Designer DeFever . . . "a mild-mannered giant with the build of a Chicago Bears tackle . . ."

YACHTING Interviews: ART DeFEVER

. . . naval architect of long range comfort

ONE OF THE most noteworthy design trends in recent years has been the marked shift toward rugged, self-sufficient offshore cruisers capable of tackling long-range passages in comfort, safety and kindly concern for the ship's company. An influential pacesetter in this movement is naval architect Arthur DeFever, whose apprenticeship in designing commercial fishing vessels evolved into a series of widely known yachts which have penetrated all corners of the globe. Adopting the Pacific Coast trawler trademarks of deep forefoot, long keel ample beam and sturdy construction, he has specialized in distilling these deepwater attributes into pleasure craft which provoke comment and admiration wherever they venture.

A mild-mannered giant with the build of a Chicago Bears tackle, DeFever easily comes by his affection for the sea. Born in San Pedro, Cal., where his Belgian-born father settled to become one of the foremost hard-hat divers in the region, he grew up attuned to a marine atmosphere. The senior DeFever completed much of the below-surface construction on the San Pedro breakwater and a sizable percentage of the shipways in Los Angeles Harbor, and was widely known in the boatbuilding community. In addition, he doubled for the leading man in underwater scenes filmed for Hollywood productions wrestling sharks, octopi or whatever the script demanded. The family household was graced with historic artifacts he salvaged from wrecks off Point Arguello, that fog-bound Pacific promontory of fierce winds and currents on which so many coastal voyagers come to grief. As a schoolboy Art acquired his first boat by digging an abandoned hulk out of the sands of Cabrillo Beach and carefully restoring it into a trim 18′ clinker-built sloop.

Following up this natural maritime inclination he took engineering at the University of Southern California and then continued his naval architecture studies through the University of California. During this period one of his summer jobs consisted of a stint as deckhand and mail boy aboard the frigate *Constitution*, stamping letters posted by visitors aboard *"Old Ironsides"* as she toured the entire length of the Pacific Coast.

His professional career has been closely tied to commercial fishing vessels from the very outset, when he started with a shipbuilding firm on Terminal Island in addition to working with designer Ted Geary. During the war years with the Hodson, Green, Haldeman Shipbuilding Co. DeFever concentrated on turning out this type of vessel to sustain the nation's food supplies, as well as seagoing tugs, lighters and small freighters. At the close of hostilities he continued work in commercial craft and tuna clippers and also turned his hand to designing the firm's line of Hollywood sportfishermen and cabin cruisers, one of the few stock boats to emerge from his drafting board. Branching out on his own shortly thereafter, he shifted his main headquarters to San Diego in 1950 and from that juncture focused much of his attention on custom work.

A hectic schedule that might fell someone not accustomed to the pace is routine, and he flies thousands of airline miles each year checking on the progress of boats building to his designs not only in U.S. yards but in Mexico, Europe and the Orient. For their own personal pleasure he and his wife Dulcie have owned a series of offshore cruisers, all named *Dul-Sea*, in which they have cruised most of the Pacific Coast and the Gulf of California. For a shakedown cruise in their most recent acquisition, a 50′ wood design built in Japan, they visited the islands forming the western perimeter of that country before shipping the boat to California. Armed with a deep fund of practical cruising experience, Dulcie often provides the distaff opinion on galley arrangements and housekeeping details.

On the subject of offshore cruisers it's obvious that the designer is wholly enthusiastic about this type of boat, although he also has had extensive racing experience under sail and has turned out several cruising sailboats. To explore the subject further we asked some questions.

There is obviously a tremendous current interest in offshore cruisers. Do you feel it is going to increase?

Yes, very definitely, judging by the inquiries and letters we get. I think this is probably the governing factor in the work I am doing, because the demand and backlog on

offshore cruisers hasn't permitted any time to do anything of a different nature in the smaller boats.

Are these designs an adaptation of the commercial fishing boats?

The original ones, starting with *Rapparee, Pau Hana* and *Chickadee,* were very definitely so, with the seiner type stern. Then, to get as much room in a 42′ boat such as *Dul-Sea II* as we had in a 47′ hull like *Rapparee,* we went to the transom stern. The underwater and forward body didn't change any and the run aft didn't change either, designing to break the transom right at the waterline and developing a good underbody run, but this does give you more beam and depth in that area. It has worked out very well, and the transoms haven't created any drag. Basically, it is similar to a commercial hull but with a finer entrance and exit, a little more deadrise and a finer hull not only for speed but for trim. Otherwise, you'd have to add interior ballast so she wouldn't bob like a cork.

Do you still do commercial work?

Yes. We have four tuna clippers of 151′ under construction in San Francisco out of a series of five. One is in service already. It is a breakthrough from the normal clipper and has created quite a little conversation in the industry. The arrangement is completely different with a stern engine room and twin screw, offset stack in the stern, and galley located on the raised deck rather than down below. It has a bulbous bow and bow thruster, and the fish wells are all forward. There's no shaft alley as such but instead a tunnel in which the refrigeration system and brine circulators are installed. *Vivian Ann,* first in the series, made something of a record run on her maiden trip, bringing home a full load in 20 days. She does 14-3/4 kn. fully loaded, and apparently her ability to maintain speed in rough water conditions is very good. This is not the largest boat we have designed but she is faster than the larger ones. Coming up the Mexican coast in rough weather she was able to maintain speed while the others had to drop back, so the bulbous bow and some of the other features are apparently paying off.

Can you translate these particular features into yacht design?

The stern engine room is certainly practical and a good feature in yachts. Norman Neely's 65′ *La Siesta* has one, for example. For the bulbous bow 150′ is about the smallest size practical. To my knowledge *Vivian Ann* is the smallest boat to have such a bow, and she's the only one in the tuna fleet with a bow thruster at this point. Because of her first trip and reports of her performance it looks like there's a run on them.

What other stock boats have you designed?

The Alaskan 46, and we have a 39′ Alaskan coming out. The others have all been custom.

Does fiberglass make much difference in designing this type of boat?

You have to design for it, because it's lighter, so your hull form changes a little to compensate. The same thing applies to aluminum over steel.

Does that mean a broader beam?

Not necessarily. The material doesn't govern the beam. The main thing is to get a good entrance at the bow and exit at the stern and a good run on the bottom for a good flow to get clear water to the propellor.

Does the material limit the design?

You can do the same thing in any one of them, be it wood, steel, aluminum or fiberglass, as far as hull design and sea-keeping ability. No one is better than another. Possibly the one difference in fiberglass, steel and aluminum over wood would be in the stern post area where you could really bring it down to a fine knife edge for a good exit. The same thing applies to the stem. When you're talking of an offshore cruiser of nine or ten knots you're going to get that speed anyway, and you're not going to add another knot by doing those two things.

Does a hard chine offshore cruiser give you more speed over a soft chine model?

Normally, yes, because most are planing hulls, and if you have power you'll break suction and go faster. Coupled with that, of course, you normally have shorter range, less fuel and less water to make the boat light so you can get up and plane. It's just a matter of displacement and resistance created. The chief reason for having a soft chine with deep hull is that it gives you more space in the engine room, the state-

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"Rapparee," one of DeFever's first offshore pleasure cruisers developed from the commercial fishing boat

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rooms can be below deck and in general you gain more room and accommodations.

Do you consider hard chine boats more uncomfortable on a day's run?

Well, this depends. *Nalla,* for example, has a comfortable roll. She is rather heavy displacement for her size (42′) and carries 900 gal. of fuel and 300 of water with steel construction. She is basically a displacement hull forward, as the chine doesn't go full length, but she does go into a vee aft with a deep fin keel. I have made several trips up the coast with her in comfort without the snap roll of a lighter boat. *Nalla* cruises at about 9¾ kn. with twin engines, and the hull does possess the capability to go a little faster with more power. With a straight displacement hull you could add more horsepower and just churn up the water.