

No More Slapping!



Before, with hard chines



Rounded chine with bottom paint

March 29, 2013 | We were eagerly anticipating our first night at anchor in our new Eagle 40, *Mischief*. Imagine, a real double bed instead of the cramped v-berth we were used to in our former sailboat. But our reverie was interrupted by a persistent slap, slap ... slap, slap, slap against the hull right in our berth; sometimes on the starboard side, sometimes on port. We couldn't hear it from any other place on the boat, just the berth.

It didn't take long after that night to determine the cause of the noise, small wavelets being driven by a light breeze under the hard chine that crosses the waterline right outside the forward berth. Our previous cruising had always been in sailboats, which with their round hulls don't have hard chines and don't have the problem. On scouring the internet I found lots of other boats have that same problem and lots of other boaters comment on it. I discovered two boats that had addressed the problem, but in different ways. Grand Banks don't slap because their hard chines never rise above the waterline. And some large Selenes don't slap because the hard chines aft are modified to become round as they move forward and above the waterline. That was a hint.

But then I discovered an article by an owner of a Nordic Tug who decided to fix his boat by filling in the chine, rounding it over as it passed through the waterline. He reported an end to the slapping and no effects on handling or stability that he could detect. This sounded like the way to go.

So I found a respected fiberglass company in the area and described what I wanted to do. They probably thought I was crazy and gave me a large estimate. But I said, go ahead. They would start the rounding where the chine was about six inches below the waterline and for esthetic reasons, extend the rounding all the way to the bow. They chose to do the filling by using bending plywood (with lots of holes drilled in it) to make a form by pressing the plywood to the hull above the chine and again to the hull a ways below then filling the form with high density expanding foam. After



Transition from hard chine to rounded chine

removing the plywood they would fair the foam to the hull and then cover it in multiple layers of glass cloth, overlapping to spread loads. After a final fairing they sprayed matching gel coat for the

topsides. Below that they did an epoxy barrier coat then a new boot stripe and bottom paint.



Rounded chine after sculpting

How did it turn out? It was the single best thing we ever did to the boat. The boat is totally immune to the dreaded slap, slap, slap and even larger wave impact sound is greatly reduced. The only time we hear waves in the berth is when they are coming from the side, which is rare at anchor but sometimes happens at a dock. It was worth every penny and we would recommend the change for every Eagle owner, despite the cost. It makes all the difference.



Rounded chine with epoxy barrier coat



Finished chine transition from hard to rounded

Michael and Karen have been cruising the Salish Sea and beyond for more than 20 years, the last 11 aboard Mischief, a 40' Eagle pilothouse trawler with all the comforts of home. Visit them at mvmischief.com.