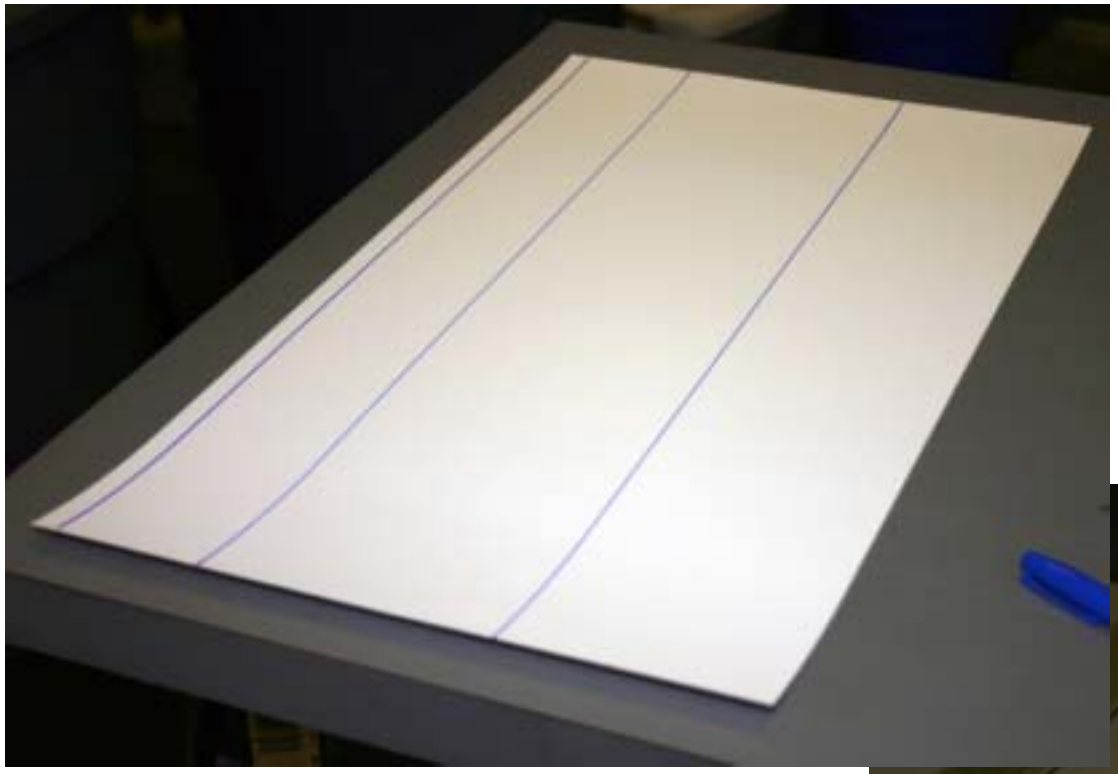
Build Your Own Bezel

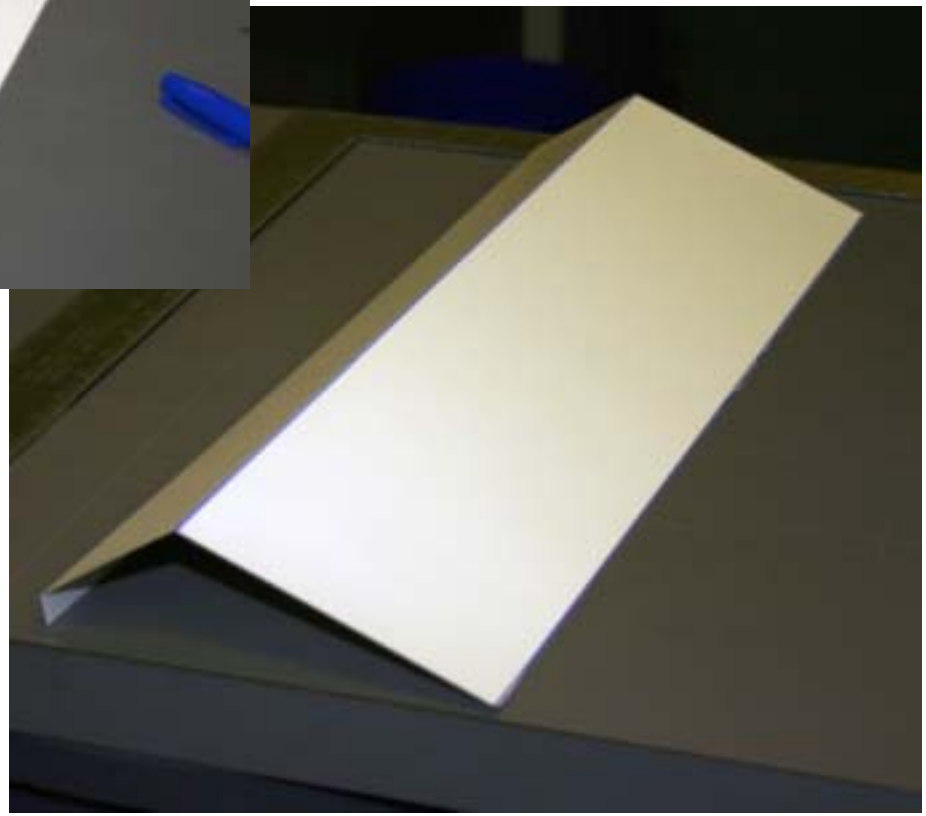
by Tailgunner

Alright, here's the walk-through

Start by taking a few measurements. You'll need width, length, and depth of the monitor surround, and measurements from the edge of the frame to the edge of the phosphors on the screen.

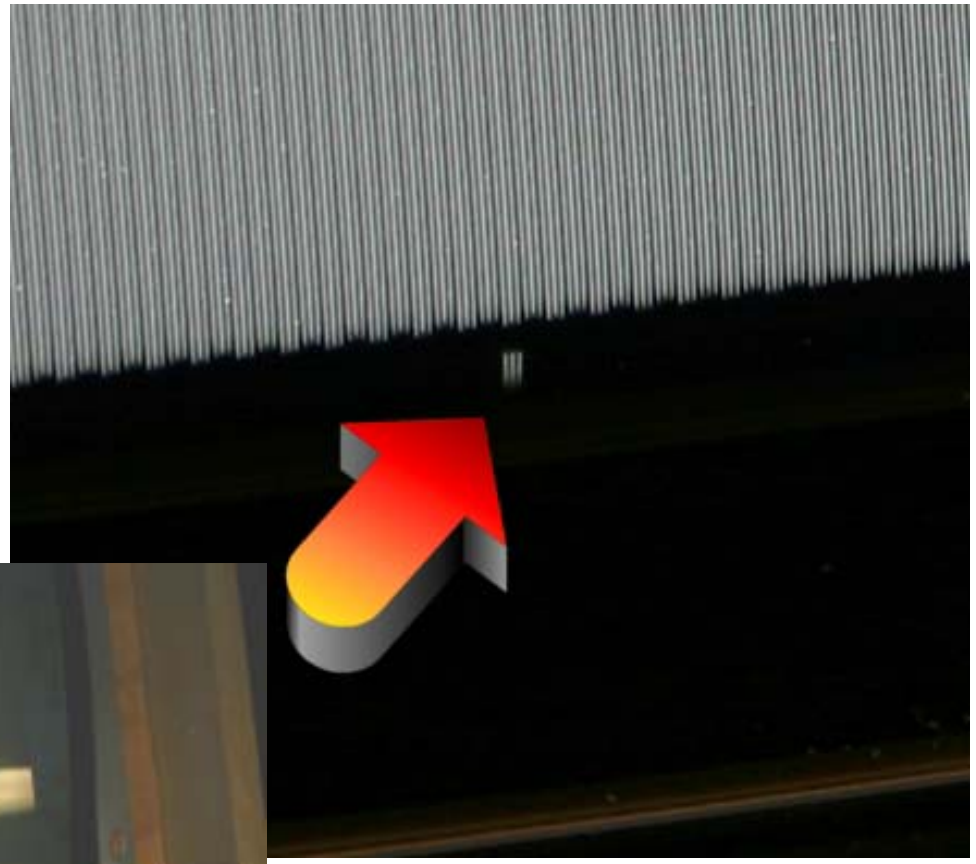


I'm starting with the bottom, here's the basic layout. I'm using a sharpie for this one so it photographs better, a pencil is more accurate and you can erase any mistakes.



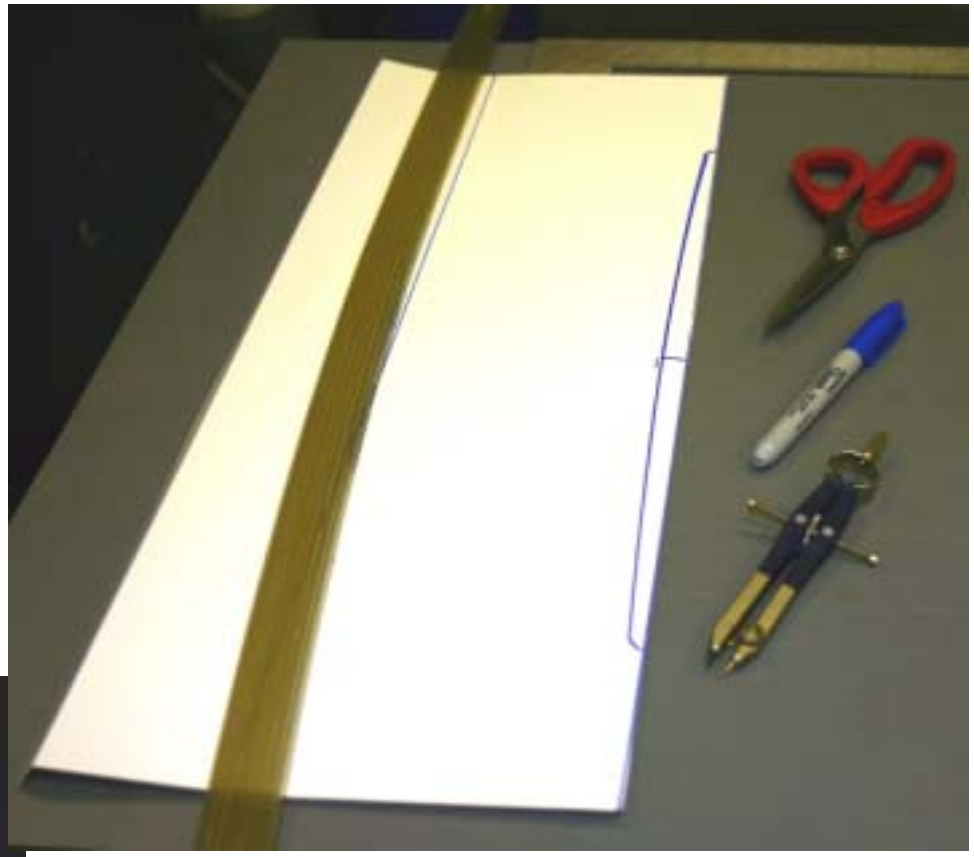
The bottom cut to size and folded.

We need to mark the bottom pattern where the tube's curve is the widest, it's easy to pick out as there are a few extra pixels on the screen at this point.



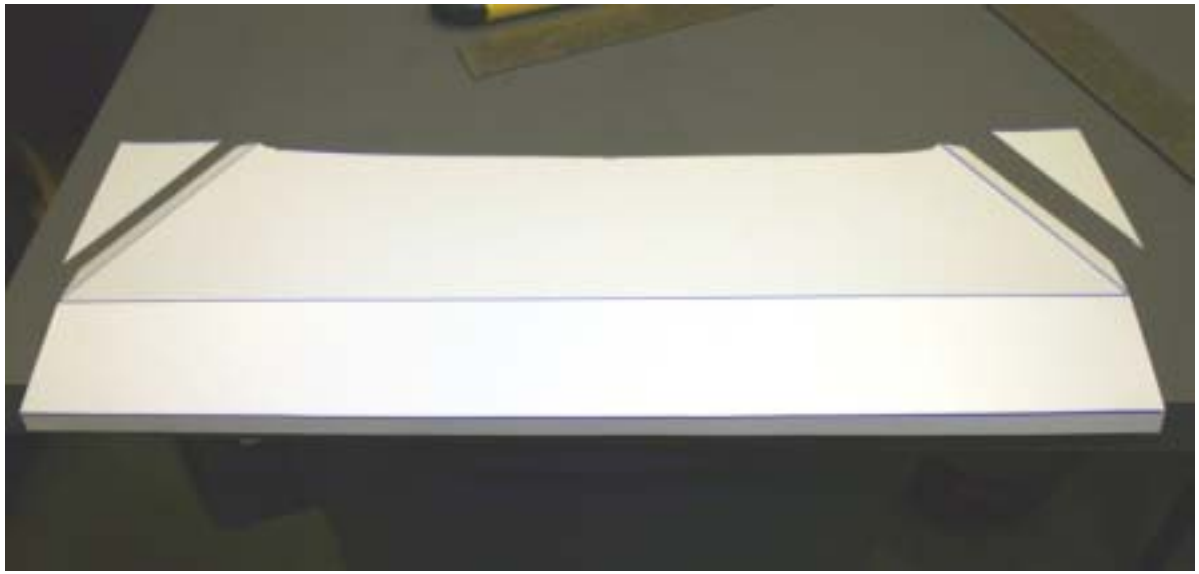
I'm marking the centerpoint and where the corners are on the pattern. I want a border that's halfway between the phosphors on the screen and the edge of the tube.

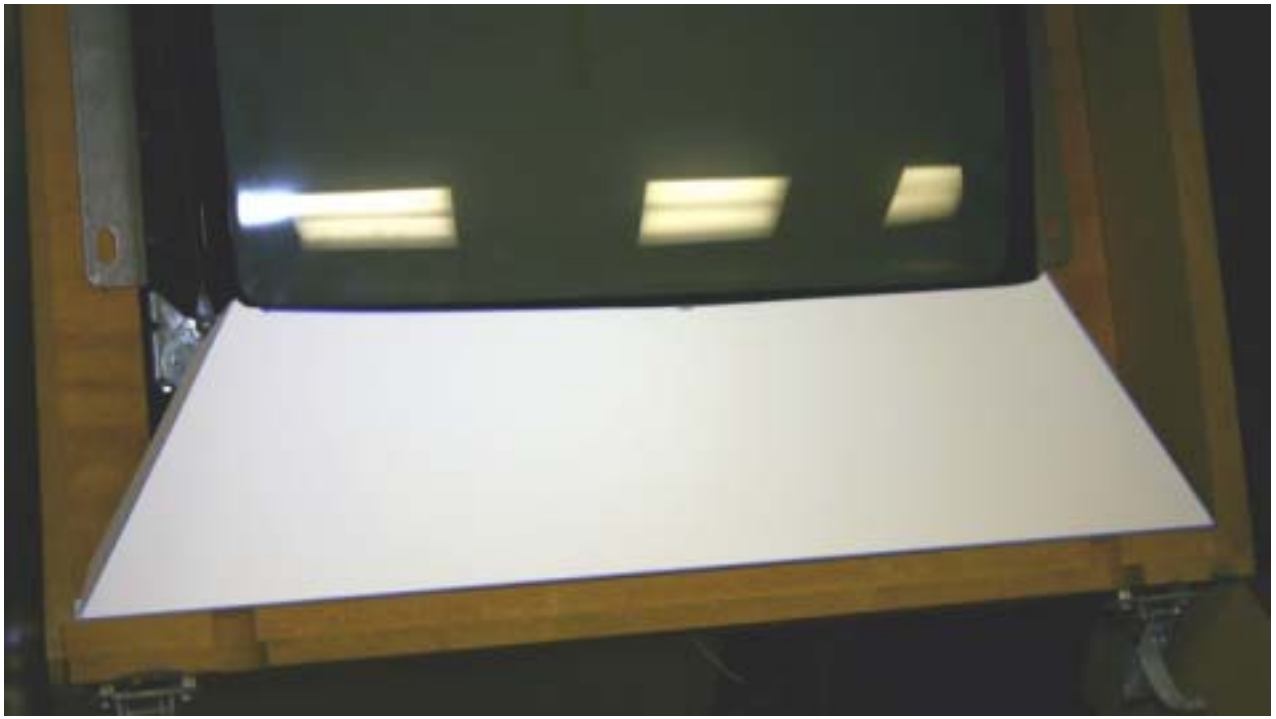
I've cleaned up the corners with a compass to get a nice radius, and connected them to the center. I measured from the tube's edge to the phosphors at the center, divided that number in half to figure out where the center should be marked. I then drew the curve using an adjustable spline, but anything semi-flexable would work. You'll just need someone bend and hold it in place while you draw the curve.



The curve cut out, I'm checking it on the monitor to see if it need any adjustments.

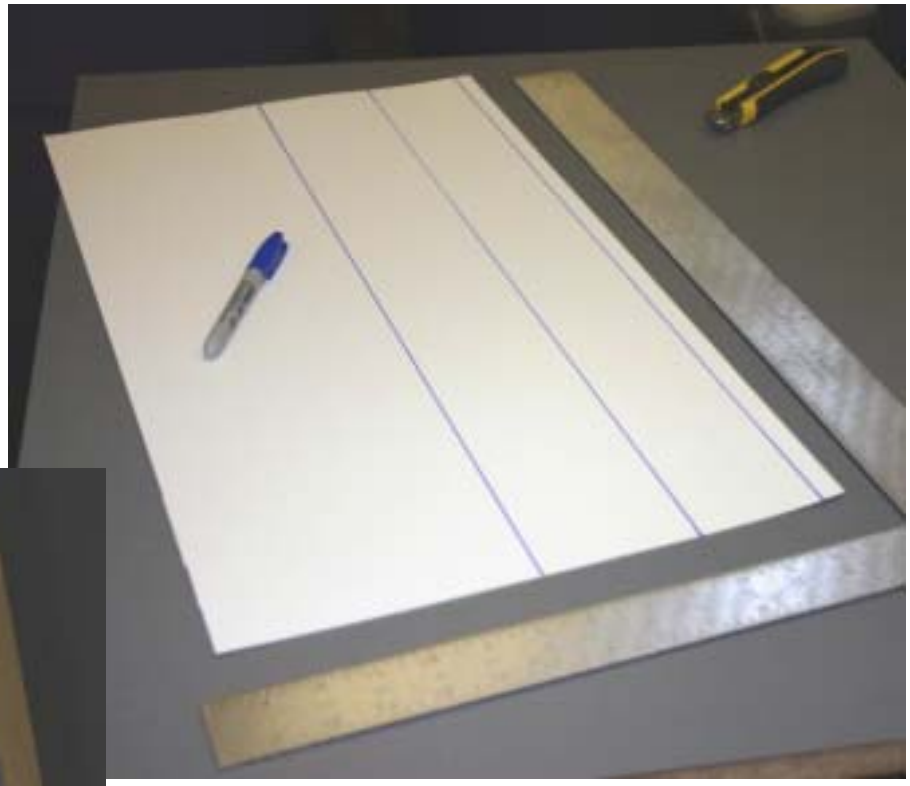
Next I'll cut the angles. Draw a line from the edge of the radius to the corner of the bezel. Add about half an inch for a flange, and cut the corners. Bend the flanges over.





Check to see how it looks. We're done with one side.

The side is pretty much a repeat of the bottom. Make a basic pattern...



Mark the center and corners...

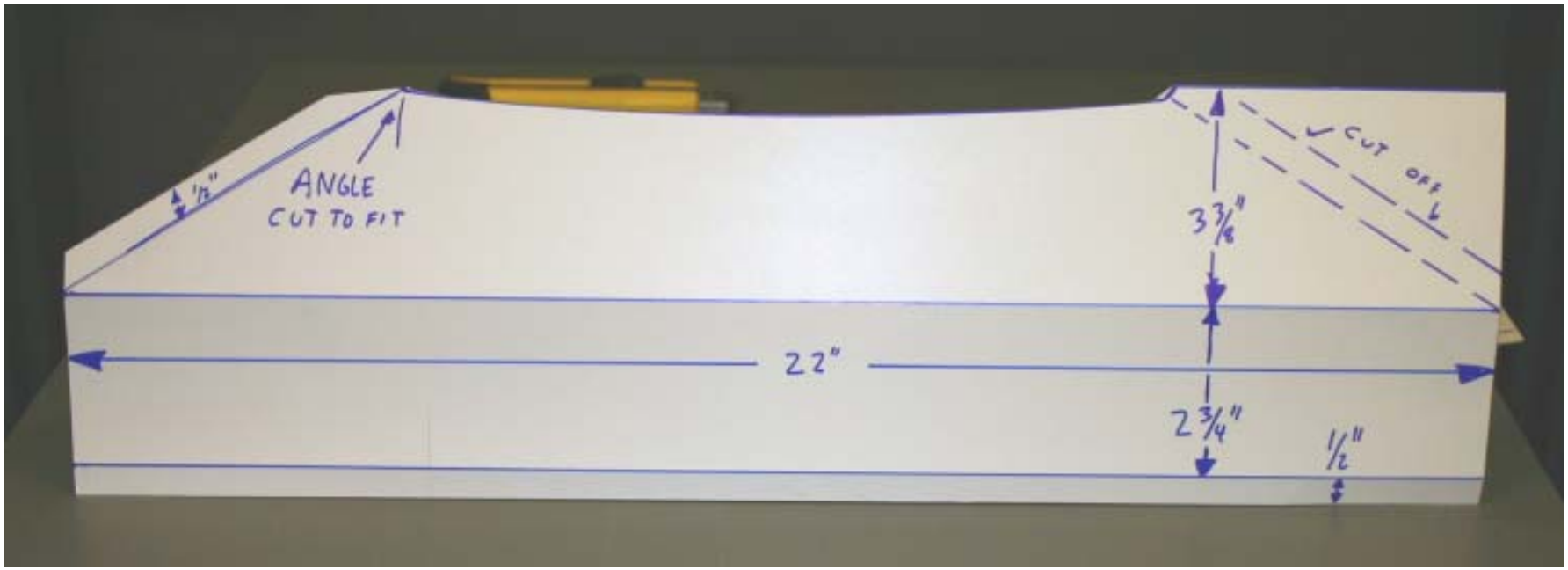
Draw the curve...

Cut out the curve. Mark the corner, add the flange, and cut the corner off.

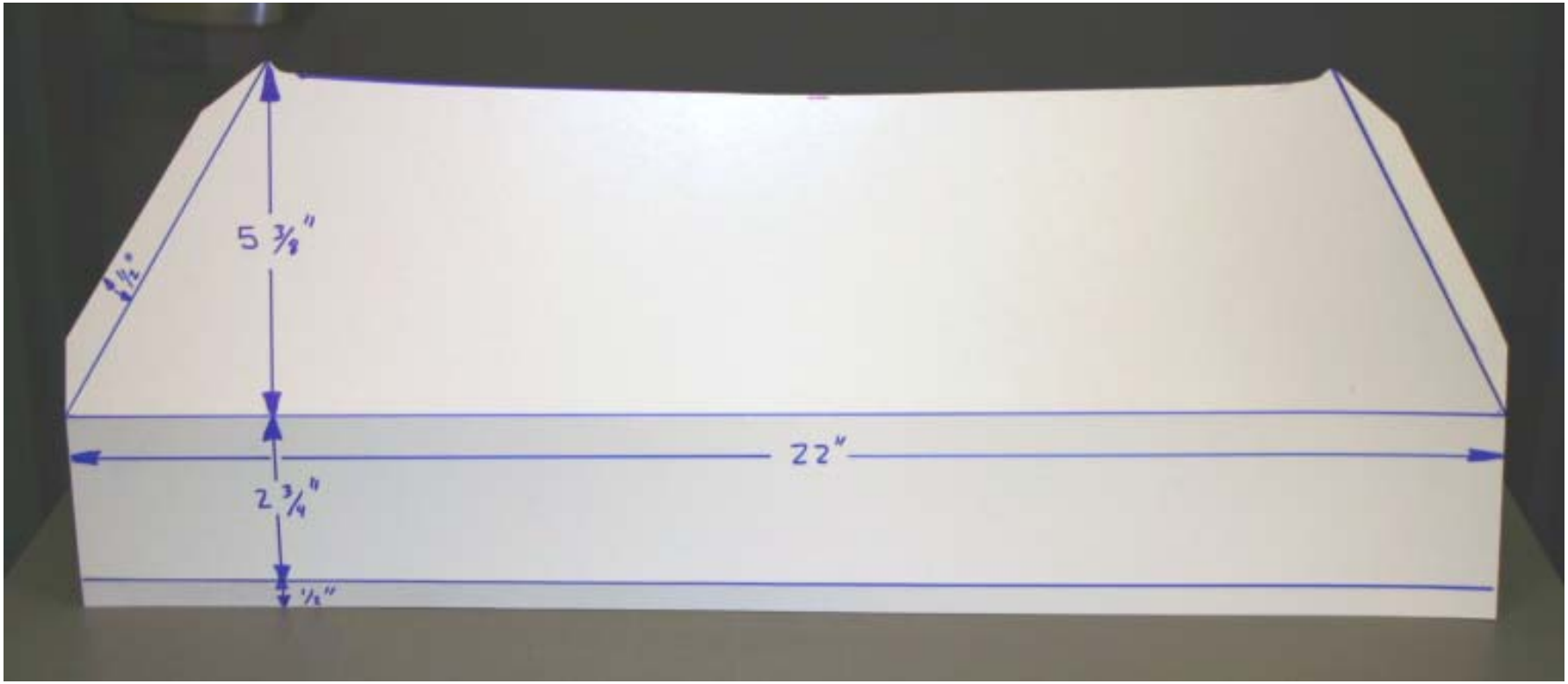
Check the corner to see how it's lining up.

I skipped doing the upper corner of the side pattern for this demo. It's the same as the bottom corner so it do it just like that one. The top pattern should be a duplicate of the bottom, if not make it before you do the sides so you can make the side curves fit between the upper and lower curves. The other side should be a duplicate of the one I've done here, but I'd still check before cutting as the monitor is probably off center a little. Mine's off almost 1/4" of an inch but it's easy to allow for it when making the bezel this way.

Here’s the resulting pattern…



And the bottom pattern…



Last one.

I boxed this pattern mostly because doing so makes it stay in place while working on it. The trade off is it uses more posterboard on each side. Most cardboard bezels have a flange around the outside edge that holds them in place, this flange gets sandwiched between the monitor surround and the plexiglas. After making this pattern it hit me that you could pin the pieces in place with thumbtacks while working on it. I trimmed the pattern pieces to fit the flanges to demonstrate this.