

X-ray sextant ▶ Power voyaging bilge systems

OCEAN NAVIGATOR

MARINE NAVIGATION AND OCEAN VOYAGING

March/April 2018
Issue No. 246
\$4.99 U.S. \$4.99 Canada

OCEAN VOYAGING
TRANS-ATLANTIC ON THE DIAGONAL
South Africa to Canada

BLISTERS
ON A
TENTED RUDDER

SPECIAL SECTION
BATTERIES



New holly and wild cherry floor

STORY AND PHOTOS BY RICHARD DE GRASSE



Above, Kathy DeGrasse working at an outside work table. Right, making measurements and making templates.

We had wanted a new cabin sole/floor in our 1972 Tartan 34.5 for several years. The original 45-year-old, 1/8-inch cork sole was still mostly intact but it looked old and seedy. Due to an unforeseen month's delay in our bottom-stripping job, we had at least four weeks for a new sole project and the late winter/early spring climate was

conducive to a boat project. We planned to live on the boat during the entire project.

After pondering the few flooring options for a hull-conforming cabin sole material, we determined we couldn't use typical 4-by-8-foot sheets of 1/4-inch teak and holly plywood because it would be difficult to conform it to the curvature of the hull sole. We settled on the only realistic material that would work: Lonseal vinyl flooring. We were skeptical of vinyl material — images of old, worn, tired kitchen floors came to mind — but we studied the floor samples and noticed that it was thicker than typical vinyl and that the Lonseal material would conform to the sole curvature. Even though there were at least three sources of the same Lonseal flooring material, we chose Plas-TEAK as our supplier because they sent us samples, offered matching trim, talked with us and made important suggestions on how to proceed. We chose wild cherry and holly rather than teak and holly because the wild cherry more nearly matched the existing aged and oiled teak cabinets along with the teak trim in the cabin.

I measured and re-measured the entire sole. A sheet of graph paper is essential to be able to purchase the right amount of material and be able to match the holly lines when you join them together end to end as you must. As it was, we bought 12 lineal feet of 6-foot wide material — more than enough to do the 14-foot long cabin sole. I considered joining the pieces end to end, carefully



matching the holly lines, at the narrowest point of the sole slightly aft of the head and just under the forward V-berth. Remember, we were living aboard! There are six separate sections that make up the total cabin floor: the main cabin and galley, under the forward V-berth, under the port-side folding table, the section next to the quarter berth and, finally, two separate small floors in the head.

I roughly graphed the floor on graph paper, recognizing that this isn't just a plain single material floor — it's a wild cherry floor separated by holly floor strips every 2.5 inches. This means the holly lines of all six sections must run straight fore and aft aligned with the centerline of the boat. We chose the initial straight edge to be along the starboard side of the centerboard trunk and shaft log, which were covered by three 3/4-inch solid teak bilge boards. Because the holly lines had to run parallel with the centerline of the boat, the flooring material would properly conform to the curvature of the hull as the floor extended out to the sides. I was especially careful in graphing the six different floor sections. As best as I could determine, we needed to cover about 38 square feet of floor.

As a result, I chickened out and ordered more than enough material. We spent roughly \$800 total on materials including 72 square feet of Lonseal flooring (a 6-by-12-foot roll, the holly lines run along the 12-foot length) and edge trim for the bilge boards, heavy butcher paper for templates, Evercoat Formula 27 filler for the seams and dings in the old cork



Top, the Lonseal vinyl flooring is flexible and can conform to the shape of the hull. Above, Kathy applies adhesive to the old cork sole material.

floor, vinyl adhesive and a notched trowel. I even bought a new utility knife with 10 extra blades for cutting the floor material! Most important, I was able to borrow two essential stainless-steel tools: a 48-inch straight edge and a 48-inch T-square.

Before we received the flooring, we removed and labeled all 20 pieces of 3-by-3/8-inch teak baseboards. There was a little trouble removing a few of the old antique brass screws, but the 45-year-old baseboards mostly came off intact. To my knowledge, water had never been over the floorboards, even on our Atlantic crossings. Of course, I was hoping the 3/8-inch baseboards would cover the raw edges of the new floor and that the old antique brass screws would go back in the same holes after we raised the existing floor the approximate 1/8-inch thickness of the new floor. Next, we applied Formula 27 and filled and sanded the seams and dings in the old cork floor. The old floor had to be finished smoothly or imperfections would show through the finished floor.

Next came the most important part of the project: the templates. A template had to be carefully made of each section. We discovered there is an art to making a template. A 50-foot roll of heavy brown butcher's paper comes 3 feet wide. Using the factory edge of the paper, we lined it up with the centerboard trunk starboard edge, roughly cutting the piece slightly smaller than the actual sole width. We taped the developing template to the existing cork floor and taped additional pieces all around the edges to fit the actual contours of the floor. Lots of paper

VOYAGING TIPS

and blue masking tape!

Each and every template was carefully checked and double-checked on the boat sole. We didn't buy that much extra flooring so no big mistakes! When we were satisfied all the templates fit each section, we chose the main cabin to cut first since it would establish the centerline of the floor and the matching holly lines of the other sections. We used the T-square, straight edge, a large flat sailmakers table and a very sharp knife — four essential pieces of equipment necessary to cut the new flooring material properly.

We wanted to lay down the main cabin section with no athwartship seams. We soon discovered that was not practical since the main cabin's galley floor was more than 12 feet long — more than the length of the material we bought. In addition, we literally would have to spread glue while crouched under the V-berth. Work space must be considered! Besides, a small 1/8-inch alignment mistake under the V-berth could result in much bigger mistake as we rolled out the material into "wet" glue more than 12 feet aft!



A section of the new flooring after the job was finished. The Degrasses' meticulous approach yielded a boat that looked brand new below.

Doing a boat sole is much fussier than laying a kitchen floor at home. The overlap method of cutting and joining and gluing seams looked good and allowed us to create a nearly invisible seam in the less heavily trafficked area about 11 feet forward from the galley to a narrow area beyond the head. We could join the cabin section with the section under the V-berth without gluing ourselves under the V.

With the one 15-inch end-to-end athwartship seam in mind, we laid out our main cabin template on the 6-by-2-foot roll of floor material on the available 8-foot sailmakers table. The template was moved around very carefully on the floor material until the holly lines were parallel with the centerboard trunk bilge opening noted on the template. The fore and aft run of the holly lines along the centerline of the boat on the main cabin sole establishes the holly/wild cherry orientation of all the other sections.

Once we accepted the fit of the main cabin section — and checked that the old baseboards covered the raw edges — we spread the Plas-

TEAK glue with the serrated-edge trowel, starting at the forward end of the floor. We then rolled out the main cabin flooring, working aft and being very careful to line up the edges. It was necessary to leave a couple of inches unglued for the seam overlap with the section under the V-berth. We were careful to line up the holly strips with the soon-to-be-laid forward section under the V-berth. The overlap method of making a nearly invisible end-to-end seam is simple but effective: Overlap the material from the two sections about two inches and cut them both at the same time (one on top of the other), line them up and glue them

down. We used three 50-lb bags of play sand from Home Depot along with tool bags to hold it down the new material while the glue dried overnight.

The remaining section templates were duck soup compared with the main cabin. We were able to do the sole in the head without removing the toilet by cutting a short seam in the flooring material under the toilet. It was a little tricky working around the toilet without letting the new material touch the wet glue until it was aligned properly. When all the floor sections were finished, Kathy removed and coated the bottom and sides of the three 3/4-inch teak bilge

boards with West System epoxy to prevent board expansion in damp weather and/or a full bilge. She then refinished the tops of the three bilge boards with Cetol Marine Light to match the wild cherry portions of the new floor. I replaced all 20 3-by-3/8-inch baseboards with little trouble: Nearly all the antique brass screws went back in the same holes and covered the raw edges of the new flooring! It looked like a new boat below deck. ■

Richard and Kathy DeGrasse live on their Tartan 34 sloop Endeavour in southern waters during the winter and summer at Islesboro, Maine.

LONSEAL®

MARINE FLOORING



Lonmarine® Stone boasts a stylized marble pattern that helps mask the routine scuffing that can occur with heavy foot traffic, while the color offerings provide warmth and elegance.



Lonmarine® Wood features ultra-realistic graining detail with vivid combinations including teak, holly, mahogany and walnut.



United States
Coast Guard Certified



MED 2014 / 90 / EU
Modules B & D Compliant

www.LONSEAL.com