

Ben Pietro

ENGINEER ASSISTANT

“That piece is what they call the sail. It extends the height of the dry area around the hatch while the sub is on the surface, to protect the hatch from waves. It’s also a good high spot for mounting navigation equipment.

The sail is made of carbon fiber, which is very strong and light so it doesn’t add a lot to the vehicle’s weight. In previous overhauls, they’ve used a red. They wanted to go with international orange this year to make it as visible as possible on the surface of the ocean.

We’re inside the paint booth up in Clark South. We try to keep all the dust down as much as possible. There’s air that comes in through the intake and pushes out through the vents at the back. We bring the garden hose in and spray down the floor and the lower part of the wall to keep the dust down. With a showcase piece like the *Alvin* sail, we wanted to eliminate all possibilities of anything coming in and disrupting the paint. If there’s dust flying around, some of it would stick on the wet paint and the sail wouldn’t shine like it shines right now.

The paint is called AwlGrip. It’s a two-part epoxy paint. It’s nasty—it’s not stuff that you want to be inhaling a lot. You wear a full-face respiratory mask, your gloves, your paint suit.

We did three coats on this. The first one you put on is kind of spotty. The second coat, you fill everything in and make sure

it’s uniform. Then the third coat is the one that you gotta make sure it goes on perfect. You want to put it on sort of robotic-like, and paint every area with the same amount of paint. If you put too much paint on something, it’ll open up and it’ll become a big, round ‘fish eye.’

We actually had to paint this twice because the first time we did it, it didn’t come out perfect. So we had to sand it all back down again and then re-do it.

I work for UOP [the Upper Ocean Processes group]. I do mostly mechanical work—build, fabricate, design moorings. I’ve just always been able to work with my hands, and my father taught me at an early age that ‘we’ve got to fix cars, so get out there and help me do it.’ It never left me. I always enjoyed it.

I’ve been doing a lot of painting since I started here, but I’m learning as I go—I don’t have a degree in painting or anything like that. [WHOI mechanic] Victor Miller helped me a great deal with this. He taught me how to control the paint through different series of thinning it and testing the material, so you don’t get drips. He taught me more in the week I worked with him doing this than I learned in the four years that I’ve worked here.

It was a great experience and a privilege to do this for *Alvin*. I was honored to be asked to do it, and I’m really proud of the piece. ▲



Tom Kleindinst/WHOI