

Boat Report

# PREMIER POWER 50

*With a steel hull and a GRP superstructure, this result of one owner's wants and wishes is the genesis for a new production line.*





You get so used to GRP, these days, that you could be forgiven for thinking there is no other way to build a production motor cruiser. Then, thankfully, along comes something to remind you that this is not the case.

With a GRP superstructure on a steel hull, the Premier Power 50 is a stylish boat which combines the benefits of both materials, in a craft which can be custom-built to match its owner's requirements.

The benefits of GRP are that it can be moulded into complex and curved shapes, and that, once you have made the mould, subsequent boats are quick and easy to produce. The downside is that the plugs and moulds themselves are time-consuming and expensive; they will cost as much as the first completely finished boat. This means manufacturers have to sell a dozen or more craft to pay this off, and buyers have to accept what the designers and marketing departments consider the best compromise.

Steel, on the other hand, has extra strength and durability, and is ideal for a one-off vessel; length,

beam and layout can be as required by the owner, commensurate with his requirements for speed and range. The drawback is that it is heavy, and not easy to form into complex curves and shapes.

Combining the two materials means that boats can be produced on a semi-custom basis, using the standard modern-styled deck and superstructure, but with a hull form and layout to suit the owner's wishes.

The Power 50's aft-cabin layout gives a total of three double cabins plus a large open saloon and a galley. After its debut at the Southampton Boat Show in September, we lost no time in jumping aboard for a test, to see if the performance lived up to the promise.

### Design & construction

The Premier Power 50 is a joint effort between an owner, a designer and a builder.

Boatowner Mike Andrews wanted to move up from his Atlantic 42 to a craft better able to handle



Clockwise from left: the saloon has seating for six to port. A midships guest cabin features twin crossover bunks. The double cabin forward is altogether larger. Reflections on the master cabin. The latter's en-suite WC features a separate shower stall and space for a washing machine.



long sea passages in all conditions, and with a customised interior. But he wanted to retain an aft-cabin layout, one point on which he found existing production boats wanting.

For what was intended to be a one-off design, Mike turned to David Marsh, whose pedigree comes from working for several design houses before setting up his own business. He started in 1982 at Moody's, working on Powles Express Cruisers, before moving on to join Ed Dubois on sailing boats, John Bennett on a number of well-known production motor cruisers, and Bill Dixon on larger motor yachts and sailing boats.

The hull was built by Croft Marine of Stratford-upon-Avon, before being shipped to Premier Yachts of Hayling Island, who built the GRP superstructure and fitted the boat out. Premier have been building sailing boats for the past five years, and also fitted out a GRP Vortex pilot-boat hull, but this is their biggest motorboat project to date. It is intended that they will produce future hulls themselves, using steelwork kits, and models up to 58ft are envisaged.

For the 50, Marsh chose a medium-to-deep-vee variable-deadrise form, with a deadrise amidships of 24.5°, reducing to 17° at the transom. Two sprayrails run nearly full-length, while the chine has a wide flat with a pronounced down-angle. Above this, a second knuckle helps stiffen the topsides and further prevent spray creeping up.

The bottom sections are convex, to add stiffness. Unusually, they run right out aft beyond the transom, forming the bathing platform and increasing the effective hull length. Also unusual is the shallow keel, which runs out to the transom, giving some protection to the

sterngear in the event of grounding.

The boat uses high-tensile steel for the hull, giving 25% more strength than conventional steel. This, and the close spacing of stiffeners, allows a shell thickness of just 4mm. Fore-and aft stiffness is achieved by using T-section stringers at 300mm (12in) centres, helped by keel fuel tanks, integral to the structure, in effect creating a massive box section over 50% of the length of the boat; transverse strength comes from deep steel web frames. All scantlings (thicknesses) are based on Lloyd's of London and American Bureau of Shipping requirements.

Another example of the owner's wish to make the boat extra tough is that the propeller shafts are carried in A-brackets, rather than the more usual P-brackets. The slight extra drag is more than compensated for by extra strength and stiffness.

It is estimated that the hull is around 1.5 tonnes heavier than a GRP equivalent, but this is partly compensated for by the use of lightweight construction techniques in the fit-out.

### Accommodation

The saloon is accessed from the aft deck by a set of spiral stairs, which continue on down to the aft cabin. A practical and attractive touch is the oval-section wooden post at the foot of the stairs, a convenient grabrail that is easy on the hand and the eye.

The oval theme continues with the saloon windows, and again this is more than just a styling touch. The shape lowers the bottom edge of the windows, giving a better view out for anyone sitting on the settees, and adds an

intriguing viewing-screen effect.

The windows throughout the boat are bonded into recesses in the superstructure. This gives a smooth finish, and avoids the need for frames which might develop leaks, but it also means it is not possible to incorporate sliding sections, so you get no natural ventilation in the saloon.

To starboard is an L-shaped settee for six people, while forward to port is a semicircular settee, again with room for six, facing a round dining table. In between are sideboards and lockers, including a rotating cocktail cabinet.

Lifting out the settee bases reveals extra storage space underneath. It also gave us a shock: instead of struggling with cumbersome pieces of plywood, we found ourselves lifting up feather-light boards. Close inspection showed that these were made from a sandwich construction of foam faced with ply, and this is used throughout, giving a significant weight-saving for a small increase in cost, and helping offset the weight of the hull.

The joinery throughout the boat is in American Cherry, in both solid and veneer forms, though any



## Premier Power 50

Engines twin Sabre 420L diesels, 420hp at 2600rpm, 6cyl, 6.8lit.

Conditions wind SW Force 3, sea calm. Load fuel 60%, water 80%, crew 5.

rpm	knots	gph	lph	mpg	range*	trim	sound levels dB(A)			
							saloon	fwd cab	aft cab	flybg
1000	7.8	2.2	10	3.55	1337	0.5	66	63	71	63
1200	8.8	4.0	18	2.20	828	1.0	70	65	75	65
1400	9.8	5.3	24	1.85	599	2.0	75	66	79	67
1600	11.4	9.0	41	1.27	477	3.0	76	70	82	70
1800	13.2	12.4	57	1.06	401	4.0	76	73	83	71
2000	16.4	17.1	78	0.96	362	4.5	77	74	84	72
2200	19.2	22.9	104	0.84	316	5.0	77	75	84	72
2400	22.2	28.5	130	0.78	293	5.5	78	77	88	74
2600	23.3	36.2	164	0.64	242	5.5	79	77	88	75

Acceleration 0-20 knots, 12.3sec. (\*allows 20% margin)

Loa 49ft 0in (14.95m)  
Hull length 45ft 9in (13.95m)  
Beam 15ft 10in (4.82m)  
Draught 4ft 1in (1.24m)  
Air draught 13ft 1in (3.98m) with mast up; 11ft 9in (3.59m) with mast down  
Displacement 20 tonnes (half-load)  
Fuel capacity 470gal (2140lt)  
Water capacity 140gal (640lt)  
Price £473,000 ex VAT as tested

wood could be specified by an owner. Andrew's choice gives a good compromise between traditional teak and the lighter timbers currently in vogue, which somehow would not suit the rugged, powerful feel of the Premier 50. The quality of the woodwork is excellent.

The helm position, forward to starboard, has a large console with space for all the electronics you could wish for. Two rows of ready-use switches, plus engine dials and lights complete the display. Apparently the owner of our test boat asked for as much space as possible to be devoted to electronic

Left: home for a pair of Sabre 420L diesels on the first Premier Power 50, the enginespace is entered by a hatch at the aft end. Positioning the fuel tanks in the keel rather than in the wings allows access to all service points.



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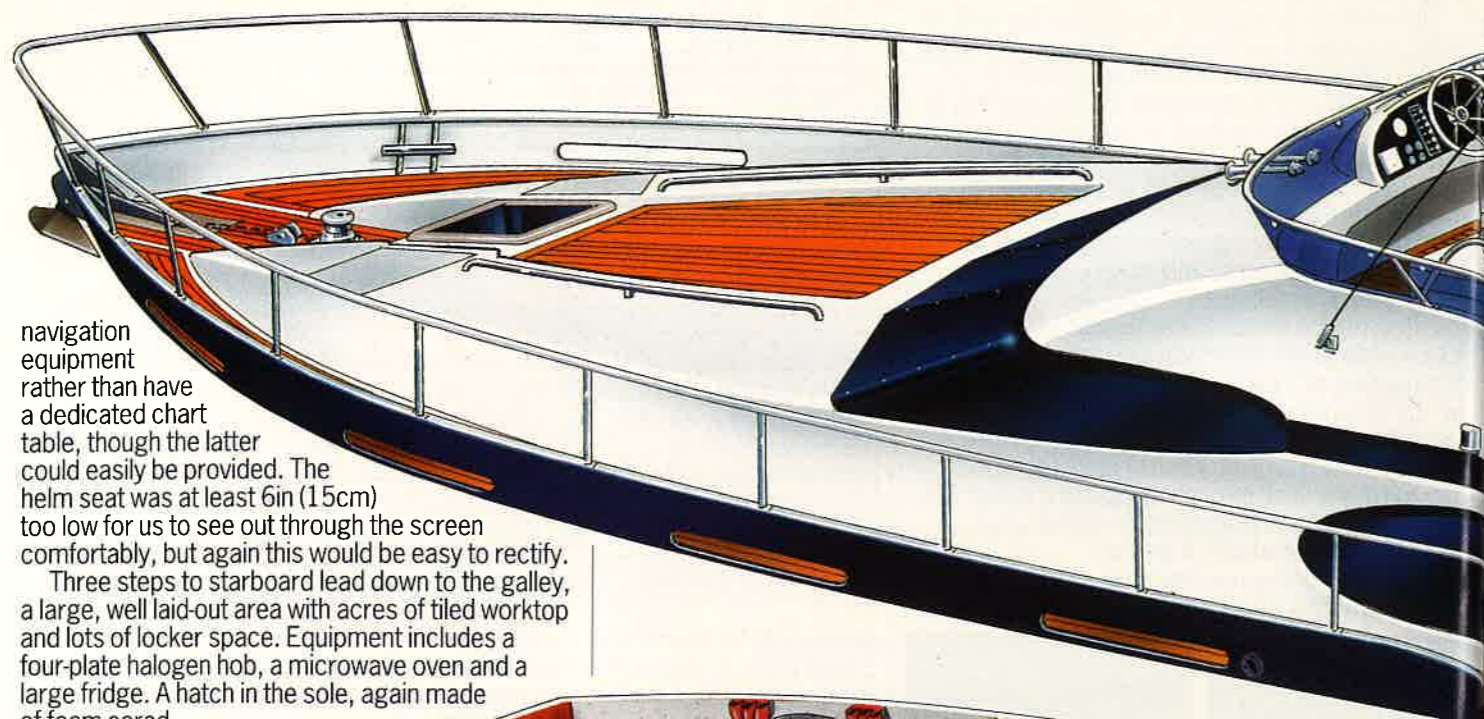
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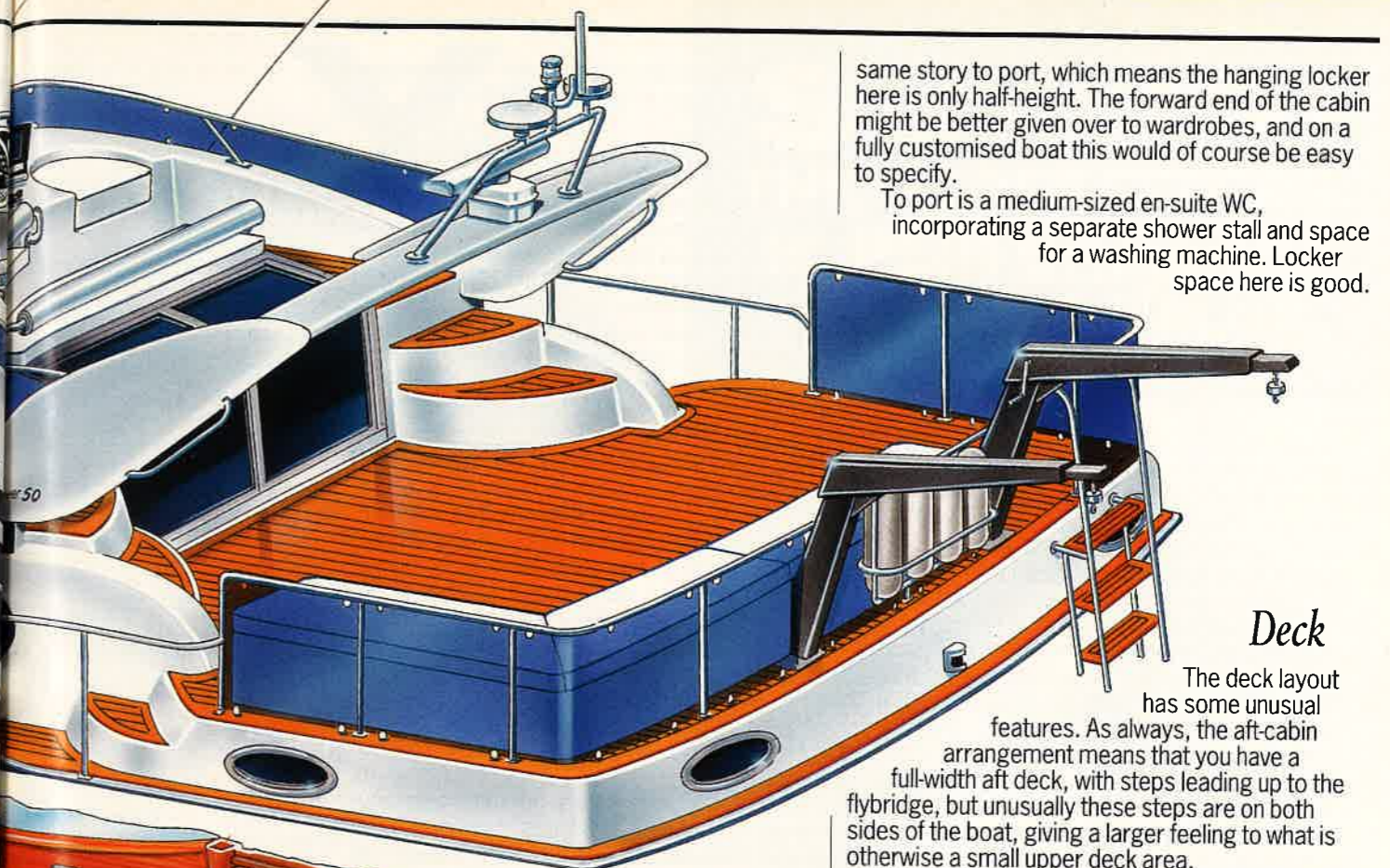




navigation equipment rather than have a dedicated chart table, though the latter could easily be provided. The helm seat was at least 6in (15cm) too low for us to see out through the screen comfortably, but again this would be easy to rectify. Three steps to starboard lead down to the galley, a large, well laid-out area with acres of tiled worktop and lots of locker space. Equipment includes a four-plate halogen hob, a microwave oven and a large fridge. A hatch in the sole, again made of foam-cored

boards, gives access to the inside of the hull, and with a little thought this space could be used for further storage. Opposite to port, the guest cabin has a pair of L-shaped crossover bunks with ample locker space underneath them. Headroom in here is restricted by the recess of the dinette above, but there is 6ft 6in (1.98m) over 50% of the area. Where the edge of the recess intrudes into the cabin, it should be padded to avoid painful contact with unthinking heads. A good-sized en-suite toilet compartment is shared with the VIP double cabin. It has a large separate shower stall, several lockers, and a very good electrically-operated Tecno toilet from Italy; you have to press just a single button, and its operating cycle is effective and reasonably silent. Accessed from the galley area by a curved door, the VIP cabin has a central oval-shaped double berth, and standing headroom at its aft end. Stowage is provided by three-quarter-height hanging

lockers port and starboard, and a drawer under the berth. You might think there would be further storage behind two large locker doors in the forward bulkhead, but in fact these just give access to the chain locker, which is something of a waste of space. There are also no seals on the doors, which means the cabin will have its own special fragrance when a muddy chain is hauled in! The aft cabin is huge, full-width and with full headroom everywhere. The impression of space is increased by a large hatch in the aft bulkhead, looking out over the bathing platform, and full-height mirrors on the forward bulkhead. The space is not used as well as it could be, however, as there is not as much storage as you would expect on a boat of this size. To starboard is what appears to be a row of lockers, but is in fact just a box over the engine exhaust pipe; it is the



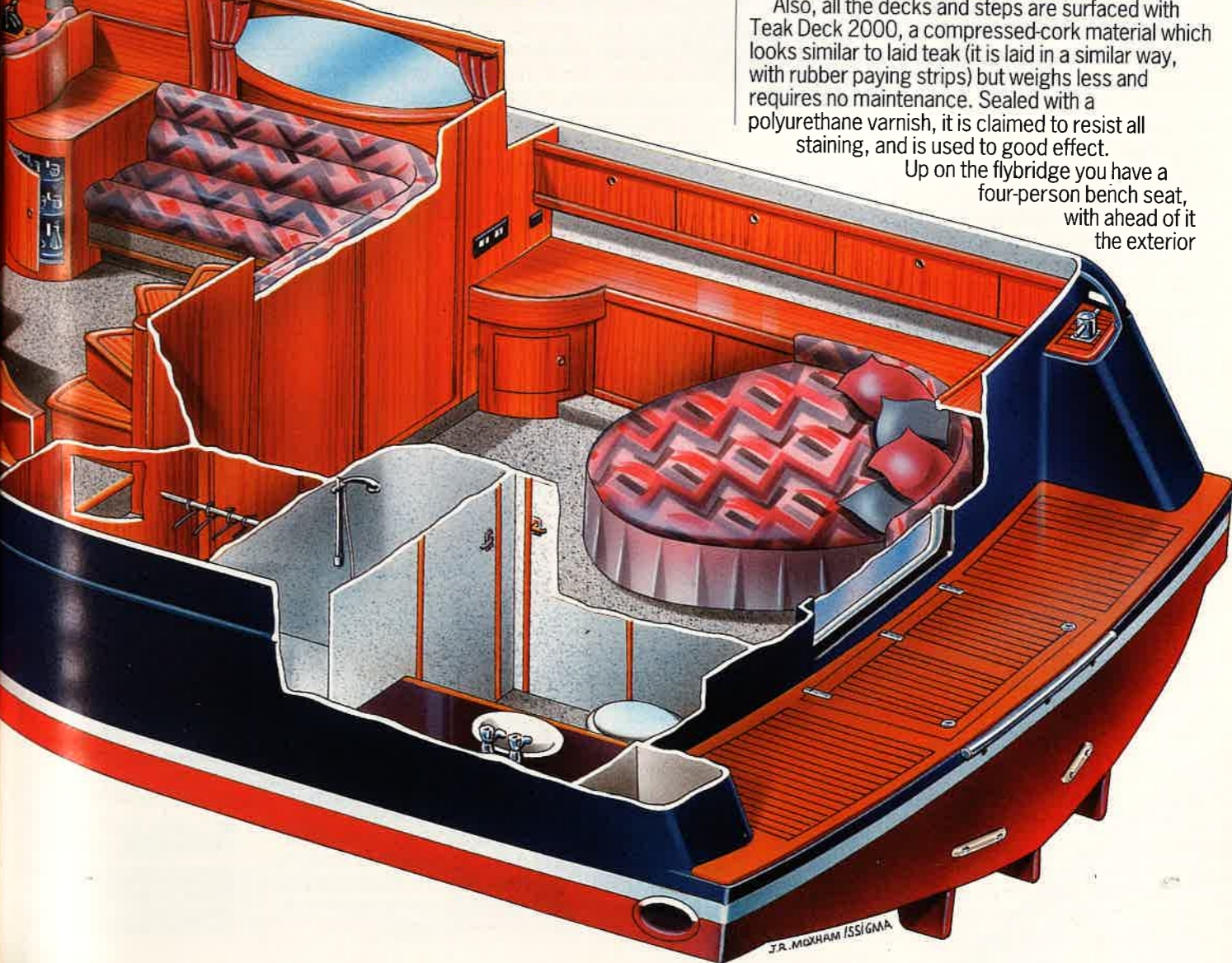
same story to port, which means the hanging locker here is only half-height. The forward end of the cabin might be better given over to wardrobes, and on a fully customised boat this would of course be easy to specify. To port is a medium-sized en-suite WC, incorporating a separate shower stall and space for a washing machine. Locker space here is good.

Deck

The deck layout has some unusual features. As always, the aft-cabin arrangement means that you have a full-width aft deck, with steps leading up to the flybridge, but unusually these steps are on both sides of the boat, giving a larger feeling to what is otherwise a small upper deck area. Also, all the decks and steps are surfaced with Teak Deck 2000, a compressed-cork material which looks similar to laid teak (it is laid in a similar way, with rubber paying strips) but weighs less and requires no maintenance. Sealed with a polyurethane varnish, it is claimed to resist all staining, and is used to good effect. Up on the flybridge you have a four-person bench seat, with ahead of it the exterior



Above: The Premier Power 50 as revealed by Motor Boats Monthly's commissioned artist John Moxham and airbrush illustrator SSigma.



helm position. The main console has a full display of engine instruments, but these have not been carefully thought-out, as they are too widely spaced for quick reference. On the left of the wraparound single helm seat is a passenger seat. On the right is an extension to the console, with the engine controls, VHF, autopilot and chart plotter falling conveniently to hand, while further right again is an extra aft-facing seat.

The hard corners on the elbow-rest to the helmsman's left would be painful if you fell against them, and we question the positioning of the magnetic compass, somewhere down between his knees.

Back down the stairs, the aft deck has a useful L-shaped seat/locker to port, with room for six or seven people and good stowage space. The smoked perspex dodgers all round are stylish, and do a good job of keeping the wind off.

A ladder which leads down to the bathing platform is too steep, and set too far aft, for safety and convenience, although the platform itself is large and full-width. A lid lifts to reveal the steering gear, but this leaves no space here for storage, which is a pity. Half-height platforms on each side carry the aft mooring bollards; using these rather than the aft deck reduces your height above the pontoon, making it easier to step off with the stern lines.

Two steps on each side of the aft deck lead down to the side decks, which are generously wide at 16in-18in (40cm-45cm) and have 10in-12in (25cm-30cm) bulwarks from midships forward. The bulwarks are topped by a stylish oval stainless steel capping, which runs right to the bow but then finishes in a wicked-looking point. Another criticism is that the Teak Deck 2000 does not extend right out right to the side of the boat, so your feet can slip off its edge. Fortunately, substantial 30in (750mm) tall stainless steel rails extend right around the boat.

The anchor stows in a double-roller stemhead fitting, with the second roller allowing the boat to pick up a mooring buoy without disturbing the anchor. The rest of the mooring arrangements are similarly practical, with large stainless steel bollards forward and no fewer than four oval stainless steel 'cleats' on each side, bolted not to the deck but to the inside of the bulwarks.

## Engines

Engine options include 420hp Sabres, 420hp Caterpillars, 430hp Volvos, 480hp Volvos, 600hp Caterpillars and 600hp Volvos, giving claimed maximum speeds of between 24.5 knots and 30 knots. Our test boat was fitted with twin 420 Sabres.

The engines are mounted under the saloon, accessed via a hatch in the floor at the aft end. Once you are in, it is easy to get at all maintenance and service items, including the inlet strainers and stern glands. A comprehensive fuel management system is mounted on the aft bulkhead, including Separ filter/separators.

Having the fuel tanks themselves mounted in the keel, one forward and one aft (with a manifold allowing the engines to draw from either), has the benefit of allowing you plenty of space to work around the engines. The only drawback is that you have to have a bilge pump on either side of the tanks, but then an extra pump is never a bad thing.

Large, secure battery boxes are mounted outboard, with proper 3in (75mm) vent pipes leading

up from them, a detail which other builders often skip. Aft are large exhaust silencer boxes.

## Handling and performance

We took the Premier 50 out from the River Hamble in Hampshire, on a day which promised waves but in the event gave us just a breeze and a gentle chop. Even running out to the forts could give us little more than a few ferry wakes to tax the hull.

What there was the boat handled easily. Its only black mark was that, when heading into the waves or just off them, it would throw up occasional bursts of spray which the wind would then whip back across the flybridge. It was not enough to drown us, but certainly enough to annoy, in what were not rough conditions.

There was no way of telling whether adjusting the running angle would have helped, as the test boat was not fitted with trim tabs. This was the owner's preference, but we would suggest that on an untried boat they should have been fitted to allow the hull to be tuned; in any case, they often come in useful in bad conditions, to help you get the bow up or down, or level the boat laterally.

High-speed turns were good, with no stalling of the rudders and only the lightest touch required on the helm.

Back in sheltered waters, our radar gun showed a maximum speed of 23.3 knots at just over half-load, which compares well with the maker's predicted 24.5 knots at half-load. Acceleration was good for a big boat, at 12.3 seconds for 0-20 knots.

As usual we carried out full fuel consumption measurements, which showed that at this speed the Sabres were taking 36gph, equating to 0.64mpg and giving a range with 20% reserve of 242 miles. Dropping back just 200rpm loses you only a knot, but brings a 20% improvement in consumption, equating to a range of 293 miles. This would appear to be the best cruising speed, because cutting back by another 200rpm gives you only a 7% improvement in consumption, at the loss of 3 knots.

Noise levels were not so good. The aft cabin was particularly noisy, all the way up the revs, but especially flat-out, where it registered 88dB(A); we felt the major causes were reverberation from the boxes surrounding the exhaust pipes (soundproofing these or running the exhausts underwater would help), plus propeller noise. The saloon yielded figures of 78dB(A) at cruising speeds, 79dB(A) at maximum. Outside on the aft deck and flybridge, things were much better, showing the benefits of the silencers in the lines.

## Conclusion

Great promise is shown by the Premier Power 50. Its combination of steel and GRP construction, which initially caused our eyebrows to raise, has worked well. The layout shows some splendid touches, and gives more usable space than an equivalent aft-cockpit boat. The minor niggles we found on our test boat should be easy to rectify, and anyway some were simply the result of an owner's preference and will not appear on subsequent boats.

This, of course, highlights the great plus point: the hull and layout can be custom-built to whatever an owner wishes, a bonus which few other boats on the market today can offer. All we would like now is to be able to get the Premier out on the water on a rough day, and see how it really handles. □

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