Separation Line Between Titanic's Hull Black Paint and Antifouling Paint

By Bob Read, D.M.D.

Introduction

The purpose of this article is to address a misconception about the boundary between Titanic's black hull paint and the antifouling paint. The misconception is that this separation line between the black and antifouling painted areas is a straight line parallel with the keel.

Landmarks

To determine the location of the black/antifouling paint boundary and its shape, we must locate at least 3 landmarks on the hull. These landmarks will be at the bow, stern, and the condenser discharge opening. The bow and stern have draft numbers which help in locating where the separation line crosses them. The convention for draft numbers was that the numbers themselves were 6 inches high. At the bottom of the number was the location of that number's depth. Halfway up the number is 3 inches. At the top of the number is the depth of the number plus 6 inches. Halfway between one number and the next number above it is the lower number plus 9-inch mark. Figure 1 shows the measurements of depth and the intermediate fractions.

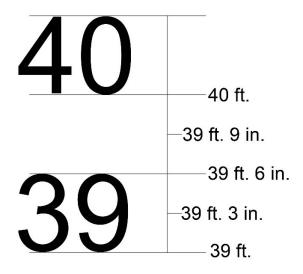


Figure 1

Draft number conventions

The Bow Location

Figure 2 shows the location of the black/antifouling line on Olympic at the bow.

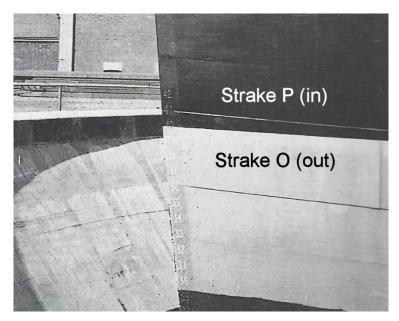


Figure 2

Bow location of black/antifouling separation line

These landmarks were the same for all three Olympic class ships. For the modeler, determining the exact location of the separation line using draft numbers would be difficult. An easier method is locating which shell plating strake the separation line crosses. On the bow we can see that the separation line crosses the upper part of strake O of the hull plating about one foot below the strake O/P junction. Strake O is the next "out" strake of hull plating below the "out" strake of the lowest portholes above it. Figure 3 is from the shell plating plan showing the location of these strakes.

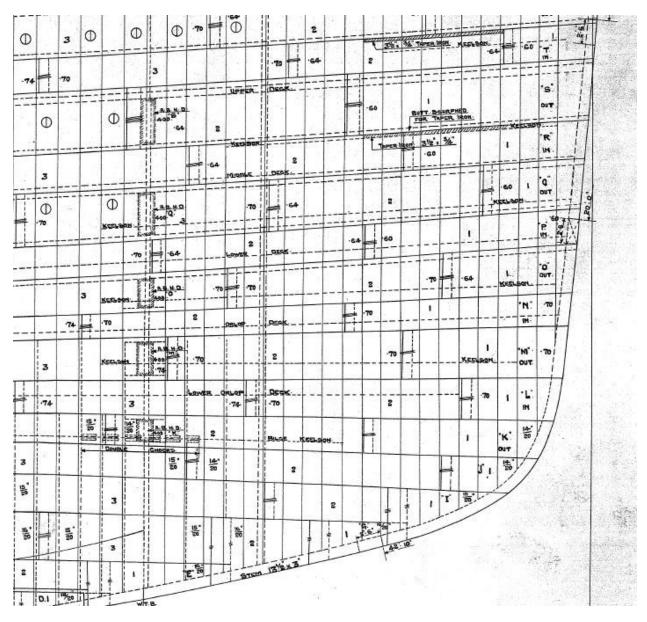


Figure 3

Shell plating plan showing plating strakes and letter designations

The Stern Location

On the stern the separation line crosses the sternpost where strakes O & P meet. This is seen in Figure 4.

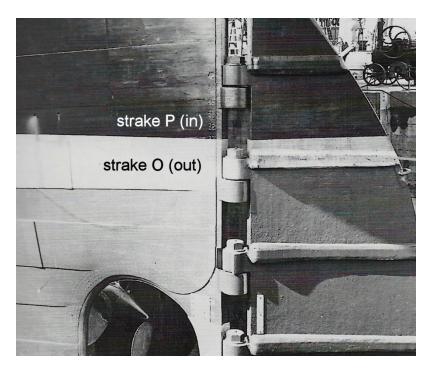


Figure 4
Stern location of black/antifouling separation line

Figure 5 shows the location of the different strakes on the shell plating plan. Strake O is the first "out" strake below the next "out" strake above it with the lowest level of portholes.

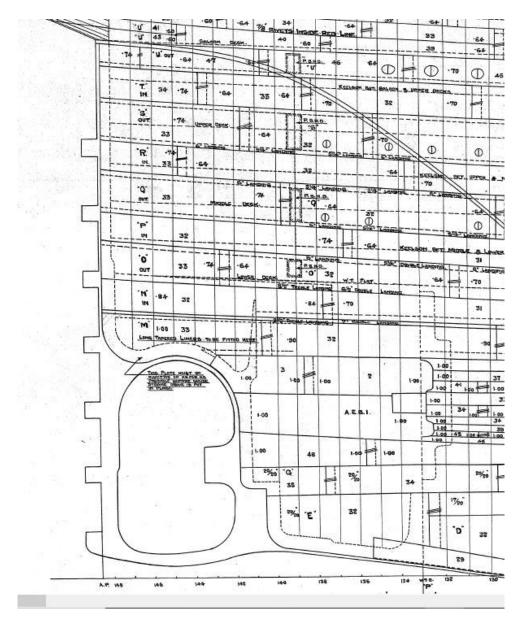


Figure 5

Shell plating plan showing plating strakes and letter designations

The Condenser Discharge Location

The third point we can clearly identify is where the separation line crosses the opening of the condenser discharge. In Figure 6 we see a photo of Olympic shortly after her launch. In this photo we can see that the separation line crosses right through the middle of the discharge opening.

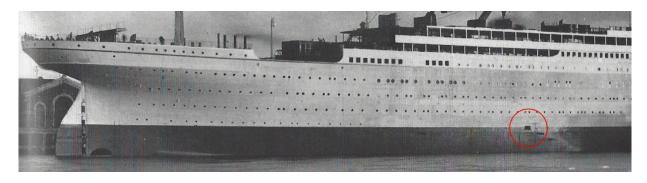


Figure 6

Condenser discharge opening

Figure 7 shows the shell plating plan with the location of the condenser discharge opening in the middle of strake Q which is the next "out" strake below the lowest portholes in "out" strake S.

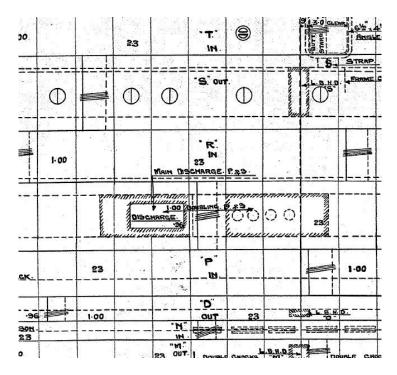


Figure 6

Shell plating plan showing location of condenser discharge

The Black/Antifouling Separation Line

Figure 7 shows a drawing of the separation line in red. If Titanic had a straight paint separation line, it would appear as the blue line in the drawing. As can be seen, a straight paint separation line would cross the bow and stern landmarks at a location lower than is actually seen in photos.

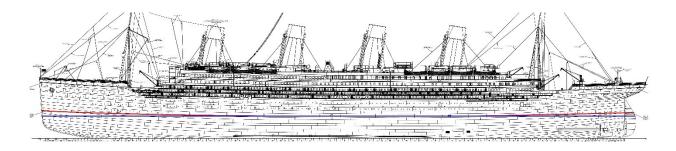


Figure 7
Black/antifouling paint separation line in red

Conclusion

This article has mainly been aimed at modelers. The paint separation line between the hull black paint and the antifouling paint is *not* a straight line. There are three landmarks which were discussed which must be observed to form this line. The line is mostly straight through the middle part of the hull. It begins to gradually curve upward at about the forward and aft well deck locations. With careful application of masking tape, an accurate curve can be formed to represent the black/antifouling paint separation line.