Ron Caudillo, designer of this model, has kindly given his approval for release of my redraw/repaint/rework of it. The colors chosen for the model are subdued approximations of the colors found on the original 11-foot shooting model before its recent appalling repaint by the Smithsonian.

Mike Hungerford's notes on building Ron Caudillo's TOS Enterprise

Step 1: I scored the length of each pylon in the four obvious places and folded it flat to glue so it didn't twist. Once the glue was set, I opened it up into a rectangular tube, THEN inserted a small dowel and rolled the shorter sides.

Step 2: I glued part 3 into place before rolling part 2. Make sure you score and fold the tabs of the side projections well; they're fragile!

Step 3: I cut all the triangular tabs off part 4. I cut all the tabs off the "petals" of part 5. For the bottom tabs, I left a nice, wide strip instead so that I could roll the thing without tearing it. I curled the petals over a dowel first to shape them, then rolled the part vertically to make it half-round. I punched out a small (1/4 inch or smaller) disc of card and glued the underside of the tip of a middle petal to one side of it with the tip in the very center, then glued the remaining petals to the disk in the same way, keeping their edges tight to one another. I trimmed off the half of the disc that was left, then cut off the bottom strip and tabs completely. I edge glued part 5 to part 4, and then glued part 6 into place.

Step 4: No changes.

Step 5: Be patient when folding and gluing the side projections; they're fragile (did I say that already?)! I folded and glued them BEFORE installing the assembly from step 3. I edge glued the step 3 assembly into place; it fits better without the triangular tabs. Get it BEHIND the edge of part 3!

Step 6: I cut the tabs off the TOP side (look at the arrows) of part 11 and edge glued it to the bottom of part 3. I glued part 11's tabs to the side projections (look at the arrows), THEN folded down the triangular tabs on the BOTTOM side. Be patient with part 12; use a slow-setting glue like Aleene's Tacky Glue so you can tweak the position while it's setting. I glued all the tabs at once and it worked quite well this way.

Skip to step 25: Assembled and installed parts 80 and 81.

Step 7: I removed the tabs from parts 15 and 17, and the bottom of part 20, to get a cleaner glue line. I didn't install the bridge sub-assembly to the top of the primary hull until later, after the primary hull was closed.

Step 8: I printed a second set of parts sheets 2 through 6, then used the extra sheets to make glue tab strips to replace the tabs on all the primary hull upper and lower rings and outer edge. This eliminates the "step" between parts and gives a much cleaner transition.

Step 9: As with the bridge sub-assembly, I didn't install the lower sensor dome until later. I removed all the tabs on parts 27, 28, and 29 and just edge glued them together.

Step 10: I glued part 33 to part 32 before gluing part 34 to part 33; this helped me to prevent distortion.

Skip to step 12: I cut off all the tabs on the support rings (parts 37, 38+39, and 40+41), applied a bead of glue to the inside of the hull for each of the rings' locations, and bedded the rings into the glue. In my previous attempt at this model, I found that all those tabs were preventing me from getting the halves of the primary hull to fit together neatly.

Step 11: No changes apart from removing the tabs from parts 35 and 36.

Step 13: I glued the front most four tabs of parts 35+36 to the underside of part 25, using the grid lines to align part 25 to the forward join of parts 35 and 36, and to the aft join as well. Once this "hinge" was set, I applied a bead of Aleene's Tacky Glue to the top edges of the three inner support rings, then closed the top of the hull onto them, again using the grid lines to make sure the top was on straight. I set the bottom of the hull into a jar lid just about the diameter of the second inner support ring, and set a paperweight on top of the hull to apply pressure until the glue was set. Lastly I worked around the edge of the hull, following Ron's instructions, gluing part 25 to the tabs of parts 35+36. It came out far better than my previous attempt!

Back to step 12: I did the cutting necessary for the pylon at this point.

Step 14: I removed the bottom tabs from part 42, and all the small tabs from part 43.

Back to steps 7 and 9: I glued the bridge assembly and lower sensor dome in place.

Step 15: I doubled part 46 to stiffen it.

Step 16: No changes.

Step 17: I didn't glue the upper secondary hull tabs to the dorsal pylon; I waited until the forward section of the secondary hull was mated so I could make adjustments (this area was a major headache which caused me to abandon my first attempt at this model).

Step 18: Note that the instructions here refer to part 46 which is actually part 48. On part 49 I left the notch for the pylon uncut to make rolling part 49 into a cylinder easier; I cut that area just after adding part in step 19. I doubled that part to stiffen it. I cut the tabs off of part

50, doubled part 51, and edge-glued it into part 50 before installing part 50 onto parts 47+48+49. Part 55 I wrapped around the toothpick and glue into place there, allowing it to serve as a depth stop when installing the deflector into its little hole where you can't see it well.

Step 19: No changes. I added to parts page 4 duplicates of the detail strips for each side of the secondary hull to help conceal the transition between the fore and aft sections and act as splices.

Step 20: No changes.

Step 21: I used the same method to shape part 66-P that I did for part 5 back in step 3. I formed part 64-P but didn't glue it to part 63-P yet. Instead I stacked 64+67+68+67+68+67+69-P, which gave me better control over those parts, then glued that stack onto 63-P. I widened the three 67-P parts to make them easier to work with, and that made them pretty much self-aligning with the other conical parts in the stack. Punching or cutting out the centers of all the conical parts whose peaks won't be visible makes them much easier to form.

Steps 23 through 26: No changes.

USS Enterprise NCC-1701

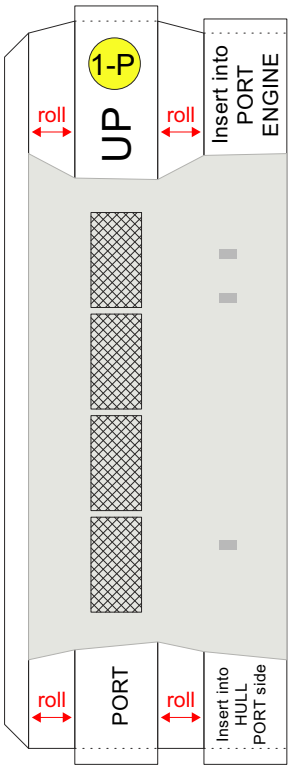
1:720 Scale Model design by Ron Caudillo (ronaldcaudillo@yahoo.com)

Special thanks to Alan Sinclair for providing working drawings. (wizardofflight@hotmail.com)

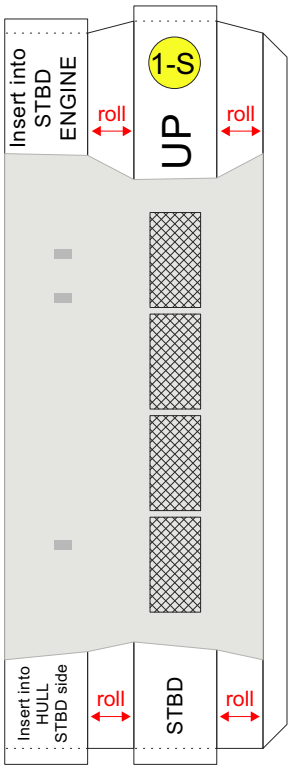
Image dimensions (W x H):
7.5 x 10 inches
19.05 x 25.40 CM

Fold up ----------
Fold down .....

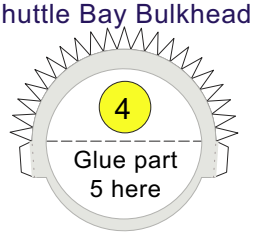
Port Warp Nacelle Pylon



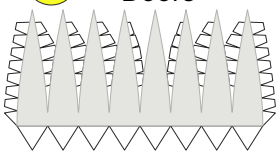
Starboard Warp Nacelle Pylon



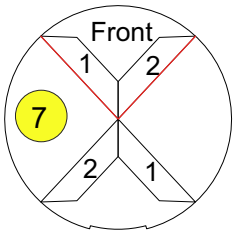
Shuttle Bay Bulkhead

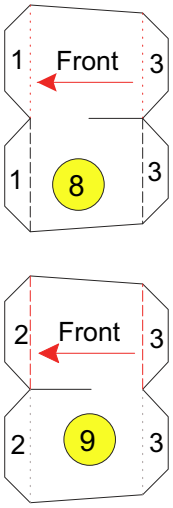


5 Shuttle Bay Doors

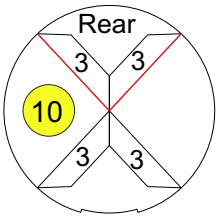


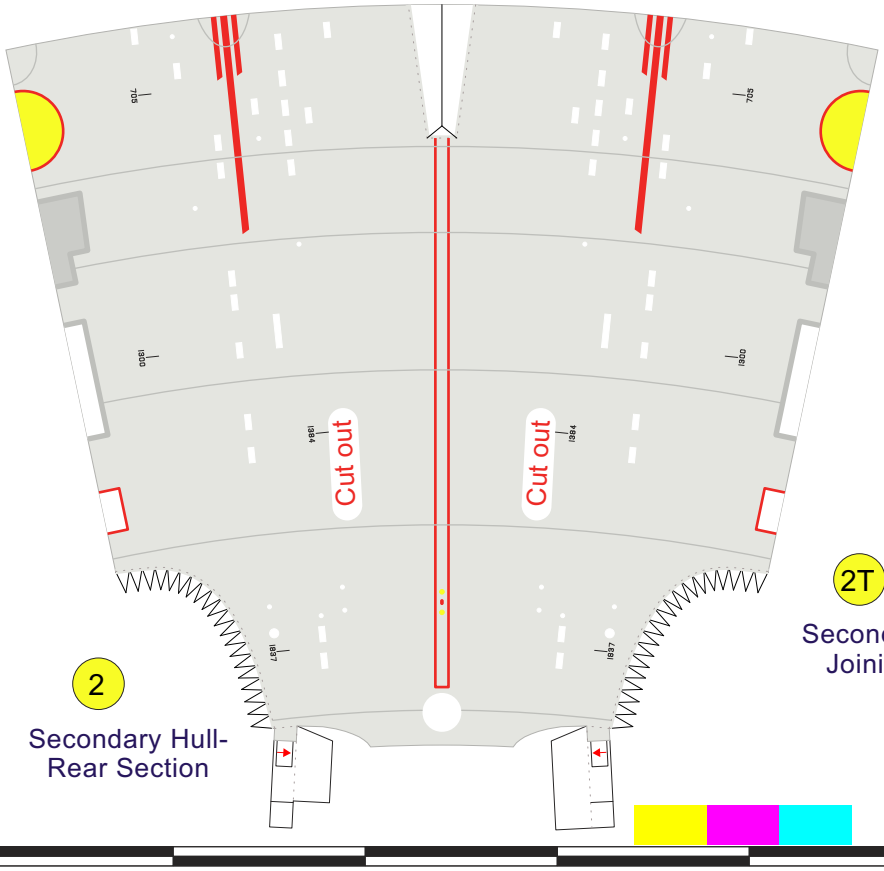
Warp Nacelle Pylon Positioner



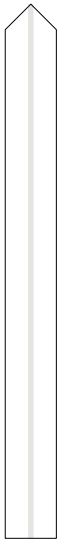


6 Shuttle Bay Tower





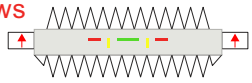
2 Secondary Hull-Rear Section



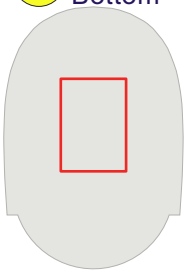
2T Secondary Hull Joining Tab

11 Fantail Rear

RED arrows point up



12 Fantail Bottom



3 Roof of Shuttle Bay

80 81 Running Light

Secondary Hull

Inches

Centimeters

USS Enterprise NCC-1701

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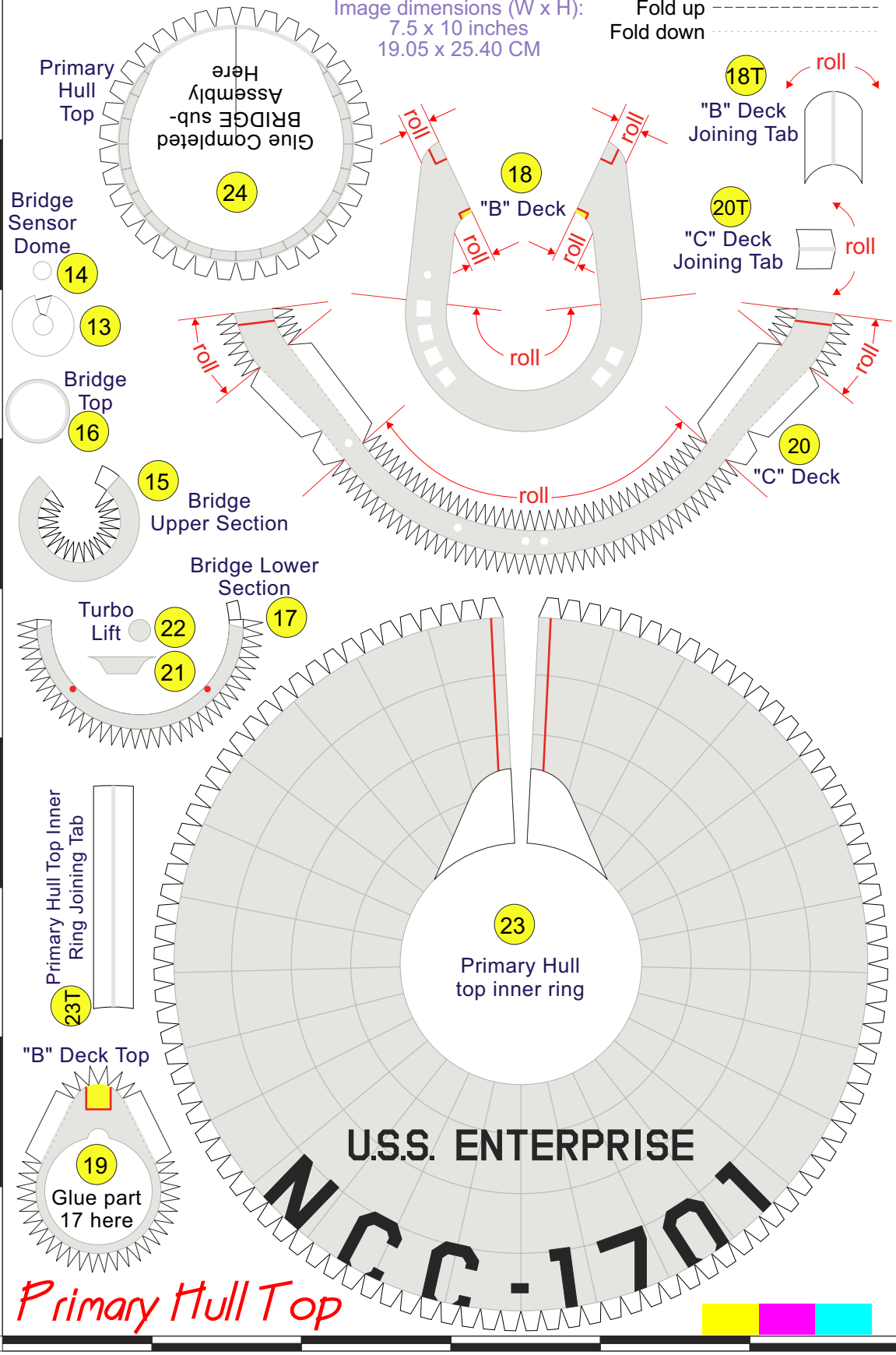

Primary Hull Top

Centimeters

Inches

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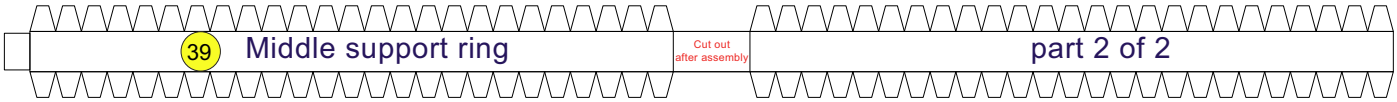

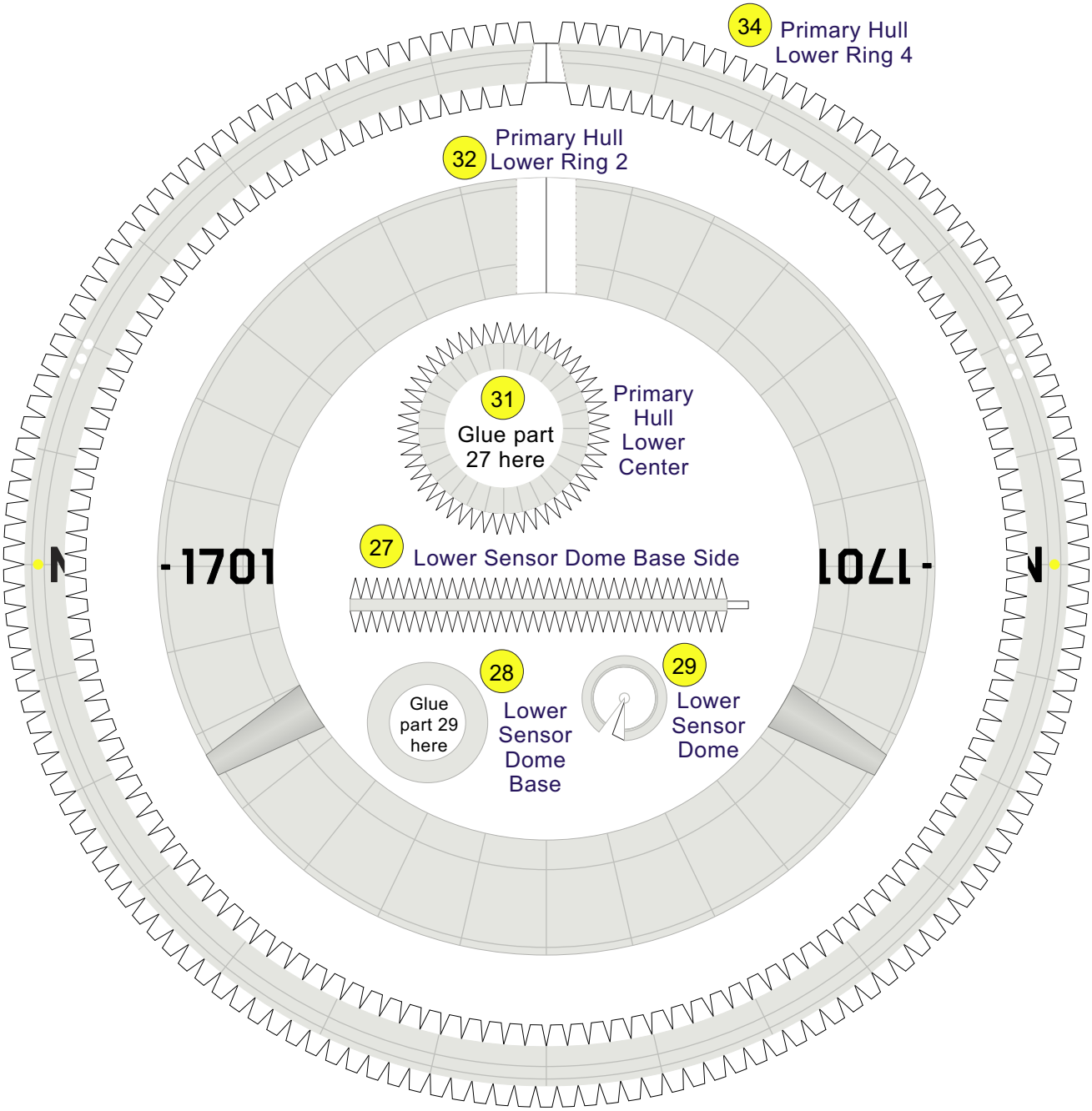

Primary Hull Bottom

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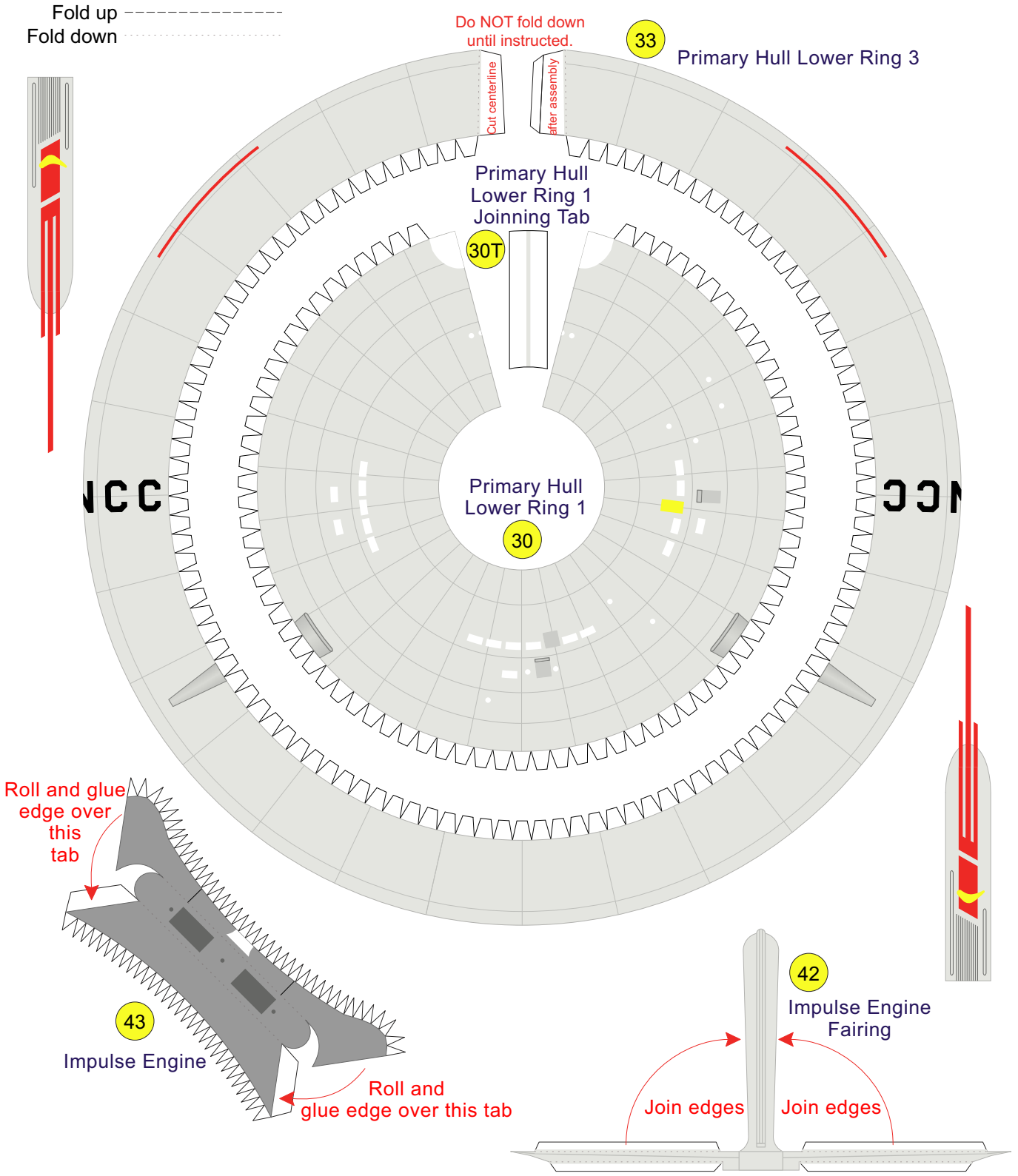

Primary Hull Bottom

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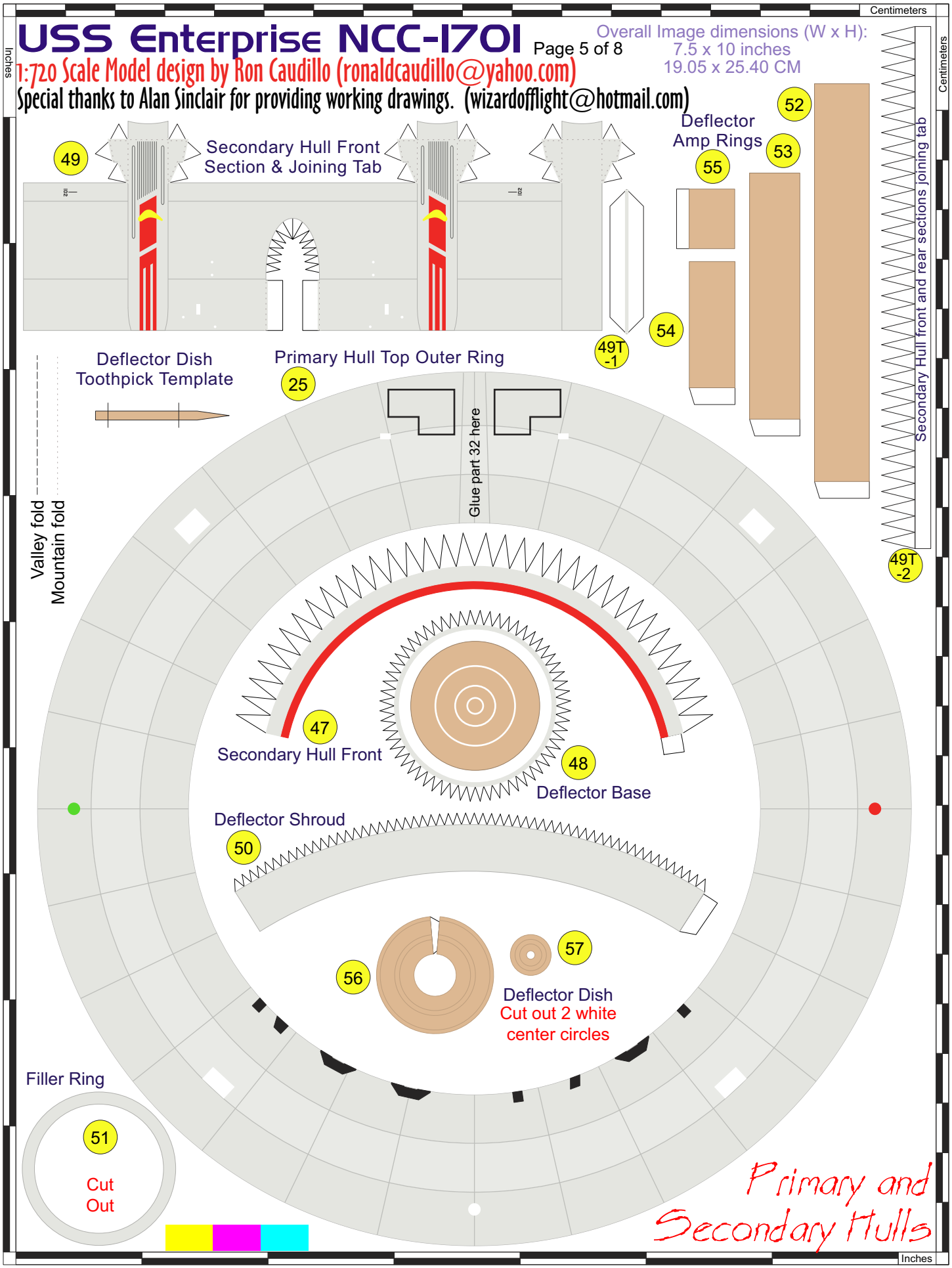

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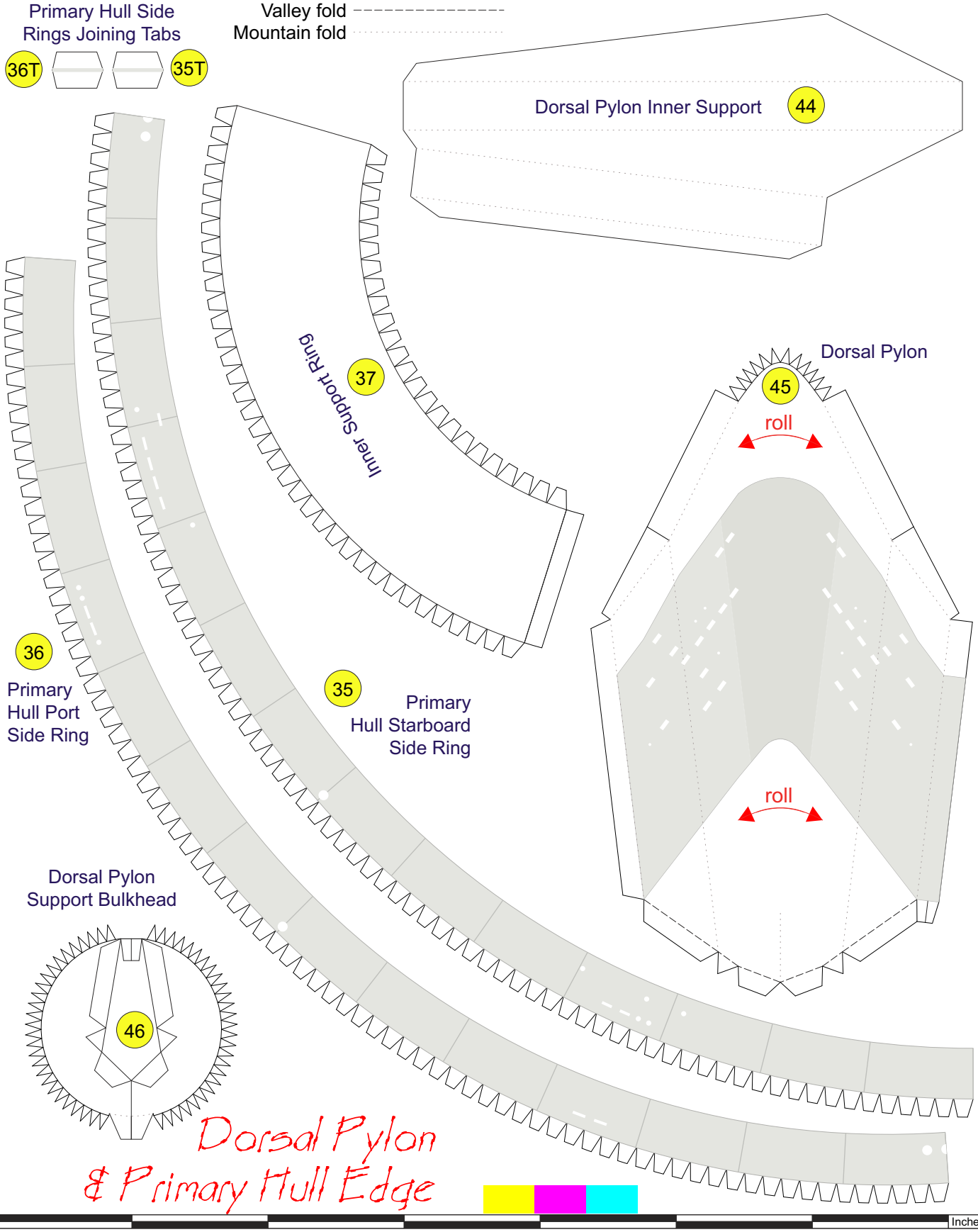

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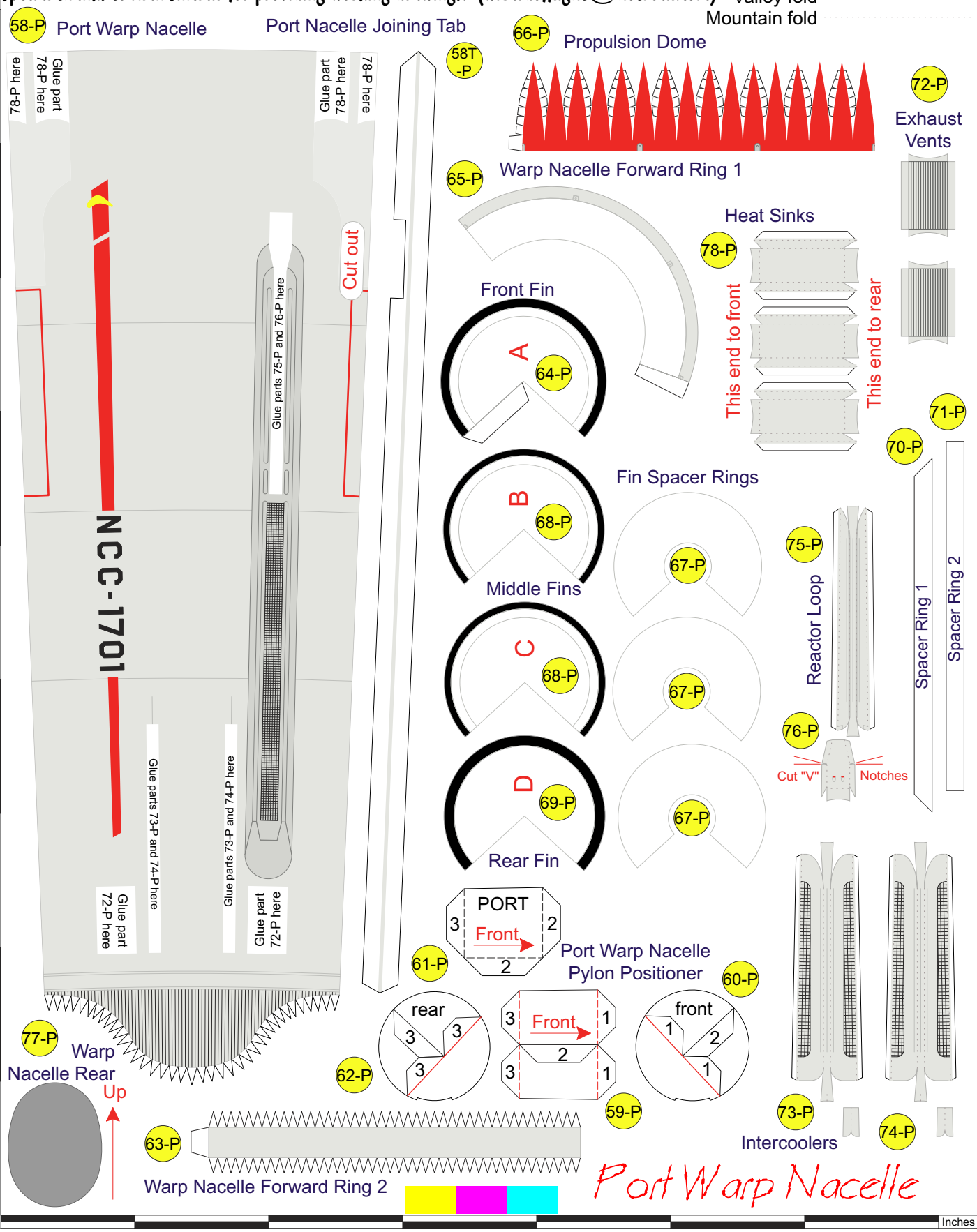
Valley fold
Mountain fold



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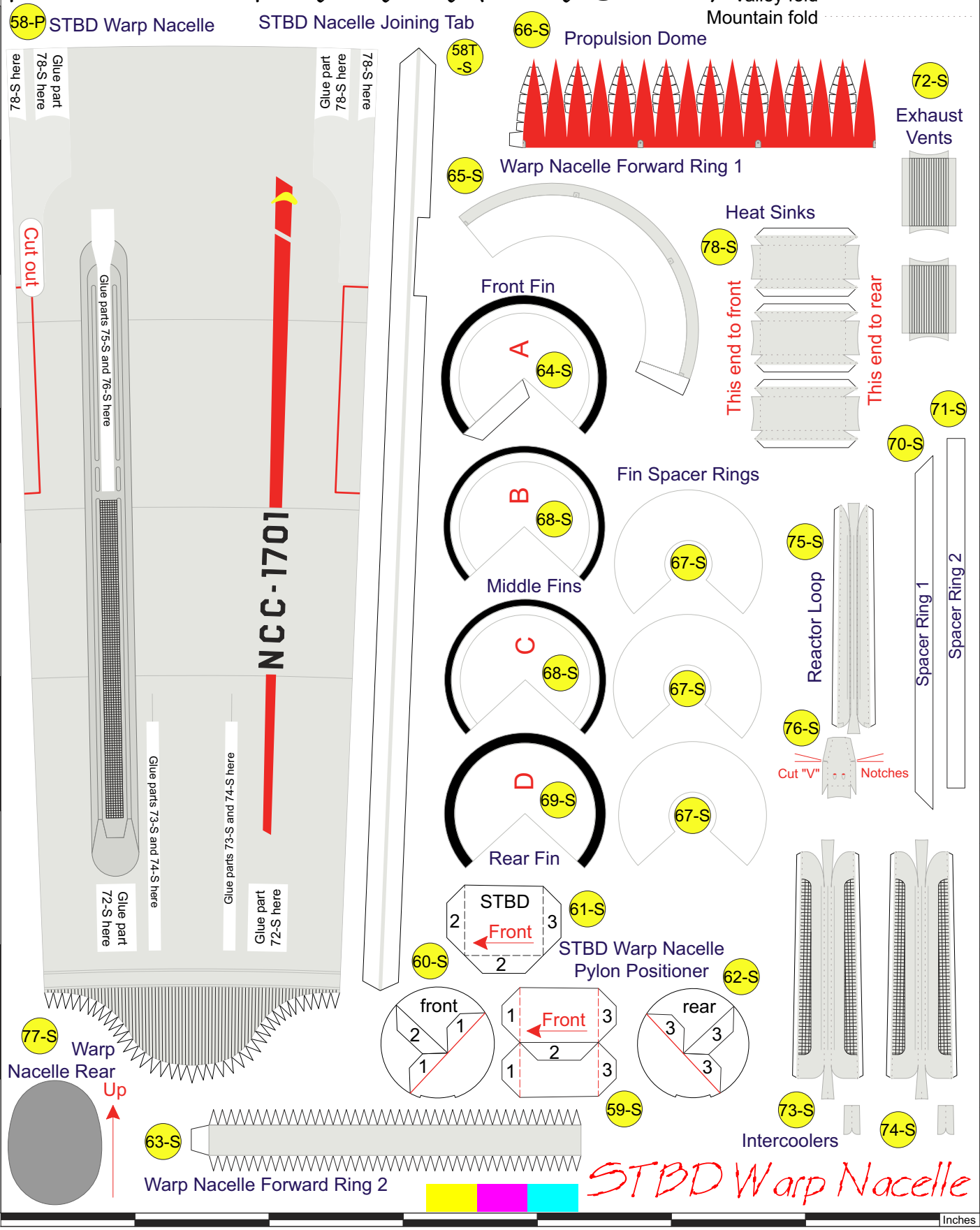

Print this page onto the back of page 5 of the USS Enterprise. Center the print output of both of these pages in order for them to align properly.

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