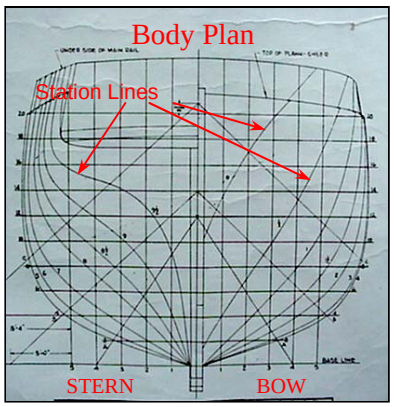
Interpretation of Ship's Lines

At first glance, Marty Meyer's task for the April meeting would seem to have been a pretty easy one. Just explain how to interpret the lines commonly found on ships' plans and to demonstrate how two-dimensional lines can be used to construct a

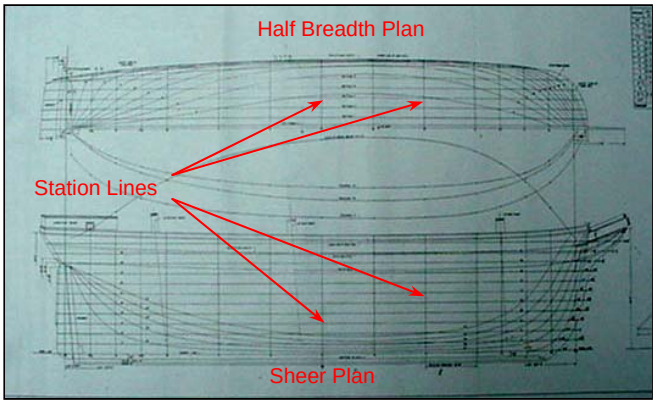
three-dimensional model ship. Well, like the old song once said, "It aint necessarily so."

Marty is a veteran of numerous presentations, and it didn't take long for him to realize that he might not be getting through. When he asked the membership if they were on the same page with him, the silence was deafening. To his credit, he backed up a little bit, and repeated certain key points. As questions began to emanate from around the room, it became apparent, progress was being made.

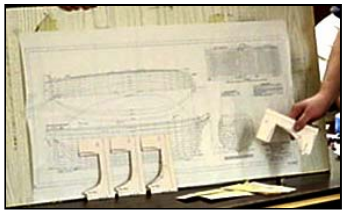


With the help of a set of *Charles W. Morgan* plans, Meyer explained how station lines, water lines, and buttocks lines all relate to each other to give a precise picture of how a real ship's hull was shaped.

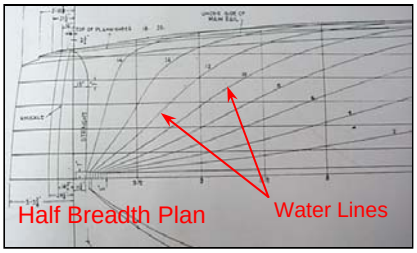
Probably the most valuable of the three views is the Body Plan. Templates or bulkheads can be made from



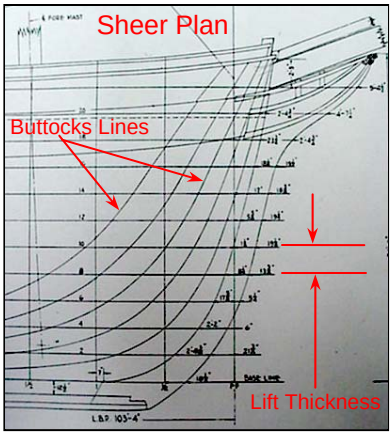
the station lines, which show the shape of the hull at various points along its length. These points can be taken off the Sheer Plan or the Half Breadth Plan. Both will give you the correct spacing.



Marty exhibited some templates, which had been used by Sid Wotman for carving the hull of his *Morgan*. Meyer pointed out that when making bulkheads for a plank-on bulkhead model, it must be remembered that the Body Plan shows only half the shape at any station, and mirror image halves must be made to complete the shape of the bulkheads.



If you are contemplating a scratch-built bread and butter type hull, then you will need the lines depicted on the Half Breadth Plan as well as Station Line templates. These lines are referred to as Water Lines. The thickness of each lift you cut will be determined by the distance between two adjacent water lines as shown on the Body Plan or Sheer Plan. Once the lifts are glued together, the templates made from the Body Plan are used to shape the hull.



When you understand the concept of how the lines relate to each other, it's not difficult to plot new water lines or station lines, which are especially valuable when building a plank-on-bulkhead model.

Merely draw a vertical line on the Half Breadth and Sheer Plans, at the point where you wish to insert a bulkhead. It then becomes a matter of transferring the points at which this line intersects the buttocks lines and waterlines to the Body Plan. Ship's curves will help to plot out the final shape. Nothing to it. Huh?