



THE 440 is the latest of the new-look Princesses. With a new exterior, a new interior, and bristling with novel ideas, it joins the larger 58 and 66 models in the vanguard of Marine Projects' challenge to the world of upmarket motor yachts.

Most notable are the interiors. Gone are the teak or ash finishes, to be replaced by expanses of fashionable maple timber and veneers, and trendy vinyl wall-coverings. At the same time the layouts have received considerable thought, more attractive and eyecatching but still with the attention to practical detail which Princess customers look for.

The 440 is the smallest in the Princess motor yacht range to receive the luxury interior treatment.

Over the past couple of years Marine Projects

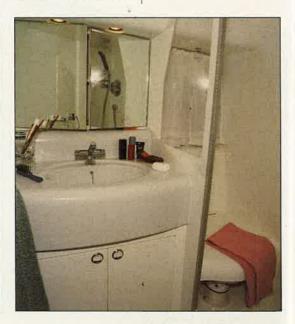
have maybe taken their eye off the ball a little, allowing their closest rivals at Fairline to steal a march with their Squadron range, but this has now been redressed. The three newcomers were introduced at the 1993 Southampton Boat Show, and their success has been reflected in healthy order books; indeed, the 66 is already sold out to the end of 1994.

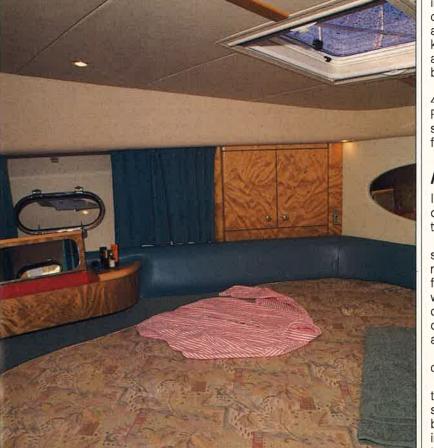
Design

Bernard Olesinski has produced one of his more extreme hulls, with variable deadrise and tunnels for the propellers.

Amidships, the sections are a full deep-vee, with a deadrise of 25°. This flattens out to 17° at the transom, giving them a variation in deadrise









The 440 is one of three Princesses to receive Marine Projects' new luxury interior treatment. Out have gone traditional teak and ash. In are burr-grained maple and designer vinyls.

of 8°, and maximising the benefits of this style of hull. The deep-vee sections forward allow the boat to cut through head seas, while the mediumvee sections at the transom give maximum lift, for higher speeds from a given horsepower and an easier planing angle.

The propeller tunnels are parallel in form, foreand-aft, reflecting Olesinski's current thinking for optimising performance and steering at high speeds.

The exterior of the 440 follows the current fashion of curved surfaces and rounded profiles. The most noticeable feature is the flight of easy-rising stairs from the cockpit to the flybridge.

First used two years ago by Sealine for their 450, this development was long overdue: hitherto, the only way up on most boats has been via a near-vertical ladder, which is challenging for even the fittest of passengers, necessitating two hands in anything above a flat calm, and almost

impossible for the less agile or for anyone carrying something. Why boatbuilders shied away from the obvious for so long we do not know. One argument has been that such an arrangement takes up too much cockpit space, but this boat shows that need not be a problem.

Interestingly, much of the prompting for the 440's stairs came from owners of the aft-cabin Princess 435, who had got used to the three steps from the aft deck to the flybridge and asked for a similar feature on an aft-cockpit model.

Accommodation

Interior layout is conventional, with an open-plan deck saloon and galley, three double cabins and two bathrooms, one of which is en-suite.

The saloon is excitingly styled, with a semicircular settee to starboard, opposite a matching double seat which can be pulled out to face the oval table. The circular theme continues with the corner unit aft to port, which contains a cocktail cabinet, tailor-made bottle and glass drawers, and space for an optional television above.

Excellent split-level windows allow you to see out even when seated. They slide for ventilation.

All the woodwork, in the saloon and throughout the rest of the boat, is to a superb standard, with solid maple timber for the frames and swirling burr-grained maple for the panels. Upholstery is in cream vinyl, with imitation baby ostrich vinyl for the overheads. Features such as the pillars in green vinyl, with matching green scatter cushions, set off the cream and brown of the timber and fabrics.

Styling is the product of Marine Projects' new in-house design team, and they have done an excellent job. However the hidden woodwork is less impressive, with some of the storage boxes under the seats being rough unvarnished plywood. We were similarly concerned by the sharp edges of the stainless steel frame surrounding the engineroom hatch in the sole, which could damage hands, or any woodwork it is leant up against.

The galley, forward to port, is set one step down from the rest of the saloon and further divided-off by a serving pier aft, but is still very much part of the open-plan area. There is room for two people to work at a squeeze, and a lot of worktop space, in moulded Avonite with a neat but effective fiddled lip.

Equipment includes double stainless steel sinks, a microwave oven in the forward bulkhead, a fridge underneath, and a triple gas hob under a lid, although where you should put the latter when it is lifted off is not clear. Storage space is not particularly impressive for a boat of this size, but is augmented by a shallow moulded locker in the sole.

Further general stowage is provided by a full-depth underfloor compartment, accessed via a hatch in the saloon sole alongside the galley. This could be a useful space, as it runs out under the galley and the helm seat opposite, and has a stainless steel ladder for access, but it is let down by being poorly finished, with bare GRP and plywood (with a lot of glassfibre shards and splinters), and the unpainted GRP of the inside of the hull

A panel in the floor gives access to the midships automatic electric bilge pump, but this,

a Rule 1000, is too small for a boat of this size.

The helm position is up two steps to starboard. Here, two side-by-side bucket seats give good lateral support and can be individually slid back and forwards. However, they could do with being another 3in (7cm) or so higher for forward vision at speed, and they give limited lumbar support when you are leaning forward holding the wheel.

Flanking the wheel are well-placed panels of ready-use switches, rounded to blend with the curved GRP moulding; clearly, thought has gone into designing this area to suit the equipment that is going to be installed. Similarly the oval recessed engine instrument panel, an attractive but practical feature, matches the same panel up on the flybridge.

The radar is mounted to the left of the wheel, with a small electrical control panel further left, under a perspex lid. We were sorry to see this had only one voltmeter for the two battery banks. with a left/right switch used to indicate the state of either bank, an unwanted cost-saving arrangement which means you cannot see the state of the batteries at a glance, or notice if a problem should develop. The single ammeter also appears to show only charge rates, not discharge rates.

A compass is located conveniently on the top of the console. A comfortable pair of black Morse single-lever controls is well placed by the helmsman's right hand, with the trim tab switches and anchor windlass control in a panel behind these. An overhead panel takes the echo-sounder, the log/speedo, the autopilot, the VHF and an optional GPS. To the left is a half-size chart area, with a shallow tray underneath.

The three windscreens are cleared by large self-parking pantograph wipers, with two speeds and washers in the arms. As they are set up, however, they do not wipe the bottom of the screen, the area you mainly look through when travelling in coastal waters at speed, where pot and net markers are the principal hazards. Also, no demisters are fitted, which quickly rendered the screens opaque on our wet test day; they should be standard on a boat of this size and sophistication.

A sliding side-window enables the helmsman to communicate with deck crew.

The three cabins are down three steps forward, and are arranged around a partial lobby.

To starboard is a twin-bedded guest cabin with full headroom over 60% of its area, a full-height hanging locker, and further lockers under the inboard berth and overhead. A hinged hatch overhead gives access to the electrical distribution panel which, reflecting Marine Projects' newly-acquired BS5750 status, is a model of clear layout, with a row of circuitbreakers and cables all neatly numbered; the only thing missing is a code showing which number refers to which circuit.

To port is another guest cabin, with twin bunks. This also has full headroom over 60% of its area, plus a three-quarter-height hanging locker, but only some tiny additional lockers and no convenient stowage for use by the occupant of the lower bunk.

Surprisingly, the guest toilet compartment, forward to port, is en-suite to neither of these cabins. It is a reasonable size, but very plainly finished, in all white, and you have to walk through the shower stall to reach the sink and the toilet, an awkward arrangement. The toilet has a hinged lid, rather flimsily made from single-skin GRP. An overhead switch controls the light, and a small electric extractor fan.

The master cabin forward has a central oval double berth. Storage is provided by matching full-height lockers port and starboard, two dressing tables, bedhead lockers each side, and drawers under the foot of the berth. The en-suite WC to starboard again has a separate shower stall, with the toilet under a lid, but this time you reach the sink first.

Exterior

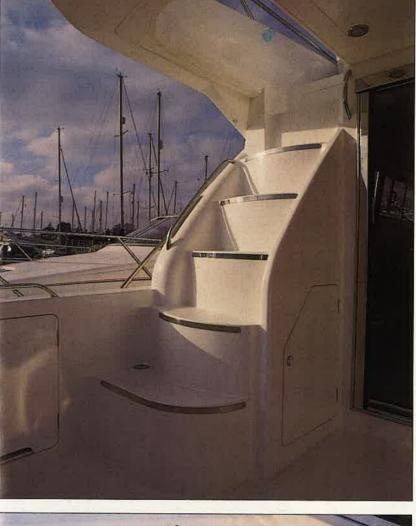
The moulded GRP stairs from the cockpit to the flybridge, to port, are an easy way up but would benefit from an extra handhold. Also needed is a better arrangement for opening and securing the hatch to the flybridge, which crashed shut whenever we hit a wave.

The flybridge itself is a good size, with seating for six alongside the double helm seat, and a two or three-person sunlounger aft.

Back down in the cockpit you have an L-shaped seat, aft to starboard, with room for six to eight people, and good lockers beneath. A walk-through door to port leads to the integral bathing platform, which has a teak grating, and small fender stowages to starboard. Wing lockers in the sides of the wheelhouse take gas bottles and the manual bilge-pump.

The sliding patio door to the saloon has a poor securing arrangement, with just a fiddly lock to keep it closed. This caused problems on our

Above right: one of the most noticeable design improvements on the 440 is the stairway up to the flybridge, although our 130-mile test revealed that an extra handhold or two in this area would be a further bonus. Right: the oval engine instrument panels are identical at each helm position and were found to be easily read at sea.





delivery trip (see panel).

A large hatch in the centre of the cockpit gives access to the lazaret, where there is good room for stowage, with ply floors covering 75% of the area. A further hatch in these gives access to the aft bilge pump, again just a small Rule 1000. Down here you also find the aluminium water tank, and large GRP silencers on each side. You have good access to the steering gear aft, which is protected by a vertical bulkhead but could also do with a lid.

Access to the side decks is via moulded steps from the cockpit. As you climb up, the overhang of the flybridge tends to push you outboard (awkward if you are standing here ready to pass mooring lines ashore) and the cabin sides have the same effect as you walk forward. This is not helped by the fact that the side decks are only 7in (175mm) wide, and the final sting in the tail is that they fade away into the coachroof as you reach the bow — all very well if you notice it, but dangerous if the first time you move forward is in the dark or rain, and not helped by the curved edge to the coachroof, which can cause you to lose your footing. This is one case where we feel the fashion for rounded edges has taken over from practicality.

The electric windlass is partially recessed into the deck, alongside a half-opening forward locker. This takes the anchor chain plus ropes and fenders, but has no dividing bulkhead, which could lead to the chain jamming if you let the anchor go in an emergency. Mooring is taken care of by 10in (250mm) stainless steel cleats

forward, midships and aft.

Engines

Three twin power options are offered: 380hp Volvo TAMD71Bs, 430hp Volvo TAMD72s or 425hp Caterpillar 3208TA. Our test boat had the more powerful Volvos, and for most people these are likely to be the preferred option, giving a claimed 32-34 knots.

The engines are mounted under the saloon. and accessed via a hatch in the sole. A stainless steel ladder helps you to climb down, but once there it is a tight squeeze between the two Volvos. This is not helped by awkwardly-cranked steel supports for the saloon sole, which make it virtually impossible to move aft.

Once there, you can get to the sea inlet valves, but this involves stretching over the exposed propeller shafts. You can also reach the

Plymouth to the Solent

Despite the gales of previous days, the sea had settled sufficiently for the delivery of the Princess 440 from Plymouth to Moody's yard on the River Hamble, 130 miles away.

Highly experienced delivery skipper Bob Turner was in charge for the run-The 440 was almost fully fuelled, but apart from a thermos and some sandwiches, it was otherwise bare of

cruising gear

The morning of our departure was cold and without demisters, the large windows had to be wiped clear of condensation by hand. A heavy November frost had also left a thin coating of ice on deck. In such circumstances, the rails could have been a little higher, and as we found earlier, the flybridge protrusion pushed you slightly off balance.

We cast off at 0940 and headed out into a smooth sea in bright surishine. As we were to head due east. Bob lined up the boat with a transit on the shore to swing the compass, and found it more

or less perfect on that heading. Turning out to sea, we pushed up to full power and the Princess rode smoothly at an instrument reading of 34 knots, but once out of Plymouth Sound we dropped back to 27.5 knots indicated.

One small fault which soon revealed itself was an annoying rattle from the locker lids in the aft cockpit, which were vibrating in resonance to the engines. A strip of rubber here, along with a locking device, would cure the problem.

Weaving through the minefield of lobster pots that punctuate this bit of coast, the boat handled well. When steering manually from below, the

helmsman has to sit forward to the wheel and his back is unsupported but otherwise the helm position cannot be faulted. The dials are clear and logically laid-out, the throttles fall easily to hand, and the dashboard has many cleverly located grannies which absorb the logbooks, pencils. Mars bars and sunglasses which always seem to appear when passagemaking.

By 1040 we were off Start Point, and ran into the inevitable tidal race that roughs up the sea here. The 440 rode it well, coming down gently and easily when you expected her to slam. We throttled back slightly, although this was

more to keep the spray down than to ease the ride.

When we climbed to the upper helm in these conditions, it was noticeable that the heavy hatch to the flybridge has no means of latching back, no upper handle and no rubber cushion to soften an accidental slam. This really needs immediate attention from Marine Projects, although an owner could correct it himself very simply. A few more handholds would not go amiss either, especially on the inboard side of the flybridge steps, and a better latching mechanism on the saloon doors would avoid the need to keep it.

locked in a seaway

By 1235 we were off Portland Bill. and Bob took us in close to avoid the white caps in the tidal race. The boat took a few awkward seas, but shouldered them effortlessly aside. Swinging past a German frigate off Weymouth, we headed towards the Needles, and our rendezvous with a helicopter for our aerial photographs:

It had been a fast and largely uneventful trip. The engines performed faultlessly, and although we felt it needed a few simple modifications, the 440 proved a fast and comfortable passagemaker

sternglands, but the curiously high-level inlet strainers are so close to the deckhead that you cannot see through their perspex inspection lid.

Fuel is stored in what appear to be aluminium tanks, covered in eggbox-style sound insulation. The port one has had a corner cut off it to clear the engine exhaust line, and the lagged dry exhaust elbow passes within 2in (5cm) of the tank, which is too close for our liking. Fuel runs in copper pipes, through small Separ filters, with no changeover system to allow each engine to run from either tank.

Handling and performance

We had two bites at the cherry. Our first test day gave us moderately calm conditions inside the Plymouth breakwater, for our performance runs, and extremely uncalm conditions outside, with a southwesterly Force 5-6 piling steep waves up the shelving waters. We followed this with a mixed run up the Channel to the Hamble on another day (see panel).

On our first acquaintance with the 440, we took it straight out to sea to try our worst.

Into the waves, the hull cut through some serious seas at a steady 18 knots, with no pounding. However there was a lot of water flying around, enough to drench us on the flybridge and tear the blades out of the wipers below.

Downwind, the boat tracked a reasonably steady course, though with its nose burying in the waves ahead. We were subsequently told that the trim tabs had been wired-up back-to-front, so the 'bow-up' control in fact pushed the bow down, and that one tab was only working intermittently, which probably explains the effect we found. On our later delivery trip, these faults had been rectified and the 440 handled excellently.

We recorded a maximum speed of 31 knots at 2600rpm, with 100% fuel and three crew, which compares favourably with the claimed 32-34-knot maximum, any discrepancy probably being attributable to the trim tabs. Fuel consumption at this speed was measured at 40.5gph (184lph), giving 0.77mpg, and a maximum range of 190 miles.

Dropping the revs to 2250rpm gives a still more than adequate 25 knots, with corresponding fuel figures of 26.6gph (121lph), 0.94mpg, and 233 miles range. At 2000rpm you are still cruising at 21 knots, with figures of 20.5gph (93lph) and 1.02mpg respectively.

Noise levels inside the boat were good, registering 82dB(A) in the saloon at full speed and 80dB(A) at 25 knots. Out in the cockpit they were more intrusive, at 96dB(A) and 92dB(A) respectively.

Conclusion

The 440 represents an exciting step forward for Princess. The interior styling is right up-to-theminute, while the hull and performance are as good as we have come to expect.

We did find several details that need tidying up, but these would not be difficult to achieve. A feature which made a most favourable impression upon us was the stairs up to the flybridge — something which we expect to see appearing in other models in the range, and developing in many more other makes in the months and years ahead.

PRINCESS 440

Engines: twin Volvo TAMD 72 diesels, 430hp at 2600rpm, 6cyl 6.73lt

Conditions: wind SW Force 5-6, sea moderate. Load: fuel 100%, water 50%, crew 3.

							!	sound levels dB(A)		
rpm	knots	gph	lph	mpg	range	trim	saloon	fwdcab	ckpt	flybg
1000	8.0		_		7	1.5	72	68	84	68
1250	9.5		-	_	-	2.5	73	70	84	70
1500	13.5	9.8	46	1.38	342	4.0	74	72	85	73
1750	17.3	15.4	69	1.12	278	4.5	77	74	88	76
2000	21.0	20.5	93	1.02	253	4.5	79	76	88	78
2250	25.0	26.6	121	0.94	233	4.5	80	79	92	80
2500	29.1	33.9	154	0.86	213	4.5	81	81	94	81
2600	31.0	40.5	184	0.77	190	4.5	82	82	95	81

Acceleration: 0-20 knots, 10.4sec.

(range figures allow 20% margin)

Loa	45ft 1in (13.75m)	Displacement	12.5 tonnes
Beam	13ft 10in (4.22m)	Fuel capacity	310gal (1410lt)
Draught	3ft 4in (1.02m)	Water capacity	107gal (485lt)

Price: £199,630 ex VAT.

Builders: Marine Projects, Newport St, Plymouth, Devon. Tel:0752 227771

Suppliers: Marine Secol, Queen Anne's Battery Marina, Plymouth, Devon, Tel 0752 600657

