# Princess 45

Combining three-cabin accommodation with high-speed seakeeping underpinned the reputation of an earlier boat with exactly the same model designation. Has a revamp for the 21st Century changed the approach at all?



# BOAT REPORT

ast September's
Southampton Boat Show
saw Marine Projects unveil
a revamp of the smaller end
of their line-up of flybridge
Princesses, introducing new 38
and 45 models to replace the
existing 40 and 460 respectively.

A previous Princess 45, launched to much acclaim in the early 1980s and produced until 1992, proved an important landmark in motor cruising, by combining a high volume of accommodation with the ability to maintain comfortable high speeds even in poor weather.

When they launched that design, Marine Projects considered it to be just about the biggest boat they might conceivably build. But within a decade they had upped the ante to 65ft, and subsequently they have gone well beyond this, leaving a

45-footer at the smaller end of their flybridge line-up.

However, this size of vessel, especially when based on a three-cabin layout like this particular model, remains a mainstay of any manufacturer's range, not least because it is still small enough to be comfortably handled by two people.

So how would this new incarnation shape up in comparison to its predecessor? Our thanks go to Cityshape Chartering, who lent us their newly commissioned 45 so that we could judge for ourselves.

## Flybridge

Handrails flank the stairs up to the flybridge, which is indicative of the way the builders have been most careful to provide steadying handholds just about everywhere you turn.

The flybridge layout is well thought-out, not least because the double helm seat does not quite abut the coaming to port, leaving a small gap so that the co-pilot can slip out without disturbing the helmsman. We also like the way the forward sweep of



the U-settee arrangement to starboard allows at least a couple of people to sit and converse with the skipper and navigator.

All the seating is most

comfortable, with a good depth of moulded base and decent height of backrest. The helm seat is also adjustable fore and aft, and has a stowage cave locker set in it.

The console is simply laid

out, with wheel and throttles falling nicely to hand and engine instrumentation easy to view. The standard inventory includes a dual-station VHF, log and echo-sounder, together with well placed wet-card

compasses; there is sufficient room to add any further electronics you might want.

Towards the rear portion of the settee is a refrigerated coolbox, and abaft of this is a sunpad.

#### Princess boats. The gap of nigh on two decades has seen a number of changes in how Olesinski achieves the twin goals of high internal volume and excellent seakeeping, But, interestingly, performance is little changed; later boats from the earlier model's production run were achieving around 30 knots with the larger engine installations. namely 375hp and 425hp Caterpillars, while the new version's standard option of twin 430hp Volvo Penta TAMD 74Ls offers much the same top speeds. Below the waterline, the format follows the trends set by other present-generation Princesses. with the propellers running in tunnels set in a medium-to-deep

vee, the deadrise easing

Design & layout

Like the original 45, the new one is

the work of Bernard Olesinski.

who currently designs all the

# Bathing platform

A full 4ft 0in (1.22m) in depth, the bathing platform can take a mini-RIB or PWC and can be equipped with either of two different crane options for handling them.

It also extends to the vessel's full beam, and the topside returns are fitted with handrails, so hopping on and off is safe and simple if the platform abuts the pontoon.

The walk-through to the cockpit is to port.

The platform is equipped with the usual swim-ladder and shower, and comes teak-laid as standard.

There is a small locker set in the starboard return, and a useful-sized self-draining deck locker. If the latter was just a little larger, it might take a few extra fenders; these otherwise have to take up space in the cockpit lazaret, there being no dedicated fender rack.



# Cockpit

Teak-laid as standard, the aft cockpit has plenty of room for people to sit, and to move around without getting in each other's way. Easy stairs lead up to the flybridge, a transom gate to the bathing platform and short stairwells to the side decks.

The transom bench is deep and comfortable, with a large single locker within its base; the hatch is thoughtfully provided with a gas strut to support it while you rummage around.

Sea Dieam

A couple of further lockers set in the superstructure returns take care of gas bottles (unless you opt for an all-electric galley and generator, as on our test boat), fuel shut-offs and the manual bilge pump.

A gas-strut supported hatch in the sole gives access to the good-sized lazaret.

On an all-electric boat, this will house the genset, which is located towards the rear of the compartment, somewhat cordoning off the steering gear right aft but without rendering it inaccessible. Out in the wings are the water tanks.

All of which leaves the main area of the lazaret, within the vicinity of the hatch, for general stowage. Anything put here is kept clear of the bilge by a GRP liner, which has cut-outs if you need to gain access to the bottom of the hull.



## Decks

Side deck guardrails run as far back as the break of the cockpit, and inboard rails are mounted on the superstructure. Furthermore the 10in (25cm) width of deck is bordered by a firm lip of toerail, so you feel quite safe moving forward. However, access directly up to either side deck from alongside is daunting, to say the least, with the bathing platform being a better route.

Up on the foredeck, the chain locker benefits from a sensible-sized hatch and the ground tackle is handled by an electric windlass.

Mooring hardware comprises three pairs of 10in (25cm) cleats, which is adequate, although on a craft of this size it would be nice to have a second set of springs amidships.

The stern cleats are hidden away under small gas-strut supported covers, which also house handy rope bins so you can quickly tidy the stern lines away.



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from 24° amidships to around 19° at the transom. This is in some ways quite different from the 1980s design, whose beam was almost identical at deck level but noticeably narrower at the waterline, with the required interior volume being achieved by way of a couple of knuckles in the topside.

Another noticeable divergence in design is in the transom area. The new 45 follows the now standard style of having an extra-deep integral bathing platform, no longer just an overhang because it has the underwater part of the hull extending right aft to support it. This not only allows the platform to be more fully loaded, but also increases the overall waterline length and the amount of internal volume available.

In overall styling, the new 45 cuts a clean dash, with rounded but unfussy lines to the topsides and superstructure plus a good amount of cockpit overhang which makes for a really substantial flybridge.

The internal layout offers three separate cabins: an en-suite double forward, an en-suite twin to starboard, and a smaller cabin with a useful set of bunks to port. The saloon opens almost fully up to the large aft cockpit, while the good-sized galley is simply a step down, just that bit separate while keeping it easy to serve food.

Headroom is generous throughout the accommodation, at 6ft 5in (1.97m).

Besides the twin 430hp Volvo Penta TAMD 74L diesels installed in our test boat, the only other listed engine option is 370hp TAMD 63Ps. However, Marine Projects tell us the former units are also available in 74P guise, which ups their output to 480hp.

# Handling & performance

The day set aside for our sea trials off Poole promised a degree of sunshine but with deteriorating, blustery weather on the way. We hoped this would have pushed up a fair chop in which to test the 45, but



## Galley

Being set just one step lower, the galley can share all the daylight and the bonhomie of the saloon while keeping the messiness of food preparation largely out of sight.

It is well proportioned, with two sinks and plenty of varied stowage and worksurface, although it would be better if the Avonite countertops were fashioned with a lip or fiddle to save breakages.

The standard inventory has a gas hob along with a microwave oven, but our test boat featured an all-electric package. A good-sized fridge with a freezer compartment completes the line-up of appliances.

The bulkhead around the hob is protected by a hinge-up flap, and incorporated in the joinery above is an extractor.

# Port cabin

The port guest cabin is a twin-bunk affair, the lower berth being just 1ft 9in (0.53m) wide and the upper one about 5in (12.5cm) wider. That said, both are full in length and have sitting headroom, so as a third cabin on a 45-footer the arrangement works fine.

Stowage is down to a reasonable-sized hanging locker and two further lockers outboard of the upper bunk.



## Saloon

The stainless steel-framed patio doors slide across to starboard, to make as wide an access from the cockpit as possible.

There is plenty of settee seating inside. The main portion of this is in a U-shape to starboard, around an extendable table, which will seat six in comfort.

If you want more space, the seat-bases of a smaller settee opposite can be pulled across; these are also designed to dovetail into the settee so as to form a sizeable occasional berth.

Further forward to port, in the boat's handsome cherry joinery, is a sideboard unit with an entertainment centre and a cocktail bar. The latter looks rather diminutive, but there is also a fridge to bolster its contents.

All the seat-bases, which are built of wood rather than GRP mouldings, offer locker space within them.

Between the galley and helm position forward, a short corridor runs down to the lobby area for the cabins. Inset within its starboard bulkhead is the conveniently placed electrical panel.

## Starboard cabin

The twin berths in the starboard cabin average out at 2ft 0in (0.60m) wide and 6ft 3in (1.90m) in length, with a side table and stowage locker between them.

There is adequate sitting

headroom above, and hatches in the bunk-bases give access to the hull and some service items.

Stowage for clothes is rather limited, comprising a good-sized hanging locker plus a small adjacent cupboard. Perhaps this could be addressed by a more painstaking use of one or two voids?



#### Master suite

Headroom in the master suite is most generous despite its location in the bow, and there is good clear access to both sides of the berth. The latter measures 6ft 3in (1.91m) by 4ft 9in (1.45m), with two large, deep drawers at its foot and a further storage area under its forward section.

Running along either side at eye height are sets of cupboards, some of which are pretty shallow, and below these are a pair of dressing tables. There are also his-and-hers wardrobes, the one to starboard being larger than its partner, which should decide who gets which!



The en-suite toilet compartment is similar in style to the guests' one, with a natty corner basin, plenty of stowage and a circular shower cubicle protecting the rest of the compartment from splashes.





# Day toilet

The toilet compartment which is en-suite to the starboard cabin also has a door to the lobby, and will serve as the day toilet.

The designers have made the mouldings interesting as well as practical, including a handsome crescent-shaped corner basin and mixer tap arrangement. This is offset by the teak and holly flooring, and by the cherry joinery of the cupboards.

One below the sink and the other at chest level outboard, these stowages are sufficiently large to take umpteen washbags and also serve as a medicine chest.

The toilet is electric, and the shower area is defined by a circular pull-round screen.
An extractor is fitted to supplement the opening port

as it turned out the wind filled in to little more than a Force 3, and, apart from the outfalls kicking up a slight fuss off Old Harry, there was little to tax the hull. Still, at least we could enjoy the boat in what was ideal cruising weather!

For passagemaking in these conditions, just set the revs at 2200rpm and you will glide along at something over 24 knots, with the fuel tanks giving you a range (depending on loading) of around 270 miles.

If you are in less of a hurry, you can settle for 2000rpm and around 20 knots, which, according to our

figures, should improve economy slightly, to just over 1mpg — not bad when you consider that, a decade ago, you could not really expect this kind of figure from a boat bigger than 40ft.

Flat-out, we clocked just over 29 knots on the radar gun.

At speed, the hull is responsive to the rudders, turning quite tightly, in under three boat lengths, at our 2200rpm cruising speed. The hull takes on only a moderate amount of heel in accomplishing this, making it comfortable for all concerned.

The steering is not so light as to be twitchy, but is certainly not

heavy either. It is smooth in operation, and just over six turns lock-to-lock is a good balance.

The trim tabs ease the bow a couple of degrees, and it was easy to level the very small amount of crosswind heel we experienced.

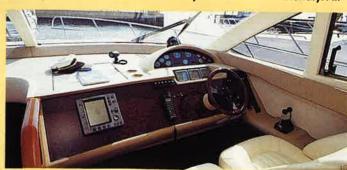
Our only slight qualm was the amount of noise in and around the cockpit, which made the saloon noisier than it might be if the patio doors were left open when underway. Matters could no doubt be improved by simply bedding the engineroom hatch down on rubber, to achieve a better seal.

Both helms are well laid-out and

## Interior helm

The builders have given a matt, almost stone-textured finish to the helm and screen moulding. Not only does this make for a much smarter finish than ordinary gelcoat, but it is also less reflective and dazzling for the helmsman.

Instrument fascias are faced-off with burr elm, and the layout is most user-friendly. All



the inset engine gauges are just the right distance away and easy to view, and just ahead of the wheel is a scalloped portion of console for housing smaller navigation instruments.

More angled facsia near the co-pilot can take larger pieces of kit, as well as a flat chart area incorporating useful stowage. A pair of twin-speed wipers keep the screen clear.

Although taking up only about the same space as a two-seater bench, the twin seats are contoured and supportive to help keep you in-situ. The skipper's is also adjustable fore and aft.

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# Engineroom

Day-to-day access to the enginespace is easy, thanks to a gas-strut supported hatch in the cockpit sole.

Items such as the fuel/water

comfortable for two people to

operate from, and visibility from the

interior position is extremely good,

but all along the starboard quarter,

which can so often be something of

a blind spot. No ducking and diving

not just over the bow and astern

separators and raw-water filters are immediately adjacent, making them readily checked and serviced. Access to the engines themselves is on the whole good, with the filters clear of obstructions, as indeed are the belts and associated



Harbour, where berthing is pretty is required; the good height and tight, the 45 could be nudged length of the upper windowline around quite comfortably without makes it a simple matter of the stiffening broadside wind glancing over your shoulder to taking control. check whether anything is making

The TAMD 74 diesels have electronic throttles, and the timing of the gearshifts is nicely set-up. Engine power on tickover gives just the right-mannered kick without being too aggressive, and both engines can be kept in gear at 600rpm and still remain just below 6-knot harbour speed limits.

Should you find yourself down to one engine, the hull also responds well to the steering.

### Conclusions

Still offering three full sleeping cabins but with the ability to be handled by a couple when the need arises, the new Princess 45 is a creditable successor to the previous one.

We especially liked the many

pumps at the forward end. If necessary, parts of the saloon sole can be lifted

piecemeal to allow fuller access, as well as allowing removal of the batteries from the head of the compartment.

The boards which act as a crawlway between the engines can be lifted to get at the bilge, which in the enginespace is serviced by two electric bilge



pumps plus the manual unit.

Lying outboard, the fuel tanks benefit from being totally smothered in foam insulation to reduce their sound reflective qualities. The same goes for the deckhead.

All-in-all, this seems a straightforward and well thought-out installation.

**Princess 45** 

its way past.

Back at Salterns Marina in Poole

PERFORMANCE & FUEL CONSUMPTION							sound levels dB(A)			
	knots#	gpht	lph†	mpgt	range*	trim	ckpt	flybg	saln	fwdcab
rpm 1200	9.2	5.3	24	1.74	501	2.5	81	-68	68	67
1200	11.1	8.4	38	1.32	380	4.0	84	68	70	70
1400	14.3	11.0	50	1.30	374	5.5	85	69	72	71
1600	_	14.5	66	1.31	377	5.5	88	71	75	74
1800	19.0	20.0	90	1.04	300	5.5	91	72	77	77
2000	20.7		116	0.95	274	5.0	92	76	78	76
2200		25.5		0.85	245	4.5	91	78	79	79
2400	27.1	31.7	144			4.5	92	79	80	80
2500	29.2	38.3	174	0.76	219					20% margir
#Mea	sured by	radar gui	n. †Calc	ulated fro	m engine	manutac	iniers i	igui 63.	,	20% margii

ACCELERATION 0-20 knots, 13.0sec

CONDITIONS wind easterly Force 3, sea slight

LOAD fuel 80%, water 70%, crew 3

#### BUILD

glass-reinforced plastic

build category B

#### DIMENSIONS

LOA

45ft 8in (13.92m)

**HULL LENGTH** 

44ft 9in (13.65m)

#### RFAM

14ft 0in (4.27m)

#### **DRAUGHT**

3ft 7in (1.09m)

#### AIR DRAUGHT

17ft 3in (5.26m)

#### DISPLACEMENT

10.5 tons

#### **FUEL CAPACITY**

360gal (1636lt)

#### WATER CAPACITY

127gal (577lt)

#### **ENGINES**

twin Volvo Penta TAMD 74L EDCs 6cyl 7.4lt diesels 430hp at 2500rpm

#### PRICE

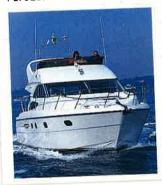
£235,530 ex VAT as standard

#### SUPPLIERS

Princess International Sales & Service Ltd, Salterns Marina, Lilliput, Poole, Dorset BH148JR. Tel: 01202 709402.

#### **BUILDERS**

Marine Projects (Plymouth) Ltd, Newport Street, Plymouth, Devon PL1 3QG. Tel: 01752 203888.



finer points of detail that have been worked in, such as easily negotiable steps and convenient handrails, along with the amount of thought put into major considerations such as engine access.

As far as performance is concerned, the new hull is keen to please, both at low speed and at its easy cruising 25 knots. Although we cannot vouch for its poor weather handling, the boat appears to follow designer-Olesinski's proven formula, which he continues to modify to better and better effect.

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