

A few of the features that make the Montgomery 17 the best!

A TRUE KEEL/CENTERBOARDER

Most small daysailors have no ballast in the keel because the crew weighs as much or more than the boat. In a strong wind, the weight of the crew, sitting on the side deck or hiking out, is plenty to keep the boat from capsizing or heeling excessively. The keel is still needed, but only in the form of a centerboard, and only for lateral area to keep the boat from slipping sideways. Also, a light daysailor is easy to right when capsized.

On a larger boat, however, ballast is needed. The rig is higher, the sail area is greater, and the weight of the crew becomes insignificant. On a small cruising boat that is likely to be subjected to high winds and the accompanying big waves, a general rule of thumb is that at least one-third of the weight of the boat should be in ballast. In the case of a well-designed boat, the ballast/displacement ratio is very carefully calculated and takes into consideration the weight and center of gravity of the boat itself, the height, size, and weight of the rig, the shape of the hull, and even the carrying capacity of the boat and the weight of the crew. The proper amount of ballast is a compromise, but a very critical compromise, with a curve of diminishing returns working in both directions. Less ballast might make a boat faster in light air (because of less overall weight), but will also make it slower in heavy air because of heeling. On the other hand, too much ballast will slow the boat in light air even though it might be faster upwind in heavy air. All around performance is the key.

There are three types of keel configurations in common use on trailerable boats.

First is the shallow-draft fixed keel. The advantage of this configuration is simplicity and low cost of manufacturing, which obviously is reflected in a lower cost to the buyer. The shallow draft keel is fine for reaching and running, and when well designed actually offers very good control downwind in rough water. The better ones will do a marginally adequate job upwind in flat water, but they are poor upwind in light air and even worse when it's necessary to beat back to the dock in heavy winds and a bad chop. One good thing about this type is that they are reliable: they have no moving parts and there is nothing to break.

Next is the "retractable keel," which is usually a heavy iron casting that pivots in a trunk inside or partially inside the boat. These offer very shallow draft, which is convenient for launching and for loading the boat with gear and provisions while on the trailer, and are generally a far sight better in performance than the shallow-draft fixed keel. Their problem is one of engineering. A heavy slab of iron hanging from one pivot bolt places a very heavy load on that bolt and on the bolt's supporting members, especially in big, pounding waves when the boat is pitching badly. They have a reputation for leaking, usually at an awkward time, and have occasionally hammered themselves right out of the boat. They generally have the pennant (lifting line) drooping behind the lowered keel, creating draft and often humming. When the keel is down, the large slot in the bottom of the hull creates turbulence and drag. The better retractable keels are satisfactory for all but dangerous waters, but there is a better way.

The shallow draft fixed keel, in conjunction with a centerboard, is the logical answer. It is better in all respects except for cost, and is enough better to justify the cost. Here we have the ballast in a shallow draft fixed keel that is molded as part of the hull, with the accompanying strength and reliability. The lateral area that is so necessary for upwind ability is supplied by a relatively light centerboard which is housed in the keel. The centerboard is light enough to not be an engineering problem, the pivot bolt is down in the keel, underwater, and it cannot leak. With the board up, the boat has excellent control downwind in heavy seas, and with the board down it has the necessary draft and lateral area for performance upwind. In the Montgomery 17 (and also our new 23) we use a quadrant shaped board of cast iron. Look carefully at the drawings; with the board down the slot is filled at all times and the pennant is up in the trunk, out of the water flow. The bearing surface of the board is spread out over the full length, adding strength and reducing play. The keel/centerboard is far superior to the retractable keel in terms of safety and reliability. Even in the highly improbable event of the centerboard falling out of the boat while at sea, the boat still has ballast, will not leak, and will still sail well enough to return to land. The centerboard is light enough (170 lbs.) to be removed and carried by two people, and it can be over-dropped for inspection of the pennant attachment by simply tapping out a pin. The keel/centerboard as used on the Montgomery 17 is very clean and effective, simple, well proven, and supremely reliable.

MASTHEAD RIG

The masthead rig, used in conjunction with a good reefing system, offers a wide range of sail selection while maintaining excellent balance. A masthead genoa in light air gives a much larger increase in power than is possible with a fractional (3/4 or 7/8) rig. It is a proven fact that the headsail on a sloop is the main driving force, and that the longer the leading edge of the headsail, the more effective the sailplan is in driving the boat, particularly upwind. In heavy air, the masthead rig is more rigid because the critical headstay tension is controlled by the backstay.

The Montgomery 17 masthead rig offers complete flexibility in sail selection, ranging from 76 feet with storm jib and reefed main, to well over 200 feet with the 170% genoa, with excellent balance at all times.

END GRAIN Balsa CORE DECK

One of the outstanding innovations in fiberglass technology was the development of lightweight cored laminates. For years, the industry standard for building decks was plywood, sandwiched between layers of fiberglass. The plywood reinforced decks, although inexpensive, were subject to delamination. When end-grain balsa became available, builders of custom racing and cruising sailboats began using balsa extensively, followed by this company along with a few others. Balsa is much less subject to delamination than plywood because of the greater penetration by the bonding resins, lighter, quieter, and a much better insulator against both heat and cold. It essentially eliminated condensation. A balsa cored deck is more expensive, but it makes your boat last longer, go faster, heel less, warmer in winter and cooler in summer. The impact resistance of balsa core equals plywood core and considerably exceeds that of foam core. It is well worth the extra cost.

OUTSTANDING COCKPIT

Part of the fun of sailing is being comfortable, and the 17 has a more comfortable cockpit than most 30's. Her high coamings and deep footwell make relaxing easy. (and keep the kids in the boat where they belong). Cockpit seats are 6'7", which is plenty for summer sleeping. For daysailing, the M-17 is comfortable for 6. A 7' by 7' tarp makes a great boom awning while at anchor and can be rolled up and lashed to the toe rail while under way.

TOE RAILS

The toe rails are heavy aluminum extrusions, designed by us especially for the 17. They greatly increase the strength of the critical hull-deck joint, and add an almost unlimited number of tie-down points for fenders, awnings, boom tents, and many other things. The jib and genoa sheets are led to blocks shackled to the toe rails, which offers a varied range of adjustments. On a wet foredeck, well heeled in a good blow, the raised toe rails are invaluable for keeping your footing.

FORWARD HATCH

The M-17 offers a forward hatch as standard equipment. The forward hatch is valuable for ventilation on warm days and nights and allows a flow of air through the boat. It is also very handy for headsail changes as the sails can be handed through the open hatch. This is more convenient for cruising and daysailing, and is faster for racing. The hatch is hinged at the forward edge so that it cannot fly up while trailering.

EXCEPTIONAL STORAGE

Storage capacity is of the utmost importance in a cruising boat of any size. There must be room for food, water, sails, clothing, bedrolls, anchors, cooking gear, fishing tackle, diving gear, the crew, etc., etc., etc. In the 17, we have done everything possible to utilize potential storage. There is storage under the quarterdecks, forward berth, under the cockpit, and plenty of cockpit storage. The M-17 easily has enough room and storage capacity for a two week cruise for two people.

RUDDER

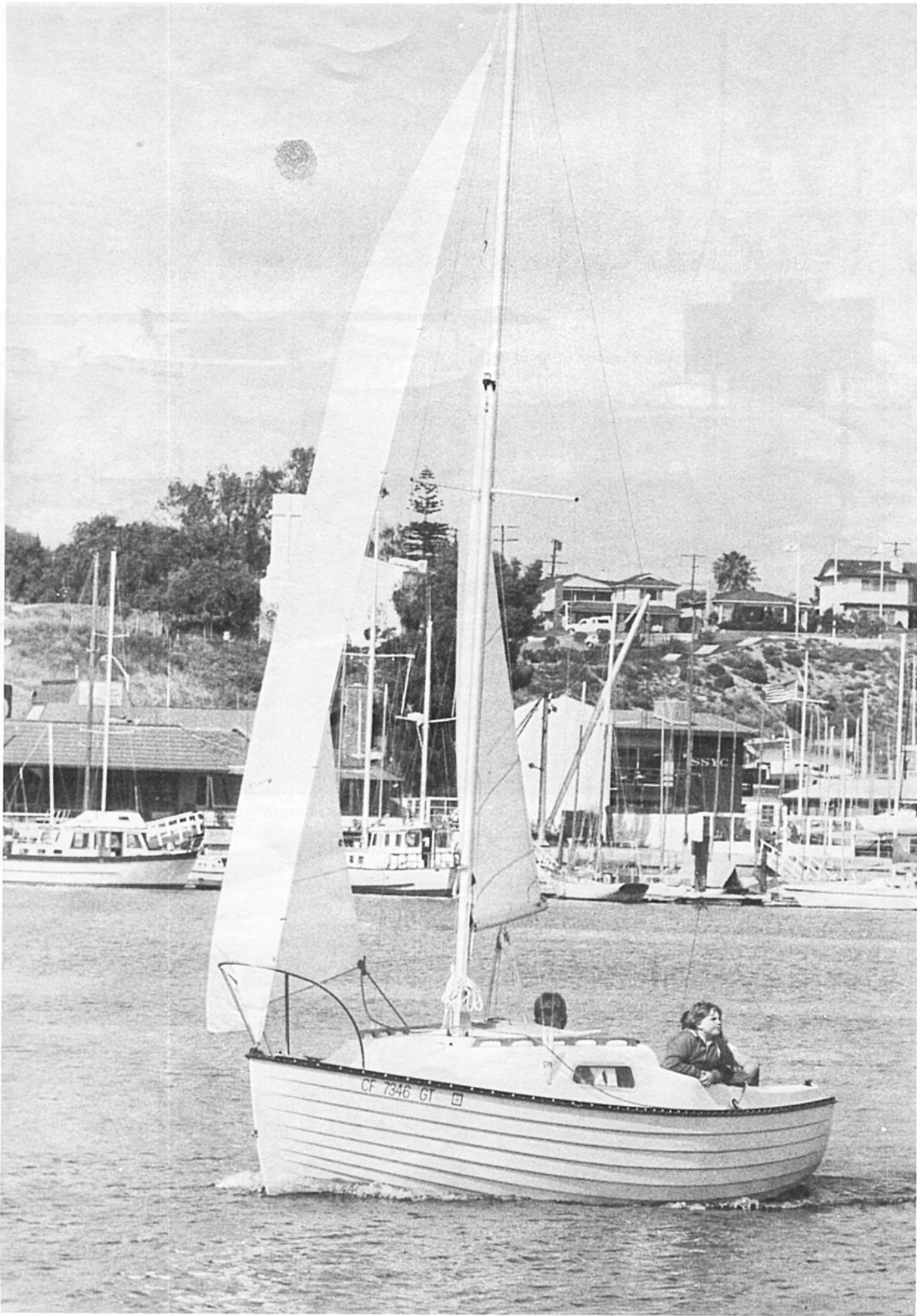
The beaching rudder used on the 17 is our own design and is one-piece, hand shaped, solid mahogany. For launching and shallow water, it slides up on a stainless steel rod. It is strong, tight, and very smooth to operate. We consider the conventional two-piece kick-up rudder inadequate for anything more than light air and small lakes and will not put them on our boats. Our rudder is lifted by a convenient and effective lifting tackle.

MOTOR MOUNTING

The M-17 has a cut-out in the transom for an outboard motor. Mounting, dismounting, and refueling is much easier with this system than with an outboard bracket because it eliminates the need to hang out over the transom with the heavy motor. Also, the cost is less; it costs us less to build this feature into the boat than it does to buy and install a bracket. Because it is closer to the center of the boat, a transom-hung motor is less sensitive to rising out of the water due to the pitching of the boat in waves. We recommend a 4 hp long shaft motor for the 17.

WHY LAPSTRAKE?

Lapstrake has the same advantages in glass as in wood — dryness, rigidity, a dampening effect on pitching in a headsea, and a better motion in quartering seas. Every strake acts as a spray rail, deflecting water out and away from the boat. A lapstrake hull is stronger and more rigid than an ordinary hull and is less likely to flex, which leads to breaking. Lapstrake is certainly no substitute for adequate hull thickness, but the Montgomery 17 has both.



THERE IS A DIFFERENCE!

Trailerable sailboats first started selling in large numbers in the late 1960's. The ability to keep a boat in the driveway, launch it on Friday night and sail away for the weekend, totally self-contained, was an attractive thing and introduced people to sailing by the thousands. Within five years, dozens of new companies were offering trailerable cruising boats, and the trailerable boat became larger and larger until, suddenly, the energy problem appeared and the trend reversed itself. Cars started getting smaller and smaller, and the "pocket cruiser" came into prominence. The pocket cruiser is a boat, usually under 20' in length, that has at least some cruising accommodations and can be towed with a compact or sub-compact car. They range in quality from "grown-up daysailors" that have marginal performance and are adequate only for overnighting in sheltered waters, to the Montgomery 17, which is a true moderate displacement cruising boat.

The Montgomery 17 brings "big boat" design and construction into this new and growing market. She is tough, seaworthy, seakindly, and is capable of braving severe weather conditions with safety and confidence. She is heavy enough and stiff enough to drive off a lee shore in a storm, and to heave to in heavy winds. On a race course, she will sail past most of the 20's and 21's, and when a good blow comes along will still be out sailing when they are struggling back to the dock.

Montgomery 17's have cruised the Bahamas, the Caribbean, the Sea of Cortez, and have made countless trips to the Pacific Coast offshore islands. A Montgomery 17 has sailed from Cape Hatteras to San Diego, via the Panama Canal. A Montgomery 17 sailed the length of the Mississippi, from St. Paul, Minnesota, to the Gulf of Mexico, and was possibly the first sailboat to have done so. Properly outfitted and prepared, she is a very capable boat. Her beamy lapstrake hull is tremendously strong and her modern underbody, with low wetted area, fine entry, and displacement well aft, allows her to move fast and point high in light air as well as to excell in a blow. Her racing record is outstanding and her handicap (Portsmouth 104) is favorable.

Unfortunately, too many new sailors make the mistake of assuming that all sailboats are adequate in performance, construction, and capability. They equate size with seaworthiness, and resign themselves to a larger boat than they need for the false security of the added size. Size has little to do with seaworthiness. Seaworthiness is determined by design, engineering, and construction, but not by size. A boat of 6' crossed the Atlantic, and many boats of 10 to 14 feet have crossed, and none that we know have been lost at sea. These boats are designed and built for the job.

In contrast, many cheaply built boats of 21 and 22 feet have come apart in small lakes. THERE ARE MORE DIFFERENCES IN THE QUALITY OF BOATS THAN IN MOST ANYTHING ELSE WE CAN BUY! More than in cars, televisions, bicycles, or airplanes. The sailboat business is much newer and requires a much smaller initial investment. We all pay about the same for materials, we all try to be as efficient as possible, and we all need about the same profit margin to survive. In boats, more than in most things we can spend our money on, we get what we pay for. If two boats that appear similar have a wide difference in price, take another, closer look, and you will probably find the reasons.

The most obvious basis for cost comparison concerns the weight of the boat. If another builder's 16' boat costs 30% less than ours, odds are that it weighs about 30% less. If the Brand X 21 costs 10% more than a Montgomery 17, it probably weighs 10% more. Other features, naturally, effect the cost. A masthead rig takes twice the number of turnbuckles and well over twice the amount of stainless wire as a fractional rig. (Hinged deck and cockpit hatches cost about 80 dollars each on the retail level.) Extruded aluminum toe rails take two good men a half day to install, but the common stamped trim with the rubber insert takes one man about two hours, and there is a difference in material cost of about 300%. A retractable keel costs the buyer about \$300.00 more than a shallow-draft keel, and a good keel/centerboard combination costs about \$400.00. Some builders take the shortcut of not bonding underneath the liner, which saves money but sacrifices strength. On 1/8" shrouds and stays, which is large enough for boats up to about 2,500 pounds, swedged terminals cost the buyer about \$5.00 each, and on a typical single lower-single spreader rig there are 16 of them! Carpet or vinyl lining on the insides of the hull are cheap and easy to install, but after a few years of getting saturated from condensation they start coming off and expose the usually poor workmanship underneath. A boat lives in a different environment than a mobile home and cannot be built like one.

SLAB (JIFFY) REEFING!

Slab reefing is by far the most effective way of reefing the mainsail, and sooner or later, we all find the need to reef. Slab reefing is the fastest, the most reliable, and gives the reefed sail the best shape. The common roller reefing is unacceptable on a quality boat because it badly distorts the sail shape. Nearly all mainsails on small boats have a rope sewn into the leading edge (a luff rope) that slides into the groove in the mast. As the boom is rolled, this luff rope quickly builds up into a bundle, stretching the luff of the sail tightly but building up a tremendous bag in the main part of the sail. This extreme fullness is very ineffective for sailing upwind and inefficient for heavy air reaching. Slab reefing, in contrast, pulls the sail down a panel and flattens it at the same time. Slab reefing also allows the more effective mid-boom sheeting. It is a little more expensive to build because of the extra hardware, but is simpler and easier to use.

STRENGTH

The Montgomery 17 was designed and built from the start to be a very tough and seaworthy boat. The interior liner is an integral part of the hull and is fully bonded at all points of contact — even the places where it is hard to reach. Hardware is thru-bolted, and items subject to heavy stress have backup plates. The Montgomery 17 is overbuilt and has a very generous margin of safety.

