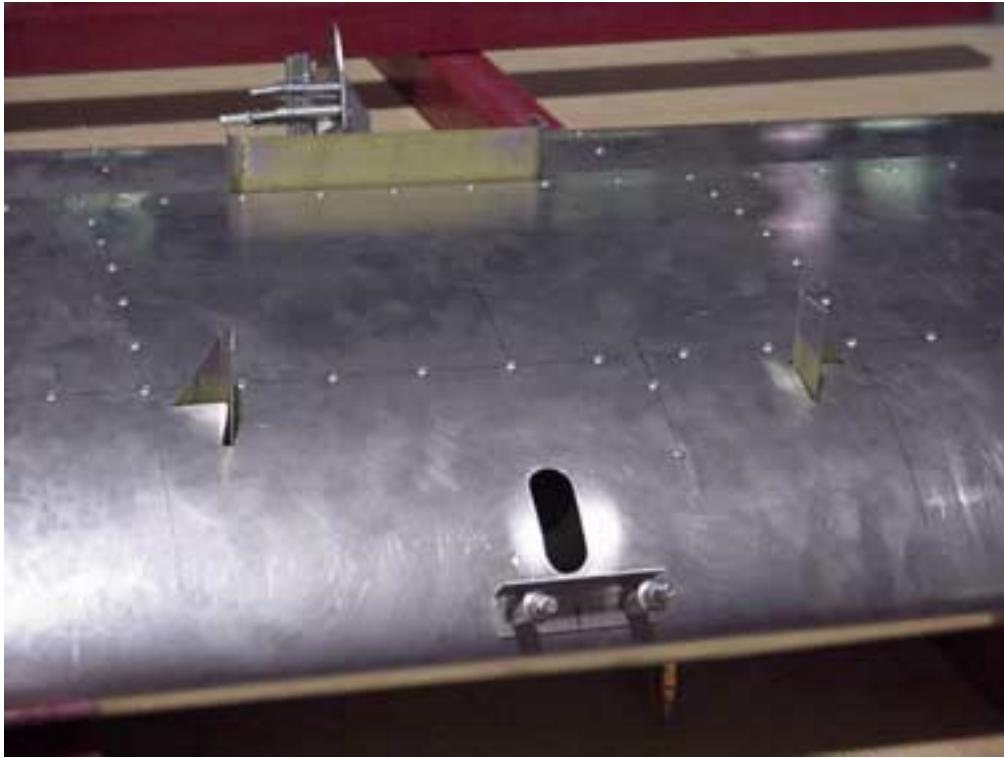
**7H4-1 Stabilizer Skin**

The Stabilizer skin may need to be trimmed a few millimeters on top and bottom so the elevator will clear.



**7H4-1 Stabilizer Skin**

Layout the cutout for the upper elevator cable from the centerline.



**7H4-1 Stabilizer Skin**

Cut a piece of 'L' Angle 70mm long. Position, drill and cleco in place.



Disassemble the parts to the stabilizer and elevator, debur and apply corrosion protection. Cleco and rivet the stabilizer and elevator.