

# BOAT REPORT

# ORIENT

# EXPRESS



## HI-STAR 48

The countryside was covered in sparkling white frost, with the sun shining bright and hard, but as low as it only does in the winter. That day in November saw us making our way towards Lymington, where the Hi-Star 48 Sundeck, one of several recent imports from Taiwan, awaited us.

MODERN trends indicate that yachts in the 40ft-50ft range are now as much in popular demand as 30ft-40ft boats. And, at around the £150,000 mark, depending on the US dollar exchange rate, Hi-Star's example of Far Eastern design and workmanship appeared to offer good value for money. We had been promised that the 48 would be quite unlike the spate of slow trawler yachts which, in the past, had almost saturated this sector of the market. At the end of the day, we were not disappointed.

### Design

The design of the 48 comes from Hi-Star's own in-house team, but the hull form bears a close resemblance to current American designs in this size of boat. Underwater you have a hard-chine planing form, but with a deeper vee section than we normally see from the States. 15° at the transom, 21° amidships can be classed as medium to deep vee, and gives a softer riding hull in head seas. The down side can be increased fuel consumption, but for how the boat fared in this area, see the Handling and Performance section.

A broad spray-deflecting flat runs the full length of the chine, tapering up to the stem, but otherwise there are no more spray rails. A deep keel runs 80% of the overall length, giving directional stability, and protection to the stern gear in the event of grounding.

### Exterior

Before boarding, we walked around the Hi-Star in order to inspect it from pontoon level. Frequently, a great deal of attention is paid to the finish of the interior, but not always to parts which are not so readily seen. Typically so, this often applies to such areas as transom quarter sections or the flare over the bow. Seeing a truly well-finished gelcoat, free of pinholes, scratches or similar faults assured us of care



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Above: a dinette with a difference. This occasional double berth features power operation for raising and lowering the table. Left: home from home — the spacious owner's cabin, located aft. Above right: the interior helm position. Note the sensible rake of the instrument panel, set at an angle that allows dials to be easily read in any light. Right: the Hi-Star's comprehensively-equipped galley. The deep double sink is a practical feature, ideal for catering when underway.

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and attention paid when moulding the hull.

Standing on the pontoon also gave us the chance to inspect the mounting of deck rail stanchions and cleats. Although rails and stanchions were more substantial and secure than many others we have looked at, the cleats were too small. For a craft of this size we consider cleats of not less than 10in essential. This said, there are however a sufficient number of these to allow springs to be made on cleats provided specifically for the purpose.

Once on deck, attention to detail was apparent. The deckrails were of substantial high grade stainless steel. What is more, they were at the correct height — that is nearer to hip level than to shin height. A very important point this, as rails that are too low can easily cause a person to pitch overboard, rather than prevent such a situation. Another good safety feature were the gates in the deckrails. They are so designed that, once secured in the closed position, accidental opening is impossible.

Wide side decks allow the crew to walk to the foredeck without having to turn sideways, and for additional safety, well-placed grabrails are provided for virtually the whole length of the superstructure. Somewhat unconventional on motor cruisers, the Hi-Star has a slight camber to its side decks. Designed to allow water to run off quickly and thus, to make the deck less slippery, they are more commonly found on sailing vessels, albeit with a much steeper angle. Unusual though they were, we quickly adapted to them, aided by the most effective moulded non-slip surface we have experienced in a long time.

The foredeck itself is large and impressive, being totally uncluttered, important when it is used as a working area during anchoring or mooring. In keeping with this, a vertical anchor winch is fitted. Not only does this take less deck space, but it can greatly assist with mooring when a strong wind is blowing. Rather than manually pulling the boat alongside, the mooring line can be winched in. Naturally such a clear foredeck also makes an ideal sunbathing area.

Moving aft to the cockpit, we could not fail to notice just how large this was. Raised above the aft cabin, it extends from the rear of the saloon to the transom, and for the full width of the 15ft 2in (4.62m) beam. Whether dining formally, lunching al fresco, sunbathing or working, this is a most useful area.

From here to the flying bridge is but two short steps, where a full-size outside steering position is found. We did not have to crouch down for shelter against the freezing north easterly Force 4/5 wind, and heading into it at over 20kts, we stood upright without undue discomfort, well-protected by the almost chest high coaming and screen. The bridge is large enough for eight people at least. It is also fully equipped with a set of duplicate engine instrumentation plus a log and echosounder, ►



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◀ all included in the standard price.

## Accommodation

The accommodation can be entered from either of two doors, one amidships to starboard, the second from the aft cockpit to port. Unimportant though this may sound, remember that on a bad day, you can choose the door which will allow less water to come in when you open it.

Sensibly, the builders have not provided this craft with as many cabins as they could squeeze in, as is so often the case, simply to be able to advertise as many berths as possible. Here we saw spacious accommodation, consisting of two large double cabins, together with a very large saloon, dinette and galley.

As a result the interior was open and light, an impression enhanced by the more than generous headroom throughout. Warm, superbly finished teak was seen in abundance everywhere, finished to a standard that should be the envy of many other yacht builders. On this boat at least, gone are the days when craft from the Far East had vast quantities of teak without regard to quality. The wood flooring, for instance, was of a standard not often equalled by even the best of domestic laid parquets.

The guest cabin is located on the lower level forward. As seen, it was fitted with a large double bed, although the yard is happy to provide two single V-berths in its place. Toilet and shower facilities are en suite. A second door allows visitors to use this compartment from the saloon. The cabin is extremely comfortable, well-furnished and has ample wardrobe space. It is in fact sufficiently large for the builders to offer the option of two cabins in its place. One of these would be a double, the other a single.

On the same lower level, immediately aft of the guest cabin and to starboard, is the dinette. Here the dining table drops level with a U-shaped settee to convert into a double berth. What is more, this operation is performed electrically at the touch of a button. Although this may initially appear to be a gimmick, this is not the case when you remember some of your struggles with jammed single pedestal tables.

Immediately opposite and to port is the galley. This is large enough to allow fair-sized parties to be catered for on board. It is equipped in its standard form with a large fridge, a grill and a four-burner electric hob, although a standard option of two gas and two electric burner hob is also offered.

Furthermore, full provision has been made with regard to both space and wiring, for that additional galley equipment that some owners cannot do without, such as freezer, full oven, microwave oven and dishwasher.

In addition to the already ample storage in

the work units, bins are set under the sole between galley and dinette, ideal for storage of tinned and dry stores.

On the lower level aft, the owner's cabin really shows what a yacht with more than 15ft beam can offer. As this dimension indicates, the size could equal some domestic bedrooms. The capacious wardrobes and extensive fitted furniture would surpass most bedroom units in quantity and finish. Naturally there is a large toilet and shower unit en-suite, and a domestic size washing machine is also fitted as standard.

The queen-size bed measures 5ft 6in x 7ft and has full storage under it. For easier access to the lockers, the divan-type base is hinged in the centre. Thus it can readily be opened at the foot of the bed, while lifting it at the head gives immediate access to the rudder stocks and emergency steering.

Natural light and ventilation for the suite is ample. Behind the bed head, fitted into the transom, is a large hatch-sized window, which doubles as an emergency exit. In addition there are large rectangular port lights in the sides and transom. All of these can be opened on that hot summer's night, yet are adequately sealed and watertight when closed.

Finally, the saloon, raised over the engine room amidships, naturally forms the main living area. This is not only roomy enough for those living on board, but will also allow some stylish entertaining. It is fitted out with a settee which will seat six persons in comfort, and which faces a most beautiful dining table. Here you have more than sufficient space for the discerning owner to add almost whatever furniture he likes. Large windows on all four sides bring out the best of the superbly finished teak, which will make any owner glow with pride.

Forward and starboard next to the side entrance is the steering console, so well designed and finished that it does not in any way detract from the saloon. In matching teak and curved black instrument panel, it is fully equipped with VDO gauges showing revs, engine oil pressure, gearbox pressure, engine temperature, engine hours and battery voltage. Log and echosounder are also included as standard. Much to our surprise, however, fuel and water contents gauges were not fitted. Although we readily agree with the builders that the sight gauges on the tanks in the engine room were much more accurate, we would still expect to have some indication of contents outside on the console.

The engines are operated through twin lever Morse controls, with the gear levers being fitted on the right hand side of the console, the two throttles on the left. A modern style helm in the centre controls the exceptionally smooth hydraulic steering.

In the side of this console, and adjoining the companion way to the lower level forward, is the electrical control panel. It covers all the

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**Engines:** Twin Caterpillar 3208 TA diesels, 375hp at 2800rpm, 10,400cc V8;

**Conditions:** Wind NE 4/5, sea slight; Load: Fuel 70%, water 100%, crew 6.

rpm	knots	gph	lph	mpg	range	trim	Sound levels (dB(A))			
							Saloon	Aft cab	Aft dk	Flybdg
1300	8.4	3.4	15.5	2.47	1027	0.0	74	78	77	68
1600	9.2	6.7	30.5	1.37	570	0.5	77	80	80	71
1900	11.9	9.8	44.5	1.21	503	2.0	78	82	82	71
2100	14.8	13.3	60.5	1.11	462	3.0	80	85	82	72
2400	18.4	19.2	87.3	0.96	399	3.0	82	88	86	76
2700	20.1	27.7	125.9	0.72	302	3.0	86	90	97	77
2800	21.1	32.6	148.2	0.65	270	3.0	88	94	88	78

Acceleration 0-20 knots 13.7 secs.

**LOA** 47ft 9in (14.53m)

**Lwl** 41ft 7in (12.70m)

**Beam** 15ft 2in (4.63m)

**Draft** 3ft 3in (1.00m)

### Builder:

Hi-Star Marine, 50 Ta Yeh S. Road, Shaou Kang, Kaohsiung, Taiwan. Tel: 886-7-871 5286.

**Displacement** 16.5 tonnes

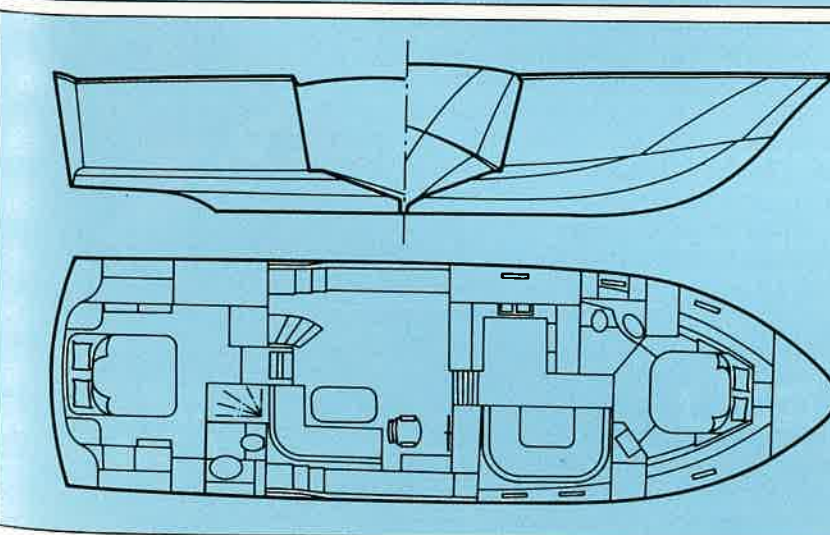
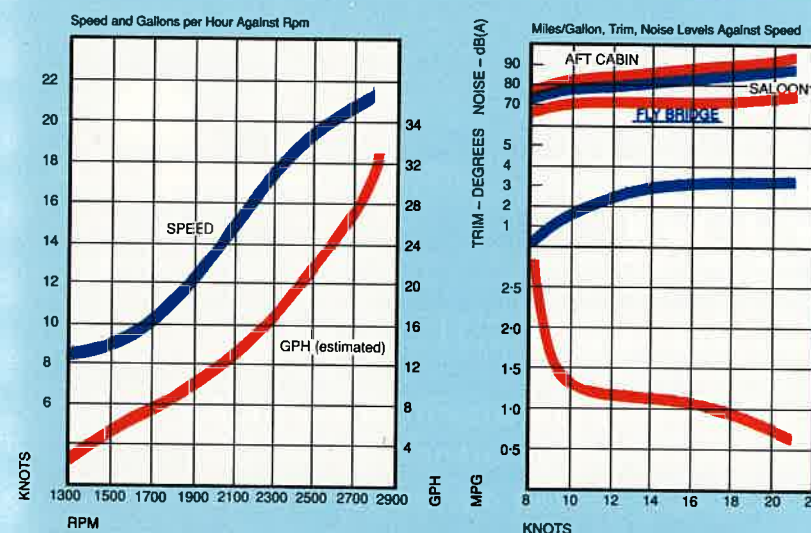
**Fuel** 2 x 208 gal (1890l)

**Water** 166 gal (755l)

**Price ex VAT (basic)** £192,000

### Distributor:

Orient Yachts (UK) Ltd, Marine House, The Quay, Lymington, Hants. Tel: 0590 76393.



220V and 12V wiring, with circuit breakers protecting each of the circuits. Control of the generator and of the shore supply unit is also effected from this panel. The wiring must certainly be considered among the best we have seen, with each cable being clipped separately to the console and individually numbered. In addition, inspection hatches are fitted in the forward cabin and in the aft cabin, so that cable runs can be inspected and tested there also.

## Engine room

Immediately on entering the engine room, one of the reasons why the Hi-Star is such a success in the USA becomes readily apparent. The boat we tested was fitted with Caterpillar 3208TA engines, each of 375hp, mounted on box section steel engine beds. These are large units, yet in spite of that there was ample room to move about.

Standard options on this craft are the 210hp Caterpillar 3208 engines which would show a saving of around £20,000 on the price of the boat as tested. Another alternative engine fit are the 320hp Caterpillar 3208T units, where the saving is almost £17,000.

Generator options range from the Mase 3.5kVA at £4750, to the 12kVA Onan at £7500.

Two 200Ah batteries are standard on this boat, one for engine starting only, the other supplying the domestic services. Each is properly secured in its own GRP battery box, just forward of the generator which is transversely mounted amidships aft of the engines.

As inspected, the engine room was fitted with the larger Onan generator and had four additional batteries. Yet all those parts of the engines and generator which need servicing or adjustment could be reached quite comfortably, and the batteries topped up with ease.

Forward and outboard of each engine are the fuel tanks. The two tanks are made of aluminium and hold 415 gals between them. Although a balance pipe is provided as standard, the builders offer a fuel transfer pump system as an optional extra. This can also be used if a deliberate shift in trim is required, although we would imagine that this arrangement would require the most careful management in practice. 165 gallons of fresh water are held in a stainless steel tank. Fuel and water tanks have sight gauges facing the centre of the engine room and, in addition are well sound proofed.

Clearly conscious of pollution control and the growing number of areas where sewage discharge is no longer permitted, the builders include a 30-gallon holding tank. Complete with macerator and a valve system, this is designed for pump-out ashore or for discharge at sea where this is permitted.



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Other equipment in the engine room includes a calorifier with an integral immersion heater which provides domestic hot water either from the engine or from shore supplies. Hot and cold water are piped through the boat by two separate pumps. This water is filtered, and any copper piping associated with it is colour coded.

We found the raw water filters for the engine intakes particularly easy to reach. They are located just inside the engine room door, one on each side. This obviates the need to go right into the engine room to clear any one of these essential units.

Just as sensible was the fuel filter arrangement. All of the filters were large Racor units, mounted in a row at eye level on the forward bulkhead. Connected by hard neoprene pipes, each had its own shut-off valve and each was fitted with a valve tag descriptive of its function. A manifold arrangement on the same bulkhead allowed for the isolation of an engine or a tank, or for cross feeding of the engines from one tank or the other.

Another point well worth mentioning are the heat extractor ducts fitted on each side of the engine room. From the outside they appear to be ordinary square channels. Yet, fitted with blowers and extractor fans in a clever arrangement, they extract most of the heat from the engine room. After running the engines hard at maximum revs during our test, we went into the engine room less than one minute after shutdown. The temperature in the engine room was no warmer than in other parts of the boat.

Two electric bilge pumps and an automatic fire extinguisher are fitted to cover emergencies.

All this, plus almost full headroom, metal grating walkways and four overhead lamps make this an engine room that should be copied by many other yards.

## Handling and performance

As we headed out from Lymington into the Solent, the wind registered NE 4 to 5, and the temperature was well below normal. Around the Needles a heavy and very long swell was running. Nevertheless we were able to steer a straight course without any difficulty. The helm was light and smooth, with the rudder responding readily and positively at speeds ranging from 12 kts to 20 kts. Although we expected some spray to come over the bow in those conditions, the boat remained absolutely dry.

When lobster pots in Totland Bay forced us to slow down abruptly, one would have assumed that, considering the prevailing swell, we would have wallowed in the troughs. This was not the case, and we were able to

assess the slow handling characteristics of the boat as we manoeuvred between the buoys. Once again we could not fault the helm and rudders, which responded promptly and accurately. Also throttle and gear operation were smooth and precise. Throughout the test the boat was as steady as any skipper, or for that matter any sensitive crew could wish for. Even during the fastest turn we experienced very little, if any, heeling.

Our initial slow speed trials were confirmed when we entered Yarmouth harbour for fuel and lunch. Moving slowly, turning at close quarters and mooring exercises proved to be trouble-free and concise, again demonstrating immediate response.

When a little later, and out in the Solent once more, albeit in a sheltered part of it, we had to transfer our photographer to the Hi-Star. We had no difficulty in keeping our craft on station while the photographic boat came alongside for the transfer. Nor did this call for more than average boat handling skills.

Shortly after that it started to blow a steady 5. Nevertheless the boat remained dry and achieved speeds in excess of 21 kts. We were also impressed to see it accelerate from standstill to maximum speed in 13.7 secs.

Fuel consumption figures were taken from previous tests with the same engines, and they indicate that at the maximum speed of 21 knots, the Cats were consuming 32.6 gallons per hour between them. This equates to figures of 0.65mpg and 270 miles range. Dropping the speed to 18½ knots improves matters considerably to 0.96mpg and 400 miles, bearing out our prediction that the deeper vee hull could have fuel consumption penalties over certain speeds. Nevertheless, the results at the lower of the two speeds are certainly respectable for a 16 ton, 48ft boat at a good cruising performance.

## Conclusion

A cut above many of its counterparts from the Far East, this is a well-designed boat, that is superbly finished to a standard that could be the envy of many European builders. You could live on it equally as well in a weather-bound English harbour as you could entertain on it in a Mediterranean port. The boat's success in the USA shows that this applies equally well in that demanding market.

While conditions were not severe, they were a mixture of wind and waves, typical of those that could be encountered at any time around our coastline. Often these can reduce planing hulls to a 10 knot crawl, but the Hi-Star carried on with a reassuringly solid feel to it.

The boat's sound construction, excellent finish and attention to detail suggest that after-sales problems will be few. This, combined with an attractive purchase price, will tempt many prospective buyers. ■