

The Santa Cruz 52

Bill Lee's ULDB has been reinvented as a performance cruiser

Twenty years after Bill Lee built his first boat in a chicken coop on a hill overlooking the Pacific near Monterey Bay, his designs are still making an imprint on the sailing world. His most recent boat is the Santa Cruz 52, a 53-foot performance cruiser that went into production in 1992. After two years on the water, owners testify that the new boat combines the best of Lee's go-fast methods with ease of handling and creature comforts that rival cruising boats known primarily for their amenities. Although the company has experienced a recent reorganization, the production line is full.

The Man and His Company

Lee, a Cal Poly engineering graduate, was a neophyte boatbuilder when he declared that "fast is fun" (a marketing slogan) and began designing performance boats. His first notable design was the Santa Cruz 27, which incorporated a beamy hull with lightweight construction methods. The boat, in today's vernacular, would be considered a pocket rocket.

By 1977, he'd designed and built *Merlin*, the first Lee 70, which set a record in the TransPac on her first Pacific crossing, earning him the nickname "The Wizard." *Merlin* was still setting records four years ago when she won the Victoria-Maui race. Downwind performance was achieved to a great extent by its ultra light displacement, hence the phrase ULDB (loosely defined as having a displacement/length ratio below 100).

Between 1974-1994, five different boats were hatched in the coop, all of which share the same pedigree as

Merlin. Bill Lee Yachts produced 140 Santa Cruz 27s, 14 40-footers, 29 50-footers, and 19 70s, the last of which was commissioned in time for the 1993 TransPac. The boats hold their value in the used marketplace so well that 50s still sell for more than their original prices.

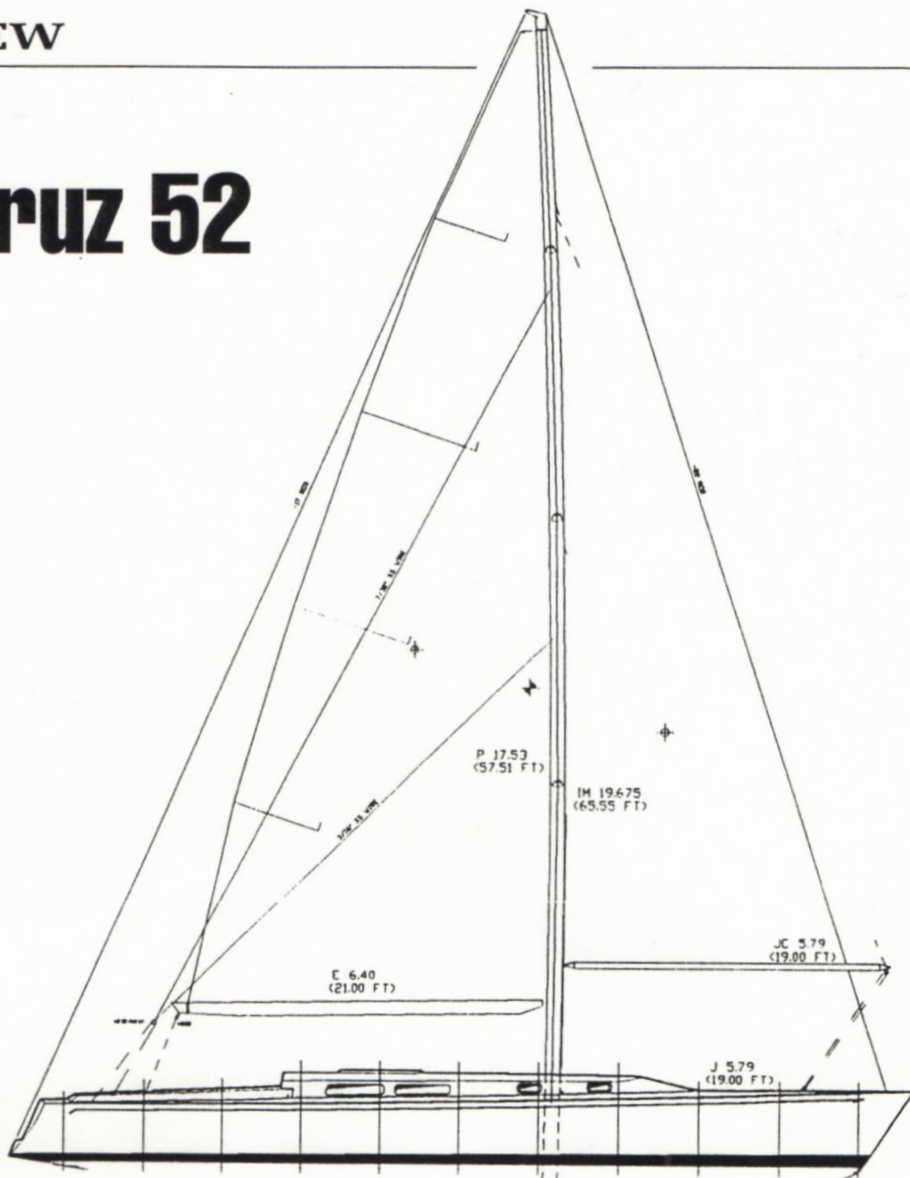
By 1991, the *Wiz* concluded that the market for large, grand prix racers was deteriorating, but that there was room for a performance cruising yacht. As a result, he began design work on the 52 with Bob Smith, a veteran architect who'd been providing consulting services since 1988. Before relocating to the West Coast after a stint with Bruce Farr's office in Annapolis, Smith had been responsible for numerous racing and cruising designs, including the Beneteau 52f.

Eighteen months later, the tooling for the Santa Cruz 52 was completed

and hull #1 started down the line, bow first. Since encountering a blistering problem with a 27 that had inadvertently moved down the line stern first, the pointy end is always aimed at the coop's swinging doors.

In July 1994, the company declared bankruptcy. Apparently there was a dispute between Lee and the owner of an IMS 72-footer under construction, and Lee found himself faced with the possible seizure of the company by officers of the court. In response, he filed Chapter 7 and the doors of the company were locked, seemingly for the last time.

When the dust settled several months later, John DeLaura emerged as temporary owner of the company. The owner of the Lee 70 *Silver Bullet*, DeLaura had a SC52 halfway down the production line at the time of the filing, so he bought the company to



avoid losing his investment. With the completion of hull #7, he sold the company to Paul Ely, who was also a potential customer. A Silicon Valley venture capitalist, Ely saw long-term potential in the market, so he reorganized the company as Santa Cruz Yachts. Lance Brown, who had been overseeing production of the boats, returned to reassume that role.

Lee, now the ex-officio dean of the ULDB school, operates as an off-site consultant, while Smith continues as resident architect. Sadly, the unfinished 72-footer sits in a pasture while its new owner attempts to sell it to a Hollywood studio as a prop in a demolition scene.

The Design

The SC 52 became a 53-footer as a result of Lee and Smith tinkering with the bow entry and coachroof in an attempt to improve appearance without compromising performance. Consequently, it has finer lines than the 50, to which it is most often compared, though it is 2 feet beamier at 14 feet. Displacement is 21,000 pounds, of which 9,850 pounds is in the keel,

giving it a high 47-percent ballast-displacement ratio. The IMS Stability Index (derived from the limit of positive stability measurement) is 121, just above the 120 threshold we have long advocated as a target for safe, offshore sailing.

Smith incorporated some elements of the 70's keel design, intended to

Santa Cruz 52

LOA: 53' 0"
LWL: 46' 6"
Beam: 14' 0"
Draft (standard): 9' 0"
Draft (shoal): 6' 0"
Ballast: 9,850 lbs.
Displacement: 21,000 lbs.
Sail Area: 1,327 sq. ft.
Disp./Length Ratio: 93
Sail Area/Disp. Ratio: 27

increase lift and reduce drag. The keels are manufactured by Mars Metal in Ontario, Canada.

The standard rig is a tapered triple-spreader section that towers 64-feet above the deck, 4 feet taller than the 50. The 52 carries 750 square feet of sail in the main, 577 in the working jib, 1,000 in a 149-percent genoa.

Robert Mann, who sold a Santa Cruz 40 to purchase hull #2, said "She goes to weather with the 70's," and is a vast improvement over the 50. "She's a hunter," he said, referring to a characteristic he defines as "more pointing ability and increased direc-

tional stability on any point of sail."

Owners who anticipate sailing in light winds have opted for a 3-foot taller aluminum mast section; a few have paid the dear premium for a carbon fiber spar—about \$40,000.

Navtec discontinuous rod rigging is standard equipment, as are running backstays. During our test sails, we noted that runners are used both to improve sail shape and to avoid mast pumping in heavy, choppy seas.

Lee added a cruising touch, a swim platform on the stern for easy access to the cockpit through the wide-open transom.

Construction

While construction methods employed at Santa Cruz Yachts focus on keeping weight to a minimum, Smith's design specifications require that the boat be built to ABS standards (though in and of itself this doesn't guarantee quality, as ABS requirements occasionally have been found wanting, especially in offshore conditions). Following the reorganization, the same experienced crew that had been doing 30-day hull lay-ups returned to the company.

The outer skin is comprised of combinations of 17- and 18-ounce Nytex and Collins E-glass laid bi-directionally and vacuum-bagged over 3/4" Select Baltek in sections below the waterline, and CK57 balsa above. The same pattern is repeated on the inner skin, which yields a 1-1/8" hull thickness. The inner skin forward of the mast is reinforced with a Kevlar collision mat that extends 12" above the waterline. The cabin top is cored with 1" Baltek, though a carbon fiber deck is optional.

To increase strength at stress points at the mast step, 1" thicknesses of solid glass run across the boat from rail to rail, intersecting bi-directional layers on the floor to distribute loads. Similar strengthening occurs on other load areas induced by the backstay, mainsheet traveler, steering pedestal, ports and hatches, and on the centerline, where the keel bolts are bedded. The hull-deck joint is sealed with AME 4000 vinyl ester resin putty and

Below: Two interior plans are available. The one shown has a private stateroom aft to starboard and a second head to port. An alternative layout, more for racing, has two pipe berths both port and starboard.

