

# Moonraker 36



Price: as inspected, £19000

WE pitched up in Yarmouth to try out the Moonraker in the wake of a gale that had crept up to Force 12. Happily it modified slightly for our arrival but the local coastguard strongly advised that we did not attempt the harbour entrance in some derring-do endeavour to get pictures at sea. Thus our photographic session on the first afternoon took place on the placid surface of Breydon Water though artistry was somewhat hampered by the staggeringly low tide which had exposed great banks of mud on both sides. Photography completed we repaired to the Berney Arms where we dined and moored for the night.

Next morning the coastguards were not quite so gloomy and suggested we try the Yarmouth entrance and make our own assessment. Though the south cone was hoisted the wind was off the land and the going was not at all bad, though obviously the further out to sea we went the bumpier it became. In the end we travelled to the Cross Sands lightship, about 10 miles offshore, and then turned down to Lowestoft where we did a sprint over the measured mile before returning back to base. For the record. Eric Coltham took the pictures and John Hawes was the skipper of the Moonraker. He does many a delivery trip for the builders, though is not employed by them, and so was able to give us inside information on any quirks the vessel might have.

## The boat

The hull of the Moonraker 36 was slightly modified as a result of tank testing and the new shape, as it were came into production in January. 1972. At the same time weights were shifted around

and it is said that these changes have made for a much better, more sea-kindly and faster craft. Hull alterations consisted mainly of widening and lengthening the chine rails and reshaping the skeg to a more aerofoil configuration while extending it further towards the stern. The fuel tank was moved aft and the water tank now resides under the after cabin.

There are many varieties of Moonraker. Ours was a 350 model with flying bridge and enclosed wheelhouse with after cabin. The figure "350" applies to the total power output. Thus, we had twin Perkins 175 hp diesels and two times 175=350. A 290 model would have twin 145 motors, and so on. Perkins are the standard engines but we saw one boat fitting out with Fords and Moonraker are always prepared to discuss such alternative power units. Other Moonraker types include varie-



ties without flying bridge: without after cabin with open ended wheelhouse and so on. Combinations of such features can be arranged.

### Performance

Electro-hydraulic trim tabs are standard on the model we were aboard and in fact, are generally specified for all types with twin 175 hp motors. The builders stress that to get the best out of the craft they should be used. In normal planing trim the Moonraker appears to trim, a trifle too bows-up for maximum efficiency

The forward end of the saloon has the dinette to port and a settee opposite. A fridge can be housed under the dinette seat and there is a stovage in the form of drawers under the raised sole.

and comfort though this attitude is just right for running down wind where a good grip of the water aft is required for positive handling. However, a tickle of the switch and the nose will drop for moderate weather topspeed in a head or beam sea and a further operation of the trim tabs will depress the bows still further into the best condition for butting into heavy seas. Using these trim adjusters the vessel behaved well in each sea condition we tried. Like all power boats with not too much in the water but a fair amount above it the helmsman has to concentrate in confused water and try to become part of the craft itself anticipating and checking its wilder manoeuvres, but we were fa-



vourably impressed with handling qualities when comparing them with those of rival vessels. In calm water inshore we found it possible to leave the helm for a fair length of time and the boat would hold us course.

The skipper seemed to prefer to make all delicate operations such as coming alongside in fierce tides and strong winds, while going astern. Whatever this may prove it does show that the Moonraker handles very positively with the engines

Sitting on the bunk in the after cabin and looking to starboard, the dressing table, hanging locker and toilet compartment can be seen.

in reverse. As said before, we had a run over the measured mile. Actually this was a standing start affair for technical reasons (if truth be known we had forgotten to bring the stop watch) but we achieved 21.5 knots. It was slack water when we did the run and on this basis would reckon that the maximum would be in the region of 23 knots with the boat having about half fuel and half water. Light displacement, we were told, was 7.5 tons and so were out at about 8 tons. For those who like to make a note of technicalities this represents a C value of 3.5 in Barnaby's speed/power

formula:  $V = C \times \sqrt{D}$  : with the square root of D, where V is the speed in knots. BHP is total brake horsepower and D is displacement in tons.

From a perusal of a few logs it seems that the average time taken on delivery trips over the 102-mile Yarmouth-Hook leg is 6hr. 33min. When using twin 175 hp Diesels. This represents an average of a shads over 15. knots, not at all bad considering that deliveries were made in all conditions up to Force 8. Something like one hour longer has to be allowed with two 145hp motors.

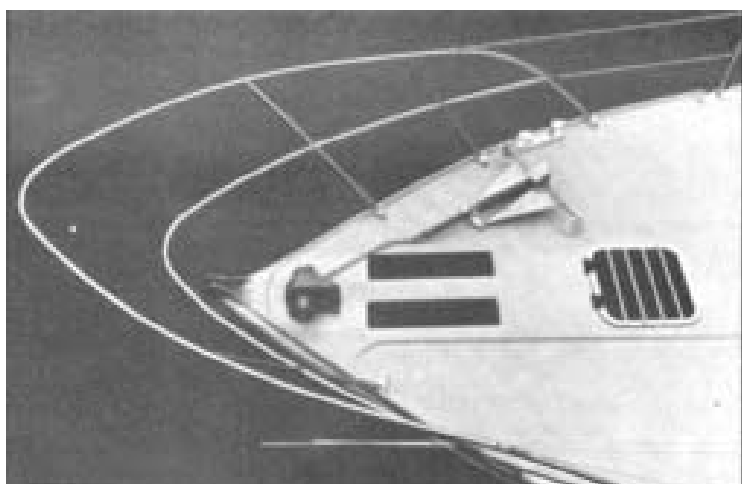


### Construction

The basic lay-up on the Moonraker is 25oz on the bottom to just above the chine line and 11oz. from there upwards and over the superstructure. On the horizontal surfaces of deck and cabin the laminate is split and 1/4 in. end-grain balsa used in sandwich construction. Round the transom and extending 8ft. forward of it each side is a foam-filled stringer. Engine bearers consist basically of two transverse girders laminated up from ply to a thickness of about 3 in. covered in 10oz. glassfibre all over and subsequently bonded in with 8oz. glassfibre. Running longitudinally between the girders are steel channels, bolted through the ply, on which the engines actually sit. Tanks, though made separately and thus not integral with the bottom, are bonded in and provide further stiffening.

Up until recently the hull laminate has been chopped strand mat plus two layers of 12oz. woven roving laid up by hand, but now a spray lay-up process is used. First the pigmented gel coat is applied and then a single layer of pigmented mat. Now the sprayer is brought into action and deposits glass to the required weight up to the point where the first layer of rovings is laid in. More sprayed glass and resin provides a bond between it and the next woven roving, when the final thickness of glass is deposited.

Spray lay-up is a fast process and one which allows accurate amounts of resin to be deposited with the glass but it does need a conscientious operator for consistent



Fore deck arrangement but fairleads and a central bollard would have been welcome.



Here the portable panels in the wheelhouse sole have been removed to show the good access to the motors. Even the far side of that port engine can be reached without difficulty.

results. The builders are Lloyds Approved Moulders and believe that their quality control section ensures satisfaction, as the saying goes. Anyway, we would imagine that they are right and the Moonraker certainly gives the impression of being sturdily-built. All craft are built under the Lloyds Series Production scheme and buyers may also have the appropriate Lloyds certificate for an extra £65. All hulls are weighed after completion and we were told that they normally come out to within 50lb. of each other, which is good going. Resin/glass ratio is kept to 2:1, which is a low figure though one consistent with high strength.

### Accommodation

A plan view of the layout is reproduced though ours varied from this in small details. Thus, the bunk was on the port side in the after cabin while the galley units were in one line and not L-shaped as indicated. However, this did not alter the fact that the boat was comfortable and practical. Quite a bit of veneered blockboard is used in the joinery and despite this causing a bit of eyebrow-lifting, the builders say that they do not employ it where it may get damp and have had no problems. Whatever the merits of this argument, the overall effect was good. The after cabin sported a double berth with toilet/shower/basin opposite, plus a dressing table and stowage space. Tillers were reasonably accessible under the bunk and in a locker. The lavatory in this area was a conventional marine, flush type.

Forward was the wheel house complete with helmsman's and passenger's seats. Both were very comfortable and even in fairly bumpy conditions the passenger could brace himself in the seat and did not need a grab rail. The helmsman had all the usual engine instruments spread before him plus switches for items such as wipers, the Godwin pressure system, navigation lights and so on. Also close to hand was the trim tab operating mechanism and a Danforth compass with red lighting for night work. There was excellent access to the engines through lifting hatches in the sole and even room to work on both sides of both engines with hatches removed. This is fairly unusual, but highly commendable of course.

The main cabin was fitted out with galley and settee to starboard, and toilet compartment and dinette to port. The toilet this end was one of these modern, electric, recirculating affairs which looked so monumentally technical that I refrained from using it. However, it did work as did the Junkers bottled gas water heater. The latter was really rather good with controls to vary water heat

and flow as required. There was also a shower and basin in the toilet compartment. The cooker was a Flavel with two burners and grill, chosen by the builders because it did not rattle under way at speed nearly as much as its rivals. Frankly, this seems as good a reason as many and a far more practical one than most for choosing a particular



cooker. The dinette table could be lowered to form a double berth or be swung out of the way for lounging and there was good stowage space in the saloon. A Webasto heater warmed things up well in the cold evening we spent at the Berney Arms. Finally came the forward cabin where shaped cushions could be inserted between the vee berths to form a double. This was comfortable. All in all the layout appealed to us as a good compromise between the requirements of the marina dwellers and those who want to undertake some proper cruising. It is not particularly imaginative but it is practical.

## Equipment

The various models of Moonraker come with different equipment and it is impossible to generalise. However, the craft we were aboard had a flying bridge which is really a splendid place from which to operate a powerboat. Close quarters handling is made much easier from these lofty heights with unimpaired vision. Trim tabs could be worked from the flying bridge but there was no compass fitted here on our boat. This can be done, usually as a repeater from the main compass, as an extra. Deck fittings were stout and well fastened down but we did have a few complaints in this department, which are given under "Grumbles", next. Standard equipment on all craft includes mooring and anchor warps, 28 lb. anchor, boat hook, flares, buoyancy aids, radar reflector, first aid kit. navigation lights and fenders. All in all a pretty comprehensive list.

## Grumbles

What follows is not meant to detract from our opinion that the Moonraker is a good, all-round boat, but we did go to test the craft and certain things impressed themselves upon us; most forcibly, perhaps, the hatch into the after stateroom whose friction device to hold it open was inadequate and which tended to shut without warning and considerable force. It caught John Hawes a four-penny one on the head as he was passing beneath. Similarly the hatch from the wheelhouse to the after deck would shut unexpectedly and once effectively locked the after doors in doing so. Minor points, admittedly and easily enough rectified but one or two other items we feel worth mentioning are not quite so simply dealt with. Just personal opinions, of course, but here goes.

The Moonraker, like the vast majority of similar craft today has a fairly light rubbing strake, not really designed to cope with coming alongside in crowded conditions. Consequently the boat must be festooned with fenders from time to time yet there is nowhere to stow these when they are not in use. A couple of deck lockers would come in very handy, not only for fenders but for warps as well.

The guard rails and stanchions were well fastened but somehow felt a trifle unsubstantial. If the stanchions had been of bigger section and had been 3 in. higher we would have been a trifle happier. On the foredeck were an anchor winch on the centreline and bollards port and starboard but no fair-leads. Though fair-leads are sometimes not worth using there are some occasions when they are invaluable and we would have liked to have seen a lipped pair combined, perhaps, with a single, centreline mooring bollard.

## Noise

This time we took a gadget for measuring sound levels and operated it at three different places in the craft and at three different engine speeds. We can make no profound observations on the levels recorded except to note that a private car is reputed to give out 70 decibels and an Underground train. 100 decibels.

RPM	Dinette	Helmsmans seat	After cabin
1000 (8knots)	70	70	75
2100 (18knots)	81	85	93
2300 (22knots)	86	90	98

All figures shown are in decibels.

## Conclusions

The Moonraker 36 Softrider struck us as a nice craft with many practical and thoughtful touches. Thus. in the galley was a fire extinguisher pointing towards the stove but operated from the wheelhouse. In the event of a fire one would presumably leap for the door of the wheelhouse and would then be in the right position to deal with the blaze. In a like. sensible manner drawers and lockers had either catches on them or were of the drop type to prevent them flying open at sea.

All boats are a compromise between the conflicting demands of seaworthiness, accommodation and, often, speed. The Moonraker is no exception but her fine lines forward with plenty of flare above the waterline running back to a moderately vee'd transom with some 15 deg. deadrise allow the craft to cope with varying conditions of sea and speed requirements far better than some extreme hull form. Since the modifications mentioned earlier were made about 100 boats have been sold and production is planned at 120 to 130 craft per year. This is good going but the Moonraker seems well planned, well built and backed by some fairly progressive ideas on both construction and equipment and we can see no reason why sales should not continue to blossom.

**Hull design** : Robert Tucker. ARINA

**Builders:** Moonraker Marine International Ltd  
Brundall, Norwich NOR 86Z

L.o.a.	36ft. 1in.
Beam	11ft. 6in.
Draft	3ft. 0in.
Fuel tankage	200 gallons
Fresh water tankage	90 gallons

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