

# BOAT REPORT

# NELSON

# 28



Take off 12ft, save around £200,000 and you have a bantam Nelson on a budget.

WHEN the late Commander Peter Thornycroft first put ideas on paper for his ideal boat, it was to have an all-weather capability to enable him to commute from his home at Bembridge on the Isle of Wight to the family firm of Vosper Thornycroft at Portsmouth. The waters of the East Solent are often stormy, particularly during the dark days of winter, with a short steep chop that taxes the stoutest of craft. But the Commander's boat not only had to handle this, it had to do so without slowing down.

Thus was born the semi-displacement hull form that was to become known and respected by pilots, police forces and other marine

operators who have to go to sea regardless of the weather.

The essence of the design is a deep forefoot and fine forward sections to cut through head seas, rapidly levelling out to give an almost flat hull from midships back to the transom, necessary to give lift at high speed, and prevent the stern from digging in too much. A tight rounded bilge rather than a hard chine softens the ride, while a knuckle running the full length of the boat keeps the bow wave and spray down as much as possible. A pronounced deep keel adds directional stability when running down the waves and protects the propellers from floating debris, or the

bottom should the boat run aground.

Semi-displacement boats can be driven easily up to 18-20 knots, but above this they require proportionately greater power input than a pure planing hull. The benefit comes in their ability to keep up their top speed in sea conditions that would force planing boats to slow down. Even more significantly, when they do have to slow down, they have no planing threshold to cross.

A pure planing hull will have a transition period that occurs between 10 and 15 knots, and can only comfortably travel either above or below this speed. When conditions worsen, and speed is forced down



Photographs by William Payne

Landguard's Nelson performed true to its design heritage on test, the twin 150hp diesels providing enough urge to cut cleanly through the North Sea chop off Lowestoft.

from 20 knots or more to 16 knots, it will be in the situation where backing off for an extra large wave will drop it off the plane, leaving the skipper to have to apply more power to get it back over again. This constant rise and fall in speed means that most people opt for much slower speeds in bad conditions. The semi-displacement hull on the other hand can be set to run at any intermediate speed depending on the waves.

The downside of the semi-displacement form is that it likes to run bow-up, sometimes restricting the view forward, and it can be wet, with a

lot of spray thrown over the screens. It also tends to be narrow in the beam, restricting the amount of accommodation space down below. This is not a problem on a working boat, but reduces the popularity of the craft for private owners.

The Nelson name originated from the first yard to build the boats. Keith, Nelson and Co were based near Thornycroft's home at Bembridge and derived their name from the proprietors, Keith Butt and Arthur Nelson Compton. The designs quickly became known as Keith, Nelson boats, later shortened to Nelson. On the design side, Thornycroft set up his own company, TT Boats, in 1961, and while Keith, Nelson were to succumb to the vagaries of the marine market, TT continued after the death of its founder in 1987, and is now in the

capable hands of Arthur Mursell, one of the Commander's protégés.

The family stretches from the diminutive 18-footer up to a 70ft model, and is continually being modified, usually with the aim of providing greater internal volume, while still retaining the characteristic head-sea performance.

## Design

The Landguard Nelson 28 is the brainchild of Philip Klein, who was originally a sailing man. As is so often the case, when he was looking for a suitable motorboat to give more reliable cruising, he turned to the Nelson range. At the time Tylers, one of the longest-serving companies moulding Nelson hulls, had commissioned a new 26ft design from TT. This was quickly stretched to 28ft, ►





◀ and Klein obtained the exclusive rights to fit out the pleasure boat version of the model.

His aim was to give a pocket-Nelson, with all the qualities associated with the name, but at a price made more affordable by applying production techniques to the fitting out, rather than offering the custom-built interiors that had hitherto been the norm. The layout was to provide comfortable cruising for one couple, with an occasional double in the saloon, and room for a fair-sized party for day trips.

The breakthrough in the design was to use V-drive gearboxes, allowing the engines to be mounted out in the cockpit, and freeing off the interior space in the saloon. The engines drive forward into the V-drives, then back through conventional shafts. The layout is used frequently in Europe and the USA, but less so over here.

The hull has the usual Nelson features, the extra beam to give more room down below, and plenty of flare at the bow. Three diesel engine options are specified, of twin 70hp, 110hp and 150hp each, giving approximate maximum speeds of 15, 20 and 22 knots respectively.



## Accommodation

Out in the cockpit you have a full-width transom seat, teak covered, with good-size lockers underneath for stowing fenders, warps and two 4.5kg gas bottles. In the forward corners are the two engine boxes, also with teak tops, that can double as seats. Deep coamings all around make this a safe place to sit or fish from, while Treadmaster, fitted as standard on the sole and the side-decks, provides the safest non-slip available. Further

smaller lockers under the sole provide extra storage, and a location for the manual bilge pump.

The way into the saloon is via a central door, rather flimsily made and only 5/8in (15mm) thick, though this was the prototype boat we were on, and in truth this was one of the only areas where we could criticise the boat as being under-engineered.

Once inside, you find a compact galley to port, with sink and twin-burner hob and grill, both under hinge-up tops. Lockers and drawers beneath



**The main sleeping area is found forward; opposite the galley, a 5ft 9in dinette, completed by flipping the helm seat over, offers limited room for two more.**

provide adequate stowage, while a fridge is set into the base of the navigator's seat ahead. Hinging this seat forward reveals a plumbed-in drainer, a luxury touch that could possibly have been replaced by extra work surface.

Opposite, to starboard, a dinette faces a small table. In the normal driving position, only two or three people can sit at this table, but with the boat at rest, the helm seat ahead hinges forward to reveal the rest of the settee — a neat feature that makes fullest use of the limited space available. At night the settee can convert to a double, but at 5ft 9in this would be best described as an occasional or children's berth.

The helm position features an excellent well-supported bucket seat, with enough room to stand or sit at the wheel. Instruments and switches are well sited ahead, while the engine controls fall easily to your right hand. The switches for the optional trimtabs

are not so well positioned down by your right leg. Ready-use switches are in a panel on the dash, while the breaker-panel is sited behind a hatch in the face of the console by your left knee.

To port, the navigator has a similar seat, though with no armrests, just a grab handle forward and a footrail. A perspex-covered chart area will take a folded chart, and lifts to reveal a shallow instrument tray below. A fiddle at the bottom of the perspex lid is needed to stop things falling off. Round the corner, a narrow vertical locker holds rolled-up charts.

Deep all-round windows give the saloon a pleasant open feeling, aided by light ash for the joinery. All four windows slide to give ventilation, and allow the driver to talk to the crew on deck.

Down forward, to port, is a three-quarter-height hanging locker, while opposite is a good-sized shower/toilet compartment, with 5ft 9in (1.75m) headroom.

Forward again, the cabin has two vee-berths, with an infill for a double. Future boats will use this infill to make a larger dining table. There is good floor space between the two berths,

and 5ft 10in (1.78m) headroom above. Light comes from five round opening portlights, and an escape hatch overhead, and stowage is provided by lockers under the berths, which extend straight down to the hull side, and two full-length shelves. A hatch in the forward bulkhead gives access to the chain locker, but has no seal to keep out damp and smells.

## Exterior

Stepping out of the cockpit is aided by stainless steel handrails placed just where they are needed on the wheelhouse wings. These are continued forward on the cabin top and coachroof, and matched by 26in (0.7m) stanchions with upper and lower wires outboard. The sidedecks are a good width — 9-12in (225-300mm) — with a raised gunwale lip and the Treadmaster non-slip. This width is however restricted alongside the saloon by engine air intake cowls.

Mooring is amply catered for by substantial 10in (250mm) stainless steel cross-head bollards forward and aft, plus 13in (330mm) bollards well-placed amidships on top of the gunwale lip. The CQR anchor self-stows and is handled by a standard



◀ manual windlass.

Substantial rubber D-fendering is fitted all around the gunwale, a blessing when coming alongside, and to complete the pilot boat image, teak badging and strakes run the full length of the boat at the gunwales and down at the spray knuckle, where it not only strengthens the hull but helps to deflect the bow wave down. This badging continues across the transom, giving the Landguard a distinctive and attractive finish that will attract admiring glances.

## Engines

As we have said, the 28 has options of 70, 110, or 150hp. These are all drawn from the Thornycroft range, with the test boat having 150hp Cummins diesels but future craft will feature Thornycroft's new Hino line.

The units are mounted out in the cockpit under boxes that hinge backwards. Open, these give complete access to the top and inboard sides of the engines, though the outsides are restricted. To get at the gearboxes you have to open hatches inside the saloon, but the stern glands are virtually inaccessible without lifting the engines. Admittedly they are fitted with Deep-Sea seals that should not leak, but we would want to see some sort of quick access, possible through inspection hatches in the sides of the engine bearers.

Seawater inlet strainers are located under a hatch in the saloon sole, along with the calorifier, battery charger, freshwater pump, trim-tab pump and the single automatic electric bilge pump. We would like to see a second electric pump ahead of the forward watertight bulkhead. The three 105Ah batteries are mounted forward again, under a hatch at the helm position, in a sturdy plywood box with screwed-down lid. Fuel is held in two 75gal (340lt) stainless steel tanks outboard, with the supply lines in copper with flexible wire-reinforced ends at the engine.

Soundproofing consists of double-thickness foam with rubber insert, and this is extensively applied to hatches and bulkheads. That it is only partially effective is due to missing out some important areas, but this will be rectified in future boats.

## Handling and performance

For our test we went up to the boat's base at Lowestoft on a grey November day. Punching out of the harbour we found a nice North Sea chop — nice that is if you are testing boats, not so



Heading for home at 8 knots.

nice if you have just had a good breakfast. The waves were just right to try out the abilities of the boat: short, steep and unpleasant.

For the first leg we headed into them for half an hour, starting at a modest 12-14 knots. At this speed the ride was soft but wet, with the spray blowing across the screen, and the twin wipers operating continuously. However, Nelsons were born to be driven hard, so we wound the 150s open to the stops and, true to form, with 20 knots on the log, we suddenly left the spray behind. Cutting cleanly through the water, the bow wave was thrown out and down alongside the saloon, with only the occasional splash on the screen.

The ride was still superbly smooth, with the big ones being heard rather than felt. We found the trim tabs a boon to take the edge off the normal bow-up running angle, and give better visibility over the stem, but too much tab would push the forefoot into the water and make the boat skittish to steer. The high-level anchor stowage also restricted our view.

Downwind you needed to trim the bow right up, as you ran into the backs of the waves, and to help the steering. However, the 28 still handled superbly, while beam on, and the rolling that could be induced in the earlier narrow Nelsons was markedly less pronounced.

On our radar gun we recorded top speed figures of 21.0 knots at 2950rpm, with 80% fuel and water, and three crew. This ties in with the makers' claim of 22 knots at half load. At 2800rpm we registered 19.6 knots, while 2400 and 2000rpm showed 15.0 and 11.0 knots respectively, confirming the progressive way the Nelson hull increases its speed.

Noise levels were on the high side, with 89dB(A) in the cockpit at full

speed, and 83 in the saloon with the door closed, 86 with it open. However none of these were excessive, and better siting of the soundproofing should show a marked benefit. We did not measure fuel consumption, but a swift look at the figures would indicate a maximum range of around 230 miles at full throttle, improving by 10-20% as you drop the revs.

## Conclusion

Landguard set out to produce a small Nelson, with all the qualities of its bigger brothers, but at an affordable price. From our day out on the boat we think they have succeeded. Some of the production details need to be tidied up, but this was the prototype model, and it is already most of the way there.

The handling was excellent, in the sort of nasty seas that few 28-footers or even bigger boats like. The noise levels should be improved, and this is being worked on. But the looks are still there — this is a proper little boat that quite clearly justifies its connection with a proud and capable marque.

Loa	28ft 6in (8.69m)
Beam	10ft 3in (3.12m)
Draught	2ft 8in (0.81m)
Displacement	4.25 tonnes
Fuel	2×75gal (680lt)
Water	50gal (225lt)
Price ex VAT	
with 70hp Thornycroft diesels	£69,85
with 150hp Thornycroft diesels	£74,90
Builder	
Landguard Marine, Hill House, 2 Victoria Hill, Eye, Suffolk IP23 7BX. Tel: 0379 871110.	