

The hull of Practical Sailor's freshly painted Catalina 22 shines in the Florida sun (photo above). Though the amateur roll-and-tip paint job was less than perfect, it was a vast improvement over her original dull, cracked, and stained body (photo below).

# Brush and roller in hand, PS's 'amateur' painters take on two-part topside challenge.

Is painting a boat's hull a job for an amateur painter? Should a monourethane or two-part linear polyurethane (LPU) be used? *Practical Sailor* is often asked these questions. Our answer? That depends on the painter and the paint.

With the right tools, research, and enough time and patience, any boat project is a manageable do-it-yourself endeavor. However, most of us lack the tools, time, and know-how to tackle all of the repairs and maintenance our boats require. The key is to only take on those projects that most realistically match our skills, budget, and schedule. But the trick is accurately assessing one's own skill level and the difficulty

of the task at hand.

So when it came time to freshen up the topsides of our long-neglected Catalina 22, *Jelly*, we weighed the pros and cons of doing it ourselves versus paying a yard to spray on some Awlgrip.

Our duty to answer our readers' oftasked questions and our addiction to product testing—and perhaps an underlying masochistic tendency—won out, and we decided to mount an amateur encounter of the polyurethane kind. The mission was neither swift nor painless, but in the end, *Jelly* shined with a glossy new paint job, we tucked another project under our DIY toolbelts, and our readers (hopefully) will benefit from our hardlearned lessons.

# **THE JELLY ADVENTURE**

While our panel test (*PS* August 2008) seeks out the most durable topside paint, this *Jelly* test was to determine which two-part LPU is the most user-friendly for the amateur painter and whether the project is manageable for the average doit-yourselfer.

That meant trusting *Jelly*'s paint job to *PS*'s "amateur" staff, rather than banking on the talent of editors like technical guru and former boatyard manager Ralph Naranjo (who can handle a spray gun as easily as the rest of us handle fingerpaints). That in turn meant settling for a less-than-perfect finish, but it also ensured a true test of the products' and techniques' user-friendliness.

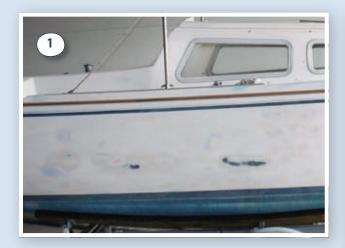
### **WHAT WE TESTED**

We chose to use the roll-and-tip painting method. It is less hazardous and requires less skill than spraying on the paint, but it does call for more deftness than brushing alone.

Testers selected two-part polyurethanes from manufacturers that historically have done well in *PS*'s topside paint

Continued on page 30









# **Starting with a Clean Slate**

- efore Jelly's hull was painted, we logged many man hours prepping her for it. Prep is the most important part of any coatings project and takes much longer than the actual painting.
- We started by washing the hull and wiping it down with acetone and lintfree cotton rags to remove any waxes or dirt that could be ground into the gelcoat by sanding. We used blue 3M painter's tape at the waterline and rubrail because it was handy, but a better choice is 3M's Scotch Silver No. 225 weather-resistant tape, which can be left on for several days.
- Testers used 100-grit sandpaper and pneumatic dual-action (DA) sanders to smooth the surface and ready the hull for gelcoat repair. (Photo 1) We opted for pneumatic DAs as they leave a smoother finish than electric orbital sanders, even when used with a heavy hand. We hand-sanded at the molded lip below the toerail and the rounded edges of the transom.
- To fill in gouges (like where the Ubolt had once been at the bow), worn gelcoat areas, and pin holes (Photo 2), testers used fast-curing two-part fillers: the vinylester-based Ad-Tech Plastic Systems No. 17 SMCR (\$17/quart) and the more expensive two-part epoxybased Interlux Interfill (\$130/gallon). (Not the difference in before and after shots of the bow in Photo 3.) Both products were easy to work with, cured quickly, and were easily faired with 150grit and higher.

- We then rubbed the hull down with Dykem No. 80660 steel blue layout fluid (\$10/4 ounces), cut 50 percent with acetone. The dye—a welcome crutch to limit the amount of over-sanding that was done—makes it easy to spot which areas need further filling or more sanding. A few more rounds of filling, fairing, sanding, wiping, and taping ensued, and then the final pre-priming once-over with the pneumatic DA and 220-grit sandpaper. (Photo 4)
- Before rolling on the two-part epoxy primers, testers cleaned the hull with the maker-specified solvents: Interlux Fiberglass Sol-
- vent Wash 202 (starboard) and Epifanes D-601 Thinner (port). Testers then went over the hull with a Bond Corp. Crystal Tack Cloth (\$4/pack) to remove any remaining surface dust.
- Using high-density foam sausage rollers, testers applied two coats each of Interlux Epoxy Primekote (starboard) and Epifanes Epoxy Primer (port). (Photo 5) Between coats, we hand-sanded with 220 arit.

Note the difference already visible after one coat of Primekote

(left) and zero coats of Epifanes (right) in Photo 3.







## MAINTENANCE









Testers judged initial gloss by a coating's reflective qualities. Epifanes presented the better gloss, in our opinion.

Perfecting the roll-and-tip technique is essential to a good finish. Taking the hull in 3-foot sections, the roller lays on the paint in vertical strokes (except at molded indentations like below the rub rail), while the tipper uses long, horizontal strokes, keeping the brush away from the body to avoid pressing too hard. It's a good idea to use undercoats to hone your roll-and-tip skils.

#### Continued from page 28

durability tests: Interlux and Epifanes. While Interlux's Perfection was released after our last test, its predecessor, Interthane Plus, took top

honors for two-part white polyurethanes, and Epifanes' Poly-urethane was named the best red or blue LPU in our four-year test published in the May 2006 issue.

On *Jelly*'s port side, we applied Epifanes Poly-urethane No. 800 white thinned with Epifanes' poly-urethane thinner, and on her starboard side and transom, we painted Interlux's Perfection Mediterranean White and used 2333N brushing reducer. (Both paints can be sprayed on, but different thinners are required.)

We also tested several fairing compounds, natural-bristle brushes, highdensity foam rollers, and two-part epoxy primers. See page 29 for more on primers and preparation techniques, and look for reports on our brush and fairing compounds test in upcoming issues.

### **HOW WE TESTED / PAINTED**

Before getting started on any first-time boat project, it's a good idea to do some homework. We searched for application tips on the Internet, surveyed boatyard "experts," and consulted our library of how-to books, the most helpful of which were "Boat Maintenance" by William Burr Jr. and "Sailboat Refinishing" by Don Casey. We browsed paint manufacturer's websites and marketing literature for instructions and any helpful advice. And we raided the *PS* archives for past tests and how-tos. (April 1, 1996; Feb. 15, 2002; May 2006; and August 2008 issues.)

The 1974, never-painted *Jelly* was in pretty sad shape. Hull shine was long gone. Her gelcoat was crazed in places; bare fiberglass showed through in other spots, and others still had deep gauges, pin holes, and scratches.

To properly prepare the hull for painting, much sanding, filling, and fairing was required, as were multiple coats of primer. (See "A Primer on Prep" on page 29 for specifics.)

We followed maker's instructions for surface preparation, priming, and application. The starboard side was primed with two coats of two-part Interlux Epoxy Primekote, and on the port hull, we applied two coats of Epifanes Epoxy Primer.

After priming, testers used blue dye to find any areas that were uneven and then sanded the hull with 220-grit sandpaper and a pneumatic dual-action sander (DA). After wiping down the hull with maker-specified solvents and tack a rag, it was time to apply the LPU paints.

Three coats of each product were rolled on using high-density, closed-cell foam sausage rollers and tipped with 3-inch Wooster and Epifanes (Omega) natural-bristle brushes. Testers wet-sanded between coats with 320-grit sandpaper, and wiped down with Interlux 202 and Epifanes thinner.

For most, two coats would suffice, but Murphy's Law, uncooperative Florida weather, and amateur mistakes led to *Jelly* getting a third coat on each side.

To determine which DIY topside makeover system was more amateur-friendly, testers rated the products on the following criteria: how easy the product was to lay on, how forgiving it was, maker-supplied instructions, finish hardness, and initial gloss.

## **WHAT WE FOUND**

For select jobs, you may find that one coat of Epifanes Primer covers well enough, but in our opinion, two coats of the Interlux Epoxy Primekote will always be necessary. We ended up doing two coats of both for better coverage in areas like *Jelly*'s blue bootstripe and where pink and gray fillers were used.

When it came to hand-sanding be-

VALUE GUIDE 2-PART PRODUCTS FOR AMATEUR DIY TOPSIDE PROJECTS						
MAKER	PRODUCT	PRICE/ PRICE SOURCE	SIZE/ COST PER OZ.	DIY FRIENDLINESS	INSTRUCTIONS	INITIAL GLOSS
INTERLUX 🖊	Primekote Epoxy Primer	\$43 / westmarine.com	Quart / \$1.34	Good	Excellent	Good
EPIFANES	Poly-urethane Primer	\$50/jamestowndistributors.com	29.5 oz. / \$1.70	Good	Excellent	Good
INTERLUX 🖊	Perfection LPU paint	\$78 / westmarine.com	Quart / \$2.45	Fair	Good	Excellent
EPIFANES	Poly-urethane	\$55 / jamestowndistributors.com	29.5 oz. / \$1.86	Fair	Good	Excellent
✓ Recommended XInterlux						

tween coats, the Epifanes primer, like its LPU, was much harder to sand than the Interlux, but it also left a harder finish—a bonus for durability but a drawback during application.

There was a noticeable difference in the workability of the LPU paints. The Epifanes Poly-urethane had a tendency to dry much quicker than the Interlux, making it hard to keep a wet edge and easy to leave holidays. Adding thinner dropped the viscosity too much. Perfection's "open" time (time where it can be brushed without leaving marks) was significantly longer than Epifanes, a major bonus for the novice.

Both paints pulled together well as they cured, but the Perfection seemed more forgiving, in our opinion. In some spots on the Epifanes side, the brush strokes never pulled together. (Admittedly, this may have been an application hiccup, but the goal here is to identify the most amateur-friendly coating.)

Both paints offered acceptable gloss, not exactly a slick, sprayed-on shine, but better than expected. Reflection tests showed Epifanes Poly-urethane to have the upper hand in gloss ratings. (See photos, page 30.) The difficulty testers had in sanding the Epifanes (primer and LPU) is a testament to its hardness.

Epifanes does offer detailed instructions, but we prefer Interlux's idiot-proof approach with spelled-out, step-by-step directions on the cans and downloadable information, including how-to videos, on its website. Epifanes offers limited application tips online.

#### **LESSONS LEARNED**

The Jelly topside project was not without its stumbles, but rather than recount all the things that went wrong, we offer this brief rundown of knowledge gleaned from the experience.

• The right tools and supplies make the job easier: Don't skimp on sandpaper or brush quality; use a soft, wide, full brush with natural bristles (expect to spend \$30-\$40 for a good brush); use maker-specified solvents.

 Prep brushes and rollers by going over them with tape to remove lint, fuzz, and stray bristles. Clean brushes immediately after finishing a coat.

- Paint a white hull white; a dark paint could result in print-through.
- Be aware of the weather: Do not paint in the direct sun, and if you live south of the Mason-Dixon, buy plenty of thinner. As the humidity climbs, so will the paint's thirst for thinner. (You'll also want to have enough for cleanup.)

Perfection

• Keep an extra clean brush and extra paint on hand in case one brush gets dropped or paint spills during application.

Wet the ground around the boat to keep dust down.

• Try vertical and horizontal tipping. For Perfection, Interlux recommends rolling vertically and tipping vertically, but we had better success rolling vertically and tipping horizontally.

For more tips, check out the "DIY Notebook" from the August 2008 topside paint review. Also, look for it with the online version of this article at *www.practicalsailor.com*.

## **CONCLUSION**

For amateur do-it-yourself application of a two-part LPU, we recommend Interlux Perfection. It's more forgiving than its Epifanes counterpart, and idiot-proof instructions are easy to come by. Epifanes Poly-urethane, a harder, glossier finish, is worth considering for the more advanced painter or for those hiring a pro. Is the super-slick look of a professional, sprayed-on Awlgrip job achievable for the beginner with a roller and paint brush? Not without a fair amount of practice at roll-and-tipping and experimenting with flow. If a mirror-reflection is the look you want, hire a pro.

If you'll be happy with a finish that's not-too-far from perfect but perfect from afar, then try your hand at self application. DIY topside painting is a feasible project with the right product, but we do recommend practicing on a fiberglass dinghy,

rudder, or piece of glass before touching your hull.

All told, the project's two testers spent about 60 hours prepping, priming, and painting. We estimate the supply cost to be about \$450 for the whole project—a savings of \$1,000 or more over having it professionally prepped and painted.

So was the *Jelly* test worth it? While we're much happier now that Jelly

has a fresh face, getting her there was a tough road. We learned a lot along the way, and take pride knowing that her clean look is a result of our hard work, which afterall, is the DIYer's mantra, is it not?

Now that we've recovered from all that sanding and the white paint has finally come off our fingernails, we're turning our attention to one-part topside paints. We plan to paint *Jelly*'s decks and the hull of our O'Day Javelin test boat with Epifanes Monourethane and Interlux Toplac one-part paints. Stay tuned for more tales of topside fun, including our one-year update of the long-term panel test.

#### **CONTACTS**

**EPIFANES,** 207/354-0804 www.epifanes.com

**INTERLUX,** 800/468-7589 www.yachtpaint.com

PRACTICAL SAILOR AUGUST 2009 31