



# NEEL 51

A compelling case for cruising on three hulls

By Peter Nielsen

**T**here's no doubt about it, the fastest growth in new cruising-boat sales is in the multihull sector. Sales of production catamarans are booming, and it seems the old prejudices against multihulls have finally eroded away. Cruising trimarans remain a niche-within-a-niche. But if boats like the Neel 51 are anything to go by, the virtues of three hulls will quickly become apparent to a wider audience as well. The 51 follows the successful Neel 45, one of which won the multihull class in the Atlantic Rally for Cruisers (ARC) a couple of years back.

## DESIGN & CONSTRUCTION

This is the fourth design for Neel by veteran mono- and multihull architects Michel Joubert and Bernard Nivel. Neel founder Eric Bruneel, who spent many years on ocean-racing tris, is bullish about the advantages of three hulls for cruising: he posits that a catamaran's peak righting moment is reached at a mere 12 degrees of heel, at which point sail area must be reduced. By contrast, a trimaran's peak is at 27 degrees of heel. It's certainly true that a tri is basically a monohull with floats and is typically sailed at a greater angle of heel than a cat.

On the Neel 51, weight is concentrated low down and amidships in the central hull. This limits pitching and equates to a softer, more comfortable motion in a seaway, especially going to windward—a weak point for many cruising cats. The Neel 51's main hull carries pronounced rocker, so that the boat will come about easily, while the slender amas are toed out to improve directional stability—a daggerboard is not necessary.

Weight management is everything when you're building performance-

oriented boats, multihulls especially. Neel engaged a specialist company to analyze the loadings on all parts of the structure in various sea conditions in order to find out where weight savings could be made and which areas needed to be strengthened. The hull, deck and cabintop moldings consist of PVC foam cores sandwiched between quadraxial fiberglass rovings and infused with isophthalic and vinylester resins. Interior bulkheads and most furniture are also foam sandwich constructions.

The boat is packed with useful features, like the deep "basement" below the cabin sole in the center hull that not only houses the engine, fuel and water tanks, batteries and all electrical ancillaries, but has room for a generator, watermaker, AC unit and things like spare anchors and rode, and much else. As any long-term cruiser will attest, this is an enviable selling point.

## ON DECK

The Neel 51 gives the impression of massive beam, but is in fact only 6in wider than a Lagoon 52. The wide deckhouse dominates the boat, though side decks are clear and sufficiently wide. An easy step up from the starboard hull takes you into the comfortable helm seat, from where the double headsail rig—a self-tacking jib set inside an overlapping genoa—is controlled by a mix of powered and manual Harken 52 winches. Reefing lines and sheets are all led here, with rope bags to contain the considerable spaghetti. Next to it is a large, cozy flybridge seating/lounging area, which in the absence of a forward cockpit will be the favored place to hang out in a tradewind anchorage. Solar panels are inlaid into the cabintop.

The aft cockpit is a wide, shallow area protected by the hardtop. It is smaller than that of an equivalent-sized cat, but can be cleverly integrated into the saloon by means of full-width sliding doors. These enable the saloon table and seating to be extended outdoors, creating a 12-place dining table and a large open-plan area. Neel calls this feature the "cockloot," and in fair weather it will be a wonderful socializing platform. There are large lockers with over 6ft of headroom in the transoms of the amas for stowing fenders, water toys and other light gear—one owner specified a full-sized washing

machine and dryer in the starboard locker. Between these and the basement, there is certainly no shortage of storage on this boat.

Trimarans have no need for the anchoring bridles employed to keep catamarans from sailing around their anchors—the breeze funneling between the amas and main hull tends to keep them facing into the wind. The anchor is set on a short sprit that keeps the hook and chain clear of the axe bow and also provides a tack point for downwind sails, backed up by a deep anchor locker and a 24-volt windlass. (The boat runs on 24V, aside from the navigation electronics.) Mooring cleats are large and well placed, and in keeping with the sporty nature of the boat, the lifelines are Dyneema.

## ACCOMMODATIONS

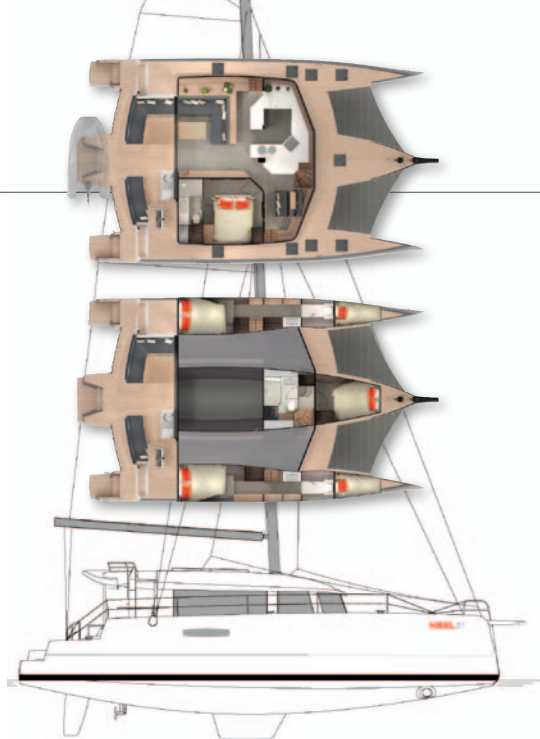
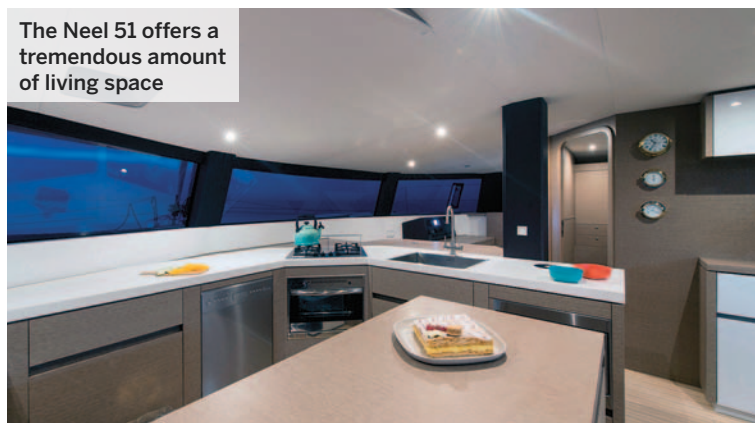
Ah, where to begin? There is space to burn on this boat. Let's start with the master suite, which is to starboard on the bridgedeck as you enter the boat—no need to go down any stairs to get to bed. A queen-size berth, plenty of locker space for clothes and belongings, a generously proportioned head/shower and a great view out through a picture window—what more could you want?

The standard boat comes with two center-hull cabins, this one and another in the bow, also with its own head/shower. After that, it's up to the owner as to what to do with the amas—one or two more cabins with en suites, as on the test boat, or just one, with perhaps a workshop in the other hull? Two more singles can also be shoehorned into bows of the amas, although four generously sized cabins, as on our test boat, is as many as you would want on a boat of this length. I doubt the boat would feel crowded even with eight people aboard. Such is the amount of space that privacy will not be an issue.

If you like the master cabin, you'll love the big C-shaped galley, forward and to port on the bridgedeck. There's loads of worktop area, as many drawers and shelves as you could wish for and a big two-drawer fridge/freezer. To starboard is a compact nav station from where you can steer the boat via autopilot with excellent visibility to three sides.

Neel's standard trim is in neutral shades of gray, with trim in Alpi wood and flooring in a hardwearing polyester material. Owners can choose a limited range of other colors. Headroom throughout is around 6ft 6in. Even in the three storage compartments, it is well over 6ft.

The Neel 51 offers a tremendous amount of living space



## NEEL 51

### SPECIFICATIONS

LOA 51ft LWL 51ft BEAM 29ft 2in DRAFT 4ft 11in  
AIR DRAFT 76ft 5in  
DISPLACEMENT 30,864lb (light ship)  
SAIL AREA 1,472ft<sup>2</sup> (main and self-tacking jib)  
FUEL/WATER (GAL) 160/160  
ENGINE Volvo 75hp with saildrive  
SA/D RATIO 24 D/L RATIO 103

What do these ratios mean? Visit [sailmagazine.com/ratios](http://sailmagazine.com/ratios)

DESIGNER Joubert/Nivelt/Muratet  
BUILDER Neel Trimarans, La Rochelle, France.  
[neel-trimarans.com](http://neel-trimarans.com)  
PRICE \$777,400 (base)

## UNDER SAIL

You only need to take a look at the knifelike entry on the Neel 51's triple bows to figure out that speed is an integral part of the boat's design brief. At rest, the amas kiss the water, but underway the windward hull is always clear, reducing drag. What was immediately apparent after we set sail out of Neel's home port of La Rochelle, France, was just how easily driven the boat is: starting off in 6 to 7 knots of breeze, speed through the water matched that, and as the wind picked up to 10-11 knots true, so did the boatspeed—respectable performance indeed. Double-digit averages should be easily attainable in any sort of wind, and the boat should have no problem reeling off 200-plus-mile days as a matter of routine.

Also apparent was the boat's excellent directional stability, which will make life easy for the autopilot. She tacked readily through 90 degrees, and would have sailed closer to the wind were it not for us having to continually dodge around the other sailboats that congest the waters around La Rochelle.

Visibility from the helm is a little restricted by the headsail, but that is a common problem with multihulls. I appreciated the electric winches, as the mainsail would be a pain to raise manually.

## UNDER POWER

No issues here—just one engine to take care of, a 75hp Volvo saildrive equipped with both 24-volt and 12-volt alternators to charge the AGM battery banks down in the basement. Engine access is excellent, and its compartment is well soundproofed. The boat will easily hit 9 knots under power with the standard Volvo folding propeller, but a more relaxed 7-knot cruising speed will still get you places reasonably quickly and with better fuel efficiency. I suspect most owners will opt for the bow thruster, as the boat is not as maneuverable under power in close quarters as a twin-engined catamaran.

## CONCLUSION

Neel is now a well-established player in the multihull scene, and the more boats it builds, the more exposure the production trimaran concept gets. These are sophisticated, well-built boats and I suspect we will see a lot more of them on the water in years to come, for this combination of performance, spaciousness and seaworthiness presents a compelling argument for cruising on three hulls. **S**