

# The Hatteras 37

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# The Hatteras 37

by Earl Hinz

**W**hen a builder of luxury fiberglass yachts adds a convertible cruiser to his line, you can rest assured that yacht quality will find its way into the smaller boat. The Hatteras-37, indeed, shows all the care in design and construction that is found in the top-of-line 70-ft. motor yachts which sell in the \$500,000 bracket. The Hatteras-37 was designed by Jack Hargrave and sells for only 20 percent of the price of a 70-ft. motor yacht but still maintains its kinship with quality.

Construction of the Hatteras-37 follows contemporary fiberglass techniques. The

hull lay-up is solid fiberglass and the decks and cabin are made of fiberglass sandwich construction. There is a soft, perforated, vinyl headliner in the cabins and the hull sides, where exposed in a compartment, are covered with a sponge-back vinyl.

One of the unusual aspects of construction is the use of a polyurethane paint over the exterior gel-coated surfaces. The stated reasons for this are to improve the du-

rability of the surfaces and to ease maintenance and repair work. Hatteras has done an excellent job of applying the polyurethane resulting in a smooth glossy exterior finish.

The interior is paneled in teak with a hand-rubbed oil finish. We are accustomed to seeing teak in boats but none have the beautifully matched figure-grained paneling that is in this boat. We are told that the paneling is Mozambique teak—a rare and remarkably beautiful wood with an unusual wavy grain. It also appears to be lighter in color than the more common Burma teak.

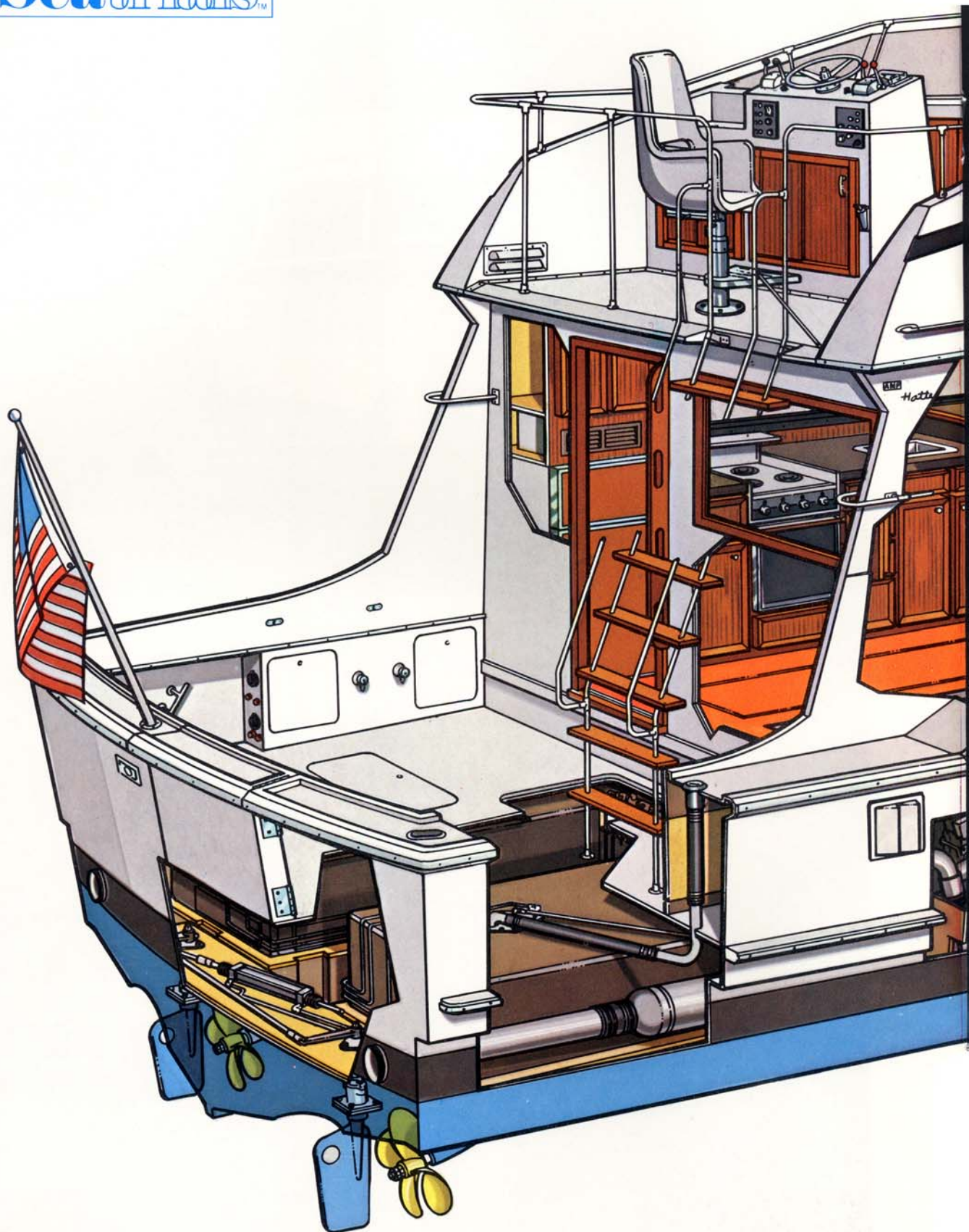
**Sea trials**™



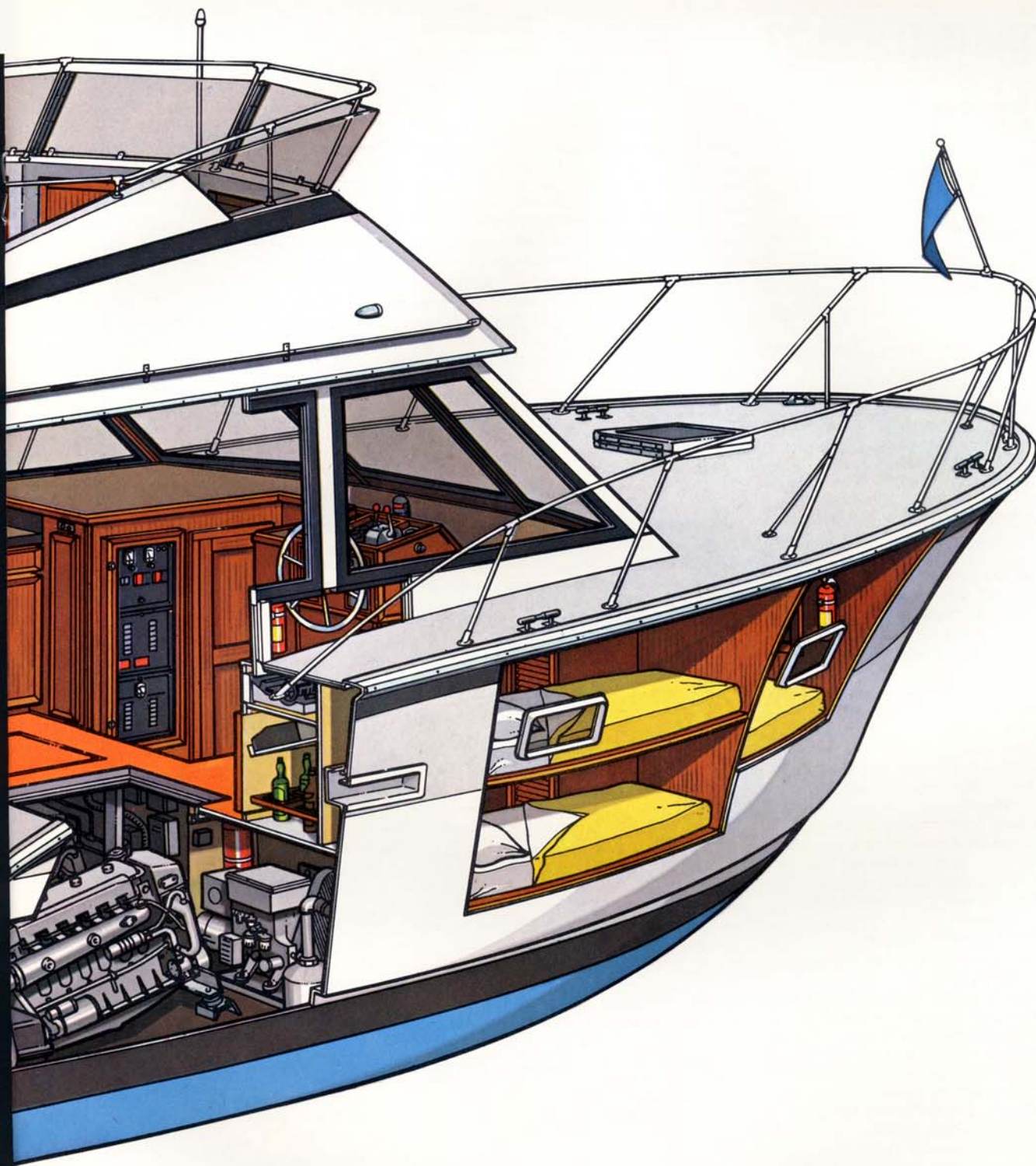












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Illustration by David Kimble



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## Seatrials™

### DESIGN INFORMATION

Length, overall ..... 37 ft.  
 Beam ..... 14 ft.  
 Draft ..... 3 ft. 3 in.  
 Height,  
     bridge clearance ..... 13 ft. 5 in.  
 Dry weight, approximate ... 28,000 lb.  
 Water capacity (one tank) ... 136 gal.  
 Sleeping  
     accommodations ..... 4 adults

### PROPULSION INFORMATION

Engine: Twin Detroit Diesel 6-71N  
 (Johnson & Towers modified)  
     310 hp at 2500 rpm  
 Gear boxes: Twin Disc type MG-506  
     1.97:1 drive ratio  
 Propellers: Michigan Wheel 4-blade  
     24-in. diameter by 26-in.  
     pitch  
 Fuel capacity: 330 gals. in two tanks  
 Designer: Jack Hargrave  
 Builder: Hatteras Yachts  
     2100 Kivett Drive  
     High Point, NC 27261

### PRICE

Base price (FOB High Point, NC,  
 July 1, 1977) ..... \$103,200

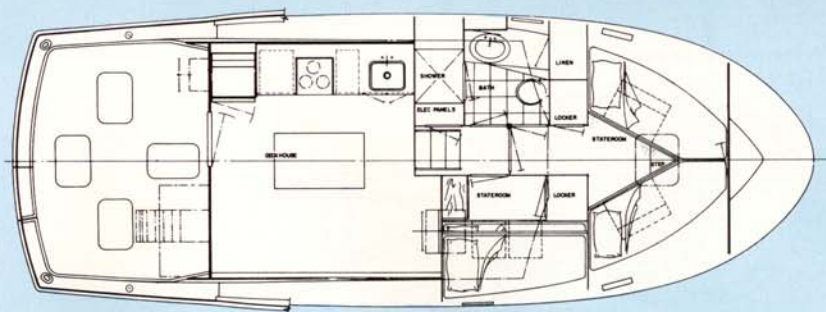
#### Includes:

Twin J & T 6-71N diesel engines  
 Automatic fire extinguishing  
 system  
 Onan 7.5-kw diesel generator  
 Pressure water system  
 Electric water heater  
 Four automatic bilge pumps  
 Two 12-volt, 205 ampere-hour  
 batteries  
 Sentry battery charger  
 Transformer-connected  
 shorepower  
 Engine and accessory alarm  
 Six-cu.ft. Norcold refrigerator  
 Princess electric range  
 Tinted safety glass in cabin  
 Hynautics hydraulic steering  
 Morse engine controls  
 Five-in. Constellation compass  
 Groco electric toilet  
 12- and 120-volt lights

Price as tested: ..... \$120,185

#### Includes:

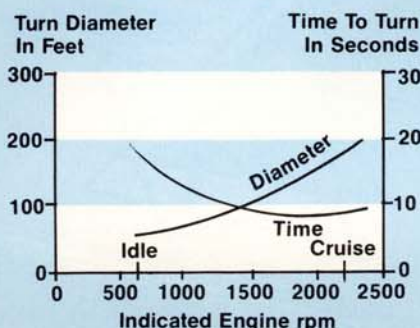
Air conditioning ..... \$3575  
 Safety monitor  
     at both helms ..... 540  
 Salon control station ..... 1815  
 Fiberglass pulpit ..... 2440  
 Ice maker ..... 1060  
 AM/FM stereo system ..... 675  
 Cassette tape deck ..... 280



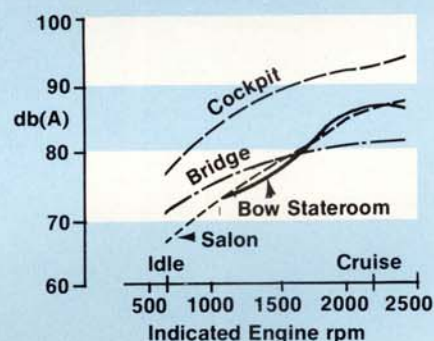
### SIDELINE NOISE (50 feet away)

Ambient noise level ..... 52 db(A)  
 Pass-by at 600 rpm ..... 71  
 Pass-by at 1000 rpm ..... 80

### 180° TURN PERFORMANCE

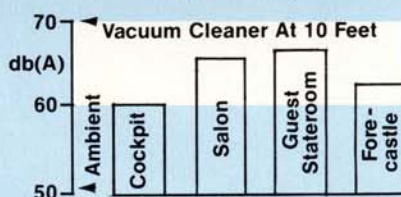


### SOUND LEVELS UNDERWAY

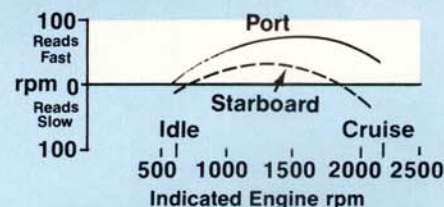


### AUXILIARY GENERATOR SOUND LEVELS

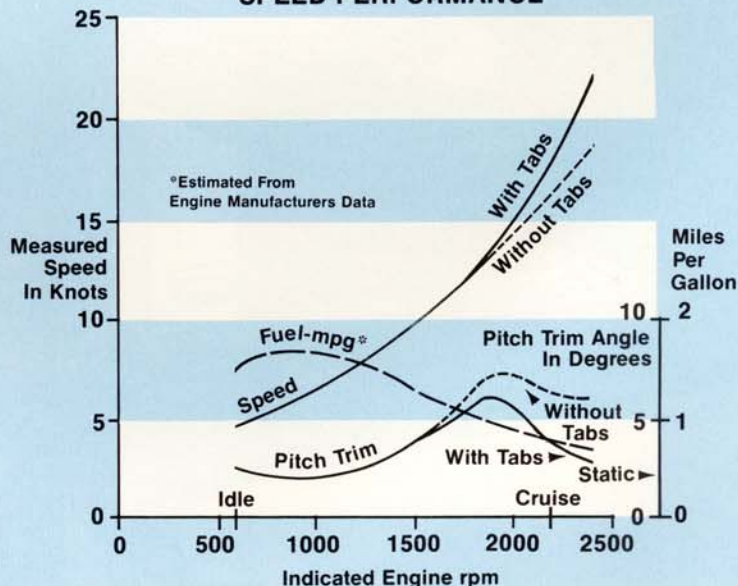
(At Anchor)



### TACHOMETER CALIBRATION



### SPEED PERFORMANCE





Your first realization that the boat is, indeed, heavier than other 37-footers, is when you step into the cockpit and there is hardly a murmur of boat movement. It is a solid feeling that wears favorably on your sense of well-being at sea. The cockpit is almost 11 feet wide and eight feet long. It is big enough for a fighting chair for the game fisherman or several deck chairs for early evening relaxing while at anchor.

The flying bridge is reached by a rugged, six-step stainless steel ladder which requires a little care coming down because the two bottom steps are vertically-placed and not sloped out like the uppers. As I was taught in the Navy, face the ladder always and you won't miss a step.

Central to the bridge is the control console which can be operated comfortably while standing and even more comfortably sitting in the high Pompanette captain's chair. Instruments and controls are within easy reach and the visibility is excellent. The flying bridge is the primary control station for the Hatteras-37 and, consequently, it is equipped with complete controls. These include a stainless steel steering wheel, Morse engine controls, Sun electric tachometers, AC Spark Plug engine instruments, trim tab controls, engine starting and stopping controls including air intake shutoff if the solenoid fuel shutoff fails, and a five-inch Danforth compass. A safety panel monitors oil pressure and water temperature on both engines, engine room heat, and AC power status.

There is no need for the skipper to be lonely on the bridge for two bench seats provide additional seating for six persons. There also is plenty of stowage space. The forward coaming has huge bins for stowing bulky items like boat covers and the control console to the left of the driver could accommodate several pieces of electronics gear.

The windscreen construction deserves special note. It is made of smoke acrylic plastic and positioned with the usual reverse slope to deflect the main windstream well over the heads of the bridge occupants. The transparent acrylic panels are solidly bolted together and screwed in place, not just clamped, and then sealed along the coaming.

Unlike many boats that need a raised cabin trunk to get headroom in the forward living quarters, the Hatteras-37 has a broad and only slightly arched foredeck which would make a wonderful place for sunning while at anchor. It is a little incomplete, though, in that the ground tackle installation is an option. SEA's test boat had only one piece of ground tackle handling gear on board and that was the optional anchor pulpit. There is a well-made fiberglass structure inlaid with teak decking but it is only one part of the ground tackle gear. To complete it one must add a windlass, which should be factory installed, especially if it is electric or hydraulic.

Safety of movement about the decks is

enhanced by a substantial set of stainless steel handrails that take you from the cockpit to the bow pulpit. One unit in particular is outstanding and that is the short handrail that wraps around the aft cabin corners. On boarding or moving forward to the side decks, this is the most convenient handgrip of any boat tested. A small point, perhaps, but typical Hatteras attention to detail.

One can, in fact, find many little areas that reflect Hatteras' attention to detail. For instance, the fillet welds at the bases of the rail stanchions have all been neatly ground to a smooth radius. And the external joints between the fiberglass or hardware components have all been carefully sealed with no excess sealant squeezed out to mar the appearance. Inside, the cabinet hardware is of coordinated design. In this case it is an antique bronze finish which goes well with the hand-rubbed teak. The quality of Hatteras construction is evident to the last detail.

Interior accommodations are laid out in a split-level plan isolating the daytime space from the sleeping areas by a three-step stairway. The large salon has the most expansive windows and windshield areas seen on a boat of this size. The windows are completely draped and fitted with teak valances but the windshield has no internal shading which would result in a lot of solar heat coming through in the summer. Presumably, the external covers provided would do the job, but they are somewhat inconvenient to use and not very attractive.

The salon is truly a social area and Hatteras has made no attempt to use it as a sleeping cabin. The electric galley occupies the full port side of the cabin beginning aft with a six-cu. ft. Norcold refrigerator-freezer and a three burner plus oven Princess electric stove. A single, stainless steel sink is at the forward end of a long counter and it has a single-lever hot and cold pressure water faucet assembly. Opposite the galley on the starboard side of the salon (or deckhouse as Hatteras calls it) is a large uncommitted area which can be furnished with a settee, table, or whatever the owner chooses. At the forward end of this lounge area is an entertainment center with stereo radio and tape player plus an optional ice maker when the weather gets really hot.

Alongside the entertainment center is the inside control station where the skipper can keep an eye on social activities. This interior control station is actually secondary to the flying bridge but it can be equipped with complete instruments and controls at the owner's option. The interior console is a design gem in itself. It is hinged at the bottom and can be pivoted out from its normal position to gain access to the wiring and control elements. Its only shortcoming is that it is too high for easy use when standing flat on the cabin sole. A high pilot's seat and foot bench would cure that problem and also allow better vision over the long bow when the boat is nose

high at displacement and low planing speeds.

The lower level accommodations consist of a guest stateroom to starboard, a head and shower compartment to port, and a bow stateroom. With this layout there is comfortable berthing for four persons which is a realistic number and results in fewer compromises to the basic living quarters than would be the case if you tried to permanently berth the rare six or more persons. All four berths are over 6½-feet long and 30-inches or more wide. Hanging lockers, or in this case they are more properly called closets, are fitted in both staterooms along with adequate drawers and a full-length mirror in each. The guest stateroom, with over-and-under berths, is ventilated and naturally lighted by a single opening portlight. The bow stateroom on the other hand has two opening portlights plus a 17- by 21-in. screened translucent hatch making it very airy and light.

There are two separate entrances to the head compartment—one from the main passage and the other from the bow stateroom. It is a well-designed area having clean white walls and abundant storage space for linens as well as the usual toilet supplies. A large medicine cabinet is mounted over a vitreous china washbasin. The toilet is an electric Groco emptying into a 70-gal. holding tank. A warning light gives indication when the holding tank is ¾ full and then it is time to put out to sea or find one of those elusive pumpout stations.

One cannot overlook the stall shower in the head. With 136 gallons of fresh water aboard you can enjoy a hot shower after a sweaty day battling a billfish or taking the salt off the bod after exploring the underwater wonders of nature. The shower has a hand-held shower head, a large bench and an electric sump-pump to clear the shower pan of water while in use.

Overall, storage space in the boat may be a bit marginal. Part of this is a result of the built-in heating and air-conditioning system. The bulk of the ducting and radiators takes away valuable storage space. But in some climates that may be a fair trade. It is probably the galley that suffers most from the insufficient storage space and that can't be remedied by using the abundant unused space that exists in either the bow stateroom or under the open cockpit.

The Hatteras-37 is offered with twin 330-hp gasoline engines as its basic power plant. But safety and long term economics (both maintenance and resale) suggest that diesel engines are the way to go. There are three diesel options offered, all within a few thousand dollars of each other: GM 4-71TI turbocharged and GM 6-71N modified by Johnson and Towers, and the Cummins VT-555. Our test boat was equipped with the 6-71s which gave a good account of themselves in the test program.

The engine room is located below the salon and is accessible, through a small



## HATTERAS 37

hatch, for routine inspection, or, through a 94-in. by 52-in. hatch for major maintenance. The engines, gearboxes, and drive shafts are readily accessible in spite of the fact that the engine room is crowded. The crowding is due solely to the builder stuffing it full of useful equipment like an Onan generator, pressure hot and cold water system, air conditioning (an option), massive 205 ampere-hour batteries, a Sentry AC-DC converter, and a built-in CO<sub>2</sub> fire extinguisher system.

The engines are mounted on four-inch wide fiberglass bearers that are capped with heavy aluminum plates to take the concentrated loads of the shock mounts. The engines are mirror images of each other so that all vital components are within easy reach on the inboard sides. The large water-cooled exhausts and Vernatone fiberglass marine mufflers are located outboard of the engines near the hull sides. Both ends of the engine compartment are provided with 12-volt caged electric lights giving safe and plentiful illumination for most engine work.

Particularly well done is the sophisticated electrical system of this boat. It has dual 12-volt batteries with a built-in charger for engine starting purposes and a 120-volt AC system has been well thought out. At dockside, power is brought in through an isolation transformer which feeds an impressive electrical distribution panel located in the stepped passageway between the salon and the lower level quarters. This panel is fitted with magnetic circuit breakers, volt and ammeters, and a battery condition indicator, all located behind a smoked acrylic plastic panel. Away from the dock, 120-volt AC power is derived from the 7.5-kw Onan diesel generator. Looking behind the scenes you see first-class wiring done in accordance with American Boat and Yacht Council standards. There is a good probability that you will always have electric power on this boat.

There are other subtle electrically-related aspects of this boat worth mentioning. For instance, all through-hulls and major electrical components are electrically bonded together. And Hatteras, rightfully anticipating that the owner of such a valuable piece of merchandise would want a single sideband radio aboard, has laminated a radio ground screen into the top of the cabin.

SEA's test boat was made available by Jim Gardella of Norwalk Cove Marina, Norwalk, CT. It was hull No. 10 and had been a prime exhibit at the Norwalk in-the-water boat show. As a showpiece it was well equipped but, surprisingly, most of the equipment was standard!

You might wonder how SEA can take such a new and totally unfamiliar boat and give it an objective test. Well, it's not done

without knowledgeable help. Our SEA Trials are conducted in two parts, instrumented tests and then qualitative handling tests. For the instrumented tests we request the services of an experienced person familiar with the boat to wring it out while we measure its performance. In this instance we had Keith Young, a senior boat captain with Norwalk Cove Marina, put the Hatteras-37 through its paces. Between and following the instrumented runs, SEA evaluated the boat for handling qualities.

Speed tests were conducted with the Hatteras-37 in a light condition, i.e., two crew members, a half fuel load, no water, and an empty holding tank. Runs were made on Long Island Sound in considerable chop and, despite its height, the flying bridge was quite wet at times. Speed topped out at 22 knots with trim tabs fully down which is the speed one would predict based on its power to weight ratio. The Insta-Trim Boat Leveler trim tabs were a definite advantage, giving a speed increment at full throttle of three knots. However, the tabs did not seem to be well matched to the boat since they took a long time to react and when fully down for best speed there was no reserve for lateral trim. The boat at cruise speeds rides about 3½-degrees bow high, which is not uncomfortable but it would be better if lowered one to two degrees with more powerful trim tabs.

Cruising range of the Hatteras-37, calculated from the engine manufacturer's data and our own speed runs, worked out as follows:

|               |     |     |     |     |
|---------------|-----|-----|-----|-----|
| speed (knots) | 9½  | 15½ | 19  | 22  |
| range (miles) | 413 | 297 | 248 | 215 |

With only 330 gallons of built-in fuel tankage, this boat is obviously not a long-range cruiser. Its 400-mile plus cruising range at 9½ knots is probably adequate, though, for most coastal cruising passages. For fishing the boat can make a 19-knot dash to fishing grounds 95 miles away and loiter there for 10 hours at trolling speeds before dashing home again and arriving with a 10 percent fuel reserve. At present fuel prices I doubt if you would want to buy more capability.

Turning performance was a shade better than other boats tested in its class. In particular, the time to turn was shorter and there was noticeably less speed loss and vibration buildup during the turn. This may be a favorable result of having four-bladed propellers installed. The turns were smooth and well banked and there was little skid at the onset.

On-board noise was higher than expected from such a heavily built boat. Although cockpit noise was expected to be high due to the large above-water exhaust outlets on the transom, it was surprising to find over 80 db(A) in the cabins at cruising speeds. The construction of the salon sole over the engines appears heavy having a

composite thickness of three inches. But most of this thickness is composed of low density insulating material incapable of attenuating the diesel engine's low frequency noise. Neither forward nor aft engine room bulkheads appeared to have any sound insulation and this also could contribute to cabin noise.


The sound of the auxiliary generator while at anchor was also unusually noticeable as shown by the table:

| Location                    | Sound level |
|-----------------------------|-------------|
| cockpit                     | 60 db(A)    |
| salon                       | 66          |
| guest stateroom             | 67          |
| bow stateroom               | 63          |
| outside ambient (reference) | 51          |

This excessive auxiliary generator noise was traced to lack of a sound shield around the unit. Onan auxiliary generators with sound shields are normally very quiet. At any rate, its external exhaust noise was not noticeable because of the effective Aqua-Lift muffler.

Handling and ride qualities of the Hatteras-37 were a mixed bag. It has a double chine hull giving it only a moderate V-bottom and there is very little bow flare. While this design reduces wetted surface and maximizes the interior volume, it also results in a rougher ride than a deep-V configuration. Steering is almost effortless through the Hynautics manual-hydraulic steering system and the Morse engine controls transmit both throttle and shift commands to the engine in a smooth, positive manner. It also is obvious that the weight of this boat adds to its stability for it feels solid and one can move about and between decks with a feeling of security.

It has always seemed to me that anyone buying a product as complex and expensive as today's powerboat, should get a good owner's manual with it. Hatteras furnishes the best and most comprehensive manual of any boat tested, sail or power. It comes in two parts, the basic operator's manual prepared by Hatteras and the supplementary instructions for nearly every subsystem and mechanical, electrical, and hydraulic component aboard.

And it is an investment, too—\$120,185 in the configuration tested. Don't gulp at the price before you compare it with other 37-footers. The Hatteras-37 is exceptionally complete in the basic boat. 

### FREE! How To Interpret SEA Trial Results

For a free four-page explanation of how SEA tests each vessel and what the various specifications and test results mean to you as a buyer, send a self-addressed, stamped envelope to: SEA Trials, SEA Magazine, 1499 Monrovia Ave., Newport Beach, CA 92663.