

Figure 12.26.7

- 17) Ensure the wing attach hole in the rear attach brackets (FUS-69) is in the correct location as in Figure 12.26.7. Drill the five attach holes back through the fitting and into bulkhead "F" with a #30 drill.
- 18) Repeat steps for the right side.
- 19) Replace bulkhead "G".
- 20) Back drill to #30 through bulkhead "F" and the rear spar fitting into bulkhead "G".
- 21) Drill the #30 holes out to #11.
- 22) Remove and debur all holes and edges.
- 23) Install the reinforcing angles (FUS-53), following the same procedure you did earlier.
- 24) Chromate mating surfaces.
- 25) Rivet bulkhead "G" in place with 1/8" rivets (RV-1410).
- 26) Bolt rear spar fittings in place with AN3-6A bolts.

12.27 Float Attach Points (optional)

- 1) Locate bulkhead "A", and mark a line from the center of the radius onto the outside skin. Mark a box 1" x 1/4" as shown in figure 12.27.1.

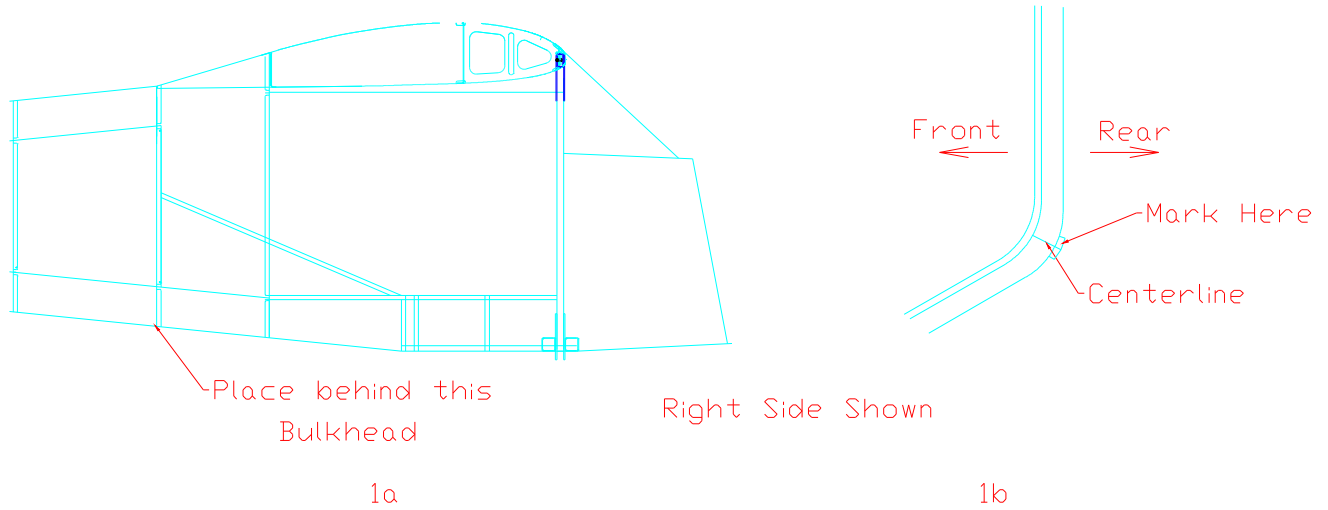


Figure 12.27.1

- 2) Drill a 1/4" hole through the outer skin directly behind the bulkhead, in the marked area.
- 3) Using aviation snips, cut out the marked area for the FUS-42 lug.
- 4) File all sharp edges on the hole.
- 5) Put the Float Hard Point (FUS-42) bracket into place on the bulkhead radius with the lug sticking out through the hole.
- 6) Back drill through the bracket into the bulkhead using a #11 bit. Drill only the four end holes as in figure 12.27.2.

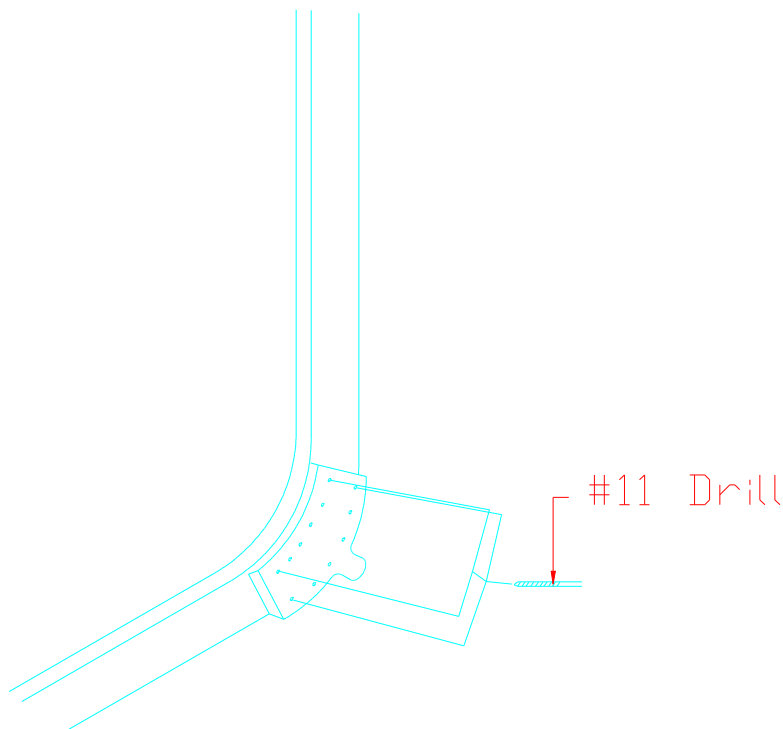


Figure 12.27.2

- 7) Cleco the bracket in place.

- 8) Drill the remaining holes with a #30 drill then remove the bracket (FUS-42).
- 9) Repeat for the left side of the fuselage.
- 10) Clamp two additional bulkheads in place back to back with the original bulkheads. Figure 12.27.3.

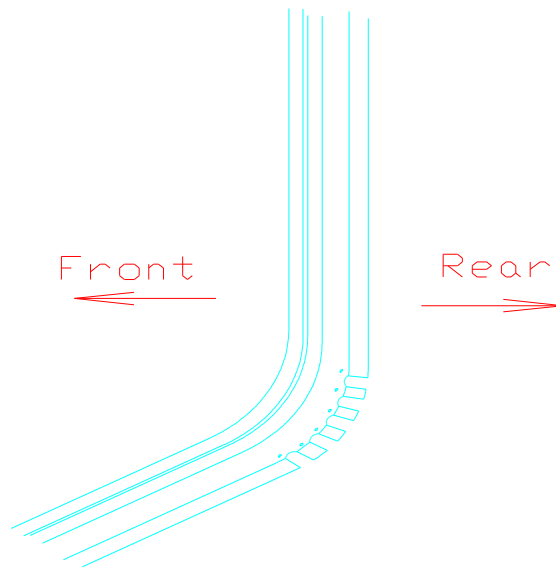


Figure 12.27.3

- 11) The bulkheads should be nested, marked, trimmed and attached to each other, same as the other bulkheads you did earlier.
- 12) Clamp the new bulkheads in place against the existing bulkheads and drill back through the bracket holes into the new bulkheads.
- 13) Debur all holes.
- 14) Put the brackets back in place and cleco together with the bulkheads on each side as in figure 12.27.4. Also place a 1/4" spacer on the floor between the bulkheads at the center of the aircraft.

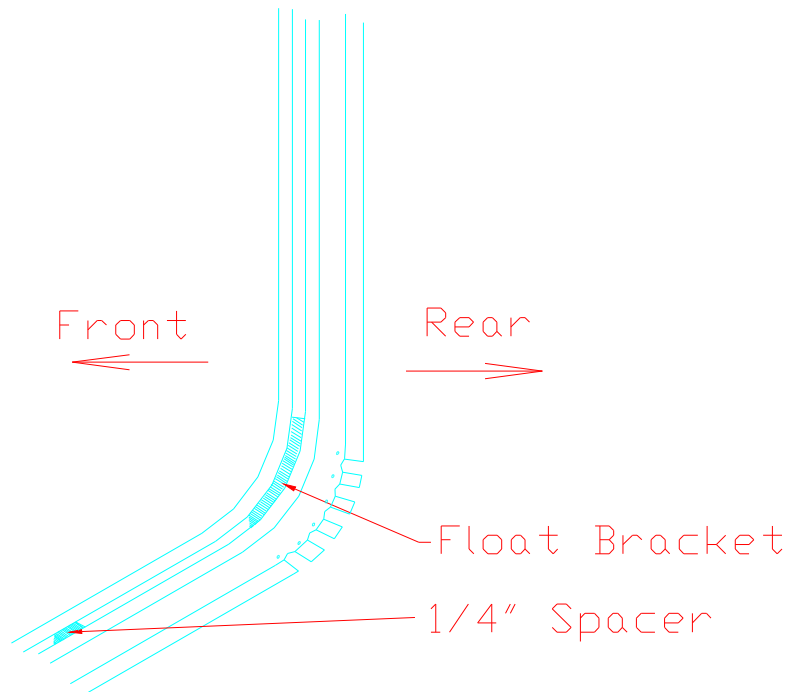


Figure 12.27.4

- 15) Drill the remaining holes in the bracket to #11.
- 16) Attach the brackets using 3/16" rivets (RV-1619).
- 17) At the top of the bulkheads, layout and drill nine attachment holes from the forward bulkhead to the aft bulkhead. You will bend the new bulkhead over to accomplish this. Bulkheads are back to back at the top as in Figure 12.27.5.

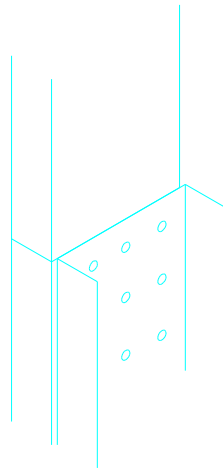


Figure 12.27.5

- 18) Attach bulkheads at this point using 1/8" rivets (RV-1410).
- 19) On the outside of the floor skin, mark a line along the center of the new bulkhead flange. Drill, debur and rivet the bulkhead through the floor at the same spacing as the other bulkheads.
- 20) Repeat for the side skins.
- 21) Remove the 1/4" spacers.

22) Rivet the bulkhead to the outer corner wrap (FUS-33) using RV-1410 rivets.

23) Cut a strip of .032 gusset material wide enough to cover the gap between the bulkheads forming a sealed beam. The strip should cover from the top end of the new bulkhead to about 4" into the floor.

Figure 12.27.6.

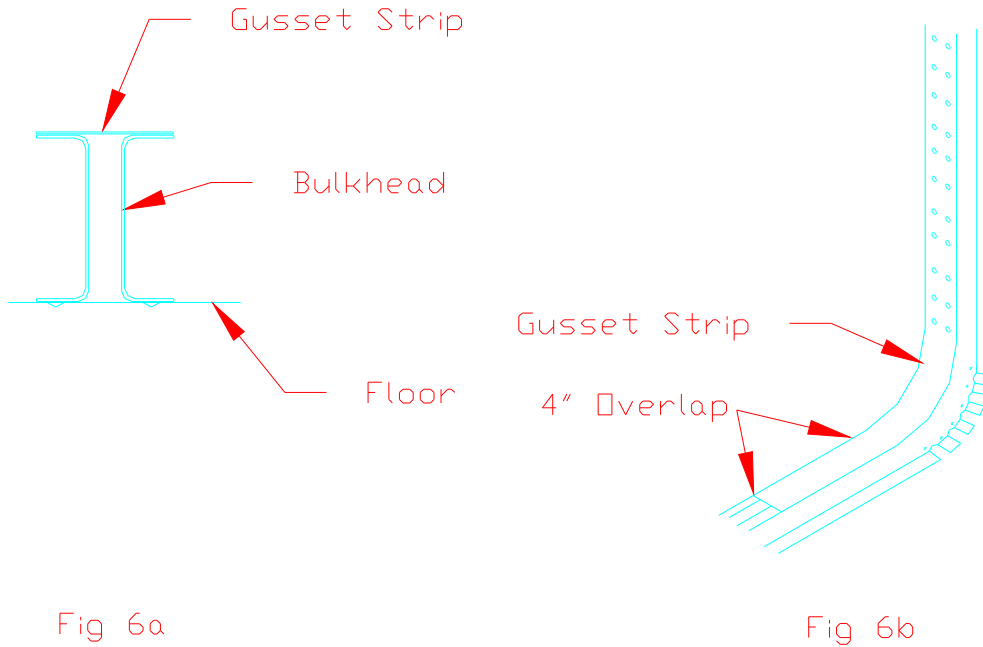


Figure 12.27.6

24) Drill and rivet into the flanges of the bulkheads along the vertical and around the radius at the bottom. Rivet with the same spacing as on the outside flanges of the bulkheads.

NOTE: The 4" overlap should not be drilled or riveted until the inner floor is installed.

12.28 Finishing Gussets

1) Measure the distance from the edge of one flange to the edge of the other. Figure 12.28.1.

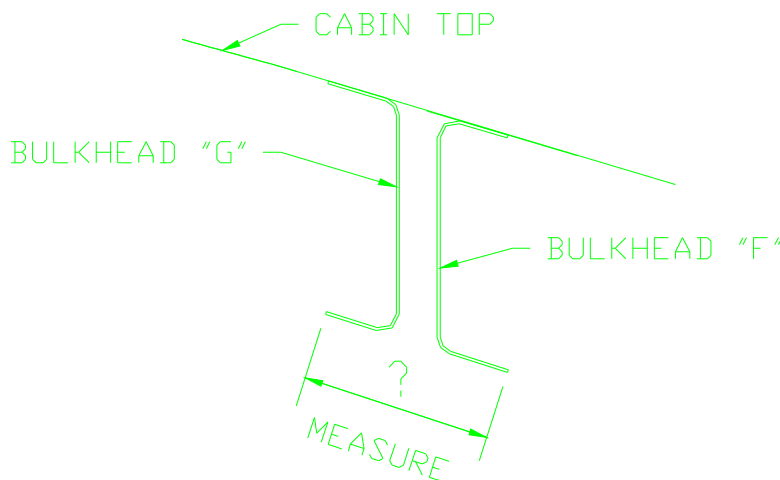


Figure 12.28.1

2) From raw stock (FUS-62) cut a strip the width measured in previous step and 48" long.