

Coming Unstayed

Not an accident, but a trend spreading through the cruising auxiliary field from Garry Hoyt's pioneer efforts/by Bill Robinson

Garry Hoyt has all the makings of a marine missionary, and his mission for the past ten years has been promoting the unstayed rig for cruising sailboats. That his efforts have been successful can be seen from the spread of the Freedom Yachts he has developed from a difficult and shaky beginning, and from the entry of quite a few other builders into the field. Although these others cannot fairly be called straight imitations, a variation at least on the old cliché about imitation being the sincerest form of flattery might be said to apply. The unstayed rig has graduated from novelty status to general acceptance and a wide choice of boats is available.

It has been a hard road, though, with much energetic missionary work on the way, and the lean personable Hoyt's qualifications as a missionary are impeccable, starting from a background of boyhood sailing on Barnegat Bay. Racing the local sneakboxes there is a challenging course in hard-nosed competition and sheer ability to survive all the tricks a cranky little catboat can throw at the unwary sailor. From this he went on to triumph in international events in Finns and Sunfish and gradually moved into the offshore racing field while living in Puerto Rico. He was there as a copywriter and executive for a major advertising agency, and the combination of competitive zeal in racing and an adman's zeal in pro-

moting the product combined perfectly when the idea for the unstayed rig became an obsession with him.

In observing the problems with conventional stayed rigs in ocean racers—where failure of one small fitting among dozens can send the whole caboodle tumbling into the sea—and the sail handling difficulties and efficiency in cruising boats, he was struck with the thought that there must be a simpler way. His research took him back to working rigs under commercial sail, where the unstayed cat-ketch rig had had a vogue in small coastal workboats, and to the works of Nathanael and L. Francis Herreshoff in the same field. His own experience with the unstayed masts of Finns and Sunfish, where he had never experienced a failure, more and more set his thinking along these lines, and he decided to put his ideas into a prototype boat, with the hull design and engineering expertise to come from a professional designer. This turned out to be Halsey Herreshoff, third generation in the Rhode Island family of yacht designers, who was thoroughly familiar with the work of his predecessors, and the combined result was the original Freedom 40, which was launched in July 1975. It had taken two years of trial and error and great expense to arrive at that moment, and from then on, Hoyt became dedicated to carrying his message to the unbelievers.

Of these, there were plenty, and

his early sail trials were accompanied by a chorus of dire predictions. His inner confidence was buoyed on the first trial, however, when his odd new baby sailed over a Shields racing sloop to windward, something he had never before experienced in a cruising boat. From that moment, his every effort was bent on showing her off to best advantage, and he became carried away with proving her by brushing with everything in sight. The first concrete result was a runaway victory in the cruising division at Antigua Race Week's high-pressure competition in 1976 and more and more unbelievers began to sit up and take notice.

Hoyt based the engineless boat in Trellis Bay in the British Virgin Islands, and he became a familiar sight among the burgeoning bareboat fleets as, wearing his "trademark" wide-brimmed hat, he sailed her through anchorages crowded with cruising vacationers, whipping her around like a sailing dinghy in a macho display of performance capabilities. He put his thoughts into a "Designer's Forum" article in *YACHTING* in December, 1976, a month after her plans had appeared in our Design section and continued to concentrate every effort into promoting the boat's special qualities. His easy smile, ingratiating manner and sparkling zealot's eyes did a lot of convincing at boat shows, where the Freedom usually had the longest lines of visitors of any exhibit. Turning conviction into sales was not so easy, however, and growth was slow at first.

It all looked very simple, but the thinking of generations of sailing in conventionally stayed boats had to be turned around. Despite all assurances, there was a gut feeling in most people that the naked mast sticking up by itself just wasn't right. And would a boat sail well without the power of a jib? What about those odd-looking wishbone booms? Weren't they awkward and what good were they anyway? Weren't the two-ply wrap-around sails hard to get up and down?

Interest was not converted rapidly to sales, as these considerations kept buyers from plunking down hard cash—and the production boat

was not a cheap one, discouraging the bargain hunters who thought simplification of rig meant reduction in price. Hoyt had purposely kept the prototype light, without engine and many conventional fittings so that her sailing qualities could be shown to best advantage, but the early production boats, with all sorts of weight added in engines and amenities, were disappointing performers. Gradually, however, with the production know-how of Tillotson-Pearson Inc., in Newport, R.I., where the boats are built, working out some of the bugs, interest turned into actual sales, and some satisfied owners joined in the missionary work.

Hoyt loaned to me the prototype boat for a family cruise in the B.V.I. in January, 1977, and in the resulting article ("Back to Basics," April, 1977) I had to admit to being convinced that she was a remarkable sailer and performer and my only reservation was in the difficulty of raising the two-ply wrap-around sails, supposedly necessary for proper flow of air around the thick masts. As claimed, the wishbone booms acted as boom and vang to hold the sails' shape on all points of sailing without distortion or twisting, and windward ability and speed off the wind were both very good.

Hoyt did not stand still with the original concept, now that accep-

tance was more or less guaranteed. Other models—the 33, 44 and 28 were introduced with the cat-ketch rig, and later single stickers at 25 and 21 feet joined the line. There were experiments with full-battened sails on tracks, conventional booms, and a remarkable method of handling a spinnaker called the "gun mount," a sliding pole over the bow.

The big-sectioned aluminum masts were a problem because of the turbulence they created in air flow onto the sails, and there was eventual development of carbon fiber masts of greater strength and less weight than aluminum as an improvement in the key to the whole idea—the unstayed mast. Many of



Freedom 40's two-ply sails provide good flow around the large mast sections. Wishbone booms act like vangs.

these ideas have ended up in the newest Freedom, the 39 schooner (see accompanying article), the latest model to be introduced.

Meanwhile, the rest of the industry was not standing idly by and leaving the field to Hoyt. The catboat concept was, of course, nothing new as a basic American type going well back into the 19th Century, but most examples being built were replicas of the old gaffriggers with at least a headstay on the mast. Jerry Milgram had startled the ocean rac-

ing set with his cat-ketch *Cascade* that caused havoc on New York YC cruises in the early '70s, and Ray Hunt had once played around with the rating rule by making a mammoth catboat out of the *Concordia 41 Harrier*. None of these was unstayed or had a wishbone, however, which was the basic key to Hoyt's concept.

One of the first of the other modern unstayed breed to be produced was the *Sandpiper 32*, designed by Walter Scott. It featured a very

shoal draft sharpie hull and a cat-ketch rig with wishbone booms and rotating masts, with the battensless sails furling around the masts. (See my article, "Simplicity and Lonely Harbors," June, 1978.) A direct descendant of this is the *Beachcomber 25*, built by the same company from Scott designs (Marine Innovators, 120 Pinckney St., Oldsmar, Fla. 33570). She is a cat-ketch with wishbone booms and rotating masts, a simple, shoal draft trailer-

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Freedom 39



Just how far Garry Hoyt's thinking has taken him since his original Freedom 40, launched almost eight years ago, is graphically evident in the latest Freedom model, the 39' schooner. The basic concept of an unstayed rig is still there, with the emphasis on ease and simplicity of handling while enjoying good performance, but there are a host of features that are new.

The beamy, balsa-cored hull itself, and the overall concept of the boat as a comfortable cruiser, starts with something new: a Ron Holland design. The underbody

is a modern one with modified fin keel and skeg rudder, a beamy powerful configuration designed to be stiff and easily driven. The airy ash and oak interior is also quite a departure, carefully worked out by Hoyt, Holland and her builders, Tillotson-Pearson. The result is a pilothouse layout that succeeds in providing the comfort and protection of one without the usual ugly bulk and vision-impairing characteristics. The very modern profile has the look of modern European designs, and the visual effect is of streamlined efficiency.

The pilothouse, which includes an inside steering station, effectively separates the two staterooms (each with head) for full privacy, and provides an eating and entertainment area from which it is possible to look out while comfortably seated.

It is in the rig, however, that one notices the most radical changes from earlier Freedoms. Not only is this the first schooner, with the aftermast taller and with a bigger sail; it also does away with wishbone booms featured on most boats with unstayed rigs. Instead, fully battened sails are used, providing more area per mast height through the higher standing roaches. The battens control sail shape about as effectively as a wishbone boom, and the tracked sail is easier to hoist and lower, as well as reef. All controls are led aft, so that all these functions can be done without leaving the cockpit. The carbon fiber masts can be slenderer than the old aluminum ones and are lighter.

The schooner rig was chosen for placement of masts in relation to the pilothouse, and it also allows use of a large staysail for offwind work—which does call for the use of a running backstay.

In a brief sail on Narragansett Bay in light to moderate breeze, I was impressed with the responsiveness of the Freedom 39, with the way the sails held shape, and with how quiet they were in tacking, as well as the way they dropped easily when doused. She went through her paces in a lively, seakindly manner.

A great deal of thought has gone into this boat, and her features seem to combine into good answers for most of the problems inherent in cruising boats.

Specifications: L.o.a., 39'; l.w.l., 31'1 1/2"; beam, 12'10"; draft, 5'6"; s.a., 818 sq. ft.; displ., 18,500 lb.; ballast, 6,000 lb.

Beachcomber 25



Parker Dawson Poacher



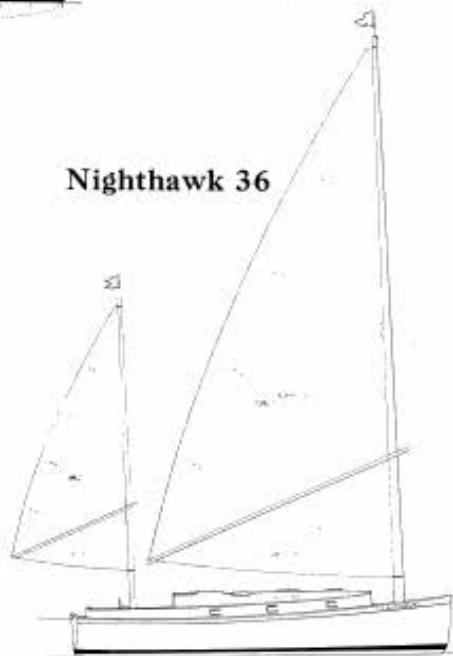
Herreshoff 31



Whistler 32



Nighthawk 36



Unstayed Rigs

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able family cruiser ideal for gunkholing.

In the smaller size range is the new Parker-Dawson Poacher, a 26-foot cat-ketch in the trailerable category offering full cruising accommodations. She is built by The Parker Dawson Corp. (55 Park Rd., South Shore Park, Hingham, Mass. 02043).

A single-masted rig with wishbone and unstayed mast was introduced by the Canadian firm, Hinterhoeller Yachts Ltd. (8 Keefer Rd. St. Catharines, Ontario, L2M 7N9, Canada). This is the Nonsuch 30, more recently followed by the Nonsuch 26. With 540 feet of sail on the 30 and 410 on the 26, a great amount of sail area was concentrated in one sail. Mark Ellis, designer of the Nonsuch, has carried the thinking even further with the 36-foot Nighthawk (Harris & Ellis Yachts Ltd. 77 Bronte Rd., Oakville, Ontario, Canada L6L 3B7). With a cat rig, her sail is 740 square feet—she is also available as a cat-ketch—and Ellis says that her modern light displacement hull form with fin keel and spade rudder, which he has developed for the modern cat concept, balances well and steers easily. The wishbone rig is freestanding, using sailtrack and slides on a spun tapered aluminum mast, with all sail control lines leading to the cockpit, an almost universal practice among these unstayed boats.

As in all the boats also, the traditional catboat hull with short ends and ample beam provides a tremendous amount of cabin and cockpit space for the overall length. The waterline length is 33'9" on a 35' l.o.a. hull and beam is 12'8".

Halsey Herreshoff has followed up his original work on the Freedom 40 with another entry in the cat-ketch field, the Herreshoff 31 built by Cat Ketch Corporation Cayman Ltd. (4483 S.W. 75th Ave., Miami, Fla. 33155), which he describes as a roomy, classic cruising boat in accommodations, combined with a modern, fin-keel racing hull that rates well and performs above her rating.

Slightly bigger is the Whistler 32 cat-ketch designed by C.W. Paine and built on a semi-custom basis by Able Marine (Southwest Harbor, Me., 04679). Only a few of these boats are built a year and there is unabashed disregard for price in concentration on a luxury, quality boat in every respect. This boat, as Paine says, is aimed at the top end of the market. Its design was com-

missioned after extensive engineering studies by Able Marine and Paine, and field work as well. Paine interviewed cat-ketch owners and sailed other models himself and decided that flat, hard-to-drive, shoal centerboarders did not adapt well to the rig. He also found that the center of lateral resistance had to be much farther aft than on conventional rigs to avoid excessive weath-

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Whistler has proved popular for bareboat charters.

er helm. Although he has worked with computer-faring of lines, he still likes to carve a half model as a design preliminary, and this he did with the Whistler. He admits a debt going back to the hull form of Carleton Mitchell's famous Sparkman & Stephens ocean racer *Finisterre*. She had a longer waterline because S&S did not worry about any rule in designing the beamy, easily driven but heavy centerboard hull. The weight helps on carrying through tacks, a problem with lighter cat-ketches.

Another vigorous entry in the field with two models, the Wings 33 and Tanton 43, is Offshore Yachts (Box 6, Cos Cob, Conn. 06807). The sailing ability of the Wing 33 was ac-

knowledgeed by Paine after a charter, and influenced his thinking on the Whistler. Built in Florida, Wings has tapered aluminum spars and a relatively long keel, offering a draft choice of four or five feet. She has been successful in bareboat charter operations in southern waters.

Offshore's President, A. A. Constantine, emphasizes his company's interest in keeping price down without loss of quality, and the 43, designed by Yves-Marie Tanton, is built in Taiwan, under direct supervision of Offshore's staff, with a considerable saving in delivery cost over similarly sized boats. She has a moderate-displacement hull with a split keel/skeg rudder underbody. The hull features considerable

sheer, a convex stern and modified spoon bow, providing a long waterline that allows for extra accommodation space and aids performance.

A special feature of this boat is her carbon-fiber composite spars that are computer-designed and produced through a filament-winding technology developed in the aerospace industry, as opposed to hand-lay-up composites in general use in carbon-fiber mast construction. Constantine points out that this eliminates the possibility of uneven work due to human error, and that the Tanton 43 is the only boat to offer this type of spar.

Throughout the field there is a wide divergence in price, but to a man, all promoters play up the ease of handling and sailing efficiency of the unstayed rig. They also emphasize the advantages of the hull type in extra interior room. It is a highly competitive field now, with a great many choices confronting the prospective owner. Garry Hoyt really started something when his first Freedom 40 sailed over that Shields sloop on a beat. □