



NOMAD IV

THE DESIGN BRIEF WAS SIMPLE – TO CREATE THE FASTEST CRUISING 100-FOOTER YET BUILT. THE RESULT, DESIGNED BY FINOT-CONQ AND BUILT BY MAXI DOLPHIN, IS STUNNING

words: Tim Thomas
photography: Tim Thomas;
Richard Sprang; courtesy of
Finot-Conq

'IF YOU'RE THE **LIGHTEST** AND MOST POWERFUL, THERE IS A **VERY GOOD CHANCE** YOU WILL END UP WITH A **VERY, VERY FAST BOAT**'



Nomad IV's deck plan follows the principles applied to the design of IMOCA 60s and other shorthanded racing yachts, so a crew of just four can safely handle her sailplan. Her wide aft beam means a giant cockpit for guests to enjoy, with tables either side that convert to sunpads (below)

Out past the Porquerolles, off south east France, the Mistral strokes the back of my neck where the hairs are standing on end. A puff from 26 knots to just over 30 knots true wind leans on the double-reefed, square top main and *Nomad IV's* speed hops from 16 knots to just over 18 in a flash. A quick flick on the wheel keeps the nose on track; the J1 jib cracks slightly, and I feel the unmistakable rise of the stern as a wave rolls in on her quarter. A dart port, then starboard, and *Nomad IV* starts to surge. The digits tick over, first to 19 knots, then 20 knots, then 21 knots as I point her downwind on the surf. A wisp of spray floats over the bowsprit, and the rising cries of the crew reach a cheer as the log tops out at 21.8 knots – the fastest *Nomad IV* has yet sailed. All around, the beaming smiles on the faces of the owner, skipper, crew and design team say it all – this is a yacht that, although the team is still in the early stages of learning her, looks like she will deliver everything that was asked of her.

It was, on the face of it, a big ask. 'I wanted a yacht that would go as fast as possible,' says her owner – in other words, to create the world's fastest cruising 100-footer yet built. A keen yachtsman, her owner had enjoyed sailing from childhood until his early 20s before more recently enjoying life afloat on motor yachts. 'My first idea was to go back to sailing yachts,' he explains. 'Then I wanted 12 berths for guests, and the third idea was to do races such as the Fastnet and the Sydney Hobart. The maximum length for entries for those races is 100 feet (30.48 metres), so we settled on that length. Finally, I didn't want to conform to IRC or a rating or box rule, I just wanted it to be as fast as possible.'

The owner met with a handful of naval architects, before choosing two to enter into a design competition.

'I chose my project manager beforehand,' he continues, 'and consulted with a third engineering office to establish the best velocity prediction program (VPP) data between the two designs. The design from Finot-Conq showed the best VPP above eight knots true wind, and it also made the best use of the room inside, because Pascal Conq designed the structure of the boat at the same time.' The result was a startling yacht with race-bred proportions: a max beam of 8.3 metres carried nearly all the way aft, with a hard chine running nearly the full length of the yacht; a lifting keel with an additional 9.5 tonnes of water ballast per tack, and an all-up displacement of just 54 tonnes.

The Finot-Conq studio has long been known for its work on ocean-going performance yachts and racers, from IMOCA 60s to yachts such as *Hugo Boss*, alongside designs for production builders. The studio's approach to both the structure and the layout of *Nomad IV* drew on this wealth of experience, with additional help from SP Gurit to check the studio's work against current practices, this being the largest yacht it had yet designed.

'We approached it very much like a racing boat, trying to optimise everything,' explains Finot-Conq's David de Prémoré, who was responsible not only for the structural design but also acted as the studio's project manager for the build. 'However, it's still a cruising structure in that it is mostly based on a longitudinal structure to accommodate the interiors, which makes it possible to have wider spaced bulkheads. Aside from that, it was designed to be manufactured exactly as any racing yacht, so she's full pre-preg carbon with Nomex honeycomb core for the hull and deck, and Corecell foam at the bottom in front of the keel and below the chine.'

With the design more or less set, the search began for a yard to build the yacht, and after approaching several yards





ONE OF THE KEYS TO THAT POWER IS THE HUGE BEAM, EVIDENT AS YOU STAND ON THE VAST AFT DECK

it was the Italian builder Maxi Dolphin that won the contract (see *BB17*, November 2012 issue for more on the design and build). Here, too, the build brief had an alternative route. 'We took the opposite approach to, for example, the IMOCA yachts,' says de Prémoré. 'We did not calculate what the boat would weigh, simply told the yard that they were allowed to be that heavy – we gave them a panel weight not to be exceeded. We went into a lot of detail on the weight schedule, but it's a work in progress until the yacht is launched. At some point you have to set a weight you think you can build to, then give yourself the means to achieve

that target. When we won the design competition we had decided the yacht would be 54 tonnes, and rather than have a weight schedule that ran to hundreds of lines we took a macro approach using ratios we know from many years of experience. Basically, we tried to be the lightest possible – and if you're the lightest and most powerful, there is a very good chance you will end up with a very, very fast boat.'

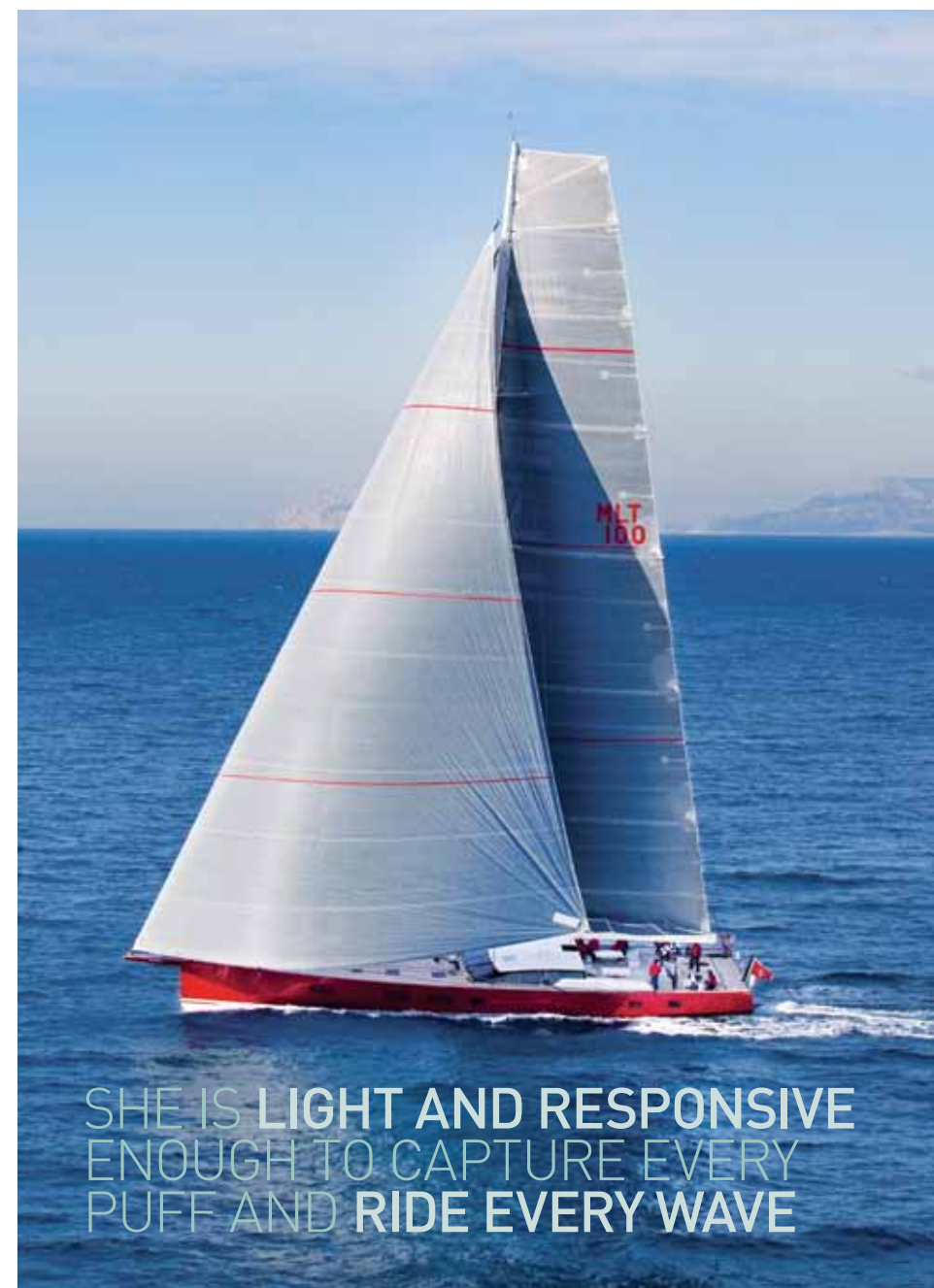
One of the keys to that power is the huge beam, evident as you stand on the vast aft deck, and emphasised by the chine that runs either side. 'The chine has only advantages if you like the aesthetic, which we do,' de Prémoré enthuses.

Crew access to the aft part of the deck means easy sailing on passage, while the guests enjoy two large seating/sunbathing areas forward. The tables rise from sunpad position and fold out to make dining tables for 10 or more guests each side

'Basically, a boat with chines is a wider boat cut by chines. So at 8.3 metres we are already close to a metre wider than most other 100-footers, and if it wasn't for the chines the beam would actually be over nine metres. It also makes for very spacious interiors as you don't have to cut the corners.'

The interiors, given that this is designed as a near no-compromise performance yacht, are surprisingly comfortable. The original brief for 12 guests in six cabins was modified to a five-cabin layout, with the owner's cabin located forward rather than aft. One of the reasons for the forward owner's suite, apart from the fact that

having the crew quarters aft gives them easy access to the helm area when on passage, was that the mast is located two and a half metres behind the position of the mast on most similarly sized yachts, freeing up more space forward to combine with the beam. The result is a spacious suite, with a further three guest cabins forward and amidships, and a fifth guest double just aft of the saloon on the starboard side. Positioning the heads between the cabins offers a degree of sound insulation – important, as the weight target meant that sound insulation was low on the list of priorities. The weight saving has been carried



SHE IS LIGHT AND RESPONSIVE
ENOUGH TO CAPTURE EVERY
PUFF AND RIDE EVERY WAVE

through to all aspects, even the heads themselves, which are beautifully crafted in carbon.

'During racing it is no problem for me to have the owner's cabin forward,' says the owner, 'and when racing [I don't use the] owner's cabin anyway – it's just as comfortable to sleep on the floor or the deck or wherever!'

The four permanent crew share two aft cabins, with direct access to the aft end of the cockpit. A spacious longitudinal galley is aft of the saloon to port, and given the quality of the food emerging for the 10 of us on board, there certainly doesn't seem to have been a compromise on that front – the owner even agreed to the concession of adding an ice cream maker.

The largely monochromatic interior palette fits perfectly with the style of the yacht as a whole, making

her feel as striking on the inside as she looks from deck or dock. 'I told my wife I was building a sailing yacht,' the owner smiles, 'and she said, "I love holidaying on the motor yacht – why do we need to change?" I explained I wanted to sail all over the world, and said you choose the interior, you choose the colour, and you choose the name. In France we call that *participatif*!' With the help of an interior decorator to pull out the details such as the lamps and the carbon dining table, touches of red soften the effect and add warmth. Further, the view from the saloon with its 360 degree panorama is stunning.

Make no mistake, though: for all the comfort of the interior, this is still a no-compromise yacht where weight saving was a critical element at every stage. The main

Nomad IV's interior style is contemporary and simple, with varnished carbon a highlight of the monochromatic palette. Red scatter cushions and accessories add a splash of colour, while the focus from the saloon and dining area is the spectacular 360 degree view

television in the saloon actually doubles as the main navigation screen, mounted as it is on a rotating module in the port-side nav station – an idea of the owner. Guests will be able to watch TV and films in their cabins by logging in to the WiFi on their iPads rather than having dedicated screens, and even the yacht's wiring was optimised to bring the weight down as low as possible.

The mechanical elements too have been trimmed. Propulsion under power comes from a lightweight Yanmar engine, and the retractable bowthruster was the very smallest the team thought it could get away with. 'The salesman thought we were crazy,' the owner laughs, although having seen the yacht manoeuvred into a corner berth in Saint-Tropez with a fresh breeze blowing, it seems the gamble has paid off. 'It was a war for the

weight,' the owner continues. 'Pascal Conq has done so much work, and my wife didn't demand complicated decoration. The owner request was not extravagant – usually in a build the owner makes it heavier and heavier, but we took out several things to win.' Even the spars came into consideration, with the resulting Lorimar mast saving one tonne over the rival proposition.

The result is simply spectacular. She feels like a Mini Transat on the wheel – there's enough feedback to keep you honest but she feels light and responsive enough to capture every puff and ride every wave. The sailplan has been designed for easy shorthanded cruising, with three furling headsails designated J1, J2 and J3, offering the chance to shorten sail as the wind picks up without having to roller reef, which in turn means you can keep an efficient sail



The owner chose to locate the master cabin forward (above) with the rest of the guest cabins forward and amidships, meaning the crew have easy access to the deck from their aft quarters. In the saloon (right) the main nav screen rotates to become a television



THE VIEW FROM THE SALOON, WITH ITS 360 DEGREE PANORAMA, IS STUNNING

shape. The powerful main and giant mainsheet track are easily controlled via the Magic Trim system, and the easily driven hull screams of performance to come. The owner – who likes to drive his own boat – and the crew are still learning her, and it will likely be a few months yet before the full power of *Nomad IV* is unleashed. ‘Upwind we have met our expectations,’ says the owner, ‘although downwind we have not reached our targets yet, but to get a good impression we need competition because I’ve never sailed another boat like this. But to do this boat is of course a compromise, because if you want something even faster, you build it without cabins and with a canting keel... But sailing in the Mistral at 140 to 150 degrees and with a Code

Zero we would probably have got 26 knots or more.’
‘We were blessed to have an owner who understood very early in the project the importance of weight,’ de Prémoré concludes, ‘and who understood that making a lightweight boat is a philosophy where you cannot afford to say, well, this doesn’t weigh much so it doesn’t matter if it’s a bit heavier than is possible. Everything must be as light as possible otherwise it doesn’t work.’
As the rush of our Mistral-fuelled blast along the Côte d’Azur mellows into a warm glow, I can’t help but think that *Nomad IV* is a perfect example of everything that does work – a resounding answer to that big ask.

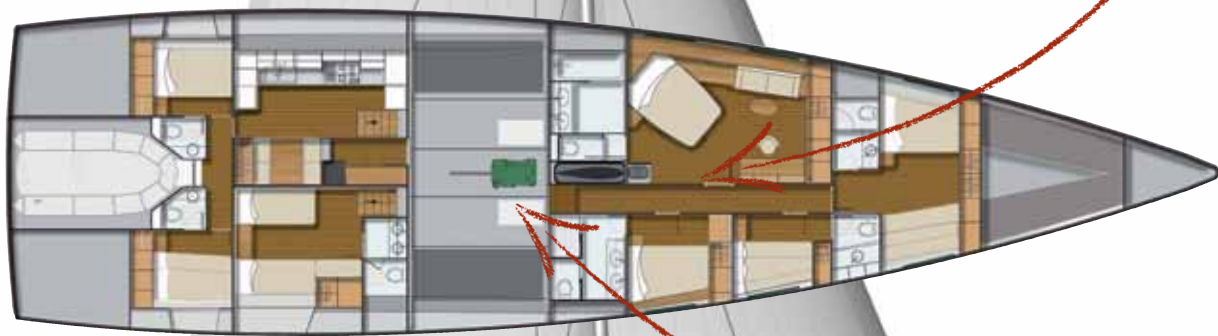


NOMAD IV *Maxi Dolphin*

<p>LOA 30.48m LWL Lorem Ipsum Beam 8.3m Draught 3.5m/5.9m Displacement 54 tonnes Engine Yanmar 370CV, 213kW</p>	<p>Cruising speed (under power) 10-11 knots Mast and rigging Lorimar mast, EC6 rigging Sails North Sails Range at TBC knots Lorem Ipsum</p>	<p>Bowthruster Lorem Ipsum Generators Lorem Ipsum Fuel capacity 4,000 litres Freshwater capacity 2,000 litres</p>	<p>Owner and guests 10-12 Crew 4 Tenders 1 x 3.5m custom carbon; 2 x 3m sailing dinghies; 3 x inflatable kayaks Construction Carbon pre-preg with Nomex and Corecell</p>	<p>Classification RINA Naval architecture Finot-Conq Interior and exterior design Finot-Conq/owner For charter Bernard Gallay Yacht</p>	<p>Brokerage Rates (ex VAT): summer €56,000pw; winter €52,000pw Builder/year Maxi Dolphin/2013 t: +39 030 771 8111 e: sales@maxidolphin.it w: maxidolphin.it</p>
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The deck layout and sailplan draws on MOC A race boat principles, giving maximum power without needing a large crew

The master cabin is located forward, a conscious decision to give the crew the aft end with easy deck access. The suite remains spacious and comfortable



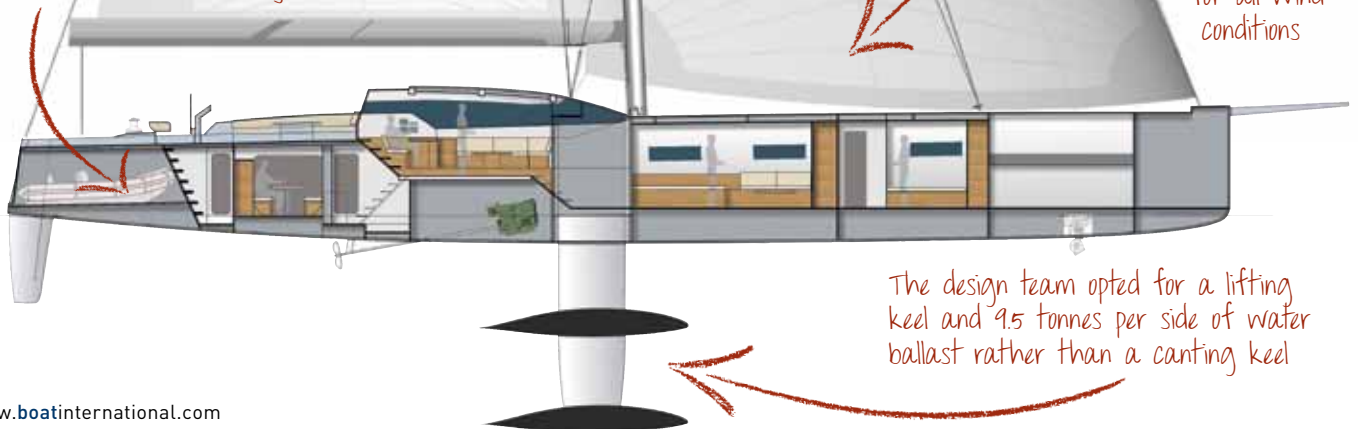
Portside seating and a starboard cabin dining table for 10 guests benefit from stunning views

The mechanical space under the saloon holds all the systems as well as the lightweight Yanmar engine and small gensets



The aft garage holds toys and a custom 3.5m carbon tender based on a jet ski

Three furling headsails, the inner two of which can be easily removed, offer easy sailhandling for all wind conditions



The design team opted for a lifting keel and 9.5 tonnes per side of water ballast rather than a canting keel