



BOAT REPORT CARVER 320

A flybridge cruiser with an aft cabin, twin diesels and 20-knot performance giving change out of six figures including VAT. An impossible formula in the high-priced 1990s? US builders Carver Yachts think not.



Admittedly not the prettiest boat around, depending upon which way you look at it, Carver's smallest aft cabin flybridge cruiser has other more important virtues of note, not least the large, open accommodation spaces within its 33ft overall length. The combination of twin 150hp diesels and relatively compact size will no doubt find particular favour with potential owners who enjoy both river and sea work, a market which Carver has successfully courted in the UK for many years now.





IN THE top ten builders in the United States in terms of quantity, Carver are one of the few remaining major independent boatbuilders. They produce family-orientated boats in both an open sports-cruiser style and, predominantly, in a wide variety of flybridge formats from 45ft (13.7m) to 28ft (8.5m). The 320 featured here is the smallest of these with an aft cabin.

The importers, now under the banner of Carver Yachts UK, have been associated with the manufacturers for a decade or so, and have obviously imparted to them the requirements of the British boatowner. The latest advent has been a change in the standard engine option, from twin 130hp Volvo diesels to a more powerful 150hp Mercruiser D183T AC installation, to give a steadier planing performance for open waters.

Design

Feedback from owners and dealers dictate many of Carver's design decisions, and these smaller, aft-cabin models have clearly been styled with the emphasis on people rather than with any great aspirations to unbridled aesthetic appeal. Possibly the 320, sitting on a hull length of only just over 28ft (8.5m), suffers more than the others, with its bulk of topside and coachroof somewhat exaggerated by the constraints on its size.

Having said that, the lines are clean, with a show of rounding to ease any cold angles. And there is the very obvious advantage that the styling allows for plenty of full standing headroom throughout and a generous internal volume, especially with the open-plan layout pushed

Bold use of open-plan accommodation spaces forward and midships maximises the already impressive internal volume of the 320. Claustrophobics will have little to worry about on board, even in the aft cabin with its single and double berths lying either side of a vanity unit.



through from the stern to the saloon.

Underwater sections are a full medium-vee — 21° at amidships to 16° at the transom — running from a reasonably deep forefoot and a rather keener cutting entry to these forward stations. To keep the body of the topside and superstructure as tight as possible, as well as the weight of the engines low in the boat, the in-house design team have let tunnels into the hull; a feature rare in America and not incorporated in any of Carver's other craft.

As we have observed in previous boat reports, these scalloped portions of the bottom panels allow the shaft angles to be reduced (improving propulsion efficiency), and thereby the actual height of the engines as well. Such benefits are invariably tempered to a certain extent by a

greater wetted surface and a less efficient planing area, both of which combine to have a negative effect on out-and-out speed.

Exterior

In the States this model is given a '28' model number, which corresponds to the actual moulded hull length. Add to this some 4ft (1.2m) of pulpit extension — tucking away the anchor — and the bathing platform and you arrive at 32ft (9.75m), and the more European-style '320'.

On the bathing platform is sited the gas-bottle locker, while the ground tackle is handled forward by an electric windlass. Other hardware includes 10in (25cm) cleats on the fore and aft decks, with 8in (20cm) versions for springs. Fender baskets

Carver 320

Engines: twin Mercruiser D183T AC diesels, 150hp at 3800rpm, 5cyl, 3.0lt.

Conditions: wind easterly Force 2, sea calm. **Load:** fuel 60%, water 50%, crew 3.

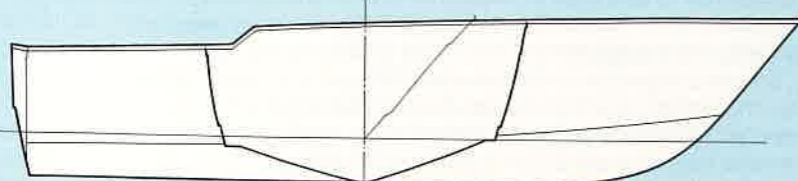
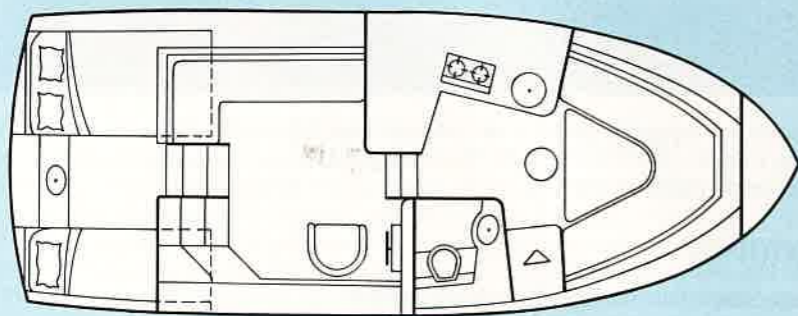
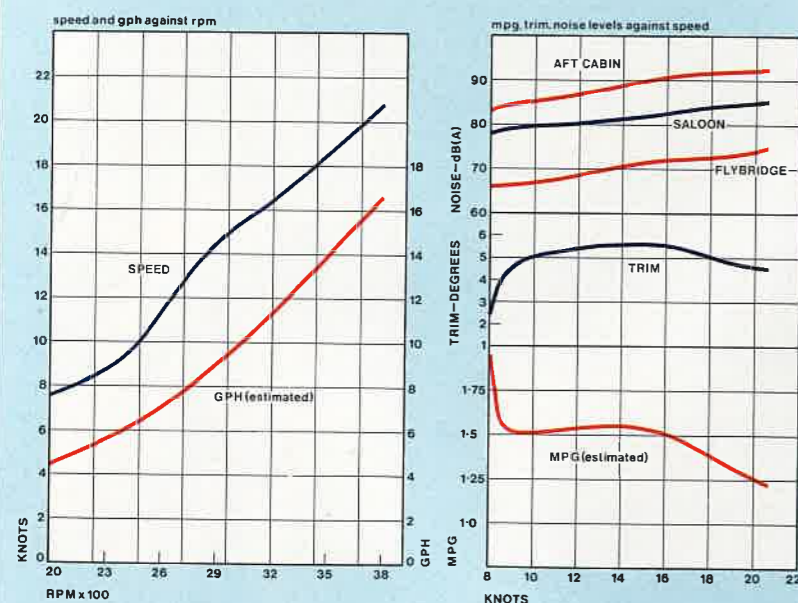
rpm	knots	gph	lph	mpg	range	trim	sound levels dB(A)			
							saloon	aftcab	flybdg	aftdk
2000	7.8	4.3	20	1.81	245	2.5	78	83	66	76
2300	8.5	5.6	25	1.52	206	5.0	79	84	66	77
2600	11.1	7.1	32	1.56	211	5.0	80	86	68	79
2900	14.6	9.0	41	1.61	217	5.5	81	89	70	80
3200	16.4	11.1	50	1.47	200	5.5	82	91	72	81
3500	18.5	14.1	67	1.26	170	4.5	84	92	73	81
3800	20.6	16.7	76	1.23	167	4.5	84	92	75	82

Acceleration: 0-15 knots, 9.3sec.

Loa	32ft 9in (9.98m)	Height above waterline	11ft 6in (3.50m)
Hull length	28ft 2in (8.60m)	Displacement	5.2 tons dry
Beam	11ft 10in (3.60m)	Fuel	135gal (610lt)
Draught	2ft 11in (0.91m)	Water	43gal (195lt)

Price: £79,995 ex VAT with twin 150hp Mercruiser D183 diesels.

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are sited on the guardrails forward, and are placed so as not to obscure too much of the view from the interior helm.

The guardrails themselves are of an adequate height but have no mid-height rail or wire, which is always something we would prefer to see. The 8in (20cm) wide sidedecks are secure enough, however, being bordered by a decent toe-rail, although it is quite a tight squeeze past the superstructure as one moves forward from the raised aft deck. Handholds run down the main superstructure and around the aft deck.

Underway, the flybridge provides the sole seating area. The raised aft deck is devoid of seats, although there is room for a couple of useful-sized deckboxes to be added. These would also supplement, and be handier than, the

The flybridge is of sensible proportions for this size of boat, and easily accessed from the aft deck. That steaming light set low in the interests of air draught but right in front of the helm looks as though it would render the whole area useless at night, but it actually extends when required. A shield fitted underneath to prevent any downward reflections would be a further refinement.

seat lockers found on the flybridge. Here, at the helm, the skipper is provided with a first-class snug, armchair-style seat, with the area to port given over to a comfortably upholstered L-settee which takes three easily, four or five if they squeeze up.

The angled console moulding is furnished with a full array of engine instrumentation (rather than just warning lights), an Autohelm Tridata log/echo-sounder head, dual-station Shipmate RS8100 VHF, and a full complement of ready-use switches, all within easy reach and sight of the helmsman. Twin lever controls are set well apart either side of the wheel, gears to port, throttles to starboard, for ease of close-quarter manoeuvring.

The sole of this upper area drops into a slight well, giving the flybridge an enclosed, protected

feel. The stainless steel-framed perspex screen provides a handhold along its top edge. A drop-down steaming light allows the height above the waterline to be kept to 11ft 6in (3.5m).

Interior

With the whole rear bulkhead between aft deck and accommodation completed in toughened glass, and the windows themselves dropping to a good depth, allowing those seated to see out (even if there does seem to be an extra heavy tint to the glass), the interior is light and airy. With its L-settee and helm position, the saloon pushes through in open-plan format past the good-sized galley and into a vee-dinette forward.

This latter area will accommodate six with the

rather small helm seat brought down to supplement it, and with the table dropped converts to a decent-sized double which tapers substantially towards the foot. The settee in the upper saloon pulls out to form a further small double. There is plenty of painted-out locker space beneath these seat-bases, and for smarter gear a useful-sized half-height hanging locker is sited in the lower saloon area.

American-spec boats do not come with the interior helm as standard, but this is included in the UK layout. As with the exterior helm, it is competently laid out, with instruments and controls set in a neat, logical fashion. Our main reservations were the lack of anywhere to perch a folded chart or pilot book, and the lack of fascia space to flush-mount any further electronics, although there is room to bracket-mount equipment towards the windscreen.

The galley area is rather more spacious, with plenty of counter-top and plenty of all the right-sized cupboards and racks. Cooking is by way of a three-burner gas hob and oven (a microwave can also be fitted if required) while the fridge is the usual American 'live-out-of' size, complete with freezer box and dual 12V/240V running.

The toilet-cum-shower compartment is not over-generous in size, but adequate nevertheless, again with plenty of storage. A sliding port provides ventilation and a holding tank is standard.

Back aft, the main cabin is furnished with a double berth on one side and a single opposite; beneath these are the fuel and water tanks. Cut-outs in the bunk bases give access to the fuel cocks, sternglands, rudder stocks and battery charger. Stowage is by way of draws set under the port bunk, a smallish hanging locker and a vanity table unit complete with basin. Opening side ports provide light and ventilation, supplemented by a larger transom safety hatch.

Engines

The 320 (or the 28 as it was then known) was originally imported with Volvo's TAM31s which produce 130hp, but these were felt to be only on the borderline of full planing performance. For estuary and river use these can still be specified, but it is Mercruiser's five-cylinder 150hp units that are now the standard European installation, and the one we tested.

Access to the compartment is through three lifting hatches, and once the engines are fully handed this will be sufficient for day-to-day checks and the majority of servicing requirements. The Racor fuel/water separators can be readily inspected and cleaned, as can the raw-water filters.

What with the holding tank and associated pipework, calorifier, bilge and freshwater pump and an electric fuel-transfer system, there is quite a lot going on in a relatively small space, so at first glance things appear a mite muddled. However, when you sort through the various auxiliaries all seems to be in order, with cable runs and piping secured out of harm's way, and we were pleased to see that the compartment was gelled out.

A reasonable level of insulation is evident, while on the safety side an adequate Halon fire extinguisher is provided, the main obvious omission being a manual bilge pump.

Handling and performance

A fair amount of misguided scorn is meted out on many American boats as far as seaworthiness is concerned, and in part the lack of attention paid to these qualities is understandable given the huge areas of inland waterway available in the USA. Much of this is sheltered, but then much is not: lakes wider than the English Channel and estuaries you cannot see across can soon whip up to punishing proportions in certain conditions, and with several thousand miles of excellent coastline for cruising it is naive to think simply along 'lake boat' lines.

To just prove they have not fallen into this trap, Carver were adamant that we should try the 320 in less-than-perfect conditions. Unfortunately, the worst a bleak English Channel could offer was a chill Force 3-4, which the 320 pushed around with obvious ease. The usual trick of passing through the wakes of ferries and the like on various approaches to bring to light any uneasy handling quirks revealed nothing untoward, and the boat remained responsive to helm and throttle throughout.

Earlier, we had been out on an even calmer day to record our performance data and rattle off a roll or two of film. The boat's flat-out speed of just under 21 knots, at 3800rpm, was down on the 24 knots or so which we had expected, the scalloped-tunnels taking their toll. Dropping to 3500rpm gave a comfortable 18.5 knots, and an estimated consumption and dry-tank range of 14.1gph (67lph) and 170 miles respectively.

Noise levels outside and in the saloon were not bad, at a maximum of 84dB(A) in the latter, although the same could not be said for the aft cabin. Levels here quickly pushed up to 90dB(A)-plus once we were up and running, propeller noise and vibration (possibly from a less than true prop after a previous minor fouling) being the culprits rather more than the engines.

Given that top speed was hovering around the 20-knot mark, we dropped our acceleration time target to 15 knots, when the boat was on the plane. At 9.3sec the result felt responsive enough, and in general we were surprised how happily the 320 stayed up on the plane once the throttles were eased.

These initial sorties in and out of the marina gave us a fair amount of time with the dual-lever gearshift and throttles which, with a view to any prolonged river and lock work, were a joy to use. The boat was responsive, albeit in a rather steadier, better-mannered way than we find on many more potent craft, especially at these slower manoeuvring speeds.

Conclusions

From the few days spent on and around the 320, we are happy to give it a clean bill of health with regard to fit-out, engineering standards and handling in the conditions we found. Whether the open-plan layout pushed through from the saloon to the bow is judged to be an attractive feature — it certainly is during daylight hours — is purely down to personal choice and the way any individual envisages using the boat. Likewise, the styling will not appeal to all, but few will dispute the boat offers a lot for the money and the prospect of relatively economic cruising at realistic speeds. □