

U9 Tracing Templates

1.) General Purpose

These tracing templates have been designed for enabling the customer to trace and cut masks for texturing and/or merely painting the saddle tanks.

2.) Description

What we are looking at is a set of medium duty paper templates on which the shapes of the dark sections being visible on the saddle tanks are being printed using Black in White. These sections represent what appears to be an anti-skid coating on contemporary photographs. Due to the rather complex profile of hull and deck, tapered shapes, a fair length of round edges, as well as other spots which are incapacitating us from taking precise measurements, we have no reference points enabling us to mask off the saddle tank patterns. These missing reference points would be essential in order to achieve a clean and symmetric masking on port and starboard. The tracing templates as well as the flexible ruler are solving this problem.

3.) Visual references



Fig.3.1.) Anti-Skid Coating on a German WWI submarine. Unknown unit

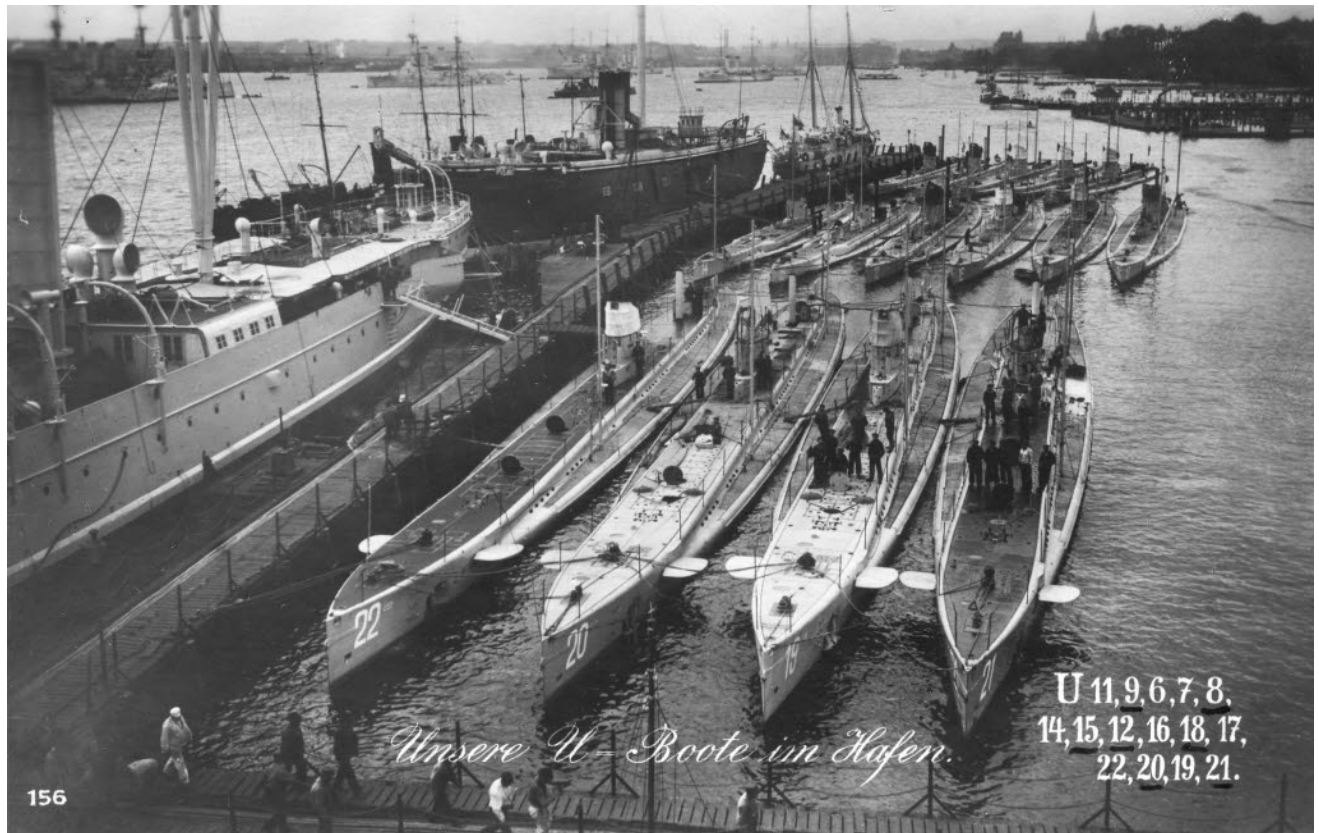


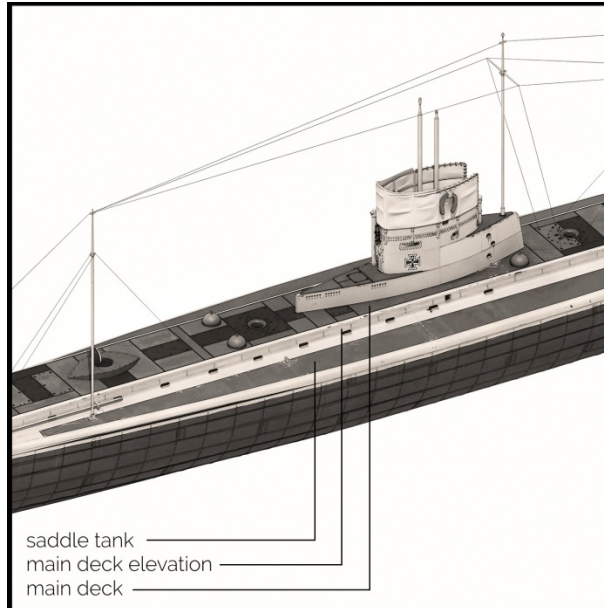
Fig.3.2.) Various classes of German submarines moored in the port of Kiel. Note the different patterns in anti-skid coating



Fig.3.3.) A close up on U12

4.) Visual references, the crossroads

While consulting the references, we might find ourselves facing two routes to turn to, with one of which being following the manual, whereas the other route is following closer to the photographic references being available. The difference between the two lays in the position (or the course) of the inboard parting line of the anti-skid texture, in relation to the main deck elevation.



What we can clearly see on the contemporary photograph is that the anti-skid texture is running up on the main deck elevation for a little bit. What this means is that we have to move the parting line towards running up higher along the elevation a little bit.

Still, the templates are serving great as a guide on positioning, in order to create our actual masks. The flexible ruler comes in handy as well in order to measure from reference points, following the contour of the main deck elevation. This manual will follow the route of the painting guide.

5.) Product layout / Application / application description

5.1.) Product layout

- 3 templates for port
- 3 templates for starboard
- Flexible ruler printed on cardboard

5.2.) Application / application description

This is only a description. The practical and illustrated part will follow down below at chapter 6.

On the kit parts, the port-side of the hull parts are including some attachments points for the antenna masts. (It's 3 in total, indicated by the White place holders (white boxes on the print)

We use these place holders as a locator-aid in order to establish the position of the templates as accurate as possible.

Let's start on the port side because we will use the port side as a reference for positioning the templates on the starboard side. We begin on the port stern quarter and work towards the bow from there.

After clean trimming, we position the template and temporarily fix it with tape. We now trace the shape of the templates using a lead pencil. We begin with P3, move on using P2 until we are able to put P1 into place. Now the entire anti-skid pattern on the port saddle tank should be traced, allowing us to position our (preferably yellow) masking tape of choice neatly.

For the starboard side we use the flexible ruler, taking the joint line of the main deck part and hull part as a reference point. We take our measures on the port side first (the distance from the joint line to the template) and place our starboard templates accordingly for symmetric positioning of the templates and subsequent tracing and masking.

6.) Practical application following the painting and marking guide

As mentioned above we begin with the port stern quarter, template P3. The stern tip/edge of the main deck, respectively where it joins the lower hull is an excellent fix point which we can use as an orientation point to begin with. It makes sense to involve the starboard stern quarter as well so that we have the tapered course of the anti-skid texture covered.

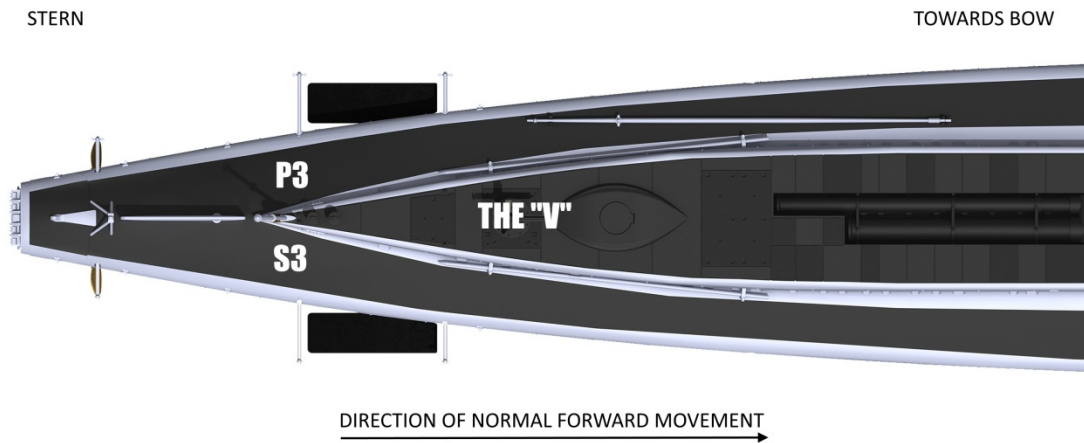


Fig 5.0) The stern section. The anti-skid texture is laid out tapered and widens up towards the bow. To make matters worse, the lower edges of the main deck elevation are laid out arching and therefore unfit to serve as a reference point to take measures from.

Let's have a look on another reference image helping us to determine our course of action:

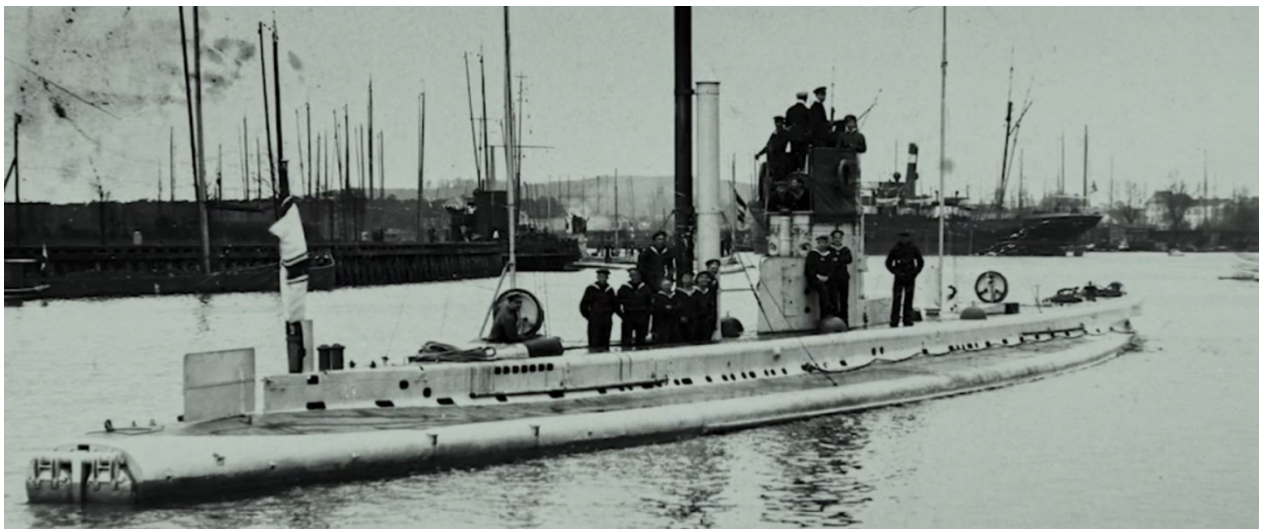


Fig.5.0.a) SIDE NOTE: Note the course of the borderline from stern to bow, going right on the arch to the main deck elevation, but keeping it below of the flooding holes.

Back to the model now.

It's important to understand that our actual "product" is tailor-cut yellow masking tape which is marking the outlines of our pattern. In other words: What is Black on the paper will be Black on the boat. So let's mask this off using the prints as a guide.

The point on which precision matters is the dashed White line being visible on these images. "THE V" is merely a term we use for better understanding.

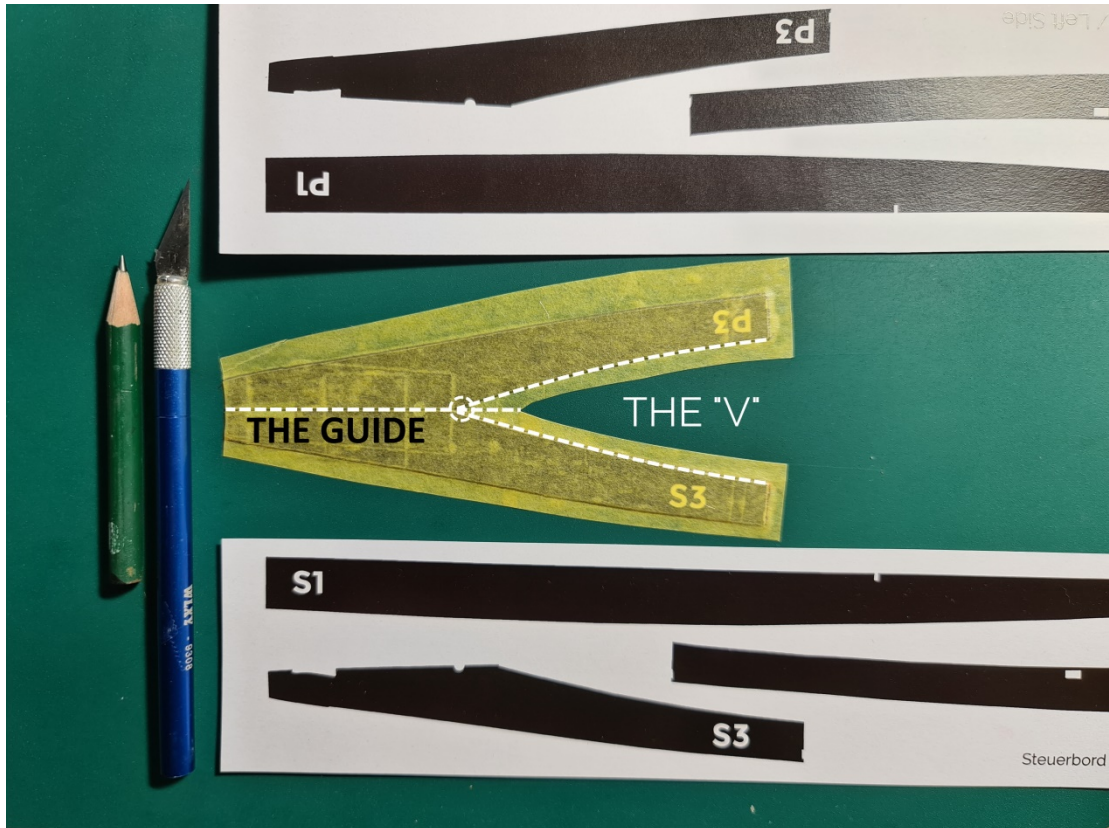


Fig.5.1.) P3 and S3 coming into play. Both halves of the stern template have been combined and covered with Yellow tape, creating **THE GUIDE**, which will be very helpful soon. The dashed lines being shown here are representing the cutting lines. **THE V** is pretty much the outline of the upper deck.

After having combined P3 and S3 and having covered this new item (**THE GUIDE**) with masking tape, we use a fresh blade and cut along the template, thus producing an actual yellow mask. Again keep in mind: **"What's Black on the paper will be Black on the boat."** In other words: The pieces we can use are those from the inner side of "THE V". We separate along the center line and put our newly created and tapered masks in place on port and starboard, as can be seen on the next image.



Fig.5.2.) The masks have been positioned and visually checked



Fig.5.3.) The self-produced tapered masks in place. The Light Grey lines have been painted using a lead pen and **THE GUIDE** we have created on P.5.1. We'll meet this guy again further below.

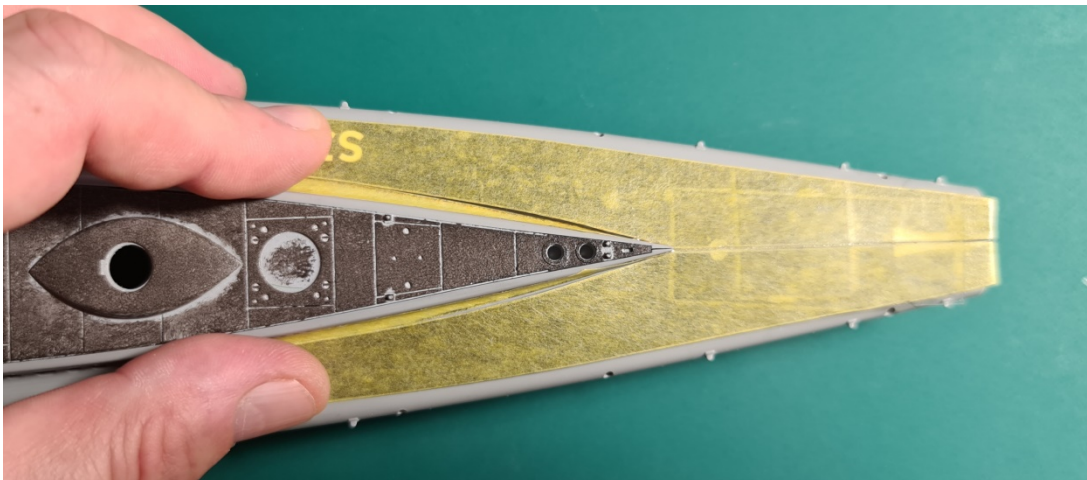


Fig.5.4.) **THE GUIDE** is again being used for further inspections and adjustments if necessary.

We now go ahead and use our trusty lead pen in order to outline the anti-skid texture's outboard border line. We can temporarily fix the template (GUIDE) with some clear tape so the template (GUIDE) is following the contours nicely and keeps its position. This method is especially useful on the stern. **!!!! Please consult your references in regards to the actual course of the outlines, depending on which boat you're going to build. In some cases the aft torpedo tubes were not covered with anti- skid texture!!!!**

It's at this point on which you decide if you go in accordance to the references, or if you follow the painting guide provided with the kit. Adjust the White dashed V-Line accordingly. Determining the exact course is on you because we are not aware of any suitable references for this area.

However, in both cases we are now defining the outboard border-line of the ant-skid texture. We use **THE GUIDE** in order to apply reference points for subsequent masking. (Grey lines within the dashed circles as first seen on Fig.5.3.)

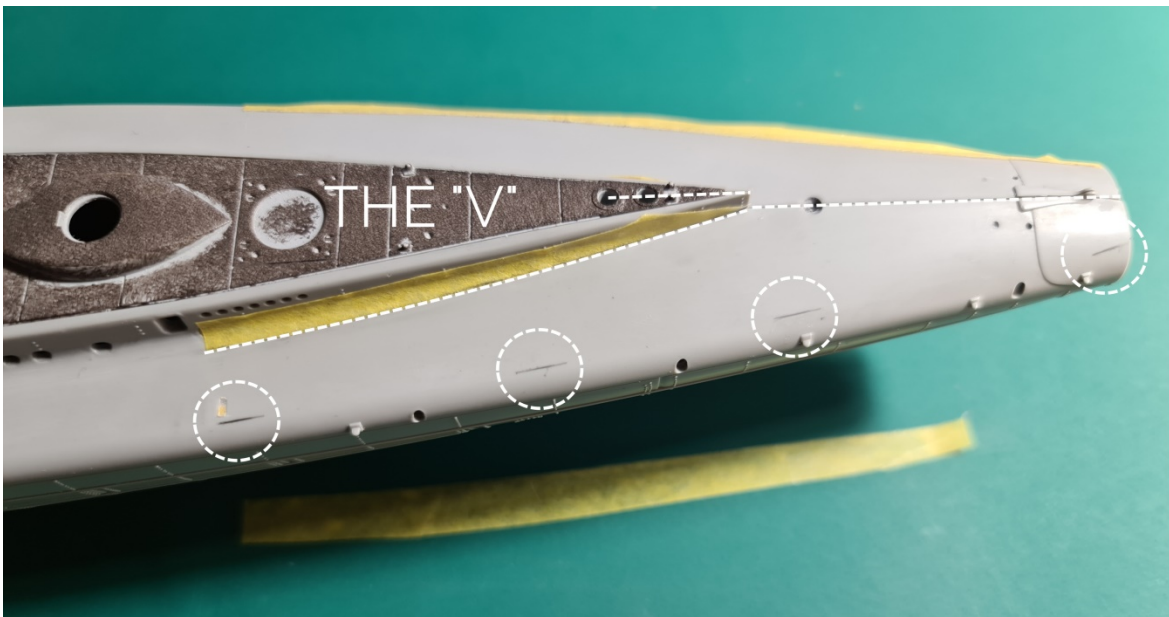


Fig.5.5.) Reference points have been applied using a lead pen.

With the stern area being all good now, thanks to THE GUIDE and THE V and all the other guys, we can now move towards the bow.

TRUST ME. THE MOST COMPLICATED PART IS BEHIND YOU. WELL DONE! 😊

So what we do is, to use P2 and S2 in order to move forward, always following the principle of **WHAT'S BLACK ON THE PAPER, WILL BE BLACK ON THE BOAT.**

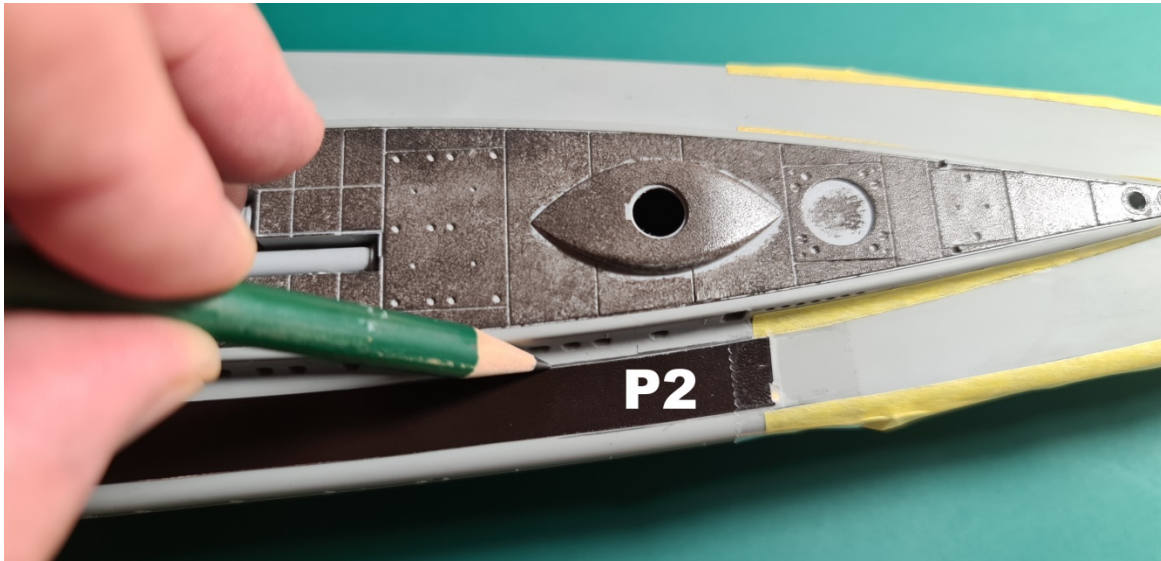


Fig.5.6.) The P2 template is being put to service. We are using the little recess on the hull as a reference point. Clear tape holds everything in place temporarily, so we can trace comfortably. Again, this is in accordance to the painting guide of the manual. If you want to go closer up the deck elevation, please adjust accordingly.

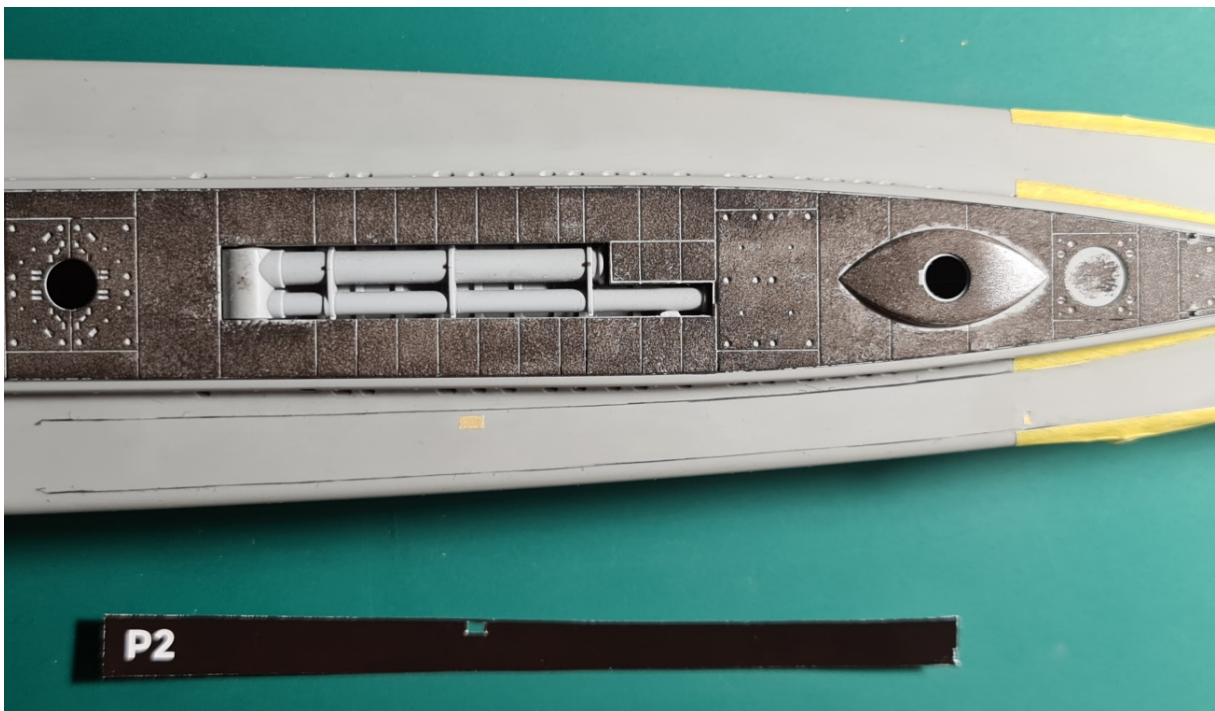


Fig.5.7.) P2 has been removed and your reference lines for masking are clearly visible. On the right hand side of the image, the masking tape has been applied already.



Fig.5.8.) We are moving towards the bow, using some reference points (cut outs) as a guide



Fig.5.9.) We are now in the position to apply our masks in order to mask off the spaces for the anti-skid texture.

With this we have managed to trace and mask the port-side of the vessel. Let's go to the starboard- side now.

WELCOME TO THE OTHER SIDE

OK, so now we need to talk about symmetry. As you have noticed, we only have round edges. This makes it difficult to even position the tracing templates symmetrically. So let me introduce you to a personal friend of mine: **MR. RULER**.

MR. RULER is kind of a flexible guy. He allows us to position our tracing template being oriented symmetrically to the other side by using the center-line of the hull. However, the center-line is nowhere indicated on the kit parts, so we use the joint line of the hull parts and the deck parts. (Note the dashed White line on the picture below)

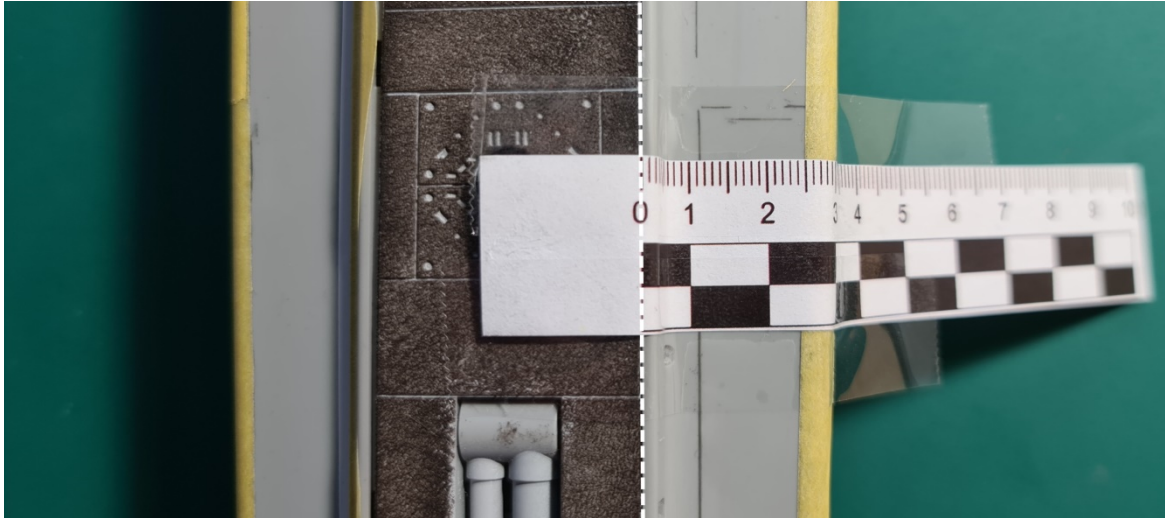
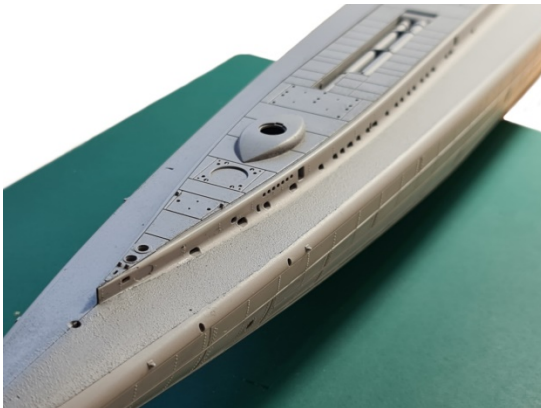


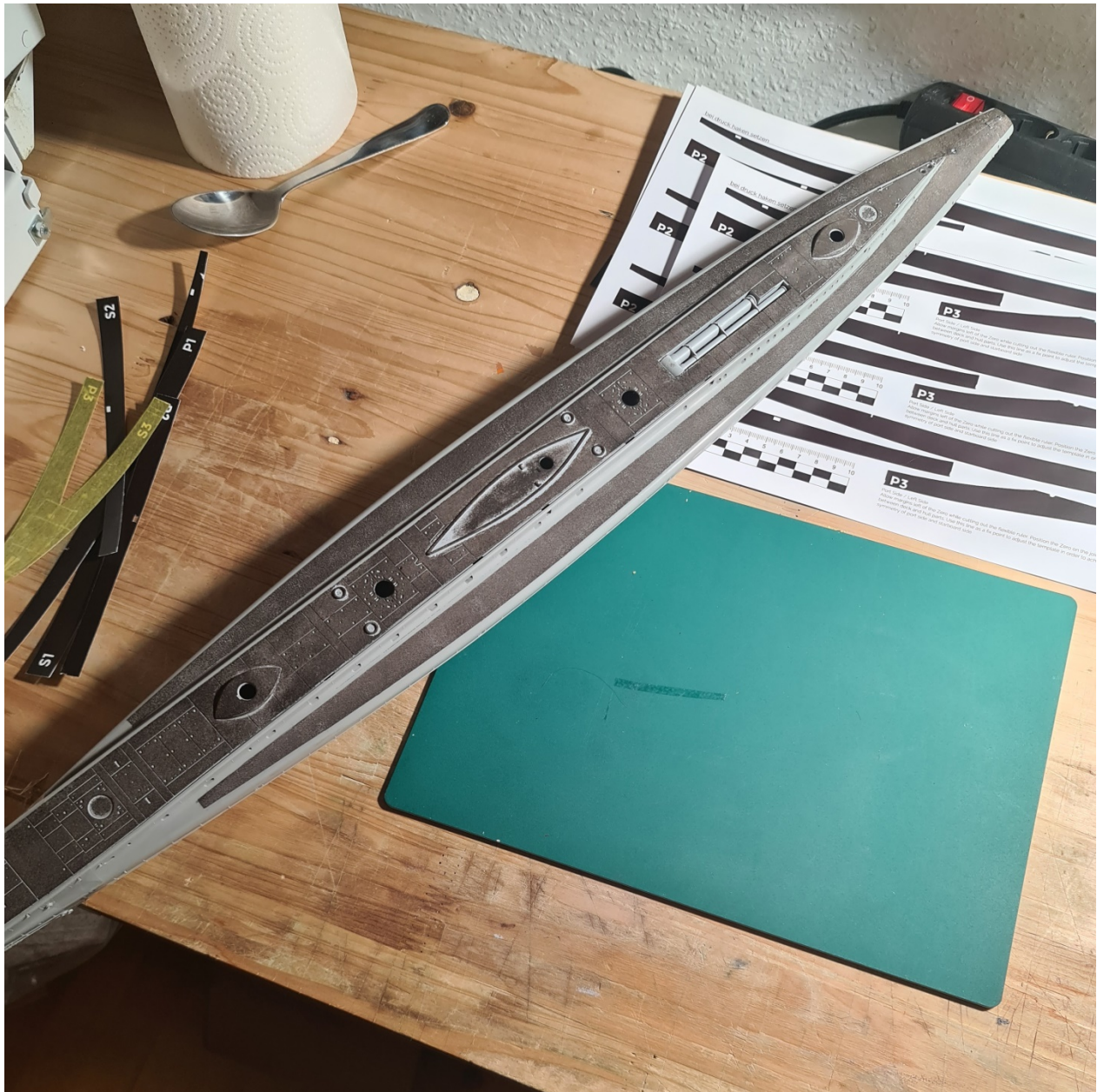
Fig.5.10.) **MR: RULER** doing his thing. On this image I'm just checking if my positioning is correct.

On the image above, the joint line of the deck part vs the hull part is being taken as a reference. (Dashed White line) We measure out what we have done on the other side and we position our tracing template accordingly on the side we are working on right now.

This method allows us to achieve symmetry while positioning the tracing template. Once the tracing template is in place, we can trace using our lead pen. In case it doesn't look ok, we can clean it up and just take a new approach.



Working with P1 and S1 (the templates being used on the forward section) is fairly easy. There is no connection between both sides as far as the pattern is concerned. MR. RULER allows us to achieve the symmetry and we can trace comfortably and apply our yellow masking tape.



THAT'S IT! YOU MADE IT!
I think these templates really made your life easier.
Do you agree?