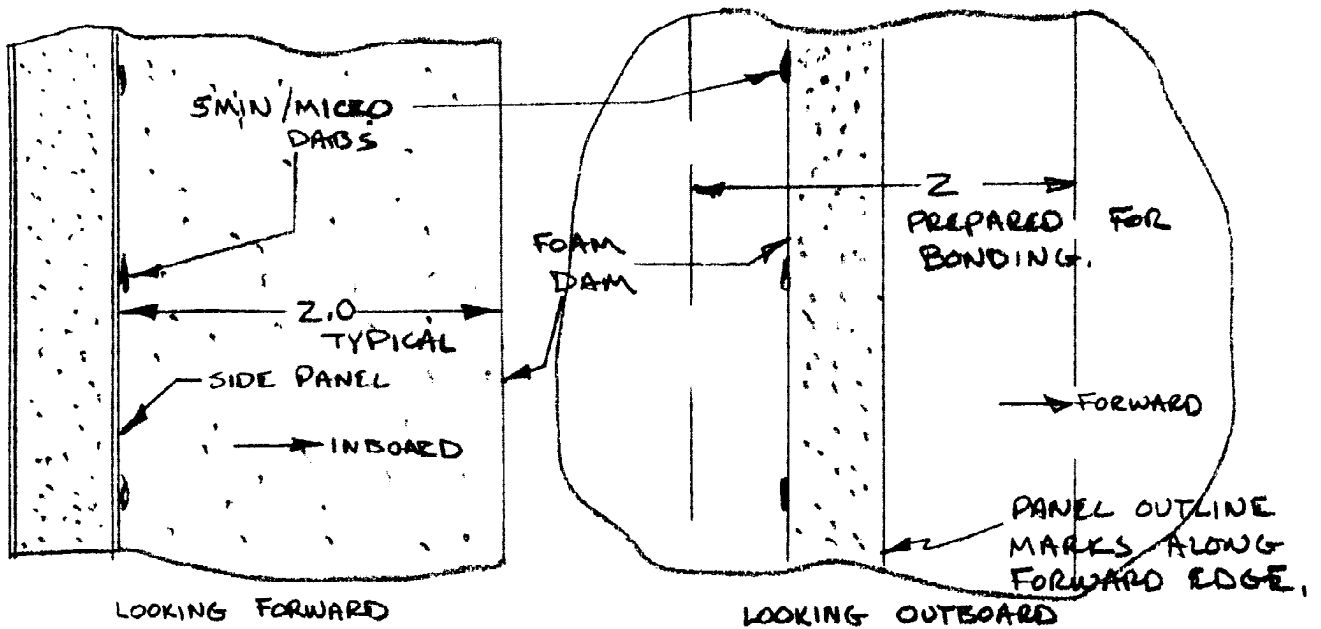


Instrument Panel and Mounting Flange

Remove the peel ply from and/or sand for bonding a two inch wide strip centered along the instrument panel outline marked on the fuselage side panels (so long ago). Use 5 min/micro dabs to fixture a foam scrap dam two inches inboard from the side panels from the front end of the consoles to the inside surface of the top cover. A typical cross section is shown below.



Protect the forward face of the dam with masking tape, cut enough 2 inch peel ply to cover the dam, and cut six pieces of 45° BID 3 1/2 x 30. Prepare the mating edge of the side console for bonding and lay up peel ply followed by 3 ply BID tape which covers the peel plied foam and overlaps onto the side panel and console one inch. Knife trim the edges and cure. Remove the foam dam and peel ply then cut more glass and repeat on the aft side. This leaves you with a six ply BID, 2 inch wide 'T' section with the top bonded to the side panels.

Cut your instrument panel blank from .063 2024-T3 aluminum sheet. The panel should be straight across the bottom edge and curved to fit the inside contour of the top cover. You can adjust your panel depth below W.L. 24 to suit your own requirements. The prototype panel is 6.5 inches below W.L. 24 at the bottom edge. Add a 1/2 x 1/2 x 1/16 aluminum extrusion stiffener to the bottom edge with a pop rivet every two inches to attach it (11 required BSP 42 rivets) to the panel. Install the stiffener with corner flush with the bottom of the panel and one leg sticking forward. Don't waste aircraft quality structural material on the stiffener, go to your local hardware store or home improvement center and look for some common aluminum extrusion. The stiffener doesn't attach to the mounting lip. Locate and drill #11 mounting holes through each corner of the panel and the mounting lip. Attach the panel with four AN525-10R-6 screws and MS21042-3 nuts.