



A merican builders Carver emphasise the practical nature rather than the finesse of their range, although it extends up to a 50-footer which is close to being a genuine twin-decker.

The 320 model is designed with day-to-day living in mind, certainly, and its engine installation helps by freeing extra space for the interior accommodation.

Design

In common with several other American manufacturers of craft of this size, Carver utilise a vee-drive layout, with the engines located under the

Above: the Carver's interior helm is short on legroom but good on visibility, thanks to good wipers on each of the three screen sections. Sleeping accommodation comprises a snug midships cabin (left) and a commodious forward one with an angled berth and good locker space.

cockpit. The idea is to keep the saloon, and therefore the whole superstructure, as low and as

Hull sections are conventional for a planing hull, wilcoaming, there being a wide step to help you up. a shaft-and-spade rudder arrangement, while the exhausts are dropped underwater.

are integrated into the main hull and deck mouldings, which brings the 320 Voyager's overall length to 35ft.

Exterior

roomy as possible.

Hull design is much as we would expect, with a boat, which makes it easy to board from aft, high beam-to-length ratio for a craft of just over 30 although a handrail to top off the transom coaming. This means the underwater sections are inevitably would be helpful. In fact it is not too much of a medium-vee, with a deadrise of 16° at the transomstruggle to board from alongside, directly over the

The transom itself incorporates a fender rack, a storage locker and a shower. A walk-through to A bow anchor extension and a bathing platform starboard leads from the platform into the large cockpit, which is kept clear of obstructions and has no fitted seating.

Access from here to the side decks is helped by

Above: the saloon has a raised dinette which will convert into a third berth. Below: opposite are the galley, a shorter settee and the helm station. Right: the flybridge driving position has a more ergonomic layout. Below right: the area around the loo can be shut off when showering in

the fully moulded WC.

large moulded steps in the coaming, and an adjacent handhold. We are a little perplexed as to why the guardrail and moulded toerail do not extend back to this point, rather than finishing around 4ft forward of it, but the decks are of a good width, at 9in (23cm), and there is a full run of handrail along the superstructure.

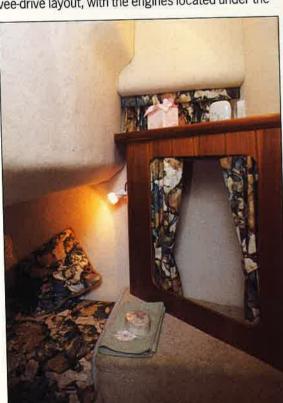
At the bow, an electric windlass serves the ground tackle which comes as standard, feeding into an enclosed locker. We were pleasantly surprised to find two sets of midships cleats to supplement the bow and stern ones, all of them being of adequate size at 9.5in (24cm).

A short but near-vertical ladder leads from the cockpit up to the flybridge, which is a good size considering there is no overhang aft. The occupants are protected by a useful height of screen, and a radar hoop is available as an extra, as fitted to our test boat.

A versatile, reversible-settee arrangement to port means that there are plenty of forward-facing seats when underway, but that a dinette or sunbed can be made up when required. The console coaming neatly holds the table and infill cushions when they are not in use, and there is further stowage in the console moulding and beneath the forward seat-base.

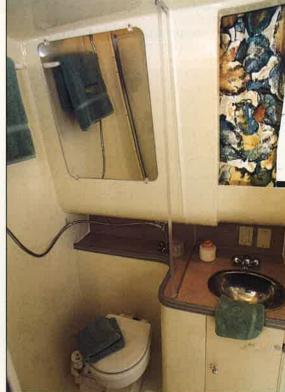
The helmsman has his own command chair to starboard, which is adjustable fore and aft, allowing













Also to be found at the exterior helm is the remote activating mechanism for the engineroom fire-extinguisher, which also automatically cuts the engines; a reset switch is incorporated for restarting them.

Interior

The low mounting of the engines has allowed the saloon sole to be set a couple of steps down

from cockpit level, which in turn reduces the bulk of the superstructure, although there is still 6ft 4in (1.92m) headroom throughout the saloon and forecabin.

The saloon incorporates both the galley, offset to the right of the companionway sliding door, and (in the boat's European version) an interior helm position just ahead of a short settee on the same side. Opposite is a raised dinette which converts into a 5ft 9in x 3ft 6in (1.75m x 1.07m) berth.

A useful amount of locker space is moulded into the various base mouldings and incorporated behind



Our test boat was fitted with twin 230hp Volvo Penta KAMD42 diesels, located beneath the cockpit sole (right). driving through hydraulic vee-gearboxes nestling under the saloon (left).

the battery isolators, and another one further forward gives access to the holding tank and changeover valves.

In the well appointed galley, the worksurface haeparate sleeping cabins. the speckled finish of Avonite, but this is in fact a twin hob can be gas or electric, according to the owner's preference, and a microwave is incorporated as standard. Storage is adequate, given that most of your food will be swallowed up hrather tiny half-height hanging wardrobe and a the domestic-sized fridge/freezer built-in obliquely ave locker. across the port quarter.

Above this is the entertainments centre, comprising a television and a video recorder, which can be readily viewed from the saloon seating areas.

Opposite is a well proportioned, fully moulded toilet compartment. The moulding incorporates a ase of our test boat the mouldings and bulkhead small sink and a modicum of storage, and the area ings were broken up with areas of teak-faced where the loo is can be shut off to create a showel cubicle. We were surprised to find no method of venting the compartment, there being neither an extractor fan nor an opening port.

The helm, with its vertical wheel and pedestal

seat, is on the tight side as regards legroom. There is also rather limited space for flush-mounting avigation aids, and we were disappointed to find lly warning lights for the engines rather than a full

The screen is split into three sections, each erved by a good-sized wiper. Visibility is alright once the seat-backs. A hatch in the stairtread aft revealsou raise the Venetian blinds, with just the quarters eing mildly obscured.

Forward, a small lobby area with hatch access to e forward bilge and pump, gives onto the two

et of gauges.

In the midships one the berth is somewhat snug, colouration incorporated into the GRP moulding. Thanks to the moulding of the dinette above, so it is a natter of sleeping with your head towards the ressing area rather than up against the ulkhead as would usually be the case. There is also

> The forecabin is more commodious, with an gled berth measuring a comfortable 6ft 4in by t 0in (1.93m x 1.21m) and a useful amount of cker and hanging storage, as well as a small seat perch on while dressing.

Here, and throughout the interior, most of the soft irnishings are covered in a mock leather. In the inery; maple is the alternative.

The accommodation is also fitted with a number carbon monoxide detectors, which Carver are roducing on many of their boats.



Our test boat was fitted with a pair of 230hp Volvo Penta KAMD42 diesels. Alternatives are a pair of 230hp Yanmars, plus a number of petrol installations primarily aimed at the American market.

> The engines are located beneath the cockpit, and accessed by lifting three large loose-fitted hatches. They

through hydraulic vee-gearboxes tucked under the aft portion of the saloon, and these, as well as the raw-water strainers and shaft logs, can be serviced via a couple of openings in the sole. With the cockpit hatches lifted clear, all the main inspection and maintenance points are accessible, including the belts and water pumps at the 'front' end of the blocks. However, the turbochargers and couplings — under the

Towards the rear of the compartment, the fuel/water separators are readily serviceable, as is the steering gear. The batteries are located between the engines, while the fuel tanks are fitted fairly tightly outboard of the engines, with the fuel cocks on top of them.

forwardmost part of the cockpit in this installation —

are rather too well boxed-in to be got at easily.

On the whole the installation is well found, but you have to be careful where you put your feet when



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standing at the rear of the compartment, as the pipe runs are a little exposed.

Loaded foam insulation covers the underside of the hatches only, while the bilge is serviced both by an electric submersible pump and by a manual unit located in the cockpit.

Performance & handling

With her twin-lever throttles, the 320 Voyager seems to want to make out that she is bigger than she really is. But there is no harm in that, and the configuration is simple to use while manoeuvring, with the four-bladed props giving plenty of bite and the controls positive yet smooth in operation.

At low speed, directional stability is excellent, and keeping the boat on course requires little recourse to the wheel. This trait continues as you open the throttles. The hull sits squarely and positively on the water, negotiating turns in a well mannered, unfussy way with just an easy lean-in, thanks to the medium-vee hull shape, which nevertheless makes for a reasonably wide turning circle. The throttles, like the wheel, are positive in operation.

Trim tabs are fitted as standard, and a touch of these is needed to lower the bow. This then comfortably handles the muddle of washes and wakes that pervade Southampton Water and the Solent, where we conducted our trials.

Our radar gun clocked just over 27 knots at the KAD42s' 3900rpm maximum. Dropping to a 3400rpm cruising setting, we obtained a comfortable 23 knots, while at 3000rpm we were pushed along at 19-20 knots.

Sound levels were reasonable in the saloon area, as they were up on the flybridge. This is where you are likely to spend most of your time when

underway, rather than in the cockpit, where noise levels were rather more intrusive.

Fuel consumption data indicates 1.45mpg at 3400rpm, for a cruising range of 180 miles.

Conclusions

The builders' concentration on liveaboard comfort means that this Carver lacks the softer lines found on some of their European competitors, and the interior fit-out is also relatively plain, albeit competently executed.

But it handles solidly, and the inboard vee-drive arrangement works well both in weight-distribution and performance terms. Its layout is effective, too, although European buyers will have to be prepared to diverge from the norm of having the toilet and galley ahead of the saloon.

Builders

Carver Boat Corporation, PO Box 1010, Pulaski, Wisconsin 54162, USA. Tel: (1) 414 822 1600.

Suppliers

CYS Yacht Sales Ltd, Shamrock Quay, William Street, Northam, Southampton, Hampshire S014 5QL Tel: 01703 235421.

Carver 320 Voyager

Engines twin Volvo Penta KAMD42P diesels, 230hp at 3900rpm, 6cyl, 3.6lt. Conditions wind W Force 2-3, sea slight. Load fuel 50%, water nil, crew 3.

Comun	t10115 WIII						sound levels dB(A)			
rpm	knots	gph	lph	mpg	range*	trim	saloon	ckpit	flybg	
2200	10.1	7.3	33	1.38	173	2.0	77	80	71	
2600	14.0	9.0	41	1.56	194	4.0	78	81	70	
3000	19.3	12.7	58	1.52	190	6.0	79	85	73	
3400	23.2	16.0	73	1.45	181	5.5	83	84	76	
3900	27.5	23.8	108	1.16	144	4.0	82	84	76	
(*allows 20% margin)										

Price £107,995 ex VAT as tested

Loa 35ft 0in (10.66f Hull length 30ft 2in (9.21ff

Beam 11ft 10in (3.61) Draught

2ft 11in (0.89n Air draught 13ft 4in (4.06n with radar arc

Displacement 6.9 tonnes Fuel capacity

156gal (710ll Water capacit 46gal (210lt)