THE WORLD'S BEST SAILBOATS

VOLUME II

FERENC MÁTÉ



INTRODUCTION

ew things are as exhilarating in life as learning. When one can couple it with personal passions, such as sailing and travel, the exultation is all the greater. No wonder, then, that surveying the world's best sailboat yards throughout Europe and North America seemed to me like a series of strung-together Christmas mornings. The presents I found were all beautiful, most very creative, and some truly amazing and ingenious.

Vast changes have occurred to sailboats in the decade and a half since *Volume I* was published. Quality has soared. The technology has evolved so much that it often seems like a brand-new world. The designs have been refined—not just in hull shapes, underbodies, and their appendages, but also in the fastidiousness of details. The emphasis seems to be on 'comfort,' followed by 'ease of handling' and 'speed.'

You will find on these pages all the new boats—many dramatically different—of builders covered in the first book; I also warmly welcome the big group of 'new' builders. Some you will recognize as established names who have leapt to the forefront in both design and quality; others, more recent entries, but with such fine achievements in a relatively short time that they cannot be overlooked.

One huge change, I'm rather sad to say, is size. Boats are becoming forever larger, grander, infinitely more complex—no longer the little magic carpets that could whisk us away from our accumulated burdens; instead, they seem to be the very embodiment of the burdens we tried so hard to leave behind.

I tried, as before, to achieve a balance. Apart from the ultramoderns, I have included a few classics for the romantics among us. But, as in *Volume I*, I chose only builders who truly have their hearts and souls in sailboats, who continue to contribute and invent, while never losing sight of practicality, quality, and beauty; their works are ones you could safely and proudly pass down to your children.

But please remember that, just as *Volume I*, this book is not a shopping list, not a catalogue of a limited number of boats from which to choose. It is, as best as I could make it, a book of *best ideas*—a collection of ever-blossoming, ever-evolving design concepts and construction methods—all of them tried and true—most of which you would do well to remember when evaluating a sailboat of any kind, any make, any design.

Ferenc Máté, Tuscany, 2003

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ISLAND PACKET



B ob Johnson's passion for sailing bloomed at an early age. He was only eight when he bought his own subscription to *Yachting* magazine, and fourteen when he wrote a term paper on his future career as a naval architect. That same year, he lofted his first sailboat on the living room floor, then sailed it down Lake Worth, with his brother holding a garden umbrella for a spinnaker. He was hooked for life. ven though he became a mechanical engineer, ending up at McDonnell Douglas designing missiles, his heart was still with sailboats. With a master's degree from MIT in naval architecture, he went to Florida and worked with Irwin Yachts and Endeavor, ending up as general manager. But he had a well-engineered dream.

He started Island Packet modestly in the mid-seventies by borrowing money to buy the molds for a 27-footer with a beam of more than 10 feet—a catboat proportion. He was everything at the company—engineer, purchasing agent, production manager and sales staff. They have since grown to near two hundred employees in an immaculate, family-owned—just Bob and his wife—facility that has its own lake, and they have developed over the decades one of the most enthusiastic and loyal followings in cruising-boat history.

But it was no happenstance. Bob Johnson had a concept in mind. As a dedicated observer, he had seen boats go from full-keel, wineglass-shaped hull forms to the *Cal 40* type with a fin-keeled, U-shaped underbody. He was struck by the fact that there had been no thoughtful, logical transition from one extreme to another. He felt that something sensible, seaworthy, and very manageable was missing.

He wanted to utilize the best of both extremes-take a modern U-shaped hull for performance and create a long keel for seaworthiness, not only by stretching the fin keel and making it shallower, but by making it an airfoil shape-he did get something out of the missile industry-creating lift. And instead of the big barn-door rudder hung on the aft end of the keel, which generated huge turning radiuses, he separated keel and rudder. Protecting the rudder-and the propeller-he still felt most important for a dependable cruiser, so he connected the bottom of the keel to the bottom of what was now a counterbalanced spade rudder. In this way, he maintained the stability and seakeeping quality of a long keel and gained a good shallow draft. Even in case of grounding, his internally ballasted hull would suffer little damage compared to the major repairs necessary for bent keel bolts or torn-out bottoms, which some deep fin-keelers might endure.

So he set out not to compete with weekend racers but to build the best cruising boat possible. While the boats are full-out cruisers, they happen to sail darned well; the 38-footer just finished first in class in the Caribbean 1500 by twenty-five hours over the second-place boat. The 45 was first to finish twice in the same series. Apart from seaworthiness and performance, he became obsessive about keeping prices in line with the capabilities of cruising families.

At Island Packet, when they talk a lot about cruising comfort and livability, they mean a boat with a gentle, comfortable, lessfatiguing motion. This in turn improves safety, and—because of lack of fatigue—a more rested and alert crew. Their conviction is that every cruising boat should have the following key features: for a start, a comfortable, seakindly motion and an easily manageable sail plan; in plain English, a cutter rig as on most singlehanded round-the-world racing boats. So, on Island Packets, furling sails—main included—are standard equipment. Next, apart from the protected propeller and rudder, they build a bullet-proof steering system, meaning rack and pinion—no cables, no pulleys, no chains. And they are adamant about the need for a recessed foredeck for safe work and immediate anchor access, because for them, an anchor is a piece of safety gear. With these ideals and very high-quality workmanship in a line of boats based on common sense and simplicity, their boats have kept their value very well over the years.

Bill Bolin, who has been with the company a decade and a half, and looks after sales and marketing, proudly explains. 'We have been awarded five *Boat of the Year* awards from *Cruising World* magazine, but we're probably most proud of the two for *Best Value*. This means not only boat-for-initial-dollar, but also the cost of ownership over the long haul. There are a lot of boats that cost less than ours do for the same length, but in five years' time, most of their value drops 20 to 50 percent, while ours have historically maintained the same price as the day they were bought.

Sail magazine told us several years ago that we have the highest percentage of repeat customers, and I believe this still to be true. There are a lot of owners on their third Island Packet and a few on their fifth. I think it's no accident that *Practical Sailor* has called us the best-run company in the business. Bob has been very meticulous in making sure that every dollar counts. And he doesn't like mistakes. Until not long ago, he used to pull every boot-stripe tape for every boat going out the door. That's dedication to perfection.

'And he has also been a firm believer in our company, giving back to the boating industry as a whole, a lot of what we have learned and gained. Several employees, including Bob and I, volunteer time as leaders on industry boards of directors with Sail America and the National Marine Manufacturers Association. And we actively participate in compliance seminars and training workshops to keep us at the forefront of changes. Bob has always felt that what was good for a builder would be good for the industry as a whole—certainly in the long run.

'To help reduce VOCs—volatile organic compounds—since many of them are classified as potential pollutants, we use hydraulic cylinders to pump catalyzed gelcoat, via a low-pressure/high-volume spray gun, onto the mold surface. This is instead of using high-pressure air systems that atomize a lot of the material. This also gives us a perfectly catalyzed gelcoat. In the more common application system, you have catalyst and gelcoat spraying out of two spigots, so you might get two drops of gelcoat and one drop of catalyst in one spot and the opposite in another. With our system, an adjustable master-and-slave cylinder mixes the precise ratio of materials for the given temperature and humidity and delivers it onto the mold with virtually no overspray. We get a glossier, less-porous gelcoat for longer life, and much less potential for osmotic blistering, enabling us to put a ten-year warranty on our hulls.

'Our gelcoat is different under the waterline and above. Below, it is terrific for blister resistance—not a blister since 1989, except for one bad batch of gelcoat, which infected three hulls that used the same barrel. Of course, we refinished all three hulls at our own expense, ground off all the gelcoat right to the laminates, re-faired and refinished, and started off with a new warranty. We like our owners to have confidence in us. But that same material chalks and oxides too much for use on topsides, so there we use one maximized for gloss retention. We have had our gelcoats lab-tested with UV bombardment and saltwater blasting and found that this new one has more than four times the reflectability after a ten-year simulation than the old one. We use different colors of gelcoat just to make it impossible for anyone to screw up, no matter how sleepy they are that morning.





'We don't spray our resin for the laminates. It, too, comes precatalyzed, but it comes out through a roller. For our hull laminates, we use knitted unidirectional, as opposed to woven, fabrics. We start with a skin coat of mat. All the rest is triaxial glass; that is, the fibers run at 0 then 45 then another 45 degrees. In the relatively open and simple surface of the hull, triaxial is just fine, but it does not bend or conform to compound curves, so in many areas of the deck, we go to biaxial. Once we wet out, we squeegee; that forces the resin in among the glass fibers. Then we roll with brass rollers to squeeze out any extra resin. The rotating molds help the extra resin to flow out of the laminates. With this system, we're getting very close to 47 to 49 percent fiber content. It takes five workdays to laminate a hull, laying one layer on one side just past the centerline, then the hull is rotated and the same layer is laid in the other half.

'Our coring for our decks and interior liners is pretty unique. Instead of using conventional materials that are prone to rot and delamination, we actually make our own core in a liquid paste form, made up of microballoons—tiny Ping-Pong balls and resin. The beauty of the material is that it is chemically very similar to, and bonds aggressively with, the composite structure, eliminating a major cause of delamination and allowing us to offer a ten-year warranty against deterioration, whereas many builders are reluctant even to offer five.

'So we take polyester resin, mix it with the microballoons, catalyze it, and then apply it with a low-pressure spray gun; it looks like shaving cream as it's applied. To maintain thickness minimums, we use spot gauging. When we attach the inner liner to the deck, we use a similar material mixed with mill fibers and microballoons—a little heavier, but it sticks like gangbusters. We then hand-scribe and fit our bulkheads to the deck, with all major bulkheads being mechanically fastened.

'For ballast, we use large lead castings or lead-and-iron ingots, depending on the model. With internally ballasted boats built like ours, we feel there is very little, if any, advantage of lead over iron. With the ballast completely encapsulated within the keel cavity, and with a complete hull laminate on top, we get a very strong, double-bottomed, boxlike beam down the center of the boat. For twenty-two years, 2,000 boats, and a few million miles, it's proven to be a system that works.

'Bob believes in simplicity. We build the boats one way with very few key options. The dealers are welcome to further personalize each boat to the owners' wishes; in fact, we do a lot of prewiring for various systems, but we know that the only system that is guaranteed not to break down at sea is the system that isn't there.

'And Bob also believes in very thorough engineering, to avoid changes and regrets once a new line of boats goes to the mold stage. He believes in mock-ups. We mock up the entire boat deck and interior—to make sure everything fits. Not just obvious things, such as berths and cockpit seats, but all access to engine, steering gear, seacocks, etc. On a small model, we have even duplicated all the rigging to see if a dinghy can be swung aboard with the help of the boom, clearing the split backstay (split to accommodate access to landing platform). For example, on our new raised-saloon model, we wanted ample aft-passageway width, from main saloon to the aft cabin, to allow easy passage even with two people working in the galley. This can look



possible on paper, but it's only proven in a full-scale mock-up.'

Their quality control is just as finicky. There is a twenty-sixpage quality-control book for each boat. Each item is signed off by three different people: the line foreman and the line supervisor, and then a quality-assurance supervisor checks all. This keeps warranty way down. In a trade where standard warranty costs often exceed 2 percent, Island Packet's decades-long record of less than 1/2 percent really shines. To achieve that, they do things like using a flashlight to check inside hard-toget-at angles, and, with a wax crayon, mark off even pin-sized holes to be corrected, whether it's an inside hatch or fridge liners or even lazarette wells.

They have an impressive number of access holes to all of their floor liners, so that every piece, no matter how hidden, is bonded, on both sides, to the hull. And the finishing is thorough even in invisible spaces, so you can reach anywhere in their boats without finding a sliver or raw edge.

The chainplate system reflects both the engineering and the highest quality of workmanship. There are three chainplates on each side. A T-bar is welded to all three plates so the whole thing is one unit. Unidirectional glass comes up and wraps around the T at each chainplate and back in a V down the hull so the load is spread well over a great surface of the hull (see photo on page 91): a good, solid system with no bolts to elongate, no leaks, no mechanical attachments, like wearing a belt *and* suspenders. Even without the upside-down V-bonding, Bob says the structure is strong enough to pick up the whole weight of the boat with just the T-bar, because you have the hull flange, the deck, and the caprail on top of it.

The meticulousness of his thinking is reflected in the whole Island Packet yard. It is utterly spotless and organized in every aspect. I laughed when I saw, in the lobby, two pens on chains on a small writing table for job applicants—the chains were laid out perfectly stretched, and both they and the pens were absolutely parallel to each other. As Bill Bolin says, 'In order to work here, you have to be able to spell *anal retentive* properly.' It's little wonder that the people who come to work here stay for a long time. There are near twenty fifteen-year employees and close to fifty ten-year employees. When you think of how small the company was fifteen years ago, those are pretty amazing numbers. I cannot overstress how important the consistency of the workforce is in building continuously high quality boats.

Island Packet has been well recognized for its quality. It was the first U.S. sailboat builder (and still one of too few) to be certified under the strict new CE certification standards. The International Marine Certification Institute has awarded the entire range of Island Packet models its highest rating— Category-A, Ocean—meaning the boats qualify for 'unlimited offshore use.' It is an extremely thorough process that examines not only design and engineering but also construction and equipment details. Panels for the forward sections of the hull and deck are tested for their stiffness and oceangoing capabilities. Also examined are stability, cockpit drainage, cockpit depths, downflooding angles, wiring and lighting, port and hatch construction and installation, fuel delivery systems, and, of course, bilge pumps. The list goes on and on. In other words, they are almost as thorough as Bob Johnson.





In the enticing photo with the palm trees is the first little Packet that started it all twenty-five years ago. The boats that followed, all from the board of naval architect Bob Johnson, who also owns the company, have much leaner but even sweeter and just as friendly lines. Their fleet—the 350 (bottom right), the 380 (two top corners), and the 420 (below) share not just good looks but also easy-to-handle sail plans. Their decks, with low bulwarks, make for safe footing on any heel. The





stern landing platforms are most practical, and the cockpits on even their smaller boats are ample, with the added creative seats worked into the stern pulpit. These, protruding beyond the stern rail, are practically 'off the boat,' opening up the cockpit for the helmsman and sheet handlers. The ventilation on the boats is extreme; the 480, in the bottom left photo, has fourteen opening ports and seven opening hatches. Bob is one of too few builders who exhaustively engineers each boat.













I sland Packet has, over the past twenty years, developed a following whose dedication borders on zeal, mostly because of the many practical details that Bob Johnson and his team have put into these classiclooking yachts. Bob is an avowed believer of making every penny count.

Practicality, combined with efficiency, results in such features as small floor liners in a high-traffic area at the foot of the companionway, which then blends into the galley (above, and bottom right). The overhead is a rigid liner, which not only reinforces the deck but is infinitely easier to maintain,







and it has a lot longer life than soft plastic ones, which can discolor or tear or, over the years, harden and break down. It also allows for molded bases for the long, easy-to-use handrails. The use of space is truly remarkable; the color illustration is a 32-footer with an aft cabin. The double berth in it is full length; the feet, ingeniously, hide under the galley countertop. The photo below is of the 350, while at the bottom left is the 420. My favorite small item, which one finds on all Packets, is the tempered-glass piece inserted into the middle dropboard of the companionway. This enables one to check for the safety of those in the cockpit without opening the hatch. I'm getting out my hacksaw and modifying mine.











bin for dropboards. To its right are the hydraulic arm and air-less sprayer (see text). What looks like jewelry is a piece of the exhaust with a thermal insulator. Below them is the flawlessly crafted double anchor roller; below that, the immaculate mold shop, and to its left, the carbon-fiber strapping I talked about in the text. Next, the compartmentalized refrigerator box; then a brilliant use of space under the bunk for bedding, with the lid held up by gas strut arms. Above that is my favorite they mock up the deck with rigging to see if the inflatable can be swung cleanly aboard on the boom.





Having a naval architect own a boatyard helps greatly in avoiding the common friction between designer and boatbuilder. At Island Packet, it's most reassuring to see the knowledge, conscience, and concerns over seaworthiness, which are bred into a naval architect, win out over the judgment of the builder, whose opinions are too often compromised by the whims of the marketplace.



THE WORLD'S BEST SAILBOATS VOLUME II

This is the companion volume to *The World's Best Sailboats Volume I*, which, with 100,000 copies in print, is an all-time nautical bestseller. With 535 color photos by the world's most respected marine photographers, and Mr. Máté's commentary, this new volume is the ultimate combination of beauty and practicality. Mr. Máté visited the leading boatbuilders of the world—from Finland to England, from Canada to California—and he surveys and evaluates the sailboats of the eighteen best yards. The text is full of technical information regarding the latest design and construction methods, while the magnificent color photos celebrate the beauty of sailboats and fine craftsmanship. His writing, as always, is both thoughtful and entertaining.



FERENC MÁTÉ is one of the most widely read and respected of sailing authors. His books From a Bare Hull, The Finely Fitted Yacht, Best Boats, Shipshape and The World's Best Sailboats Volume I are all nautical classics. He is also the author of the critically acclaimed A Reasonable Life and the international bestseller The Hills of Tuscany. He lives with his wife and son in a thirteenth-century farmhouse in the Tuscan hills. They spend their summers cruising aboard their Bruce King-designed cold-molded ketch.

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