

**Thoughts About the Geometry of Stern Galleries**

Anyone who has built a plank on frame model of a sailing ship will probably agree that stern galleries are right up near the top of the list of challenges.

For one thing, the stern galleries often do not appear in a top view of the ship in your drawing. Of many original draughts from the National Maritime Museum that I have examined, none included such a view. And, in the frequently used drawings by Harold Hahn, you are mostly left to your own ingenuity as far as the galleries are concerned. To be fair, I will note that Jean Boudriot's drawings, and those in the *Anatomy of the Ship* books do include details concerning the galleries.

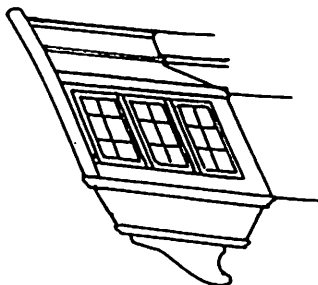
The basic problem is to determine the shape and orientation of the curves at the top and bottom of the lights (windows). Viewed from the side, the lines of the galleries should always appear to lie in the same direction as the hull moldings or planking adjacent to them. Small differences will be very obvious once the model is on display. The whole problem is complicated by the fact that the galleries are usually constructed from the bottom up. Thus the curvature at the lowest level influences the shape of the curves at the highest level.

Viewed from the top, the lines of the galleries are curves, but not just any curves. Normally, the end points can be approximately located, based on the views that are given on the drawings. In the sketch below, these would be points A - B and C - D.

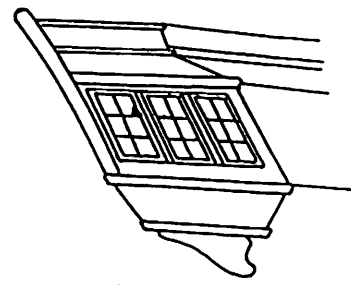
But what is the shape of the curve from A to B, and C to D? There is some leeway here, but keep in mind the following:

1. The galleries are the officers head. Allow some space for this function.
2. It will be necessary to install several windows in the galleries.

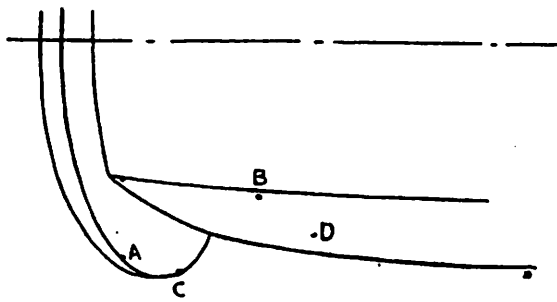
If the curves at the top and bottom of the galleries are not of similar shape and orientation, you will eventually have an unpleasant surprise because you will find that the window areas are not flat. To fix this problem, you can start over, or use plastic windows that bend, or make the windows of several small panes of glass, or tolerate a condition where the windows are recessed varying depths from the outer surface of the gallery. None of these options are very pleasant. It is better to plan ahead. Some of the pitfalls are illustrated below. *Editor*



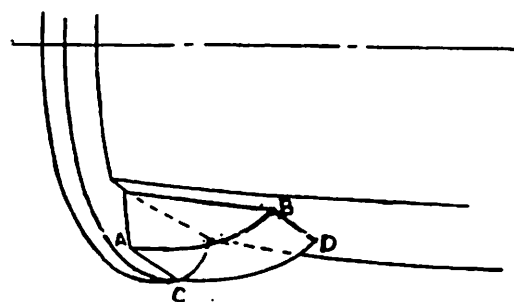
**CORRECT**  
(Gallery Lines Parallel to Moldings and Planks)



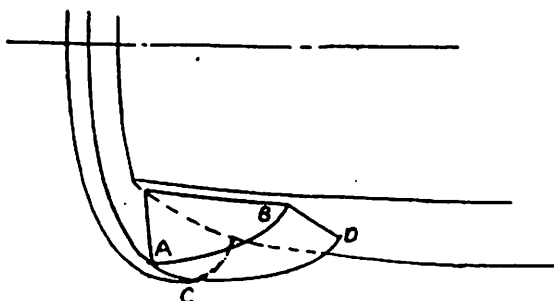
**INCORRECT**  
(Lines not Parallel) *89R 12-96*



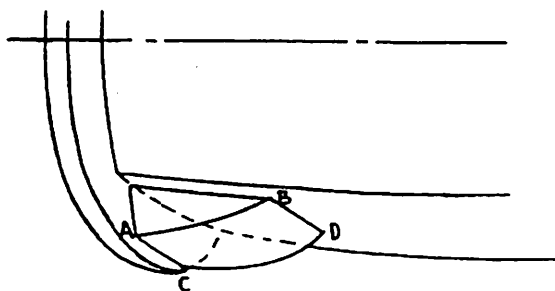
Top View  
(Approx. Stern Gallery End Points)



**CORRECT:** Upper and Lower Curves Similar, with Same Orientation



**INCORRECT:** Curves Similar but Orientation Different



**INCORRECT:** Curves not Similar

*89R 12-96*