

MacGregor 26

This water-ballasted trailer sailer is targeted right at the novice sailor; it's priced (and built) accordingly.

The MacGregor Yacht Corporation is a survivor. It stands as one of the few boatbuilders from the 1960s still in business and still making money. It also stands on a street in Costa Mesa, California that once housed now-defunct builders like Islander and Westsail.

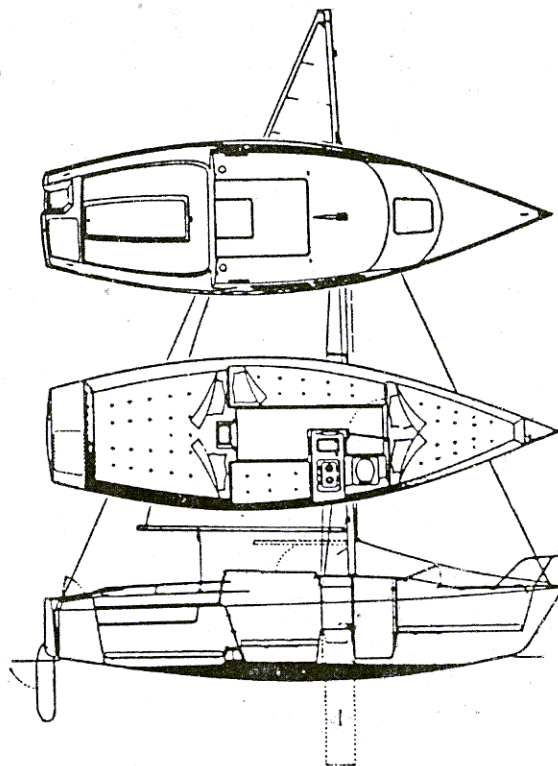
MacGregor is, and always has been, a one-man show; in this case the man is Roger MacGregor. He founded the company in 1964 to prove the validity of his Stanford MBA thesis, the hypothesis of which was that boatbuilders would be more successful if they were more efficient. A "hobby" at first, with only 26 employees, MacGregor decided in 1967 to "really go at it."

Through the years, MacGregor has produced a number of boats, first under the Venture trademark, and for the last ten years, under the MacGregor name. The thrust of the line has always been aimed at the first time sailor; today Roger MacGregor has a better handle on that market than anyone else in the industry.

The first boat the company built was the Venture 21; it was discontinued in 1986, after 22 years in production. In the interim, a number of small boats were produced, like the Venture 22, 222, 23, 24, and 25. The only deviations from the trailerboat theme have been a 36' catamaran, and a 65' ULDB "sled," which is the only boat still in production other than the MacGregor 26.

Of the 25,000-odd boats built to date by MacGregor, 17,000 of them are MacGregor 25s. From this statistic, MacGregor learned that the trailerboat market prefers bigger boats, so he replaced the 25 in 1986 with the 26, a new, but similar design.

To get around the problem posed by smaller and smaller automobiles, they eliminated the 25's swing keel, which weighs 600 pounds. This leaves the 26



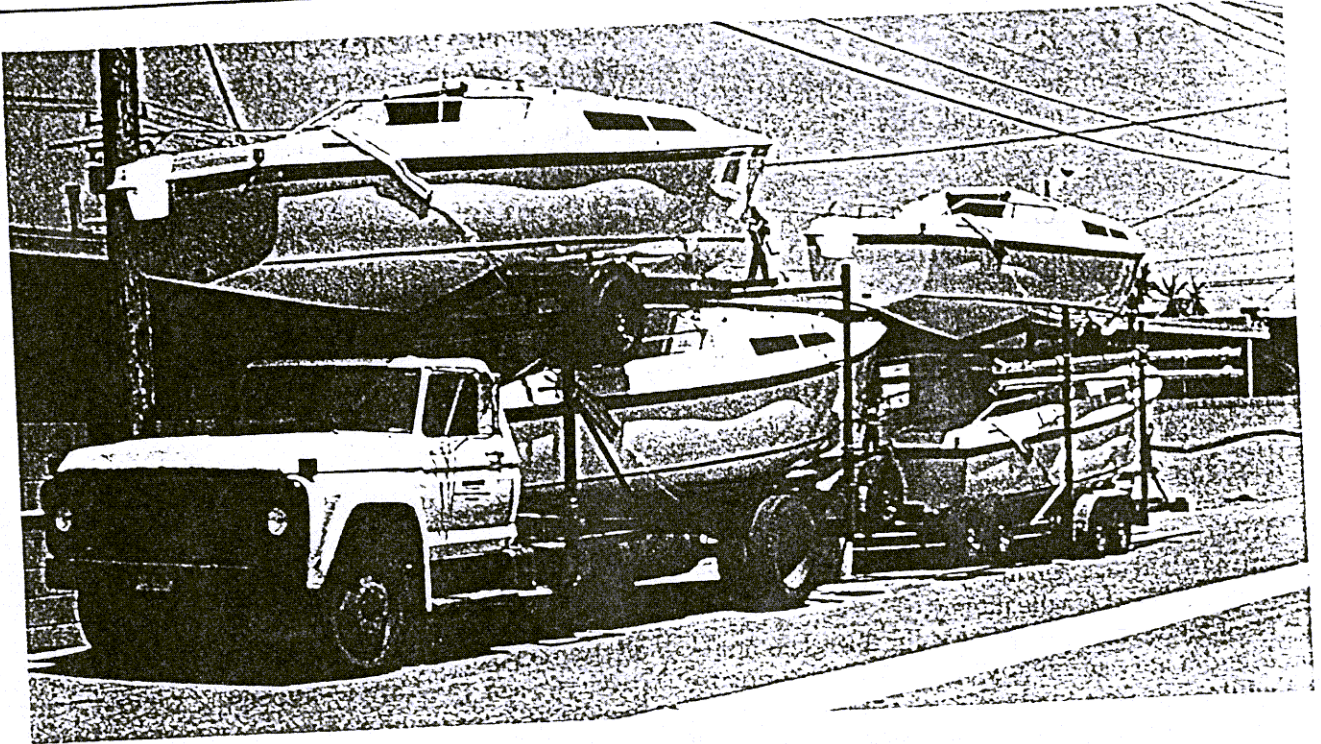
Specifications

LOA	25' 10"
LWL	23' 6"
Beam	11"
Draft	1' 3" / 5' 4" (board up/down)
Displacement	2,850 lbs. (tank full)
Ballast	1,200 lbs. (water)
Sail area	236 sq. ft.

weighing only 1,650 pounds (2,200 pounds with trailer), light enough for most mid-size cars. The lack of a keel also puts the boat lower to the road for less windage.

To provide stability lost by removing the keel, the MacGregor 26 was designed with a slight V to the bottom, which houses a water ballast compartment. The compartment holds an additional 1,200 pounds of water, to bring the total sailing weight up to 2,850 pounds.

Roger MacGregor says he knows why the boatbuilding industry has gone sour, and has found, in the MacGregor 26, the secret to success. He cites the common explanation that the market has dried up, that fewer people are interested in sailing at the introductory level because of the cost and complica-



tion. He has overcome those objections by making his boats very uncomplicated, writing lengthy instruction manuals in non-nautical terminology, and by having a dealer network that caters to the first time sailor.

One-half of MacGregor owners are beginning sailors, and the dealers know it. Most dealers go so far as to show the new owner how to rig and sail his boat, or arrange for sailing lessons, says MacGregor. Of the 40-odd PS boat owner evaluations returned on the MacGregor 25, not one reader had anything but kind words to say about his dealer. This is an exceptional record.

Another pitfall of modern boatbuilding that MacGregor has conquered is the prohibitive cost of compliance to environmental regulations. Because he owns his plant, Roger MacGregor says he can support the expense of compliance, while builders trying to get on their feet in rented property cannot.

MacGregor says many boatbuilders were closed after being purchased by conglomerates, because the conglomerates weren't willing to weather a sustained period of operating in the red. Roger MacGregor says he'll never sell his company; that's why he changed the name of his boats from Venture to MacGregor.

The biggest reason that builders fail, says MacGregor, is inefficiency. This is where MacGregor Yachts shines. The MacGregor 26 only has three options: cockpit cushions, bottom paint and surge brakes on the trailer.

The boat comes complete with trailer, sails, lifelines and pulpits, battery and lights. The only major item you have to buy is an outboard.

MacGregor takes pains to save money at every turn, right down to owning its own fleet of trucks. The dimensions of the MacGregor 26 were not determined by what would be seaworthy, or even what could be legally trailered: rather, the boat was laid out so that four of them would fit on the truck at a time.

Making the boat relatively complete accomplishes two things. First, it helps satisfy the most common owner complaint about the MacGregor 25—that the boats required too much additional equipment. Second, it simplifies the “tracking” of boats through production.

There is no need to keep track of which boat goes to which dealer while in production. If a dealer's sale falls through, he isn't stuck with an odd boat, because all boats are the same. Red tape and paperwork are drastically reduced.

Making all boats alike has allowed MacGregor to “jig” almost every step in production, saving a great deal of time. MacGregor says this saves about \$800 per boat.

MacGregor also saves money by owning and maintaining a company fleet of trucks, complete with drivers and mechanics. The outside dimensions of the MacGregor 26 were determined by the space required to fit four of them, with trailers, on a company truck. Cost of shipping to the east coast is only \$900.

MacGregor has individual shops to build trailers, spars and upholstery. While other builders usually farm out these tasks, MacGregor says they save money by doing them “in house.”

Hull and Deck

The best way to describe the construction of the MacGregor 26 is "quick and dirty." The plant finishes four boats a day, five days a week. A hull is in the mold for only 13 hours.

There's a timetable to be met at each step of production. Production hangups aren't allowed. If the work gets a bit behind, the workers work a bit faster. Sloppiness is inevitable.

The construction flaws caused by this sloppiness are hidden from view, but the finish details are not. The MacGregor 26 will appear somewhat crude to the experienced sailor, but the "rough edges" may not be so apparent to the inexperienced sailor for whom she is intended.

This isn't to say that the buyer of a MacGregor 26 is getting a bad deal. On the contrary, the MacGregor 26 is a lot of boat for the money.

The MacGregor 26 hull is a solid fiberglass laminate, and a not particularly thick one: the laminate schedule calls for a total of 54 ounces of glass fiber per square yard (cloth and roving) below the waterline, and 30 ounces above the waterline—but remember that this is a lightweight boat.

MacGregor's immigrant work force lacks the skill needed to operate a chopper gun, or to trim the fiberglass to size by first rolling it onto the mold. To avoid mistakes—and improve efficiency—the fiberglass is cut to a table pattern, then folded and boxed, one box to each step of the lamination.

The flat areas of the deck are cored with plywood, which is pressed into wet fiberglass mat by laying dozens of weights on top of the wood. The overhead liner is installed onto the deck in the same manner.

To save time, the fastening holes for all of the deck fittings are made by dropping a single jig onto the deck and drilling the pattern of holes. Then the interior side of each hole is bored to 5/8" diameter, to countersink the nuts and washers. Finally, the nut is hidden by a plastic cap; this gives access to the fastenings should you want to replace deck hardware.

Small backing plates, made of scraps of fiberglass, are used on the bow cleats, but not on any other fittings. While the plywood core in the deck reduces the need for backing plates, the practice of countersinking the washers and nuts reduces the strength of the attachment. In addition, plywood is more likely than balsa core to absorb water and delaminate should the deck fittings leak or the lamination work be sloppy.

The hull-to-deck joint, fashioned by a deck flange overlapping the hull and hull liner, appears to be adequate. A rubrail is bolted through the joint with #10 bolts on 6" centers. Foam weatherstripping forms the bedding for the joint, but adds no strength. Final

waterproofing is achieved by running a bead of 3M 5200 sealer/adhesive around the edge of the deck flange; 5200 is also used to bed deck fittings.

The hull liner is pressed into wet mat laid on the keelson. Then vertical surfaces of the liner, where accessible through holes cut in the liner for lockers, are glassed to the hull. To save time, no filleting is used; the tabbing of the liner is done with roving 8" wide. This is not a clean or particularly strong method, but it's adequate for the use for which the boat is designed.

The chainplates are bolted directly to the hull, at the outboard edge of the gunwale. The hull in the area of attachment is reinforced with an additional fiberglass at the rate of 150 ounces per square yard.

The cabin house extends to the edge of the deck, and there are no structural interior bulkheads save those formed by the hull liner. This design gives less support for loading from the rig than would be advisable when sailing in heavy seas.

MacGregor 25 owners complain of cockpit floor flexing and resultant gelcoat crazing. MacGregor says they have solved this problem on the 26 by adding extra fiberglass around the corners of the cockpit floor.

Rig

Our owner surveys did register complaints about the MacGregor 25's rig, which is virtually identical to that of the 26. Made by MacGregor, the mast is anodized but untapered.

The rigging is minimal, external and crude. The rig is fractional with swept-back upper and lower shrouds. The spreaders are tubes that swing freely on small, U-shaped brackets. If the spreaders were fixed they would add stiffness to the mast and safety in heavy air. With freely swinging spreaders the mast loses athwartships support when it bends excessively. Shroud tangs are external, but through-bolted. Halyards are external as well, and they cleat on the mast, not aft in the cockpit.

The shrouds terminate with Nico-pressed eyes, not swage fittings. While MacGregor says they've never had a failure, *PS* owner surveys contradict this contention. Plate adjusters are used instead of turn-buckles on the shrouds.

Daggerboard/Rudder

The MacGregor 26 has an unballasted daggerboard, housed in a trunk running from bilge to deck just aft of the mast. The trunk acts as a compression post for the deck-stepped mast. The trunk also bisects the water ballast tank, which is good and bad. If you were to fracture the trunk in a hard grounding, the ballast tank would leak, not the hull; but if the ballast tank leaks, you could lose the ballast required to keep the boat upright.

To solve this problem, MacGregor says, the daggerboards are designed to shear off in a hard grounding. Replacement boards are \$125.

The innovative board and rudder are nicely shaped airfoils. Holes are drilled in them so they will fill with water when sailing. In the daggerboard, this is a good idea. It leaves it lightweight for trailering, yet allows it to have negative buoyancy so it won't float up when sailing.

In the rudder, however, it only makes the helm feel heavier and more sluggish. Rudder action is further aggravated by a sloppy pintle-to-gudgeon fit and play in the rudder head. The pintles, like all of the MacGregor 26's rigging, are underbuilt.

The daggerboard is short enough to be self-contained inside the trunk when trailering. This means that there isn't much board inside the trunk when it's lowered for sailing; this adds to the loads placed on the trunk. However, the ballast tank gives the trunk some extra support.

The fit between the board and trunk is not particularly tight; we expect you might hear it "thunk" as the boat rolls in waves.

Ballast Tank/Flotation

The most unique feature of the MacGregor 26 is her water ballast system.

Water ballast in sailboats is usually restricted to singlehanded offshore racers, where ballast tanks are mounted under the gunwale to add stability. Their system requires that the leeward tank be filled, and the weather tank emptied, before each tack.

MacGregor's system is different. Patterned after

European trailer sailers, it uses a single ballast tank running the length of the bilge.

This configuration doesn't provide the leverage of a lead keel of similar weight, nor of a gunwale-mounted ballast tank, but it does make the boat self-righting. It takes 125 pounds to hold the tip of the MacGregor 26's mast in the water, says her builder, compared to only 75 pounds for the MacGregor 25.

The ballast tank can be opened and closed, and the water level inspected, from inside the cabin. The tank is closed by drawing a rubber-backed plate up into a recess in the keelson. The rubber must be kept clean of fouling or the tank could leak ballast when the boat heels.

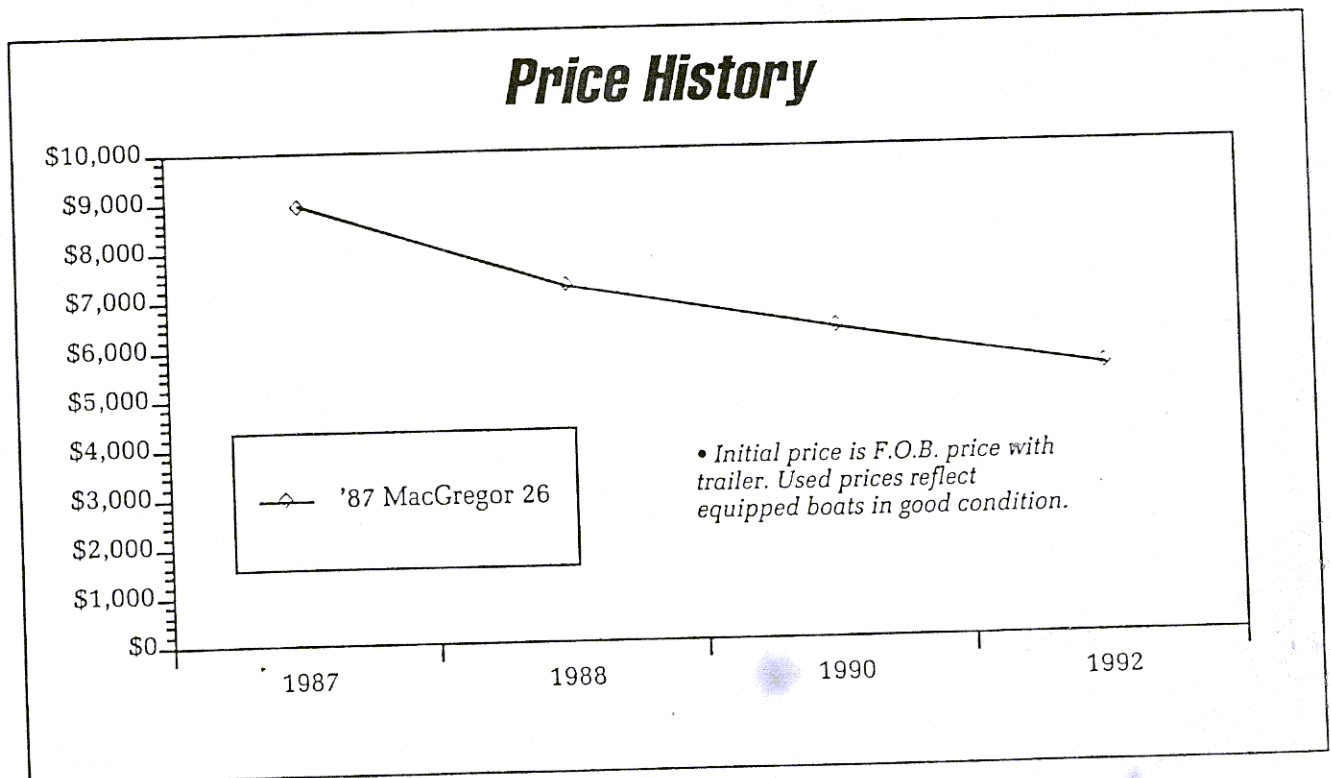
The tank has a fiberglass baffle to keep the water from sloshing around when sailing. It takes about six minutes to fill or empty the tank when launching or hauling.

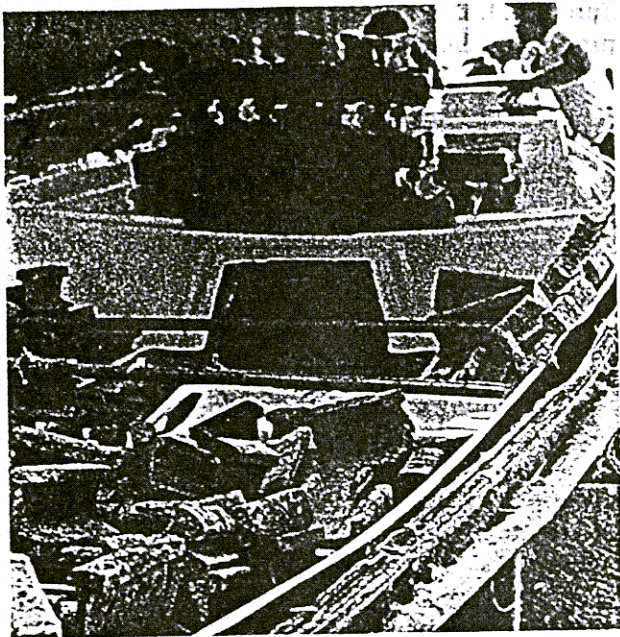
The MacGregor 26 has positive flotation when swamped, a commendable feature, especially in a lightweight, trailerable sailboat. The flotation is provided by blocks of styrofoam under the V-berth, aft berth, over the galley, and under the cockpit.

Styrofoam is preferable to sprayed-in urethane foam, because it's less likely to absorb water and doesn't expand when exposed to heat.

On the other hand, styrofoam blocks don't fill the compartments as completely as urethane foam, so some of the flotation space is wasted. For example, the styrofoam in the MacGregor 26 only fills one half of the space under the V-berth, yet the berth is closed off.

The waste is less serious than it might be, however,





The deck molding is held in place by weights while the resin cures. The entire production process is set up to move as fast as possible, which means cutting corners everywhere.

as the MacGregor 26 needs only 14 cubic feet of flotation because her water ballast is neutrally buoyant. The MacGregor 25 has 25 cubic feet of flotation.

Handling On the Water

The MacGregor 26 is not a performance boat. She is hampered by a rig which is too small for light air and too flimsy for heavy air. The standard boat comes equipped with a main and working jib from Gastra, a quality Hong Kong sailmaker. The cloth weight is on the light side, but the workmanship and sail shape is above average for OEM sails.

Adding a genoa to the inventory would improve her reaching, but not her upwind performance. That's because the genoa has to sheet around her gunwale-mounted shrouds.

The working jib sheets inside the shrouds, which reduces the sheeting angle and allows the boat to point higher.

The MacGregor 26's rigging is too simple to make her handle well in a strong breeze. There is no traveler; the four-part mainsheet is fixed on the bridgedeck. There is no boom vang. The deck-stepped mast is light and bendy, but there are no backstay adjuster or turnbuckles on the shrouds to control mast bend. No tiller extension, either.

The jib leads are a fixed bullseye. Lewmar #6 single speed winches are standard. While adequate for the working jib, they are too small for a genoa. The cam cleats for the jib sheets are cheap and poorly angled. On the boat we looked at, the bedding com-

pound had gotten into and gummed up one of the cam cleats.

Halyards cleat on the mast, and reef lines and outhaul cleat on the end of the boom. The standard mainsail has two reefs. At least the MacGregor 26 is rigged for slab reefing; the 25 has roller reefing on the boom, which works poorly. The gooseneck and the reefing hook for the tack are lightly built.

The 1,200 pounds of water ballast sitting in the bilge is also a detriment to the performance of the MacGregor 26. Because the ballast runs for two-thirds of the length of the boat, she is heavy at the ends.

Combined with the sloppy rudder assembly, this makes her steer sluggishly and turn slowly. We also expect it will make her pitch more in a seaway. With the ballast in the bilge instead of hung from a keel, the boat is initially tender.

The outboard motor mounts directly on the transom, as it would on a dinghy. There is no external transom bracket. When tilted up, the head of the motor lies in a recess molded into the afterdeck. This doesn't make the outboard any more secure, but MacGregor says that it allows you to trailer with outboard attached because it doesn't hang far off the stern.

The MacGregor 26 has an afterdeck almost 3' long. This makes for a long reach to the motor controls. It's a good thing that the motor isn't mounted on an external bracket.

The afterdeck also houses a large lazarette that has more than enough space to stow the outboard and tank. The cockpit drains obstruct the lazarette, though, and are fabricated of unreinforced hose and fastened with single hose clamps. You'd have to be careful when stowing the motor.

Handling Off the Water

The boat comes equipped with a MacGregor-built trailer. Surge brakes are optional and recommended if you don't want to wear out your car brakes on lengthy road trips. The trailer is painted steel; a galvanized finish is not even offered, because California environmental laws make it cost-prohibitive, says MacGregor.

The trailer is made of steel channel with only a short section of the tongue made from steel box section tube. Channel can be kept from rusting because all surfaces are exposed and can be scraped and repainted. Box sections will eventually rust from the inside out.

MacGregor builds the trailers on a jig which rotates so all of the welds can be horizontally applied. The welding appears clean and completely encompasses the joints.

In preparation for painting the metal is only wire brushed. Although a zinc chromate primer is used,

we suspect that the trailer will need to be repainted every other season if kept near salt water.

The MacGregor 26 sits low on her trailer because she has no external centerboard or swing keel. MacGregor 25 owners complain that a tongue extender is often needed to float their boat off the trailer. MacGregor says that the 26 will float off when the wheels are in only 2' 3" of water—9" less than the depth required for the 25. A jack stand would be useful, but the trailer does not come with one.

Because the mast is deck-stepped on a tabernacle, raising it simply requires that you walk it upright and attach the headstay. The swept-back shrouds only come taut when the mast is upright. To keep the mast from swaying sideways before the shrouds come taut, an extra set of in-line lower shrouds is rigged. To give you extra leverage when raising the mast, there is an optional "mast raising pole" which runs from the base of the mast to a tackle at the base of the headstay.

Belowdecks

For a trailer sailer, the MacGregor 26 is spacious belowdecks; but for your average 26-foot sailboat, she is cramped. The requirements for trailering require the boat be light, narrow and shallow. This doesn't leave a lot of interior volume.

The 26 is just big enough so that the daggerboard trunk is relatively unobtrusive, being used to form one side of the galley. The first thing you notice when going below is the huge, 9-square-foot mirror over the galley. MacGregor says the mirror adds the illusion of space. Even if the mirror were of better quality, so the reflection wasn't distorted, we'd still think it gaudy.

The galley is barely adequate, even for weekending. There's a molded sink with a collapsible 5-gallon water tank, removable for refilling. There's counter space, but no stove; mounting one would use up most of the counter. There's no table or icebox. There isn't even any space for a portable ice chest; it would have to live on top of a berth or in the middle of the cabin floor.

There is an enclosure for a head, but no head is provided. The enclosure is designed to fit a portable head.

The V-berth is very narrow at the foot. The settees are narrow, too, but they have seatback cushions and the port settee is 7' long. Under the cockpit is a queen size berth, a feature growing in popularity, even on boats this small.

There is plenty of sitting headroom, and a "pop top" for standing headroom. A dodger for the pop top is standard. The hatches are made by MacGregor and use weatherstripping for watertightness. We doubt that they would remain watertight with green water on deck.

The cabin house windows are bedded in silicone sealant with few mechanical fastenings.

The boat is equipped with a battery, running lights and two small cabin lights. Interior joinerwork is sparse and cheaply done. All pieces are cut by a pattern router to save time, and finished with imitation wood plastic veneer. The plastic peels off easily; we doubt it will stay on the facings of the joinerwork for very long.

There is almost no interior storage, save that inside the head compartment. There are small bins under the settees and aft berth, but much of that space is filled with flotation.

On Deck

To make space for the double berth under the cockpit, the cockpit floor had to be raised. This makes for cramped legroom and almost non-existent cockpit seatbacks.

MacGregor made an attempt to solve the seatback problem by installing stainless steel handrails along the cockpit coaming. The optional cockpit cushions package includes cushions for the seatbacks which attach to the handrails. This makes for comfortable sitting in calm conditions, but the cushions could be torn from their straps and washed overboard when water comes over the rail while sailing in a strong breeze.

The boat comes equipped with a bow pulpit and a set of stanchions and lifelines on each side of the cabin house. The lifelines are needed to go forward in safety because the cabin house extends all the way to the gunwale. The stanchion bases have extra bracing and seem adequately attached to the boat. The lifelines are run to the base rather than to the top of the bow pulpit. This makes for less wear and tear on the foot of the jib at the expense of a proper handhold to the bow.

Conclusions

At only about \$10,000 new, the MacGregor 26 is a good deal. The water ballast makes her truly trailerable. For weekending on inland lakes she is an excellent choice. She's also a good choice for daysailing in protected waters if you cannot afford dock space or a mooring.

The boat has certain limitations, however. While she is simply rigged, that simplicity hampers her sailing ability and her seaworthiness. While there are no glaring structural flaws, the entire construction is just slipshod enough to make her unsuited to sailing where you might get caught in heavy weather.

We're sure that many passages have been made to places like Catalina Island in 20-25 knots of wind and healthy seas, but doing that on a regular basis in a MacGregor 26 is, in our opinion, asking for a pack of trouble.

• PS