THE INSPIRATION

Robert Beebe inspired legions of long-distance cruisers, and continues to do so today.

story



et me preface this by saying I knew Bob Beebe, who arguably gave the word "passagemaker" to the world, thus introducing the concept of the long-range offshore cruising powerboat.

I was a young magazine editor, and he was already a towering figure, literally in height and figuratively in yachting lore. He had launched his revolutionary *Passagemaker*, a 50-footer, in Singapore in 1963. By the time I became the last editor of *The Rudder* magazine, he had written the 1975 book *Voyaging Under Power*, which detailed the 60,000 miles he had put on

the yacht at that point.

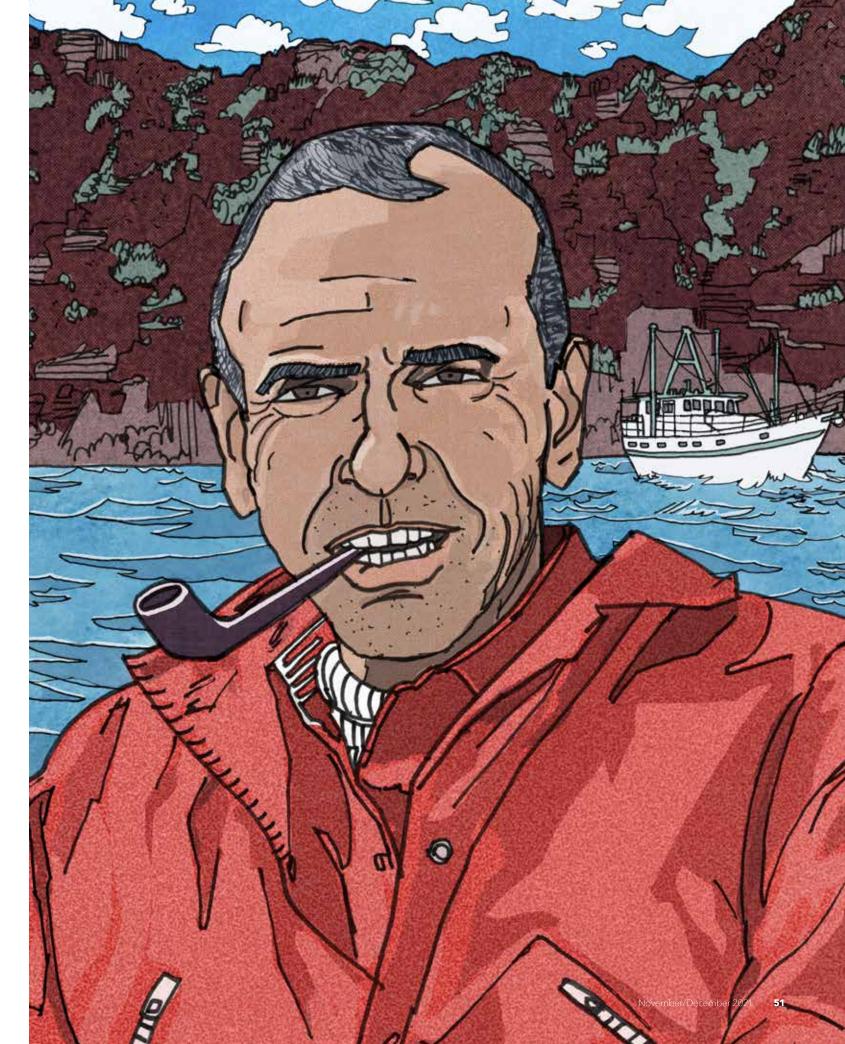
I remember many things about him: his sometimes haughty demeanor (especially among nonbelievers), his incredibly fertile mind, his ever-present pipe and the fact that he had wrung more salt water out of his socks than most of the "yachty" writers in my stable.

But when I think about him, one formula in particular stands out.

No, it wasn't displacement divided by length, or the prismatic coefficient. It was instead the trawler-to-truth formula. This, he used to measure what he referred to as the "bullshit factor" that some yacht salespeople use to claim a particular vessel is suitable for long-range adventures.

Technically, this trawler-truth formula has nothing to do with how untrustworthy the salesperson seems to be, nor with how many of a boat's brochure photos show Mo'orea or the Greek Isles. No, the formula is quite simple: The weight of the ballast should equal 50 percent of the fuel weight. This keeps the yacht from being overly light or high in the water as fuel is burned on a long crossing.

The trawler-truth formula is just one among countless bits of wisdom that Beebe bestowed on all of us who love to cruise long distances under power. His entire life was devoted to learning about boats, designing boats, being aboard boats, and sharing knowledge about boats in a way that continues to inspire legions of cruisers today.



DANIEL ZALKUS

Beebe the Man

Born in the Philippines to a career U.S. Army officer, Robert Park Beebe launched his lifelong love affair with the sea by graduating from the U.S. Naval Academy in 1931. He was fascinated by naval architecture. As the navigation officer of the aircraft carrier USS Saratoga during World War II, he was naturally predisposed to numbers and formulas. I can only imagine that, between campaigns in the South Pacific, Beebe had time on the bridge to sketch ideas for boats he might like to own and cruise once the conflict was over.

A career U.S. Navy man, he went on to assume command of the USS Sitkoh Bay, an escort carrier during the Korean War. In 1958, he was transferred to teach at the Naval Postgraduate School in Monterey, California. He continued adding to his portfolio of designs, and after his wife died, he found himself retired in Seattle, again sketching.

Beebe's years at sea had taught him several things. First, he wanted to roam the world aboard a yacht. In those days, the accepted norm for long-range cruising meant one thing: a sailing yacht. Powerboats simply didn't have the range or the

seaworthiness to cross open oceans.

The second thing he knew was that he didn't want to be tied to a sailboat, since he'd already done enough cranking of winches for a lifetime. And so, he decided to focus his design thoughts on producing a powerboat suitable for ocean adventures.

But—and this was a big but—he knew that stability was a major issue. Sailboats have natural stability from a chunk of lead in the keel, and they have secondary stability from a cloud of sail overhead that dampens rolling.

Beebe spent time on the waterfront watching salmon trawlers come and go like clockwork, despite often-appalling Pacific Northwest conditions. Then came his "aha moment."

He noted that they all had what they called "flopper-stoppers," or "West Coast stabilizers." These were wing-shaped water kites that flew underwater from the trawler booms.

Below (left to right): Beebe's 1975 book *Voyaging Under Power*, deemed a must-read by many cruising enthusiasts, details the 60,000 miles that *Passagemaker* had put under her hull; Beebe in his earlier service days.

VOYAGING UNDER POWER by Robert P. Beebe



Foreword by Carleton Mitchell

The quest for a seagoing motorboat to "cross oceans with speed and dispatch." Covers: History, Designing & Building the prototype, Passagemaker. Includes: First Ocean Passages, Cruising Europe & Planning Voyages—World-Wide. Plus: Seagoing Boats by 20 other Designers, Stabilizing Against Rolling, Essential Technical Data, Graphs, Charts & Study Plans of New Designs. 180 Figures & Photos.



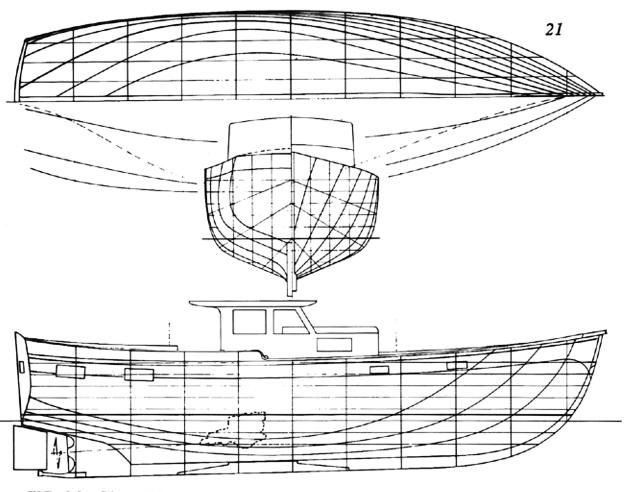
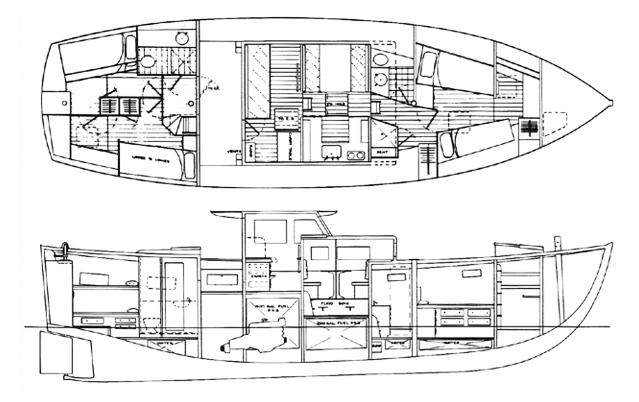


FIG. 3-2. Lines of Passagemaker.



No one ever described *Passagemaker* as a "pretty boat," but she did have the authenticity of purpose you see in a Glock pistol or an Abrams tank. The sheer was unremarkable, sweeping up aft to provide headroom for the stateroom below.

They brought the roll angles to a livable minimum, which was especially important since the salmon crews were working on wet decks around dangerous winches and gear.

Beebe was familiar with paravanes, of course, from his Navy days. Every minesweeper used these wings towed to each side to harvest and destroy mines at a safe distance from the hull. He knew there were huge loads on the vanes, and that they were designed to pull out away from the minesweeper, while the salmon trawler vanes went straight down to steady the boat while trawling.

And so the flopper-stopper came to yachting, whose designers, for inexplicable reasons, had never tried them.

Previous Long-Rangers

Well before Beebe, there had been long-range power yacht adventures, notably Thomas Fleming Day's crossing of the Atlantic from New England to Ireland aboard *Detroit*—a promotional stunt to prove the reliability of gas engines from, you guessed it, Detroit. Day was the editor of *The Rudder*, where he published features about the crossing. The *Detroit* had an open cockpit, which says as much about Day's durability as the engines.

Even earlier than Day was William Newman, who crossed from New York to Falmouth in 1902 to get publicity for a newfangled kerosene engine. Another early west-to-east crossing was Frenchman Marin-Marie aboard Arielle, a 42-footer that did the crossing in just 19 days (Detroit took 28).

From books and articles about these pioneers, Beebe came to understand that one critical requirement for success would be to reduce rolling. All of the early crews had arrived weary and battered from the incessant rolling. Crew protection was another need, especially in the case of Day's *Detroit*, which left the skipper completely exposed to the elements.

Beebe did, however, recognize the benefits of sails for longrange cruises, both for steadying and to take advantage of natural tradewinds along the downwind shipping routes used for centuries. And, he was aware of William Hand, a designer who first saw the benefits of powerboats with sailboat-shaped hulls. Hand's motorsailers are now classics from the 1920s and '30s that used sails not for propulsion, but for stability.

The Boat

Beebe channeled all of this information onto his drawing board and into one boat: Passagemaker.

This yacht, which was officially Beebe Design 67, was 50 feet length overall and a long 46 feet, 6 inches on the waterline. Her beam of 15 feet clearly had European canals in mind, and her draft of 5 feet, 4 inches allowed for exploration of many island harbors. Displacement was a mighty 27 tons, and she carried 1,200 gallons of fuel, which Beebe thought would be enough to cruise (in reasonable seas) for 2,400 nautical miles. In fact,

Passagemaker easily reached the 3,200-nautical-mile range.

Beebe contracted with the Thornycroft boatyard in Singapore, which built high-performance patrol boats, to build to his design. She was planked with teak over laminated chegal (a tough Malaysian hardwood), with plywood decks and a predecessor to fiberglass sheathing called cascover, which was nylon fabric with a resorcinol-type resin.

Power came from a Thornycroft-converted Ford six-cylinder diesel with a heavy flywheel turning an oversized prop protected by a skeg, which also carried the lower rudder bearing. In line with Beebe-think, she had 5,000 pounds of outside ballast bolted to the keelson.

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The masts were low, since she was intended only for convenient sailing. The rigging was overbuilt to carry the immense loads from the flopper-stoppers in a seaway. The cockpit was deep, in line with Beebe's theories of protecting the crew from falling overboard from a boat that would probably be on autopilot for days, long before anyone thought of man-overboard alarms.

And the pilothouse, with the roof extending over much of the cockpit for weather protection, included an inside helm with good visibility, a dinette and a galley. The sleeping spaces fore and aft were just that: for sleeping.

The Book

Beebe's Voyaging Under Power became the bible for thousands of skippers who committed its recommendations and formulas to memory. The title was an immediate success upon publication, and it became a main selection of the Dolphin Book Club, which introduced it far and wide. Beebe took to calling it "VUP" and was privately amused not just by its acceptance, but by the hundreds of "ocean-crossing trawler" knockoffs it spawned. Hence the trawler-truth formula.

In 1994, cruising yachtsman Jim Leishman was invited to update the book, since he had conceived and was building the Nordhavn 46 as one of the early ocean-ranging powerboats. The update includes items Beebe never saw after his death in 1988, from fin stabilizers in place of flopper-stoppers to bow thrusters and carbon fiber. The book, now in its fourth edition, continues to be the bible for long-distance power cruising.

And, as such, Beebe's last sentences remain good advice amid all the formulas and advice on power cruising that are ubiquitous online and in print today.

"But one lesson is most important of all—we are glad we have done it and hope to do more. And so we will leave you with one simple thought: Go!"