

# The 1940 Restoration of the Yacht DILEMMA

By Tom Morgan

I FIRST SAW DILEMMA in the fall of 1940 about two years after her arrival at the Newport News Shipyard. After unloading, she was placed at the west end of the Reduction Gear Machine Shop, an area away from the normal activities of the yard and an ideal, somewhat secluded spot, to be revitalized.

Our group, all local small boat sailors of the lower James River, and close friends, consisted of the writer, Bill Osborne, Dick Osborne, Jimmy Nicholson, and Jack Maclay. We attended the Apprentice School of the Shipyard and worked on the DILEMMA in our spare time.

We had long entertained the ambitious idea of jointly buying a large boat to race, a notion that all young sailors aspire to. I think it was Bill Osborne, a worker in the adjacent Reduction Gear Shop, who called our attention to the DILEMMA and suggested that we look into buying it.

We had no knowledge of the DILEMMA's important background but learned that Captain Roger Williams had obtained

her for the Mariners' Museum. When we contacted Captain Williams, he detailed the DILEMMA'S historic significance and his plans to have her restored and put on display in the Museum. He suggested that if we would do the restoration work, with the

yard furnishing the materials, he would turn her custody over to us to sail, as much as we cared, before turning her over to the Museum. The offer was a rare opportunity for amateur sailors and we readily accepted.

Apparently, since no effort had been made to reconstruct the DILEMMA following her arrival at the yard, he took advantage of our inquiry to make his offer. It was a fortunate agreement because it would have been a futile venture for us, considering the expense involved, to undertake the project alone.

The yard assigned a charge number to the project for the purpose of requisitioning materials and sundry supplies: however, much of this was done on a gratuity basis. The news of the project seemed to have spread around the yard beforehand, as good cooperation was extended to us by the yard's personnel.

A new profile drawing, drafted from the original Herreshoff drawings was prepared by Jack L. Stevens of the Hull Technical Department. Stevens also prepared a detailed drawing for the fabrication and attachment of the new keel which was constructed of mild steel plate.

Perhaps the most critical and demanding part of the restoration was making the new keel and attaching it to the hull. Using templates, the keel plate and angle bars were laid off in the Anglesmith Shed.

RESTORATION - continued on page 3

*The offer was a rare  
opportunity for amateur sailors  
and we readily accepted*

**RESTORATION - continued from page 2**

The fabrication and riveting was supervised by my father, who was the foreman in charge of the shed. When this operation was completed, we laid off the keel bolt holes on the angle bars for drilling. Then the assembly was hot-dipped galvanized in the large tanks of the Galvanizing Shop.

Patterns of the lead ballast were made in the Pattern Shop and the two halves were cast in the foundry. They were bolted to the keel with three 3/4" diameter galvanized bolts. The completed assembly was blocked upright and the DILEMMA was lifted and lowered over the keel by the yard's crane. To our great relief and satisfaction, every bolt hole lined up perfectly. The total weight, including the lead casting is 5380 lbs.

While the keel was being fabricated in the Anglesmith Shed, we replaced the midship section of the longitudinal keel bolt stringers, which had been cut when the original keel was removed. These stringers fit over the floors and extended well beyond the ends of the keel to distribute the enormous weight of the keel. They also incorporated the mast step and absorbed axial loads of the mast.

Again, wood batten templates were made to duplicate the exact length and shape to fit the new sections in place. They were joined to the original section with 1/4" thick galvanized splice plates. Also, two lifting pad weldments were fabricated and installed over the stringers connected by four keel bolts each to facilitate lifting the boat with a wire rope sling.

Keel bolts, having diameters to suit the original holes, were installed and set up tight. With this accomplished, our work was focused on the brass diagonal strapping between the frames and hull planking. This strapping was a technique used by Herreshoff to provide lightweight strengthening to the hull, particularly at the high stress area around the shroud chain plates. The strapping was secured with brass screws which had corroded and become loose. We rescued the strapping using larger diameter screws where this could be done; however, some of the screws were inaccessible.

The cedar hull planking was still in remarkably good condition: however, there were five or six broken ribs that needed to be repaired. A steam box was devised to facilitate bending new ribs that were placed along side the fractured ribs and secured. Also, a few of the deck beams were repaired in the same manner. In general, these repairs were minor and quickly accomplished.

A new bobstay fitting for the stem was made from details shown on Jack Stevens' drawing. Whereas, the drawing called for casting, Jack Maclay machined it from bronze bar stock. It was installed, recessed in the stem, with flush head bolts to secure it.

The spade rudder, which had been removed at Fishers Island was installed and secured with the original rudder post retaining rig. The original bowsprit was installed along with the new bobstay and turnbuckle.

Work progressed steadily during the winter months of 1940 and, beginning with spring, the final stage of cleaning, sanding and painting started, as well as refinishing the spars.

After the keel was painted and anti-fouling applied, the DILEMMA was moved to the yard's waterfront for rigging. Skipper Larsen, my boyhood hero of the North Beach, who worked on the yard's rigging loft, fitted the DILEMMA with new standing rigging. I can remember him making splices in the wire and rope stays and serving them with marlin, a practice seldom used today. Skipper Larsen, who years later was to become vice-president of the shipyard, rigged my first sailboat and also Spencer Plumber's.

When the standing rigging was completed, the DILEMMA, all spic and span, was re-launched July 19, 1941, and towed to a mooring off the Hampton Yacht Club in Hampton Creek. There the running rigging and beautiful new blocks, furnished by W. H. McMillan and Sons, were installed. Ratsey & Lapthorn furnished new sails from Jack Stevens' drawing. The mainsail was a high peak gaff rig, with a long overhanging boom and the jib was full hoist self tacking with a club that extended

*I dropped below deck on my haunches  
and worked my way forward looking for  
leaks*

beyond the  
end of the  
bowsprit.  
The jib luff  
was wire  
rope (no  
hanks)  
which

provided a tight leading edge when needed.

I remember, probably our first sail, when Jimmy Nicholson and I took the DILEMMA out for a picture taking spin in Hampton Roads. It was a calm, light air day, but the wind filled her sails and she demonstrated the speed for which she was famous half a century before.

Mr. E. P. Griffin, the yard's photographer, took several pictures that displayed the DILEMMA'S powerful rig. During this outing, we passed close by some watermen in a workboat. They were surprised to see DILEMMA glide smoothly along and asked if there was a motor propelling her. With a puff of wind, she would heel slightly, then straighten up, smoothly accelerating ahead, something we hadn't experienced in our centerboard boats.

On another occasion, that turned out to be the DILEMMA's last sail, we were sailing in a stiff autumn breeze on the James to take her to a winter anchorage in Deep Creek, located near our neighborhood. The wind was blowing straight down the river which meant a beat of about five miles to Deep Creek. It was late afternoon and the sun was close to the horizon. Sailing along at a good clip, we began to notice a small accumulation of water in the bilge. We were puzzled at this, because there was no spray coming over the sides. To investigate, I dropped below deck on my haunches and worked my way forward looking for leaks. I didn't see any and as I turned to return to the cockpit, my eyes swept the windward side just as a puff hit, and at that moment I saw a glint of sunlight through the hull seams near the chain plate. Under the strain of puffs the seams were opening just enough to let the spray of water outside seep in. I think it was right then that we realized that the DILEMMA had reached true museum piece status!

RESTORATION - Continued on page 4

**RESTORATION - continued from page 3**

Apart from the fact that the DILEMMA had survived for fifty years, we certainly didn't want to jeopardize her safety. So after wintering in Deep Creek, she was towed back to the yard, lifted from the water and transported to the Museum, where she is blessed with an institution fully aware of her special nature.

There, she was placed on permanent display as a joint memorial to the designing genius of Nathanael G. Herreshoff and the yachting enthusiasm of Clifford O. Mallory and Captain Roger Williams, who were the persons responsible for the preservation of this historical craft.

It was a fascinating experience for those of us who had a part in the notable achievement of her restoration. Indeed, she is our sweetheart too!

**CHRONICLE.**

Herreshoff Marine Museum  
One Burnside Street. P.O. Box 450  
Bristol, RI. 02809-0450  
P:(401)253-5000  
F:(401)253-6222  
E: herreshoff@ids.net

Editor: Carlton J. Pinheiro  
Design/Layout: Mark Holden  
Contributors: Clarence DeWolf Herreshoff, Tom  
Morgan, Barbara H. Rockwell, Carlton Pinheiro  
Published in Bristol, Rhode Island

All rights reserved. Reproduction without permission is prohibited.