

Half Hull Models

Bob Filipowski opened his presentation with what might be considered a confession. He stated that like most people, he has usually given half hulls on exhibit at maritime museums, very little attention. Yet, he'll be the first to admit that these artifacts are arguably some of the most important items on display. They were the primary tool by which shipwrights designed, and built vessels of all types.



The half hull models in this photo at the Smithsonian are obviously not the primary subject. Bob was hard pressed to even find these!

Filipowski passed around some photos of half hulls, which he had taken at the Essex Maritime Museum and the Smithsonian. He admitted that he had difficulty finding any pictures at all, and in one case the half hulls were in the background, and not the primary subject.

The use of half hulls as a building tool dates back to the late 18th or early 19th centuries. When one considers, that in all probability, a half hull was carved for just about every vessel built in the eighteen hundreds, not many have survived. One reason for this was the fact that many were cut into sections after the design was approved by the future owner. These pieces were then used to lay out the full size frames. This practice was especially common in smaller yards, where craft of lesser tonnage were the specialty.

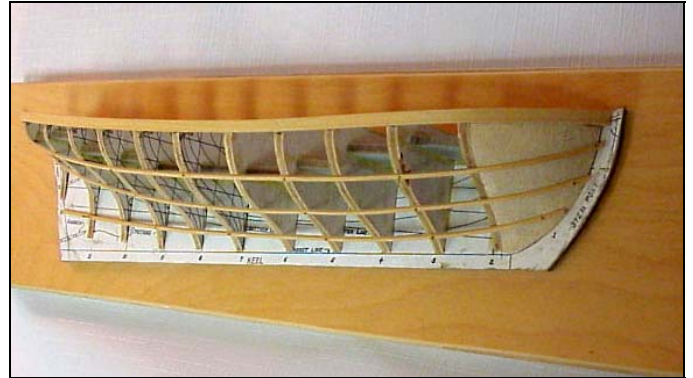


Some very nice half hulls at the Essex Maritime Museum. These examples represent fishing vessels, which were built in Essex yards.

Authentic half hulls were very plain in appearance. Other than possibly being marked with some lift or station lines, they usually lacked any external features, including the

keel, stem, and stern posts. They also could be pretty beat up from the handling they received during the construction of the vessel.

Although it's their sheer simplicity, which makes them popular as a short term modeling project, many modelers like to add their own embellishments. This can range



One of several half hulls based on the *Fair American*, which were made as training aids for spiling. The bulkheads were made by gluing photocopies of the station lines on to plywood, and then cutting them out. Simple, but effective!

from exotic woods to a considerable level of detail such as coppering, figureheads, deadeyes, and deck furniture. Bob has even seen half hulls with wooden sails! Whatever your inclinations are, they all make great decorative items.

Filipowski stated that a basic understanding of station and lift lines, and how they relate to the actual hull of a ship is essential in constructing an accurate model. He then proceeded to give an abbreviated explanation of their function. It is somewhat ironic that constructing a half hull using station lines is the exact opposite of what actually occurred.

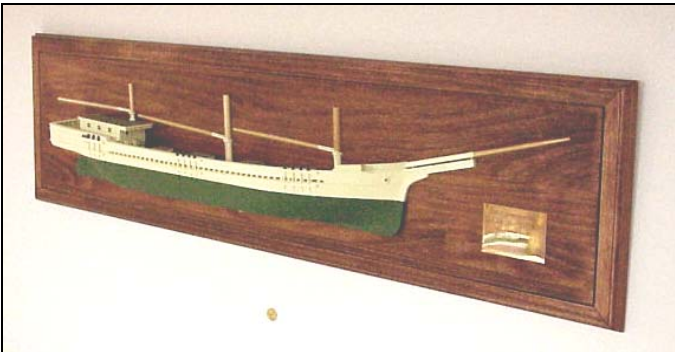
Originally, a half hull was carved to lay out the station lines!



The clipper ship *Black Hawk* - A Northeastern kit that was built pretty much right out of the box.

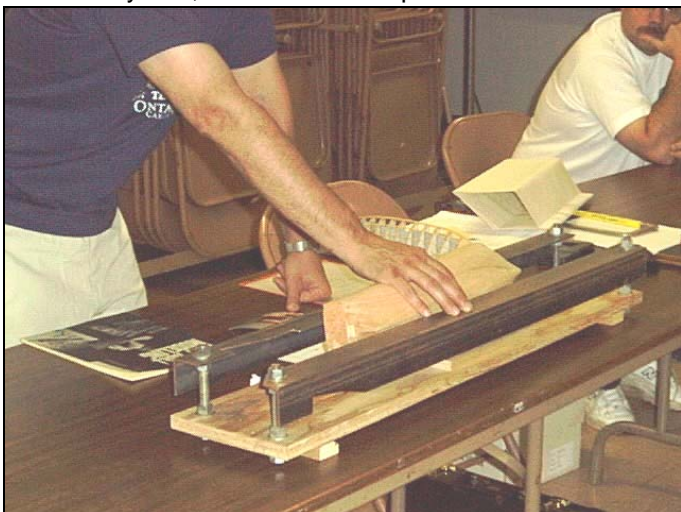
Bob brought in three models for his presentation. Each had a different origin, and reason for being built. The first was a small half hull of the *Fair American*. It was one of several, which had been built as training aids for spiling, and was nothing more than a series of bulkheads with battens attached. Never the less, it clearly demonstrated the concept of station lines transformed into bulkheads, which could be used to build a model.

The second offering was the clipper ship *Blackhawk*, which was a kit once marketed by Northeastern. Bob admitted that this piece was pretty much a “shake & bake” model, which had been a short diversion. Although this particular work had been built straight from the box, Filipowski indicated that he had seen other examples painted black with white trim, and a copper bottom, which was very impressive.



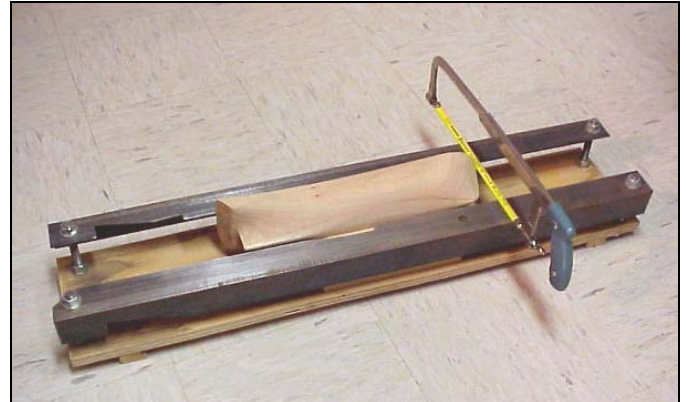
The third half hull, the Great Lakes schooner, *Lucia A. Simpson*, was probably the most intriguing. Originally started in 1961 as a full hull model (bread and butter construction), this piece languished on the workshop shelf for almost 35 years!

Finally, in 1996, Bob decided he would either throw it away, or make it into something “displayable.” He had toyed with the idea of converting it to a half hull for a number of years, so he devised a plan.



Bob explains the cradle he designed for turning the *Simpson* into a half hull. Note the ½” threaded rod, and double hex nuts used for adjustment. The hull in the photo is the Model Shipways kit *Eagle*.

Since he didn’t own a band saw, and he suspected that the lifts had some internal wood screws, he decided to use a hacksaw with a 14 tooth/inch blade. To ensure that the cut would be straight and true, a cradle was devised that would secure the hull on its beam. Two lengths of 2” x 2” x 1/8” angle iron, mounted on ½” threaded rod, were then placed on either side of the hull. The threaded rod and a double nut setup allowed the height of the angle iron to be adjustable.



If you have a friend who owns a band saw, you really don’t need this setup. Bob ran into wood screws while cutting the *Simpson* in two. So, it was probably a good thing that he did it this way. Slow, but sure!

With two wood screws being encountered along the way, it took approximately two hours to saw the hull in half. The *Simpson* was in pretty bad shape from 35 years of neglect, so the kept portion had to be completely refurbished. Although not up to Bob’s present standards, as much of the original structure was retained as possible, for sentimental reasons.

Bob suggested that this technique would be a great way to “dispose” of an unwanted kit. Can’t sell it? Turn it into a half hull, and give the other half to a friend! Better yet, make port and starboard versions. One very basic, and the other planked, painted, coppered, and some fittings from the kit added for good measure. They’ll make great conversation pieces!