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Phenomenon on Front Street

Three veteran Maine boatbuilders and the head of an industrial composites fabrication firm joined forces to create—in no time flat—an award-winning full-service large-yacht facility.

An interview by Paul Lazarus Photographs by Billy Black (except where noted)

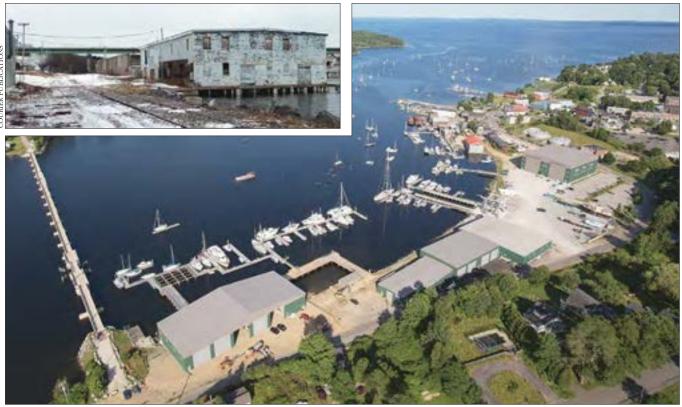
Above—The beefy Brownell hydraulic trailer, the tall Marine Travelift, and the big Varco Pruden pre-engineered metal building all were specifically sized by Front Street Shipyard for large yachts. This summer the new Belfast, Maine, operation will commence construction on an even bigger shop to accommodate a huge (485-U.S.-ton/440-mt) marine hoist.

ost of you have seen a visual cliché we'll call the hyperanimated building-site sequence. Typically, it's a film clip of a substantial house with attached garage being built, shot at a given time interval, say every 10 minutes, by a stationary camera set up to view the entire job site within the frame. The still images are then run together as a motion picture so in just a few minutes we watch a construction project teeming with equipment and professional crews proceed from earthwork to foundation to framing to roofing to sheathing to siding to finish carpentry to landscaping.

Something very much like that

high-speed scenario is currently playing out in real time in Belfast, Maine, at Front Street Shipyard. The yard's owners officially announced their plan to start a large-yacht facility from scratch, in January 2011. Two years and one month later, as I write this, Front Street is not merely up and running, it's booming, bursting at the proverbial seams, along a skinny 6-acre (2.4-hectare) strip of land.

Actually, the yard's owners started at worse than scratch: they'd purchased a defunct, derelict sardine cannery and some surrounding acreage, plus the remains of an unfinished upscale condo-and-marina development gone



Above—The yard's collection of new and renovated buildings—each clad in metal siding painted green—occupy a 6-acre (2.4-hectare) strand of urban deepwater harbor frontage that affords protected dockage and marina services along with easy access to Penobscot Bay, one of the Eastern Seaboard's premier cruising destinations. **Inset**—Front Street Shipyard's origins looked fairly grim to begin with: a defunct, derelict sardine cannery shared the site with a failed condo-and-marina development. Coastal U.S. Route 1 traffic is carried by the high bridge in the background (as distinct from a footbridge in the aerial photo, below). Note the discontinued railroad tracks running past the cannery.

bust. Moreover, the yard's original site plan amounted to a crazy-quilt of rights-of-way, city property, and a slew of small privately owned parcels, all of this real estate situated along a narrow strand with a hundred-year history of municipal and industrial activity that predated any concept of green.

Front Street Shipyard's ownership managed to reconcile this seemingly irreconcilable patchwork of property limitations such that today, by the numbers, the vard comprises 72,555 sq ft (24,281m²) of yacht storage space and 10,320 sq ft (959m²) of shop space in a cluster of newly built or completely renovated buildings along the 1,500' (457m) of deepwater frontage. In addition, Front Street has built a modest marina, and acquired 7 acres (2.8 hectares) of nearby off-site boat storage with a half-dozen existing structures dedicated to service and repair.

The yard started with a handful of employees and now has more than a hundred. A partial list of large-yacht projects under way includes refits on a 90' (27.4m) Lyman-Morse motorvacht, a custom 122' (37.2m) classic sailing yacht, an 80' (24.4m) South African-built ketch, a 92' (28m) Palmer Johnson ketch, and an 80' (24.4m) Burger motoryacht (the second of two Burgers; the first, a 106-footer/32.3m, is described on page 34). One hundred thirty boatspower and sail of all sizes-are currently stored and being serviced. The American Boat Builders and Repairers Association just conferred its annual "Boatyard of the Year" award on Front Street, for 2013.

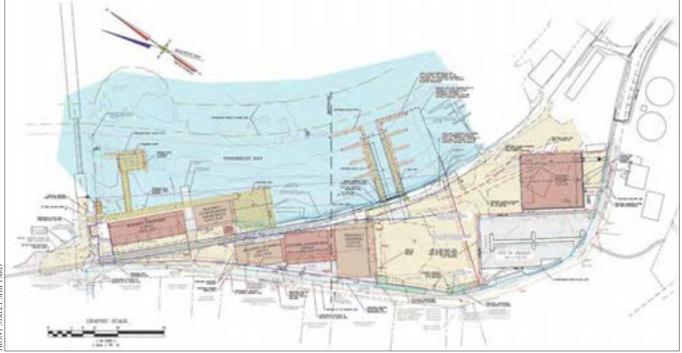
The yard's rapid expansion continues apace, with the announcement in mid-February that Front Street ordered a 485-U.S.-ton (440-metricton) marine straddle lift from Italy, necessitating a new 24,000-sq-ft (2,230m²) building shed to accommodate it, for which the permitting process too is under way.

In just two years' time, the shipyard went from virtual zero to warp speed; it is now the biggest large-yacht facility on the East Coast north of Newport, Rhode Island, with a global reach entirely its own.

At IBEX 2012—the marine-industry trade show and seminar program founded and co-produced by *Professional BoatBuilder*, and held last year in early October in Louisville, Kentucky—JB Turner, Front Street's general manager and one of its owners, presented a slide show documenting the yard's extraordinary development to that point in time. His presentation was part of a technical seminar devoted to case studies of physical-plant layouts.

Turner's IBEX talk was necessarily limited to layout, not management. Front Street's ownership structure and management dynamic, however, have been crucial to its early success and may be unique within the industry. In editorial columns, features, and profiles previously published in this magazine, we've met several members of the yard's actively involved ownership:

• First and foremost is Turner, the



An engineering survey and site plan, completed in late spring of 2011, suggests the underlying complexity of Front Street's property holdings, which comprise a mix of outright ownership and leases, the latter granted by the City of Belfast. The entire area owned or occupied by the yard has a lengthy industrial and municipal history; this older, less-discriminate land use required recent rezoning by the city so the yard could proceed with its ambitious plans. An updated site plan will indicate additional major infrastructure, particularly in way of the parking lot in the lower right. Front Street Shipyard also acquired an off-site boat storage-and-repair facility nearby, not shown.

only owner on site on a daily basis. From 1998 to 2010, he was an owner/ operator at Lyman-Morse Boatbuilding (Thomaston, Maine), which he grew from 43 to 200 full-time employees. His extensive prior management experience includes Wayfarer Marine in Camden, Maine, and Dodson Boatyard in Stonington, Connecticut. After Lyman-Morse and before Front Street, Turner served as a project engineer at Kenway Corporation, in Augusta, Maine. More on Kenway in a moment.

 Taylor Allen is the owner/operator of Rockport (Maine) Marine. The yard specializes in wooden yachts, whether new construction or refits and restorations. Two significant restoration projects recently completed there include the Sparkman & Stephens-designed 73.5' (22.4m) ocean racer Bolero, and the Fife-designed and -built 99.75' (30.4m) schooner-vacht Adventuress.

• Steve White is the owner/operator of Brooklin (Maine) Boat Yard. A fullservice facility, the yard is best known for its wood-composite construction and traditional restorations, but its allcomposite skill sets are increasingly evident in the marine marketplace.

• Ken Priest is president of Kenway Corp., a firm specializing in state-of-the-art composite construction for a diverse list of industrial customers. In a previous life, Priest was a production boatbuilder, which helps explain Kenway's recent acquisitions of three companies producing composite center-console outboards, one being the well-regarded Southport brand.

• Two other owners-business entrepreneur and registered Professional Engineer Jack Rettig, and former restaurateur Lucia Michaud-keep a low profile. In addition to this ownership group is a bank presence, notably Bangor (Maine) Savings.

Well before the formation of Front Street, Allen and White had been scouting property on the Maine coast where they could collaboratively build boats larger than their own yards presently permit, due to space constraints. Even though their yards have bid against each other on past projects, they've also cooperated successfully, the best example being their concurrent builds of the initial pair of 76' (23.2m) W-class racing yachts, designed by White's father, Joel.

Turner, too, besides cultivating his own yen for bigger boats, had long

maintained a friendship with Allen and White. While at Lyman-Morse, Turner occasionally bid on boat projects also being pursued by White and/or Allen. When the availability of Belfast's Front Street property hove into view-with its deep-water frontage, relatively central location (on the Maine coast as well as to Allen's and White's yards), and the prospect of large composite parts getting built at Kenway's spacious modern facility (where Turner was then working)this foursome jumped on the opportunity. Their compatibility, and solid reputations as builders and business managers, helped secure the financial backing needed to close a deal and begin establishing the kind of yard each of them wanted.

The following interview, on site with Turner in mid-January 2013, takes us behind the scenes at Front Street Shipyard. It offers an instructive glimpse of the atypical ownership/ management structure at work, by way of decision-making regarding the vard's rapid growth, and a new-build bidding scenario in a projected series of large sailing yachts. There are currently two such series in the works, namely: new additions to the W-class



The concrete slab for what is currently Front Street's biggest building, called "No. 5," turned out to be, in the summer of 2011, the largest pour in the entire state since 2007—or just prior to the Great Recession. Designed to handle 300-ton (272-mt) loads, the slab required 1,336 cubic yards (1,021m³) of concrete, reinforced by 175,000 lbs (79,379 kg) of rebar.

lineup, and a semi-custom series designed specifically for the yard by Sparkman & Stephens.

In the second portion of the interview Turner discusses the buildout of the yard's infrastructure, within the context of the property's lengthy and complex land-use history.

In the final portion Turner comments on the physical constraints and possibilities governing the yard's future. One measure of how quickly and dramatically those parameters may be changing is this: within a month of the magazine's interview, Front Street announced the purchase of its massive new boat hoist to complement the yard's current daily workhorse, a 165-ton (150-mt) Marine Travelift. At the time of our interview Front Street was anticipating a mere 300-something-ton machine. The 485ton monster actually ordered sends an emphatic message to the international vachting community that this young yard with a seasoned ownership stands...ready to serve.

Growth and Bidding

JB Turner: Nothing ever comes out exactly like you think about it in your mind, or how it's going to evolve. First of all, not only has Front Street Shipyard happened really fast, it's happened much faster than any of us [the

Building No. 5, shown on the article's opening page, seen here in frame. Maine Coast Construction Co., based in Camden, erected, renovated, or supplied the materials packages for all the yard's buildings—and did so on an exceedingly tight timeline. ownership group] expected it to happen. Also, the way the relationships work hasn't quite gone as we thought they might-but not badly, either. By that I mean, with Kenway I thought that if Front Street were commissioned to build a big composite powerboat or sailboat, then Kenway would build the hull and deck and ship those parts down here, which would save the yard a lot of space. But along came Southport boat production, and then things got crazy busy at Kenway; we're actually working on a Navy "camel" [specially designed large composite fenders for berthing submarines] project of theirs right here, because Kenway's facility is packed full. So if I got a call tomorrow from somebody interested in building a 90-footer, Kenway would have to say, Can't do it. Big as their facility is, right now they don't have the space.

Professional BoatBuilder: Let's say that call happened under the original idea, whereby a big composite part would be built by Kenway. Was it going to be cost effective to build a hull or deck or both for a 90-footer off-site, and then truck it 45 miles [72 km] from Augusta to Belfast?

JBT: We worked through all that; it was pretty clear. We looked at it several times. We actually had a 120-footer [36.6m] we're considering. It can be done.

PBB: So this was something you'd anticipated: trucking very large parts down the road?

JBT: Right. We talked with trucking companies, we had it all approved, we discussed it with the state's Department of Transportation. It was all very possible, and still is.

PBB: Thanks to the highways between here and Kenway, it





Left—Front Street "inherited" an unfinished and thus languishing marina project. Most of its pilings had to be replaced. **Right**—One of the yard's first priorities was to build a substantial pier for its 165-ton (150-mt) Travelift, with associated finger piers

certainly wouldn't be as difficult as moving a retired NASA space shuttle through the streets of Los Angeles.

JBT: I'm sure there'd be some spots here in Belfast that would be fun. But, no, we—the yard's principals—do help each other all the time. It works very well that way. If it wasn't for Rockport Marine, Brooklin Boat Yard, and Kenway Corporation at various stages in our evolution, there was no way we could've delivered on boat projects with the space we had, get those projects out on time, on budget, and with a happy customer. Our partner companies sent their troops in to help.

By not realizing just how fast we were going in the first year, every Monday morning I'd come in and say, What the hell am I doing? I need more people.

This past year Rockport Marine helped us out with a bunch of

different things. Some of their carpenters have since joined us; on the 106' [32.3m] Burger refit, we had five or six of them. Kenway sent down glass guys to put in bow thrusters at the last minute, plus mast parts for the 90' Doggersbank. So, without that kind of backup, Front Street would never have been able to put forth the good face we presented during our first year, and then grow quickly thanks to that. We would've had our trips and falls; we would've looked like every other boatyard that's fallen over on their behind. So, in that regard, the whole Front Street partnership has been fantastic. Just yesterday I called up Taylor [Allen, of Rockport Marine] and said, "Can you build a mast for this schooner I've got here, out of steel?" And he said, "Sure."

It worked out well, even though his guys are busy on a big sailboat he's building there.



PBB: Then you're constantly in communication, as needed, with Taylor, Steve, and Ken.

JBT: The way it really works-not on the day-to-day stuff, but on the physical plant, on ideas and circulating ideas, and getting approvals on ideas-is I might, or someone else might, come up with an idea and send it out to all of us, by e-mail. It's Steve and Taylor and me for the boat stuff, and Steve and Taylor and Ken and me for the plant stuff. We get together regularly, like today, at 3 o'clock, to talk about various projects we have going on and what the priorities are going to be and what we want to focus on for the next boat or bank meeting or whatever it is. The e-mails indicate what we're thinking. This arrangement might seem crazy from the outside.

PBB: At 3 o'clock are you reporting to everyone on the bankers' meeting you had this morning?

JBT: Yep. And we're also going to talk about the bid, or bids, for the 100 [a W-class 100//30.5m sailboat build].

PBB: Does that size, 100′, challenge capacity for Taylor or Steve?

JBT: Originally, it was a 135-footer we wanted to build. Then it came down to a 120-footer, and then he

Specially designed composite fenders called camels (in yellow), for berthing U.S. Navy submarines, were fabricated by Front Street for partner company Kenway Corp., whose own shops were unable to accommodate another large project at the time. Most of each camel, not visible, conforms by steps to the sub's underwater shape.

As a full-service facility whose owners bring to it considerable experience and expertise in custom boatbuilding, Front Street is geared to large-scale composite construction. Here, a one-off motoryacht hull is being resin-infused.

[client Donald Tofias] decided he wanted three new lines of boats in that class besides the existing 76- and 47-footers [23.2m and 14.3m]. He said, "I'm going to go with a 100, 123, and 135 [30.5m, 37.5m, and 41.1m]." Those are three new designs.

He commissioned design work for the 135 and then said, "Well, it's more likely than not that I'll actually build a 100. So let's put our energy into that. And since it's only a 100-footer, let's have Rockport bid on it and Brooklin bid on it and Front Street bid on it; three separate bids."

Well, we—Steve, Taylor, and I worked this out for a while. And then the other day we decided to approach Donald and see whether he would accept the following: "What if we were to give you one number, then you pick the yard you want to be the lead yard, and the other yards would support it?"

He agreed to that. So now we're trying to resolve the number we can all agree on, and then figure out who will build what parts. Speed—meaning, elapsed time from start to finish—also figures into the issue.

PBB: Whose idea was that? Submit one number and the client picks the yard?

JBT: It came out of a group meeting that included Steve, Taylor, myself, and Bruce Johnson [former president of the Sparkman & Stephens design and brokerage firm, in New York City], who now does business development for all three yards. We four were talking in a circle about various things, including rules of thumb for bidding. We listed and detailed a bunch of questions all of us had about the boat's specs, and we said, "Wouldn't it make more sense to submit a single bid. because the boat wants to be built soon, and therefore get started soon?" Steve said, "Well I've got a bid on a 72-footer [21.9m] and if I get that bid, which is just as likely, then I'm out. I'm out for a year."

PBB: He can't do a 72 and a 100—simultaneously?

JBT: No way. Taylor and Steve can



launch 100' boats, but both are quite busy at the moment. So we're all sitting around and suddenly we said, "What if we give Donald one number? Maybe we build the hull here at Front Street, because we're the biggest facility, and somebody else builds the cockpit, and somebody else builds the interior, so the whole process happens in a much shorter time period."

PBB: Similar to the way Hodgdon Yachts built the large Bruce King designs, with the collaboration of other boatshops, including French & Webb, here in Belfast.

JBT: At Lyman-Morse we pulled in subs from all over the place. From a partnership point of view, this works pretty well. We're building a deck for Steve right now, in fact, for a 70-footer [21.3m], because his contract calls for a one-year construction period. A cold-molded hull, with a composite deck.

The single-bid arrangement is great. Then we all work together with the buildout. The idea evolved quickly. Like the yard itself, because, well, the yard has been hard to stop once we got going. At first we had the cannery here that we had to tear down, and then we rebuilt a bunch of the existing buildings. Started immediately on a Travelift pier. That was the first thing we did, since there was a deadline on the pile-driving.

PBB: A weather deadline?

JBT: No. A state Department of Environmental Protection deadline. We had to conclude pile-driving by March 15, because of the possibility of salmon migrating past the yard on their way upstream to fresh water. But we actually had to go beyond that date to finish our piles. Which meant bringing in an engineer with special audio equipment, to make sure we weren't exceeding noise limits underwater.

So we get the new Travelift, a 165ton machine, and we've got a bunch of buildings that we can't drive into. That June we look around and say, Why did we build this yard? We didn't build it to be just another boatyard on the coast of Maine. We built it to be a big-boat yard. The only way we're gonna be a big-boat yard is if we have a building that we can take our Travelift into, and block the boats in it. And build boats the size that we're talking about right now.

That June we decided to start the bidding process for a big new building. And in August we broke ground on Building No. 5, the building we're in now. That was a lot of firsts. At the time we poured the slab for No. 5, it was the largest pour in Maine in the previous four years: 1,336 cubic yards [1,021m³] of concrete, with 175,000 lbs [79,379 kg] of rebar in the slab. So it could handle 300-ton (272-mt) loads coming in here.

August was the pour. The frame went up starting in late September.

PBB: Prefabricated steel.

JBT: Correct. Maine Coast Construction [Camden] assembled it. All of our buildings. [For details about the buildings' construction, visit www.proboat.com.]

PBB: Same source and contractor you used for the new shop at



Lyman-Morse? [See "True Green," PBB No. 115.]

JBT: Yes. Same crew. So I knew, and I told Maine Coast Construction I knew, that if you start on this date, I know you can finish, because we've done this before; it'll be easier this time, we're not building into a hillside, you don't have to build batter walls, none of that stuff. I also said, "You have to be done by December 1st. We must move boats into that building." And we did.

That fall we were very fortunate to pick up the *Stoneface* project, which really rocketed us ahead. It's a 106' Burger motoryacht we completely rebuilt. Everything: interior, exterior, engines, generators, all the systems, completely rewired the boat, new cabins, crew cabins, new tanks.

PBB: Who pulled in that job? How did it happen?

JBT: That was just amazing. The captain of the boat was driving over the high bridge on [U.S.] Route 1; like so many people who cross that bridge, he looks down to see what's going on. He was actually on his way to interview for the captaincy of *Stoneface*. Well, he pulls in here on his way there, dressed up for the interview. He comes walking into what was, at the time, a small shack we were using as temporary head-quarters. He says to me, "Would you guys be interested in doing a refit on a 106' Burger?"

Remember: we're in a shack. I said, "Sure, no problem." He says, "Well, where would you do it?"

I said, "Come here." And we walk outside, where I said, "Picture a building over there."

I was pointing to an old railroad building and a field of weeds.

He says, "Okay, let's keep talking."

He got the captain's job. Lives a short way down the coast, in Orland, and also has a house in Florida. We had several of what I would call loose conversations over the summer, and then that October he says to me, "The owner wants to move forward with this thing; we're going to fly you down to New Jersey, to Barnegat Light."

I flew down there, saw the boat: it was a disaster. It literally had not left the dock in five years. And who knows when it last moved before that.

PBB: Was the previous owner the reason it hadn't left the dock?

JBT: No. Same owner. He'd purchased the boat five years earlier, brought it to Barnegat Light, and then it just sat there. It did move once, to get its bottom painted. And that was it. Never left. It was ever so slowly being refitted by a friend of the owner. Well, the owner and captain came north, to our yard. And they said, "Okay, let's do it."

That was the first boat into this big new shed, No. 5. We moved her in on December 3rd. She arrived Thanksgiving Day, in snow. In effect, *Stoneface* was in here before we were in here—before there was electricity. Three of Front Street's six owners, shown at the yard's formal announcement on February 1, 2011. Left to right: managing partner JB Turner; Brooklin Boat Yard owner-operator Steve White; and Rockport Marine Inc. owner-operator Taylor Allen. Ken Priest, not pictured, is a fourth actively engaged owner, whose Kenway Corporation specializes in large composite parts for industrial customers. White and Allen also continue to run their own yards. Front Street's unusual, interdependent construction and management dynamic is discussed at length in this article's interview with Turner.

We had no lights, no heat. Still constructing these offices.

We started tearing the boat apart. That project moved us from 15 employees to 40 employees—immediately. Pretty soon the building was full of boats. In fact, every building we have, filled up. It was just phenomenal. People often ask me, "Where did all these boats come from?"

PBB: Build it and they will come.

JBT: Yes! We didn't take boats away from other yards. Lyman-Morse was full and we were full and Wayfarer was full. Boats just came from everywhere. Because we were so busy with projects last winter, including *Stoneface*, we continued to expand the facility. Until we said, We'll rewire *Stoneface*—the entire boat, in March. That decision propelled our employment base up to probably 60 by last spring. And we just kept growing through the summer.

This fall we picked up Atlantide, a 122-footer, from Palma, with a new owner. And a bunch of storage boats returned to get work done. A 92' Palmer Johnson ketch came in, that we're rebuilding. So now we're at 105 people, as we speak. And yet we haven't started any new-build projects yet. One hundred people, no new construction, and once you add in that layer of work, it's going to be I'll put it this way: I always thought we'd be at 150 people at the five-year mark; that was my prediction. But we could easily be at 150 by year three if we sign some new construction.

PBB: Which would be the 100-footer?

JBT: Or it could be the owners of the 60' [18.3m] Morrelli & Melvin-designed carbon catamaran we built



A Southport center-console under construction at Front Street. The brand and its assets were bought by Ken Priest, who began his career as a boatbuilder. FSS's builder-owners are being flexible about the collaborative arrangements among their respective facilities—depending on project scope and space available.

at Lyman-Morse. That boat subsequently had a fire. Lithium ion batteries. Port hull is gone. I went to see it. A mess. Was hit by lightning, batteries were damaged but nobody knew it; they went to recharge, the batteries exploded, created a fireball. That took out the port hull, and inflicted other damage. Very bad. So, the owner wants to rebuild, and will probably enlarge the boat to a 70-footer this time; there are now more kids in the family. We hope to start the new hull this year.

Staff and Infrastructure

JBT: I was really lucky when we started here: we could never have grown as fast as we did if I didn't have my guys with me. They were core people when I was at Lyman-Morse, who joined me here right away. If that hadn't happened, there's no way we could've handled the rapid growth. Their presence here meant I didn't have to manage the day-to-day, oversee new crew members. I was able to keep everything else going, and left it to those guys whom I totally trusted to make the place work.

PBB: How many was that? From Lyman-Morse?

JBT: Initially, the core was probably eight, nine people.

PBB: In various skills?

JBT: Yes. Carpentry, mechanical, electrical, rigging. Because we keep expanding, a lot of others have joined them, people from Lyman-Morse and other local yards—a whole paint crew, for example. They're phenomenal. I love those guys. We got a really good mechanic, super guy. So, we've been growing the staff.

PBB: You underestimate your own draw. Let's discuss "plant."

JBT: It started with Buildings No. 3 and No. 4. And the Travelift. The property came with "contract rezoning," which is very unusual.

PBB: Wait. When this property was slated to become condos, they were building a marina. Did you take that stuff out?

JBT: The pilings and beams are in the same place, but they're not the same pilings. First of all, when they were driving them they weren't filled properly with concrete, so they weren't structurally sound. Second, the steel-mesh reinforcement rusted, compromising the concrete. Third, the pilings that had been set were for an 80-ton [72.6-mt] Travelift, which was simply too small for us. **PBB:** So you pulled them out.

JBT: We pulled all of them out. The only ones we kept were a preexisting group for a pier put in by the Belfast Bridge Association. Those pilings were poured properly, and set properly.

PBB: Are they wood pilings?

JBT: No. Fiberglass. But we went with wood for everything else. Pressure-treated greenheart. All our new pilings are pressure-treated. They'll last a long time, I hope.

Okay, then we decided to erect Building No. 4A, which was a connector between a shop and our only boat-storage structure at the time. All along we have wanted a restaurant on the property and we have a location, which is our Building No. 2, but we don't want to be in the restaurant business, so would look to others to undertake that. And that's consistent with contract rezoning: we don't have to follow conventional zoning regulations. In effect, we have a contract with the city, which grants us the ability to build. In theory, if the city granted it, we could cover this whole place with sheds. And without setbacks.

PBB: You could be roofed over.

JBT: Completely. Contract rezoning

allows us to build over the water again.

PBB: How did the yard "get" contract rezoning?

JBT: It predates this yard. Belfast had done that in this particular area because, when the sardine cannery closed, the city basically viewed this waterfront strip as a disaster zone, and said, "We've got to do something to entice people to come here. We, Belfast, can't afford to fix it up, we don't own it, but we can change the zoning arrangement."

Well, that allows a property owner, like us, to build out over the water, or right to the edge of the water.

PBB: So the yard got a variance that you never had to ask for. The city had granted it.

JBT: Correct. It was already here. That was part of a deal.

Then, after we'd built No. 4A, we turned our attention to the piece of



3A Composites Core Materials has added a line of fiber-reinforced urethane structural foam (formerly Penske Xtreme) to its family of core materials. These cost-effective products

are now named AIREX® PX. The line is available in a range of densities in rigid panels as well as pre-cut kits. AIREX® PX is well suited to masstransportation, marine, wind-energy and industrial applications and will complement our existing AIREX® foam and BALTEK® balsa core materials. For excellence in core solutions, contact us or visit us on the web at www.corematerials.3AComposites.com

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land that now has the building we're sitting in, No. 5. We're on city-owned land here. We can go back to the city and say, We're growing, we're growing fast, we want to put up more buildings, but we don't have enough land. Can we build on your land?

PBB: On a lease basis?

JBT: Right now it's a lease with an option for another year. And after a number of discussions with the city, we ended up on this particular location, which has worked out very well. That enabled us to erect Building No. 5, and we followed it with Building No. 1. That's now a storage facility where our service yard is, and where all of our transient facilities are—showers and heads, a laundry, a lounge, Wi-Fi, et cetera. Last winter we built out a marina at that end of the property.

Then, this past summer [2012], the owner of Belfast Boatyard decided to retire, and asked us, "Would you guys be interested in purchasing my yard?" And we said, "Uh, okay!"

We worked out a deal with him that also brought us a storage yard off-site but only one-and-a-quarter



Except for a stint as project manager at Kenway, Turner's professional career has been spent in three of New England's storied boatyards. It was the Kenway shop, however, that changed his thinking about the utility and versatility of redundant overhead cranes.

miles [2 km] away, on Route 137, giving us about 7 acres there along with seven more structures. That storage yard has some soil-contamination issues we have to resolve, in accordance with a so-called VRAP [pronounced "vee rap," shorthand for voluntary response action plan] order from the state's Department of Environmental Protection. For us the VRAP order is essentially a get-out-of-jail-free card. If we're going to pour a foundation, we have to let the agency know, but it's not a big deal. Basically, they're saying, "We're not going to come in and close you down, as long as you follow the voluntary action plan."

Front Street Shipyard has a VRAP order along this portion of the waterfront [Turner points to a section of the site map], because it was contaminated: and another one for this area. likewise contaminated. This entire area consisted of trains, and their fuel, for a hundred years. And before that, it was the city dump. The reason we have flat land is not because it was here to begin with; this was railroad trestle in the 1800s, a place they called Puddleduck. It was all water. The city decided to make it a municipal dump, and filled it in. Over the years, it also acquired fuel depots, which meant fuel leaching into the ground. In addition, coal from the trains was dumped in this area.

Well, now we're talking with the city about potentially purchasing or leasing the city-owned parking lot, so we can erect another building like this one on it. That would take us as far back as the topography permits. We could then put in another pier for another boat hoist.

PBB: Would the piers share one leg?

JBT: In a sense, yes. You've got the existing concrete, right? And then we have a wooden deck attached to that, so we can drive trucks out on it. The new pier will be attached to it by way of another pier with a wooden deck in between.

The decking over the piers is precast concrete. It's a very strong system. The sections are made off-site, brought in by barge, piles are driven, and the segments are placed on top.

So, that's the plan for the near term. We've enjoyed a good relationship with the city all along.

The Future

PBB: The Lyman-Morse new-shop construction project was a pretty good training ground for you.

JBT: Absolutely. I learned a lot from that building. And tweaked some things here. For example, the air socks [large fabric tubes that are part of the air-circulation and filtration system]. At Lyman-Morse those run down the center of the structure. It's a terrific system, but the tops of the socks collect dust. You have to be mindful of that fact when you turn on the air, inflating the socks prior to painting. Here, the socks run down the mezzanines; the dust doesn't go anywhere.

Another example is overhead cranes. I learned what I wanted for overhead cranes when I was at Kenway, where there are two hooks per crane, and two cranes per bay. It's a much better setup than one hook



and one crane. Like night and day.

We were working with Kenway, building the Southport line here, and that went along well for a while. But it was better that Kenway took it back. They wanted to run the whole project themselves, see the thing all the way through; meanwhile, we were getting busier and busier. Truth is, we were getting too busy to produce Southport boats at this yard, and we simply stopped trying to make that program succeed at this location.

PBB: Tell me more about the pilings. Did you use Martin Grimnes? [He is the founder-owner of Harbor Technologies, in Brunswick, Maine; and previously founder-owner of Brunswick Technologies, maker of innovative composite fabric reinforcements.]

JBT: Yes. Martin and his son Chris. We had to replace some of the original pilings, and we went to him for those. His new-generation pilings have a much thicker wall, with no steel in it.

PBB: No steel?

JBT: No steel mesh. There is

substantial internal steel: a steel I-beam, down the center of each column, which is driven first. Then a fiberglass shell is put over it, and then you pour the concrete. The steel and the concrete are doing the work, but the laminate serves as the form for putting it together.

Returning to the site plan, we finished Building No. 1 in July. The open-water area is where we want to erect Building No. 2 someday. But we're still into expanding the boatyard itself, at the same time trying to figure out whether and when to build a restaurant....

PBB: What about that southerly complex of buildings close to FSS?

JBT: [pointing to the site plan] This one's a bar that was called the Offshore Bar—until we came along. Then they changed the deck, and the name; now it's the Front Street Pub. This one's a brewing company. Here are tugboats. This is a shop. And that's a gift shop.

Now the city's talking about rebuilding Front Street itself, because of the loads we're putting on it and the traffic it's now getting. Penobscot Frozen Foods [a potato processing plant, just past the northern terminus of the yard's property] trucks come down this way to get out of town instead of going up the hill; our trucks come down this way to take boats out to state Route 137. Plus, we'd dug many trenches across the roadbed in order to bring power into our various facilities. So, the city wants to widen it.

Belfast is planning to rebuild the road such that we'll be able to carry a 300-ton boat on a trailer. If we were to acquire the processing plant, that would of course get us there; only problem is that the plant owners want a great deal of money for a facility we'd have to tear down. That's going to be a while coming. But it might make sense eventually.

About the Author: Paul Lazarus is Professional BoatBuilder's senior editor. For details on Front Street Shipyard's buildings, including specs and notable features, see Paul's article titled "Going Up" on the magazine's website, www.proboat.com.



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