



Layout the cutout on the under side of the bottom skin 6B1-4. The cutout is symmetrical about the aircraft centerline.

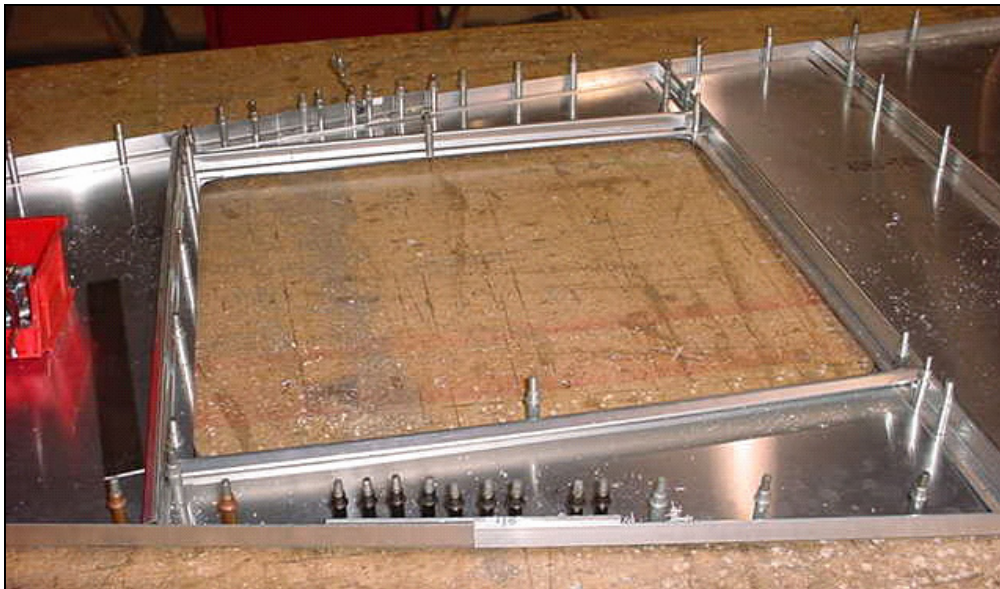
Access door hinged along front edge.



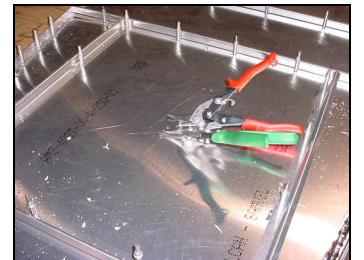
Access door
6B3-8



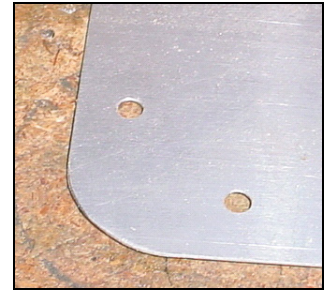
Detail of corner radius
R15 tangent with edges
of cutout (all 4 corners).



Cutout in fuselage bottom skin is reinforced with Z angles all around.



Cut out the opening.



Aft corner of door.

Top view of Z angle reinforcement around the cutout. Before cutting out the cutout, check to see how the door will overlap the sides and aft edge.

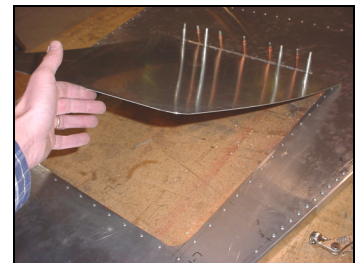
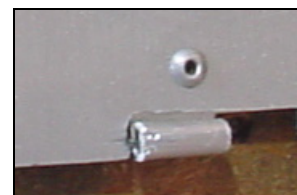


Photo of the bottom skin on the workbench, checking how the door will open and overlap along the side and aft edge.

The front of the door is flush with the front edge of the cutout. The 5mm cutout on the front of the door is to make room for the spine on the piano hinge (drawing changed from 8 to 5mm 09/06).



Hinge



Rear right detail.
Z angle overlap on top of the Longeron 6B2-1
Flanges overlap up to the bend tangent line.



Bottom view

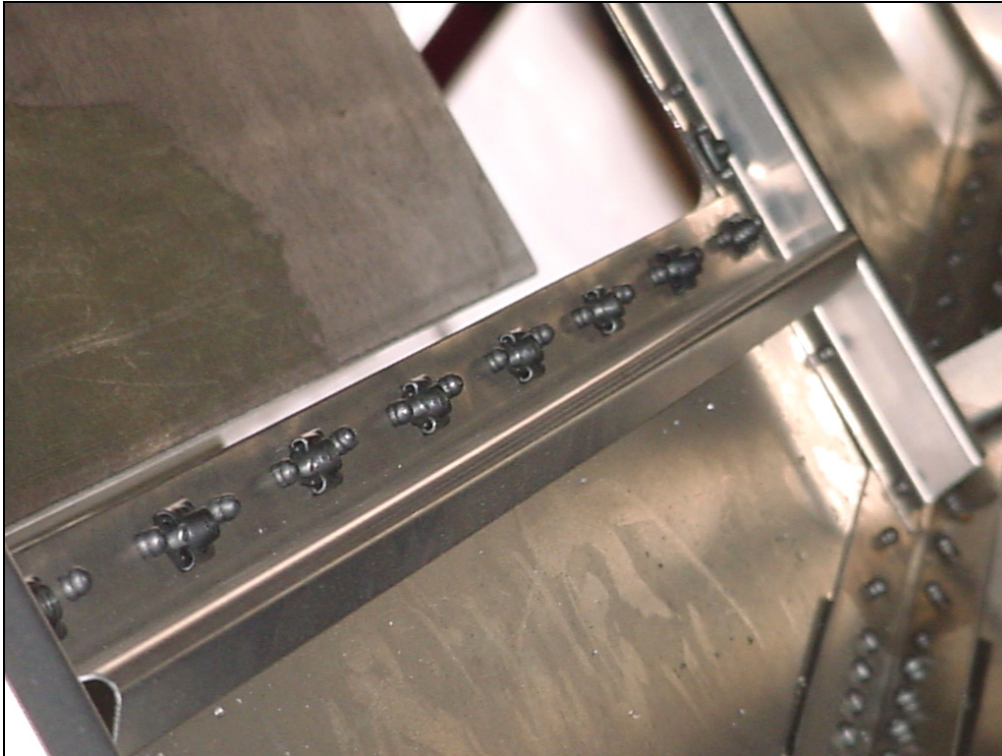


Left side.
Z angle

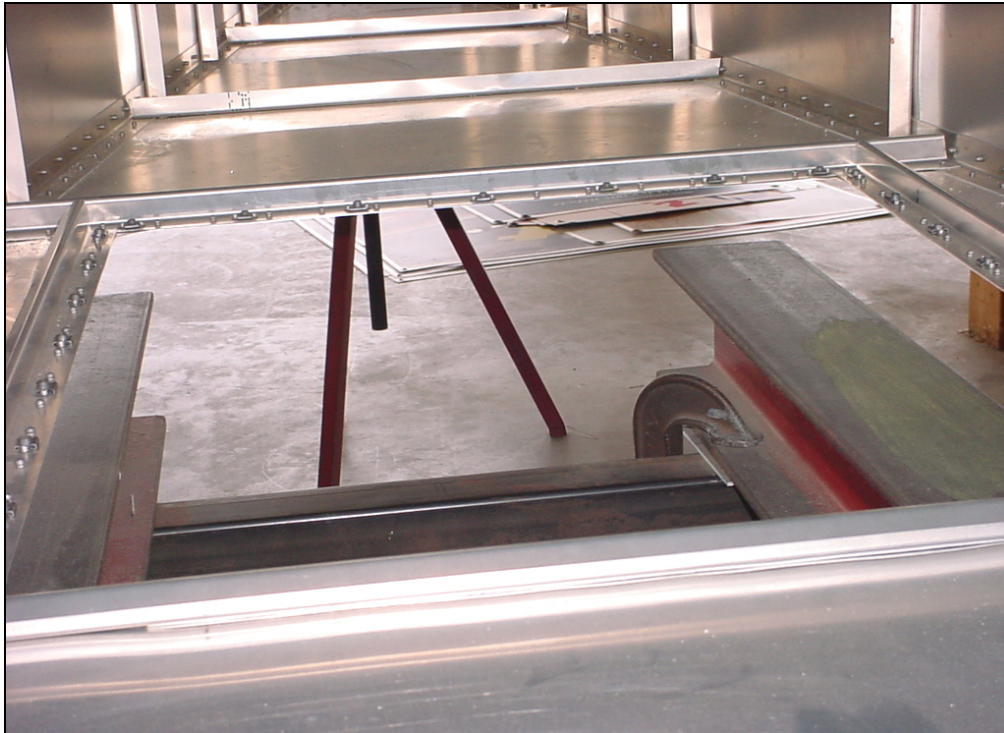




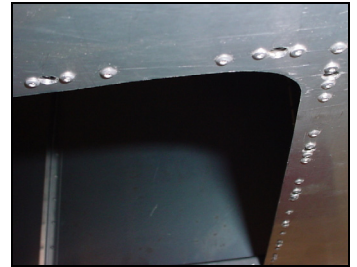
Right side.
First locate the position of the nut-plates, then layout the rivet pitch (side Z angles).



Right side Z angle



Top view looking back.



Looking up and forward, rear right corner.

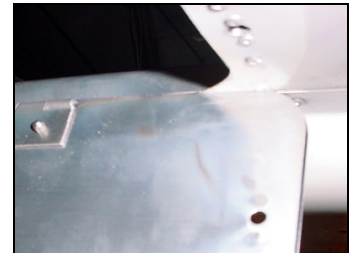


Front left corner.



Corner radius = 15mm
(all 4 corners)

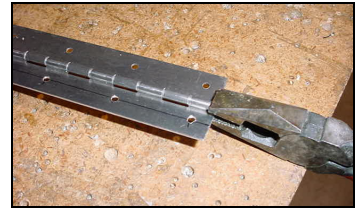
Note: The top flange of the Z angles point away from the cutout.



Detail looking up at the
front right corner of the
cutout.



The hinge is not the full width of the door. The hinge is centered on the door. Install the piano hinge.



Cut the pin approximately 5mm shorter than the length of the hinge. Pinch the spine to prevent the pin from slipping out.



Squeezed end of spine to keep the pin from coming out.



Nutplate between the A4 rivets. Drill the center hole for the nutplates, edge distance = 10mm from edge of cutout. Remove the door, open the middle hole with #12 drill bit (oversized 3/16" hole) install the nutplates.



Homemade spacer tool to drill the two 3/32" holes for the nutplates in the door, bottom skin and Z angles.





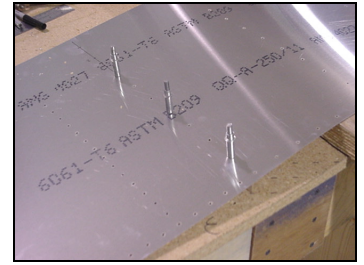
AN525-10R7 screws

Hole diameter for screws = #12 drill bit.



AN960-10 washer under screw.

When using A4 rivets (domed heads) to rivet the Z angles, there will be some separation between the edge of the door and the fuselage bottom skin.

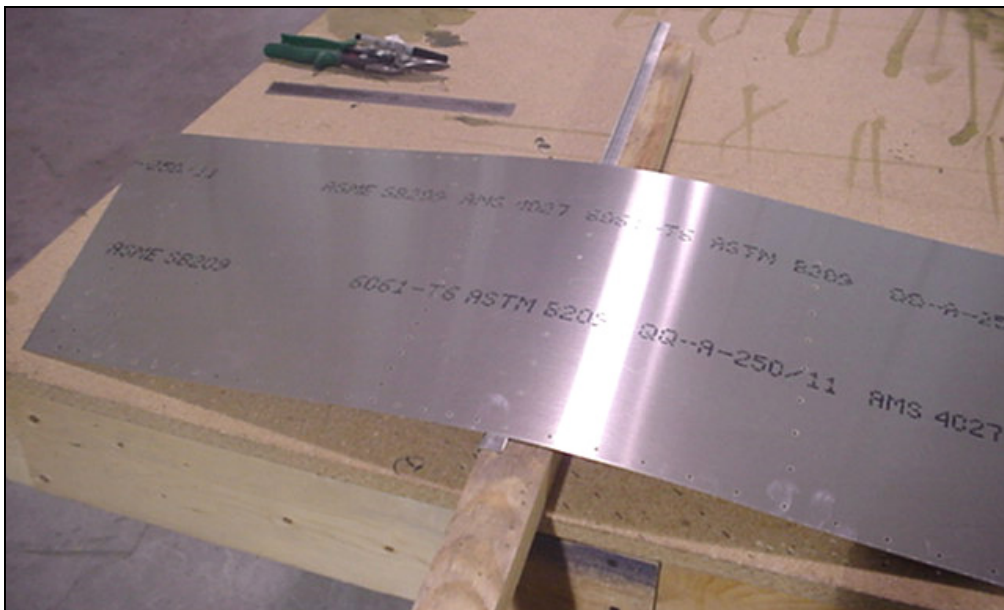


**FUSELAGE REAR SIDE SKIN
6B3-1**

Drill the **L ANGLES** to the side skins.

Orientation: the bend is towards the front.

END HOLE: Drill the first hole 10mm up from the bottom of the L angle. Cleco the first hole in the L angle through the corresponding hole in the longeron. Back drill and Cleco when the rivet line on the L angle is visible.



L angles Cleco to side skin.

With a marker, mark the top edge of the skin on the L angle.



REAR LONGERONS 6B2-1

Layout: Ref. 6-B-3
The front end of the longerons is at 1970mm from the aft top corner of the side skin.

Clamp the rear longeron 6B2-1 flush with the top edge of the side skin, let them overhang past the end of the fuselage.

Screw some 1x2 boards to the side of the workbench to help support the side skin.



Clamp the longeron to the top flange of the front and rear HT frames.



Clamp the side skin to the boards.



Trim the length of the L angles to fit underneath the longeron: 23mm below the top edge of the skin.

Note: The 2 front L angles are cut 42mm below the top edge of the Side Skin to make room for the Upper Front Longeron 6B11-1.

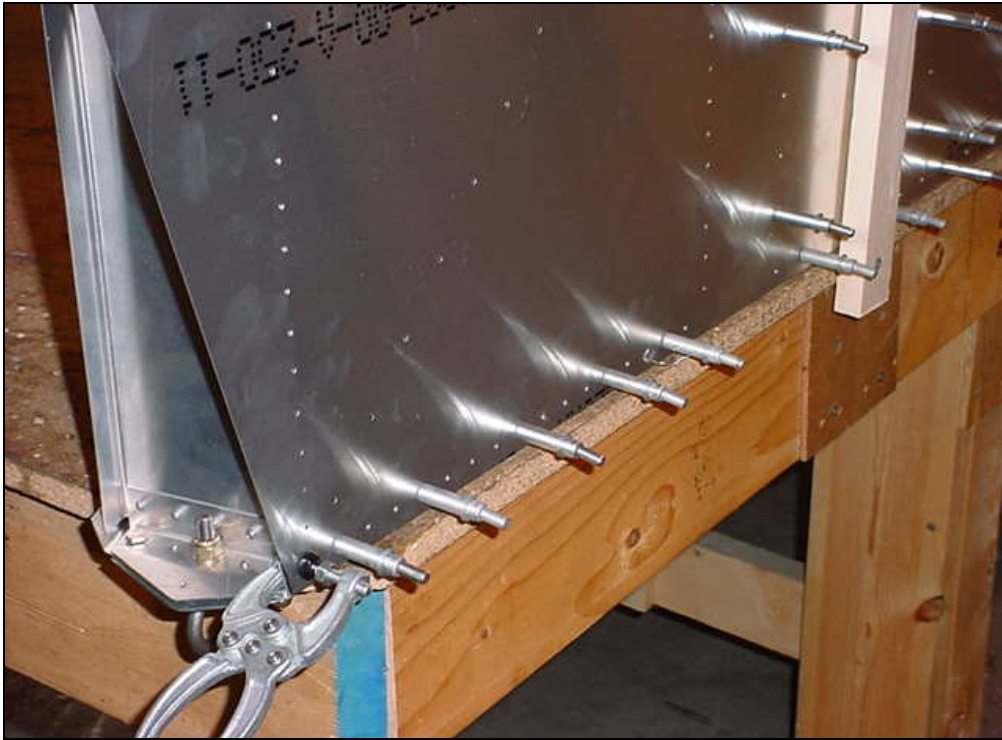


Joggle to the flange of the L angles that overlap the extrusion longeron 6B2-3



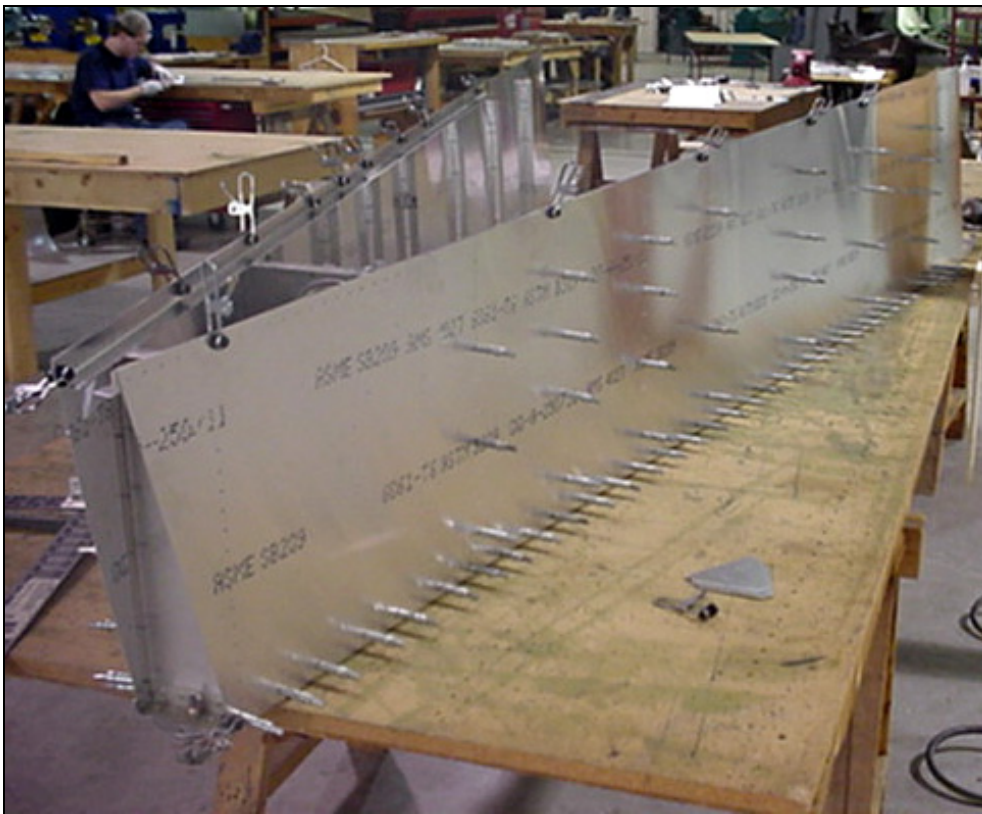
The front bottom corner of the side skin 6B3-1 is flush with the bottom skin 6B1-4.

Adjust the height of the side skin: Slide a sheet of .025" between the top flange of the HT frame and the longeron to compensate for the material thickness of the panel 6B2-3. The top edge of the skin is flush with the top edge of the longeron.



CHECK: The pre-drilled holes in the skin are in line with the H.T. Frames.

Drill and Cleco the side skin to the side flange of the bottom longerons 6B2-1 and 6B2-3.



6B3-1 Fuselage Rear Side Skin

Cleco the left and right side skins to the bottom longerons.