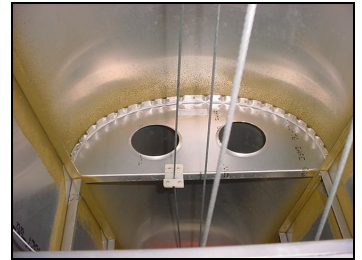


FUSELAGE ACCESS DOOR OPTION

Ref Dwg 6-ADO-1



Bottom fuselage access door option



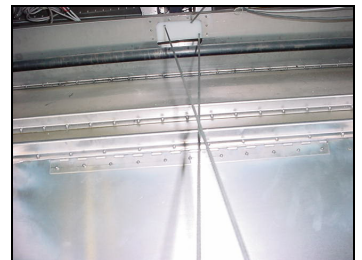
Access to upper elevator cable fairlead Ref 6-B-12



Access to lower cable fairlead on 6B1-1



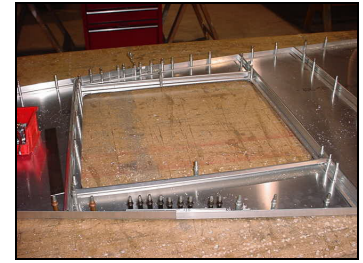
Access door located behind fuselage step fairing 6G3-5



Access to cable fairleads through the rear frame channel 6B5-2



Access to flap control arm 6B19-2



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

Access door hinged along front edge.



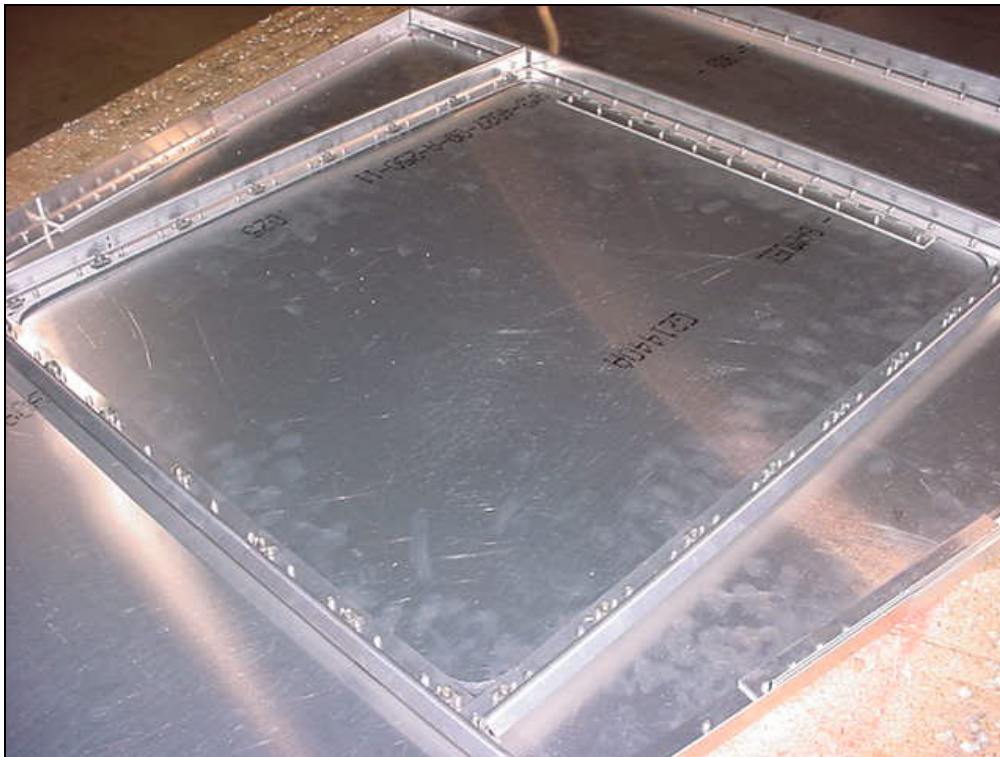
Flexing door forward.

For better access inside the fuselage, the door can be flexed forward to stay out of the way.



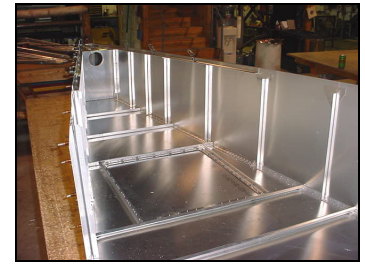
Detail of corner radius R15 tangent with edges of cutout (all 4 corners).

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



Access door 6-ADO-1-1

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.



Rear fuselage

The L angle at 1535mm from the front edge of the fuselage (aft edge of the cutout) is replaced with a standard Z angle.

Looking inside the rear fuselage at the access door.

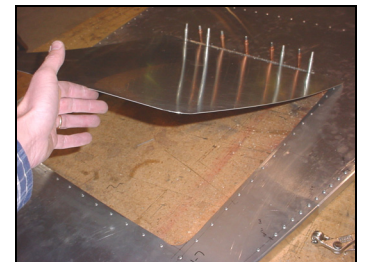
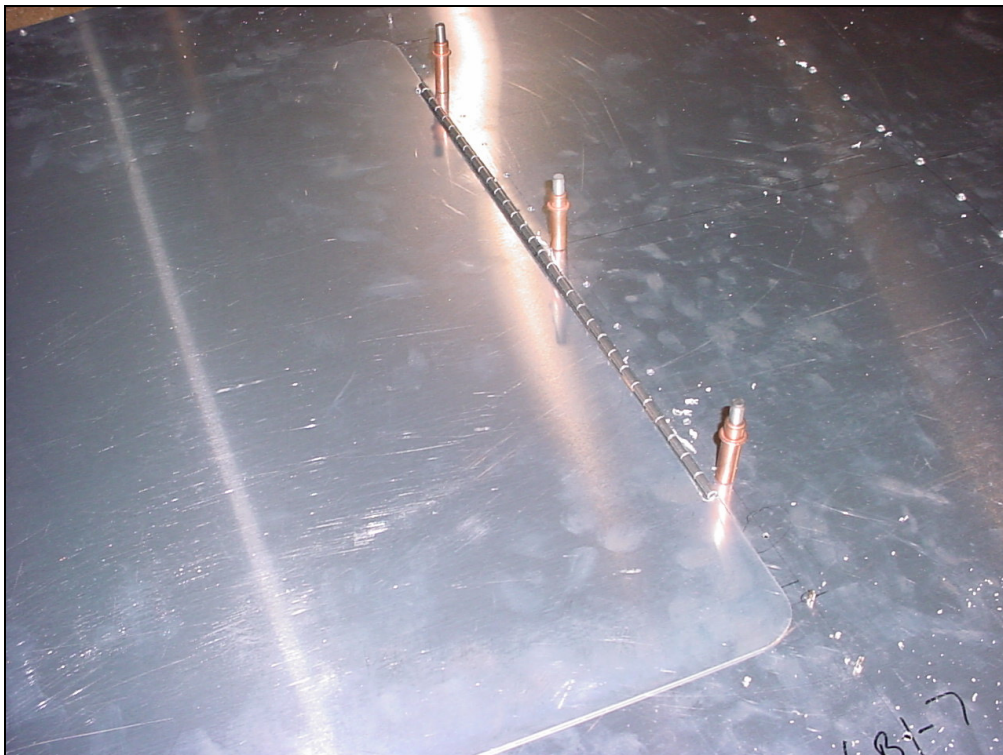
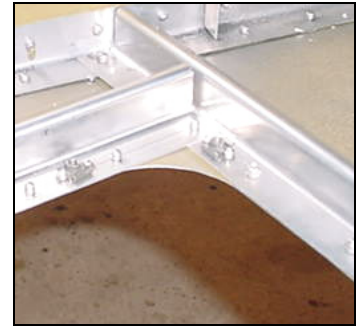


Photo of the bottom skin on the workbench, checking how the door will open and overlap along the side and aft edge.

The front of the door is flush with the front edge of the cutout. The 8mm cutout on the front of the door is to make room for the spine on the piano hinge.



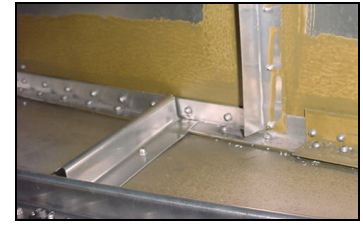
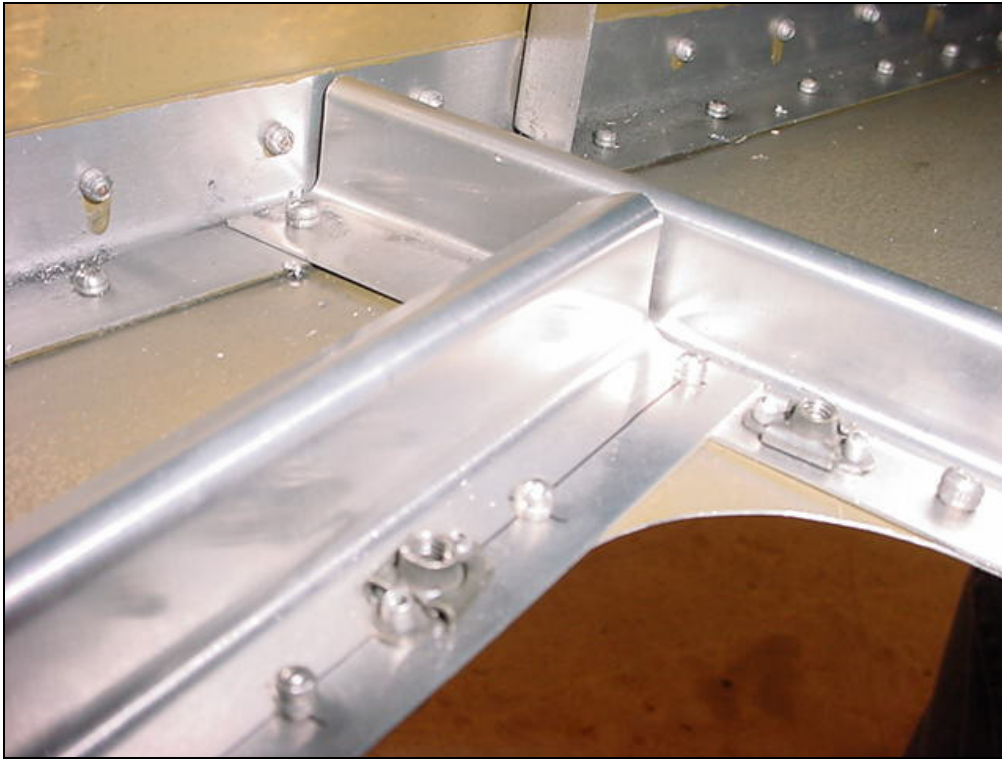
Z angle overlap on top of the Longeron 6B2-1

Detail of rear left corner of cutout
 Replace the aft L angle with a Z angle, back drill through existing holes in bottom skin.



Short angle
 Cut and reinstall the short piece of L angle or Z angle between the longeron and the side Z angle

Aft left corner
 First install the front and aft Z angle (span wise stiffeners), then cut the side Z stiffeners to overlap the bottom flanges.



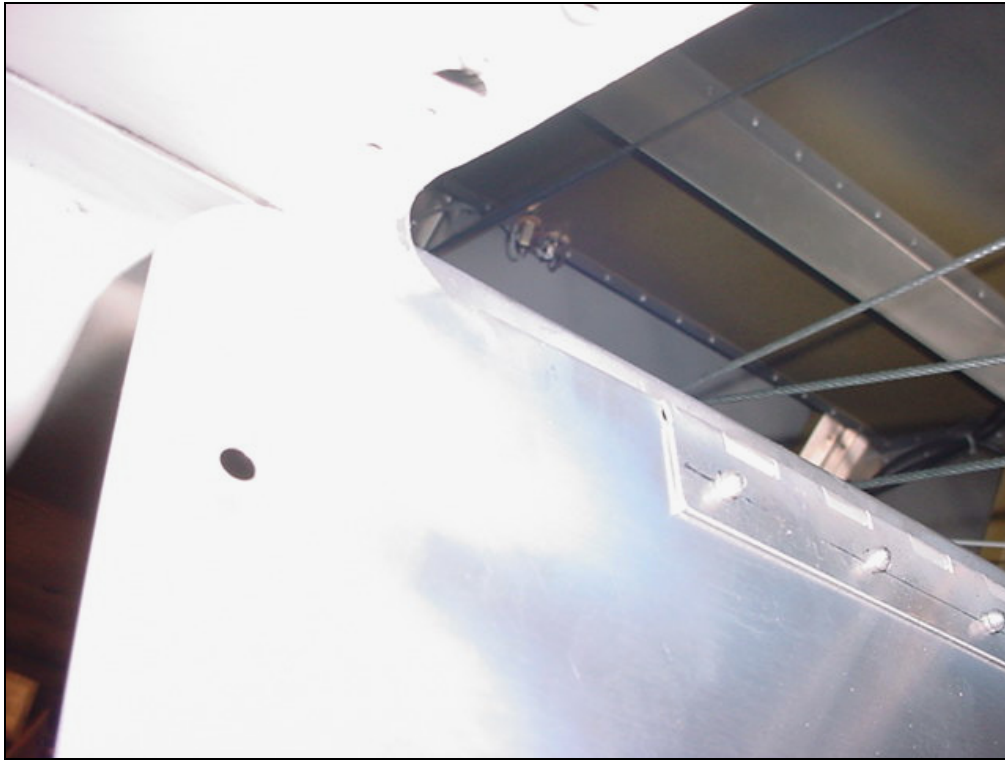
Short angle

Rear right cutout
Flanges overlap up to the bend tangent line of the bend.



Aft right corner

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

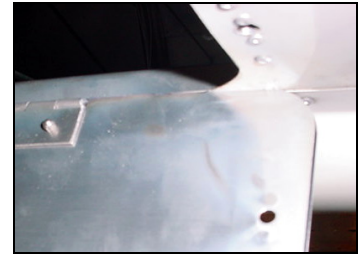


Front left corner.

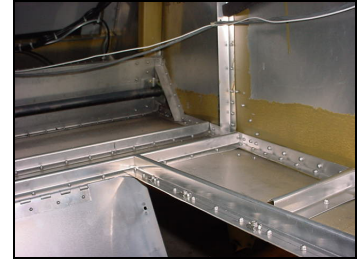


Corner radius = 15mm
(all 4 corners)

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



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



Short angle



Cutout is framed with Z angles all around.

Note: The front edge of the door is flush and even with the front edge of the cutout.

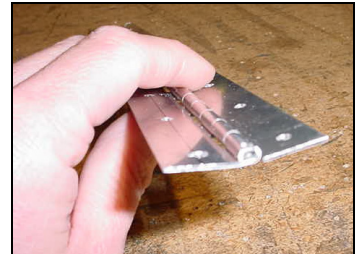
The front Z angle will be riveted with the fuselage step fairing 6G3-5 and with the piano hinge 6-ADO-1-2



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 separate between the edge of the door and the fuselage bottom skin.