



Superyacht Pit Stop

A Florida repair business thrives on a tireless work ethic and a willingness to take on any job.

Text by Dan Spurr
Photographs courtesy
All Points Boats
 (except where noted)

Nathan "Nate" Goodwin, 44, grew up in Maine, but spending summers at his grandfather's place on Southern California's Catalina Island was where his love of boats matured. In adulthood he took to fishing and racing sailboats...and learning to repair them. So when he settled down, as it were, he bought five shipping

containers, rented some yard space (no building) at the Lauderdale Marine Center (LMC) in Fort Lauderdale, Florida, and started a business fixing boats. The name he chose, All Points Boats, is accurately descriptive.

Last we heard from Goodwin was 10 years ago (see "All Points Boats," *Professional BoatBuilder* No. 93),

Above—A welder executes the exterior cap welds in the shell plate at All Points Boats (APB), in the Lauderdale Marine Center (LMC), Florida. Welds require complete non-destructive testing (NDT) before coatings are applied. Company owner Nathan Goodwin says surveyors and class societies typically stipulate the type of testing, which could involve mobile X-ray, vacuum, ultrasound, dye penetrant, or lab analysis. **Right**—LMC bills itself as the largest such facility in the U.S., able to haul and service any number of superyachts at one time.



DAN SPURR

during a visit to the LMC in 2004. In 2014, on the 20th anniversary of his first container rentals, we caught up with him to see how his operation had developed.

He's got an office now and a desk, but it's doubtful he ever sits at it. In fact, at one point during my visit he muttered something about hating it. He'd rather be out with his crew and the boats, buzzing from one shop or boat to the next, responding to one walkie-talkie call after another. It's kind of crazy, but he seems to love the urgency.

"You want to talk first or get out and see what we're doing?" he asks me.

"Get out," I answer. I can tell he's excited to show how much the business has grown.

"Good," he says.

And off we go on a golf cart. LMC is so big the carts are everywhere. Billed as the largest marine service center in the country, the 60-acre (24-hectare) LMC is a one-stop shop for superyacht captains, who can find experts in every field to work on their charges, as well as very nice accommodations and workspaces while they are laid up. APB has grown with the center, now employing around 30 people year round in multiple shops in several different buildings, including wood, metal, composites, paint, and others. A mobile welding team provides service at other area marinas. At any given time they may be working on 15-20 boats with myriad work orders for each.

First stop was a bay in APB's main hall, where Goodwin is rebuilding a 1986 Blackfin 32 (9.8m) as a company vessel to train new apprentices including his own sons. The old MerCruiser 350s had been removed and the interior gutted. "Bill Blount [of Donald L. Blount and Associates, Chesapeake, Virginia] is doing a full engineering package," he says, vowing to put the boat on "steroids."

Beyond the pleasure of working on a boat of his own, he plans to set up his sons in a fishing charter business with this one. He's figured out most of the specs himself: Cummins QSB 6.7L engines, 2:1 ZF transmissions. Humphree auto cruise control with interceptors in the tunnels. Though superyachts are the core of APB's business, Goodwin sees restoration of classic boats as a promising niche. "Many clients love their classic boats;



DAN SPURR (ALL)



Above left—One of the ubiquitous golf carts is parked in front of APB's wood shop. **Above**—At LMC, anything can be repaired, including hydraulic rigging systems. **Left**—Straight Line Marine, in a shop adjacent to APB, specializes in shafting—turning new ones and straightening out-of-line shafts.

they just want them modernized with the latest components and modern materials. I truly enjoy working on the classics; it's just hard to find the right owners that are willing to pay for our level of detail and quality."

A walk-through of APB's various shops is a tour of primary marine-industry trades: pipefitting, welding, hull repair in metal and composites, custom fabrication in the aforementioned materials, and carpentry. "Our services offered have evolved and expanded from refinishing and composite work to one of a select few who offer ABS, Lloyd's, RINA, MCA, USCG, and other classification-society-approved metal fabrication, welding, machining, plumbing and pipefitting,

valve testing, composite and fabrication repair, and installation of major machinery," he says. Goodwin delved into some other specialties early on but learned to stick with what he knows best, and rely on the skills of his LMC neighbors. For example, Christopher Brown at nearby Straight Line Marine limits his work to shafting—turning new propeller shafts and straightening out-of-line shafts. A division of High Seas Yacht Service, Straight Line has specialized lathes and straightening machines that can handle shafts up to 6" (15cm) in diameter and 0.0015" (0.038mm) tolerance. APB, Straight Line, and the other service providers at LMC seem to work well together, each finding its own comfort zone.



1—In large composite yachts, Goodwin says he often discovers fluid migration in the integral tanks. Its causes might be traced to original construction and/or flexing of the surrounding structure. In this case, inadequate baffling probably resulted in laminate cracking, exposed here by initial grinding. **2**—Surface preparation in tanks is key for a quality repair. APB performs lab tests and pull tests of all coatings and resins. Documentation and adherence to drawings are essential when working with class societies. **3**—Templates made from Visqueen plastic sheeting, drawn in situ, were then taken to the shop, where the cloth was cut and kits were made up. Every effort is made to minimize the time spent working in confined spaces. **4**—New baffles have been glassed in place; the removable section in the middle allows inspections on the other side. The silver coating is an AmeriCoats product formulated specifically for epoxy and fiberglass tanks.

Walking across the vast tarmac, from one bay to another, Goodwin remarks on the various yachts APB and other LMC vendors are working on this week: A 140' (43m) sportfisherman is in for a multi-million-dollar repair, due to a catastrophic engine failure. APB is preparing to build steel cradles and raise the keel 6' (1.8m) off the ground. The plan is to cut the bottom out, build an A-frame under the hull, and drop the engine. Goodwin says, "We could go through the side, but we'd have to cut the hull-deck joint apart. Engineers are concerned about supporting the 16,000-lb [7,254-kg] motors. Nothing is ever easy!"

Another shed contains a large yacht whose engine overheated, causing delamination of the composite exhaust tunnel. The repair is not one for the claustrophobic, as workers have to crawl in, peel off the bad glass, sand, prep, and lay in new glass. "We vacuum-

bagged in stages our way out of them," Goodwin says. "We had a guy inside laminating the tube with six layers." Then the epoxy will be post-cured.

Inside a third shed is a yacht with a hole punched in the bottom; in the fourth a grounding dislodged the shaft struts (see page 105), and as we work our way along the sheds, Goodwin describes damage to a 1,200-gal (4,542-l) water tank caused by too few baffles. Crawling inside to remove the broken baffles and prep the cracks in the tank wall is another job not for the faint of heart (see above).

A current list of APB projects is also a glimpse into the good, the bad, and the ugly sides of contemporary boat-building practices in the U.S., Europe, and Asia.

"It's numbing, some of the stuff we see," he says. "We try to be easy on the builders. We don't want to throw them under the bus. We don't want

them hating us. We need them. But it's frustrating when you see the same problems over and over again. It's hard sometimes to bite your lip. We have to keep everybody happy. In this industry, you don't know who you're going to work for next. You don't want to upset some guy and two months later you're working for him. I've made my share of mistakes.

"All of this is learn-as-you-go. There are no guidelines. It's amazing things work as well as they do. If this was the auto industry, it'd be regulated all the way down. But this is like the Wild West. We have seen much more involvement from class societies than in years past with keeping the large yachts in compliance."

Scope of Work

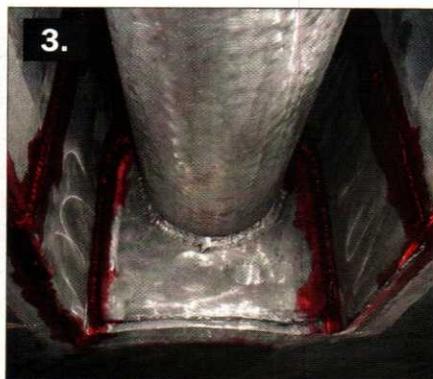
Nearly all customers at LMC own large yachts. APB and the other businesses at the center routinely work on



1.



2.



3.

1—The propeller shaft struts were broken when this 139' (40m) motoryacht ran aground. Even the barrels cracked. A custom jig was set with a threaded rod so the strut and barrel could be adjusted fore and aft, up and down, as they were welded. Here, the strut supports are being prepared for a fit-up weld inspection by class inspectors and **(2)** an optical alignment of the barrel, performed by High Seas Yacht Service. **3**—After new marine-grade aluminum shaftlog tubing is installed, quality-control tests are performed. In the photo, all welds are tested with dye penetrant for class approval, a common procedure on aluminum boats during their 5- and 10-year surveys.

yachts built by Feadship, Lürssen, Trinity, Westport, Heesen, Palmer Johnson, Sunseeker, Delta, Christensen, Burger, Benetti, and others. For class vessels, APB performs one-, five-, and 15-year surveys.

In addition to those noted earlier, services include custom mold fabrication, structural repairs, tanks, carbon fiber repair, hardtops, restyling and construction, infusion, vacuum-bagging, sheet stock panel, and cored panel

fabrication. APB recently built an 8' x 20' (2.4m x 6m) perfectly flat alloy table for the fabrication of large panels with a flawless gloss finish. Goodwin says, "We are now fabricating [composite] panels for many of the

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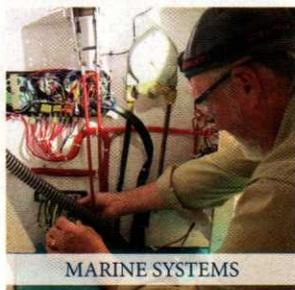
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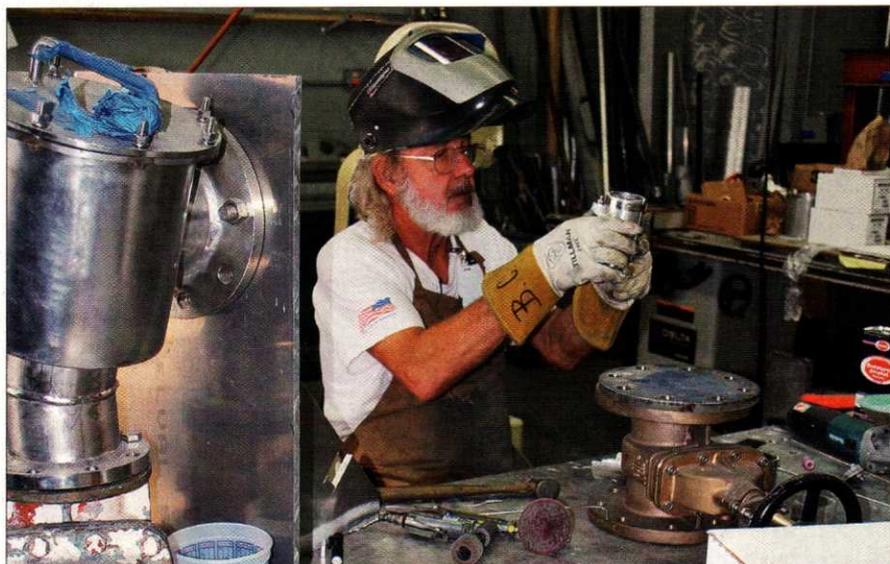
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Above—In addition to servicing and rebuilding valves and piping on-site and with full class-approved oversight, APB developed its own custom valve-testing apparatus, **right**. It can produce classification society-approved valve-test conditions for many different materials such as cupronickel (copper nickel), stainless steel, and aluminum.



local builders and fabricators.” Applications include bulkheads, engineroom walls, shower enclosures, dashboards, swim platforms, consoles, and exterior

deck cabinets. In addition to fiberglass, panels also are laid up in carbon fiber and wood veneer.

Work is billed based on time and

materials. Experience is critical for accurately estimating jobs. Mistakes are painful. Goodwin says that when dealing with a client at the outset, he

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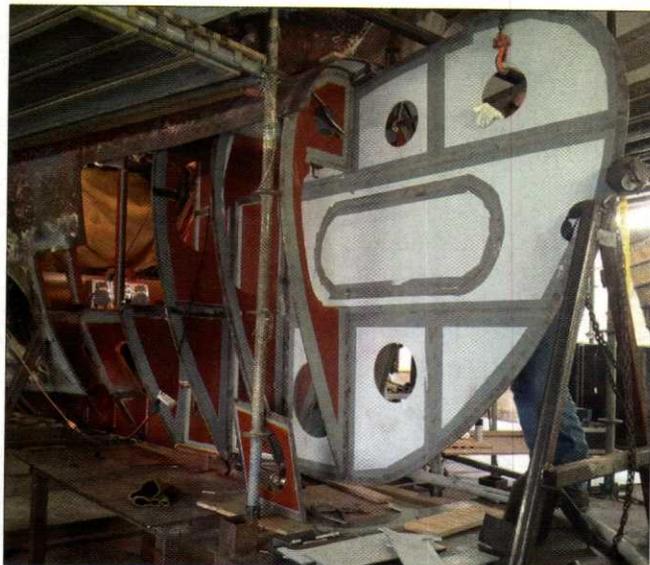
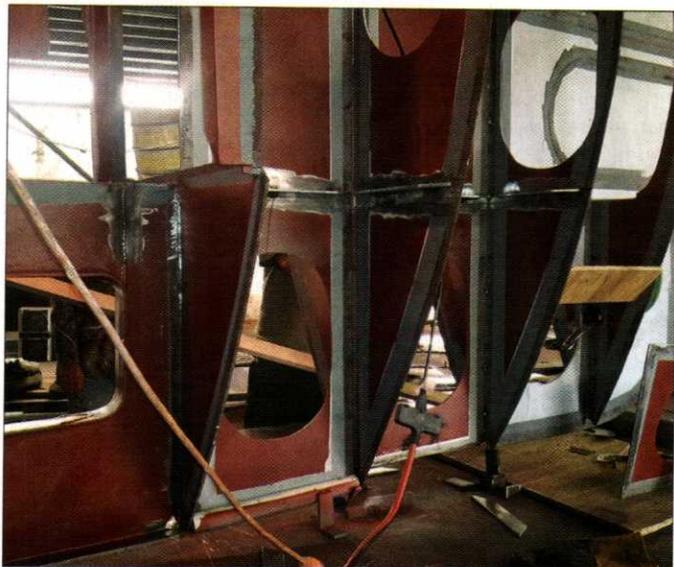
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Left—The bulb on this yacht rusted from the inside out and had to be replaced. Here, an internal grid for the new bulb is prepped for shell plating. **Right**—The bulbous bow was fabricated with manufactured sections and then fit into the existing structure, a common repair on older boats, where steel has been exposed for long periods of time to salt water. Class inspectors and naval architects monitor all aspects of construction in APB's shop.

gives them "a feeling where it'll be, based on previous jobs. We can get it pretty close. It's hard to quote unless you've done it before. We give them

parameters and write a detailed scope of work. When things grow we can see where problems start to arise. All the guys complete daily time sheets.

We break it down by boat, by guy, by item. We do it every day.

"It's still hard estimating jobs," he continues. "The captains don't come

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with a firm plan, scope of work. They show up and say go from one end to the other and get as much work done as you can with our limited time. It can be frustrating, but we work our way through it and enjoy it.

“Our biggest nightmare is when you think you’re on schedule and then have a hiccup. Something happens—which is daily. One boat gets delayed, and it’s catastrophic all the way down the line. It’s amazing. We’re fully

booked four months out. It’s a good time for the industry. People are spending money. The last three years it was hard to get owners to spend any money. But the boats kept acquiring maintenance. The big boats kept chartering and chartering. They never stopped and did maintenance. You have to maintain them. Especially boats with aluminum pipe work. Can’t go a couple of years without looking at them. We’ve learned so much

about isolating materials, isolating valves, bolts, to help reduce the failures we’re finding.”

Crew

“Training apprentices has become a full-time job,” Goodwin says. “Trying to pass the knowledge down to the next generation is the key for our industry. The size and complexity of the vessels is changing the way we look at the future. Without a good source of skilled labor the industry will suffer.”

Last summer was the “smoothest” yet for APB. “We kept the whole crew together,” he says happily. “Keeping 30 guys together is tough. We didn’t want to walk into the season with a skeleton crew. We did a lot of maintenance on the shop. Worked on our infrastructure. We’re flatline now... can’t take in any more big stuff.”

Cross-training is essential for APB, and most of the crew can work in more than one discipline, such as metal and composites. Nearby Broward College is one source of new hires; it offers an associate’s degree in marine engineering. Other schools APB draws on include McFatter Technical College, in Davie, Florida, which offers certificates in drafting and welding, and the Marine Mechanics Institute, in Orlando.

“I don’t want guys from other yards,” says Goodwin. “It’s a cancer. A lot of negative energy. Better to teach young kids. We also have midrange guys 30–40 years old. And older guys who teach the kids how to do things right. Fabricating is a big part of what we do, and the young guys latch onto that. We go through the new guys pretty fast. Some can’t handle it. But those that stuck around are running things now. If they want to be here, they’ll work out. Each employee knows they can rely on my help when they need it. I pay them the most generous wages in the industry, and when others are laying off I keep them working and providing for their families. We provide health care and benefits to all of our employees and families. Most importantly, I am ready to jump in and help turn a wrench. The employees respect that I am prepared to do everything that I ask them to do and I have done it all many times in my 20-year history. That loyalty pays off. Many have benefited from the training. Even though keeping star

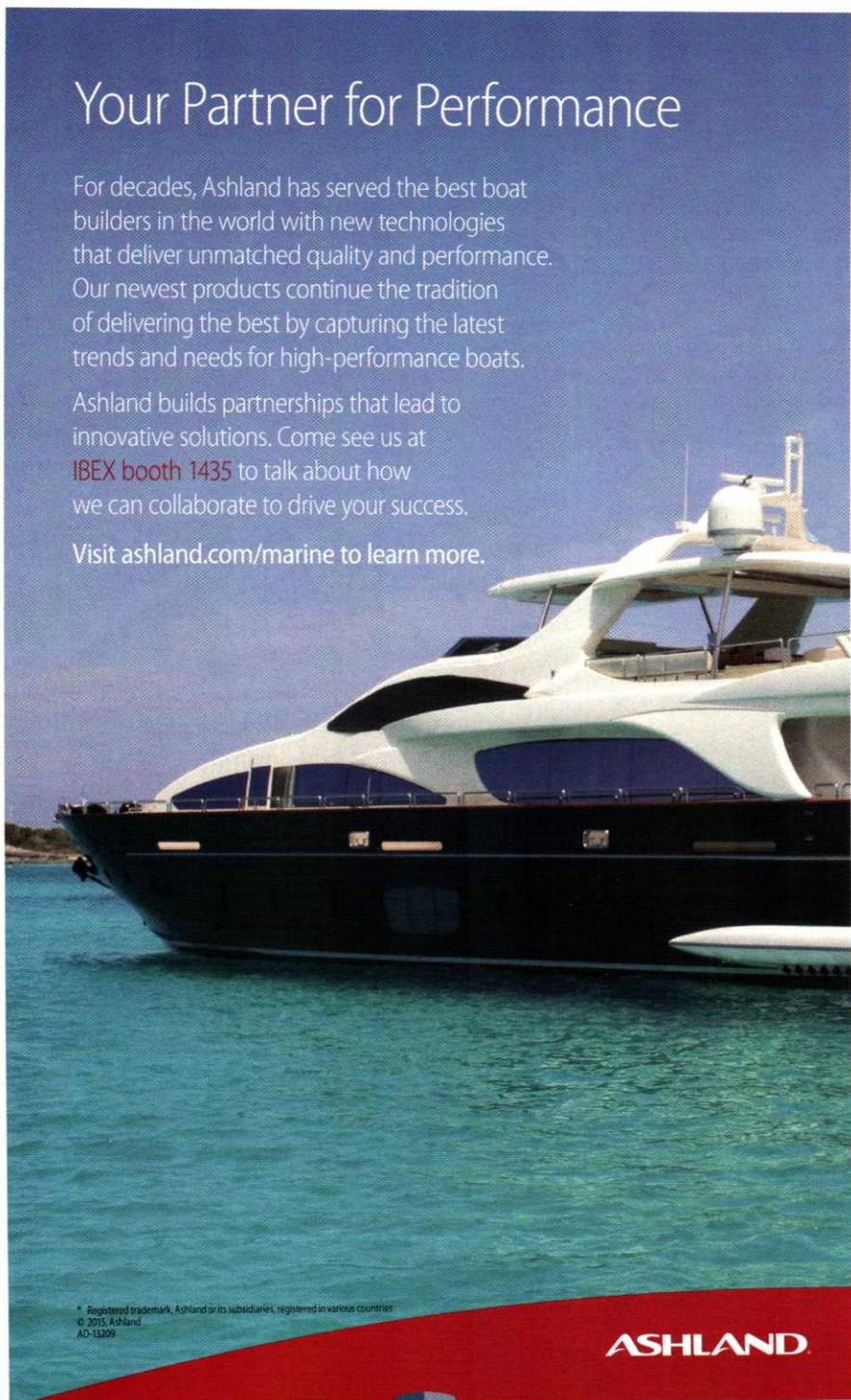
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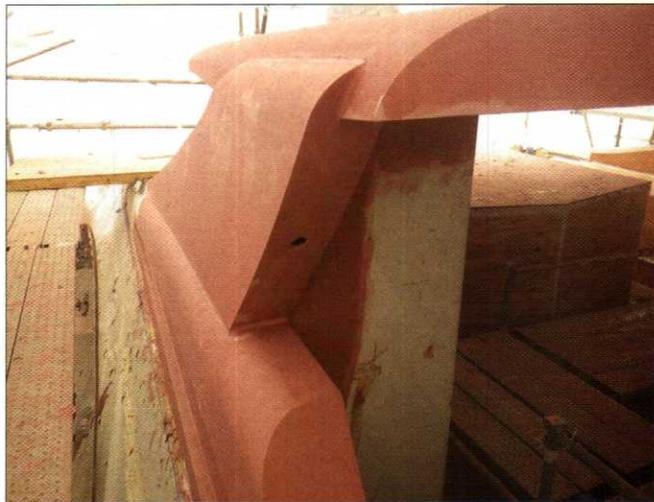
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Left—Damaged sections of this powerboat hard top were removed, and NDT performed to determine the scope of work. Elaborate scaffolding and tenting were erected to facilitate the repairs and provide safe access for workers and inspectors. **Right**—All new construction is faired and painted according to the manufacturer's specs and oversight.

employees from being scavenged is always a challenge, it is also a sense of pride."

Goodwin says it costs \$30,000–\$40,000 to get welders class-certified. "I don't make that commitment for everybody. Pick the right ones. Nothing

hurts me more than watching one leave after all that expense. If you're fired, you're fired. If you want to move on and quit, I only ask every employee to act like a man with the same respect I have shown them. We only want people who want to be here."

Looking Ahead

APB does not have to advertise. Most of its clients find the yard by word of mouth. A lot of captains, Goodwin says, have APB on "speed dial."

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repair service 24-7, even for vessels under way, anywhere in the world. Last year a crew traveled to Aruba, Bermuda, the U.S. Virgin Islands, and every state on the East Coast. "We have to grow," Goodwin says, "because there's too much work out there." He

sees that growth potential servicing more commercial vessels: cruise ships, barges, tugs, fishing boats, research vessels, and others.

Walking back to his office, Goodwin

reflects on his time at LMC. "I've been in Florida 21 years. Came to work at Derecktors; that's where I got my start. I came here doing repairs on racing sailboats. One thing led to another. None of this was here then. I had containers. When the doctor [Selvin Passen] bought the marina and started developing it, things naturally fell into place for us [Passen, who also owns the Baltimore Marine Center in Maryland, recently sold LMC to the Washington, DC-based Carlyle Group]. We took a small bay and started steadily acquiring more space every month. We don't own anything. We still lease our space. In some respects it's helpful, because what we lose by not owning space we gain with accessibility to customers. The Marine Center is a one-stop shop. You can get everything done right here. The captains like the open-door policy. They can see the guys work, control their time schedules, and their destinies." **PBB**

About the Author: Dan Spurr is Professional BoatBuilder's editor-at-large.

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