



R77 MEGA SAILER

This weird and wonderful 77m/253ft design is bristling with innovative ideas, particularly in its freestanding rotating rigs. To allow their creations to cross between the Atlantic and Pacific, designers must get creative with air draught in order to fit below the 62.5m/205ft height restriction of the bridge over the Panama Canal.

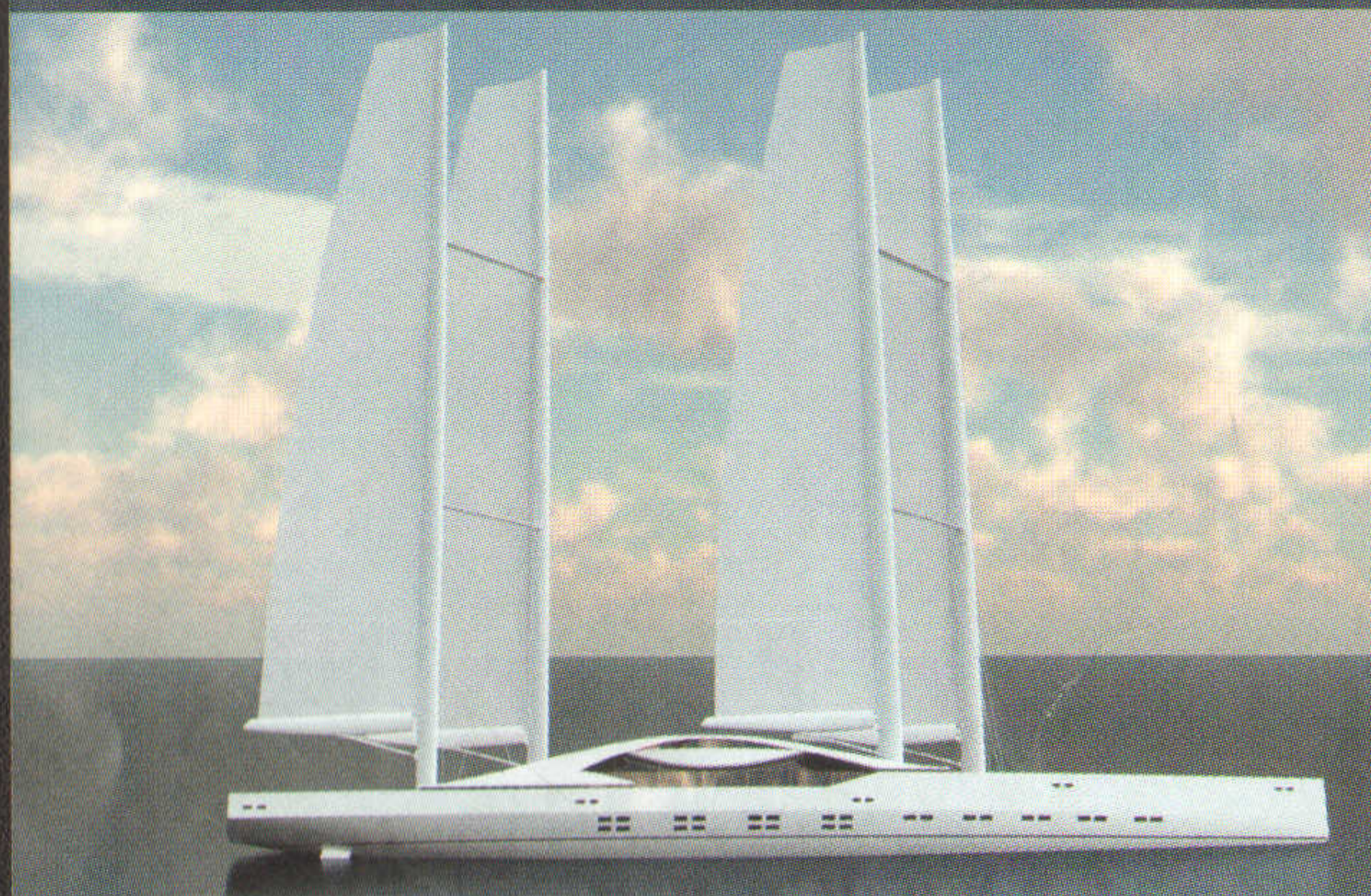
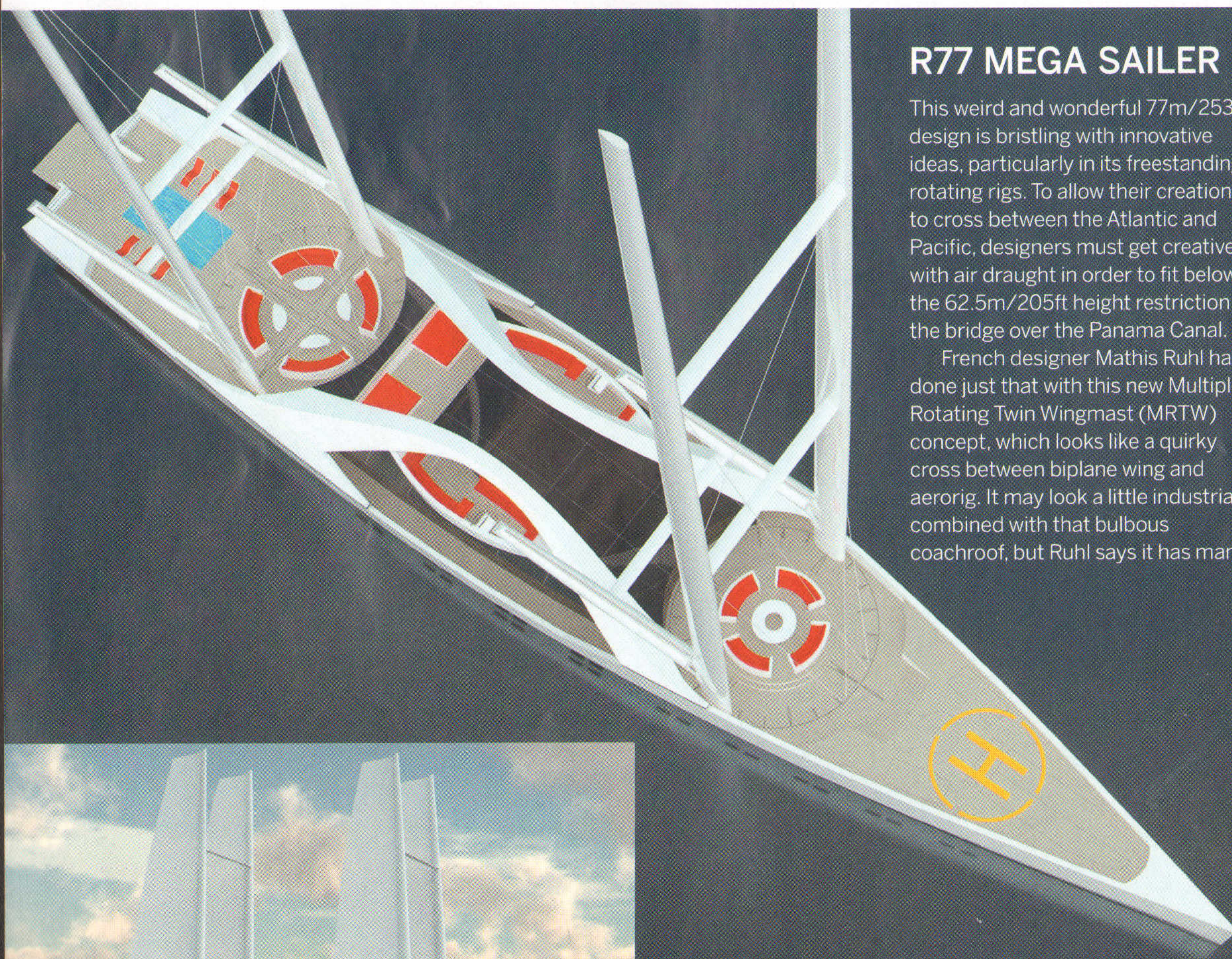
French designer Mathis Ruhl has done just that with this new Multiple Rotating Twin Wingmast (MRTW) concept, which looks like a quirky cross between biplane wing and aerorig. It may look a little industrial, combined with that bulbous coachroof, but Ruhl says it has many

benefits, mainly ease of handling.

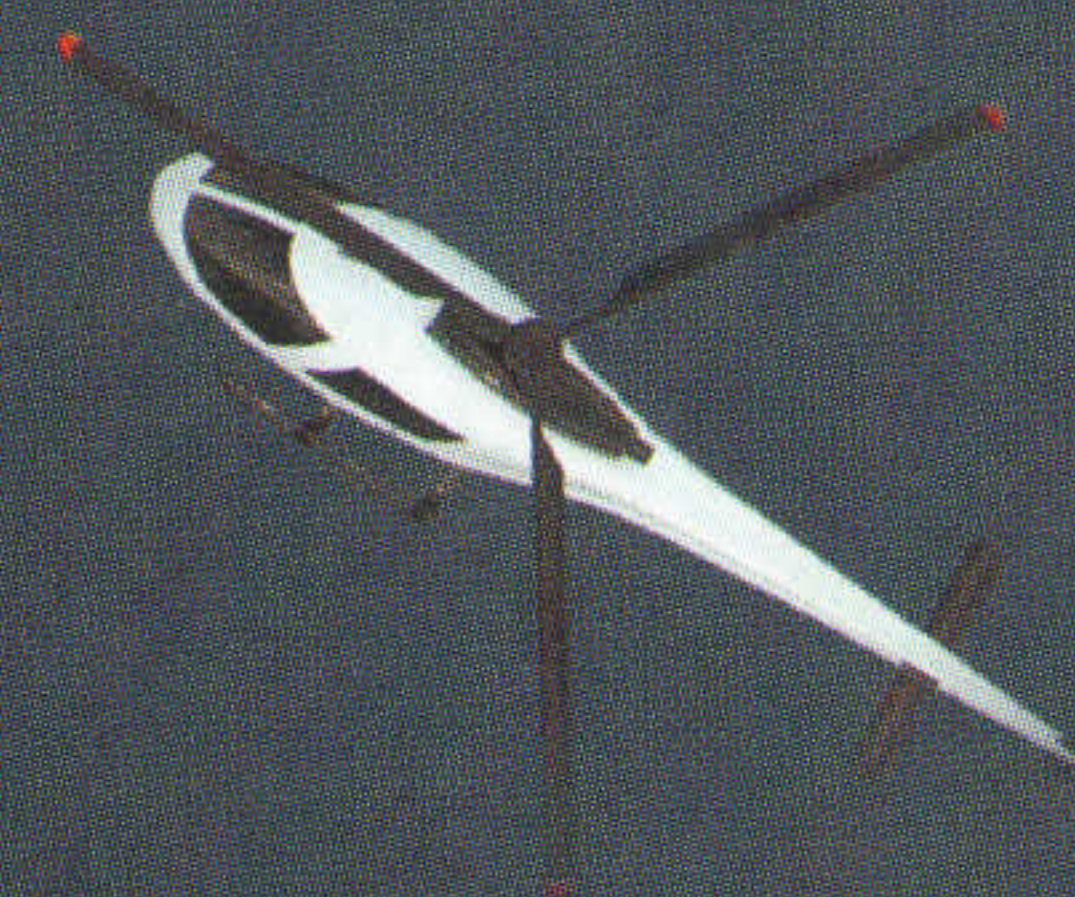
The freestanding masts with furling booms, are set on vast 360° rotating bases. This means the rigs can always be set for best efficiency, from upwind through to downwind – windage is minimised and spinnakers are not needed. In fact there are no jibs or their associated blindspots either and sailhandling is fully automated.

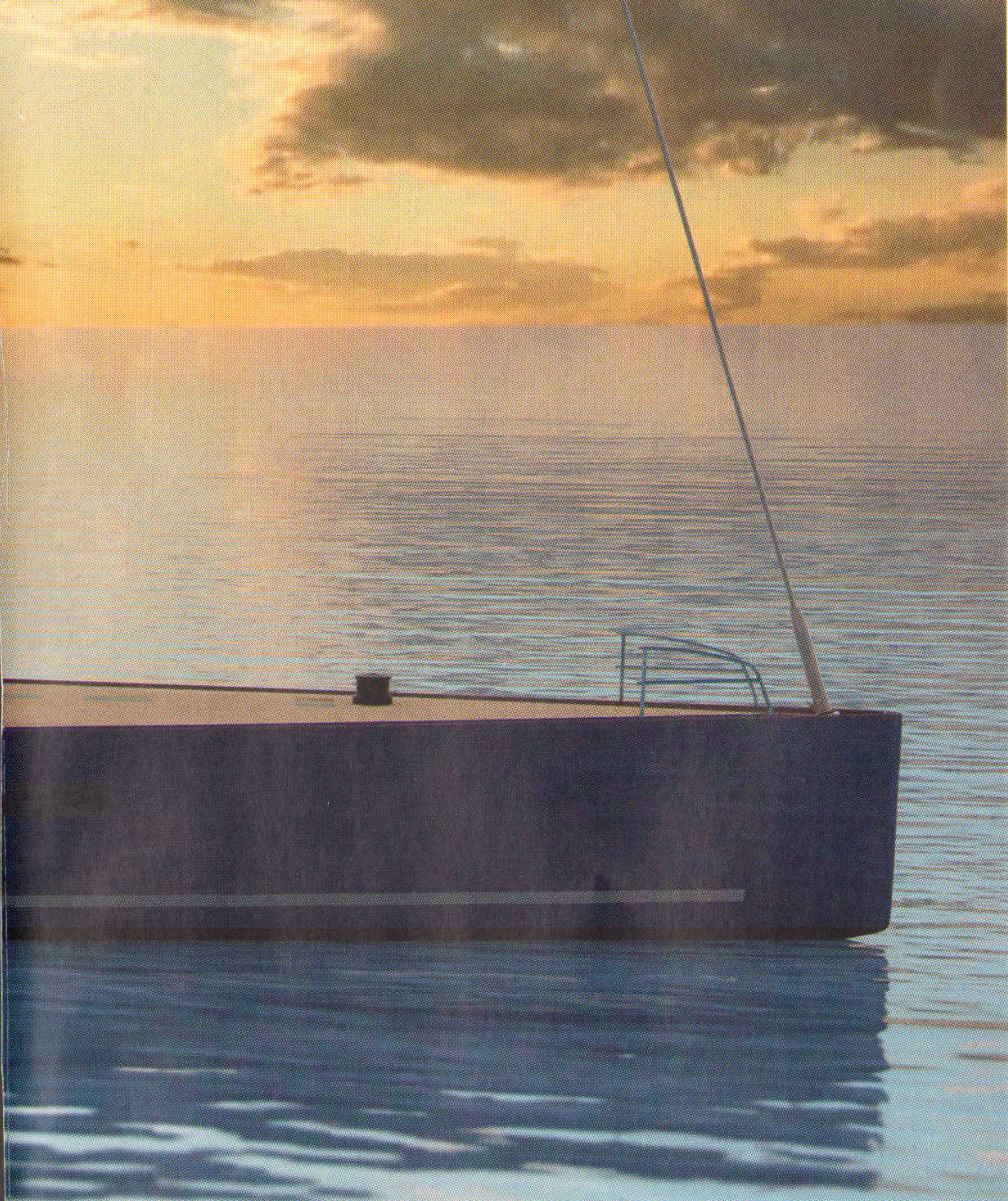
These two beam-wide rotating mast base wheels, complete with mast base guest sofas that rotate with the base, look like significant structures in terms of weight and strength reinforcement though.

Their circular shape is the inspiration behind the prominent arches in the superstructure, which is set on a contemporary-looking hull with progressive hard chine. "The large glass surfaces allow an extensive interior to exterior visual relationship," says Ruhl, who has previously worked for Vismara, Southern Wind and Philippe Briand. www.mathisruhl.com



A helipad on the foredeck and pool on the aft deck are just some of the potential facilities available to a yacht of this magnitude





McKEON ON A ROLL

As well as the news of the BlackCat (page 04), designs from Malcolm McKeon continue to proliferate. Two monohulls at 33m/108ft and 32.5m/106ft, both with carbon hulls built by Green Marine, currently sit in the main assembly hall in Vitters in fit-out stage. The 33m (pictured), with a Design Unlimited interior, is due to launch in July.

McKeon has also signed another 33m, this with a fixed bimini, that will start building later this year. The three projects are all performance-based sloops with lifting keels, but McKeon stresses that they are very different-looking designs.

They join a growing fleet of 30-35m/100-115ft performance-based carbon monohulls from builders such as Baltic, Swan, Vitters and Wally, a trend that is making the superyacht cruiser-racer circuit look increasingly popular.

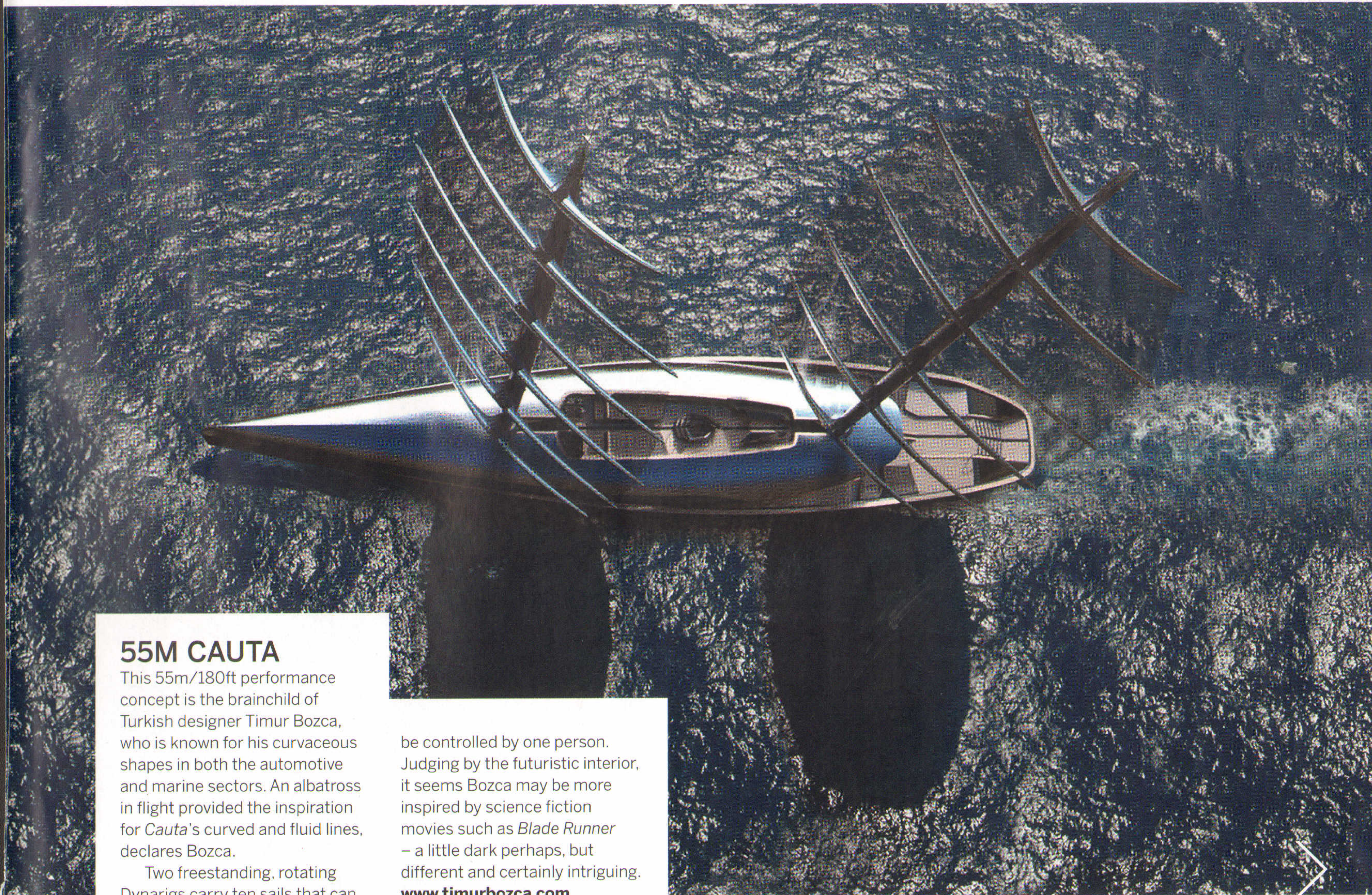
"It's a nice size of boat," reasons McKeon. "You still get four very nice cabins and there is not the need for such a big crew (typically four)." He

maintains that carbon is not extravagant in terms of cost compared with aluminium and this size is more manageable and efficient to race than 40m/130ft, with good comfort and speed.

McKeon is also working on a 56m/184ft monohull, again a performance-oriented lift-keel carbon sloop. Currently at bid stage, he will be looking to secure a yard by the end of the year.

"People want the performance," says McKeon. "They don't have the corrosion issues of an aluminium boat and they are lighter and more fun to sail, with less maintenance and running costs. There is a higher initial outlay, but yards are getting cleverer with how they build and the price differential is getting closer." A problem, however, is that there are few yards with composite experience of this size of vessel.

Even further up the size scale a 72m/236ft aluminium sloop is also in the offing – the keel was recently laid – but, like the 56m, details remain under wraps for now. www.malcolmmckeonyachtdesign.com



55M CAUTA

This 55m/180ft performance concept is the brainchild of Turkish designer Timur Bozca, who is known for his curvaceous shapes in both the automotive and marine sectors. An albatross in flight provided the inspiration for *Cauta's* curved and fluid lines, declares Bozca.

Two freestanding, rotating Dynarigs carry ten sails that can

be controlled by one person. Judging by the futuristic interior, it seems Bozca may be more inspired by science fiction movies such as *Blade Runner* – a little dark perhaps, but different and certainly intriguing. www.timurbozca.com

A RADICAL CAT FROM MALCOLM McKEON, THREE COOL DESIGNS FROM FRERS AND SOME INTRIGUING RIGS. TOBY HODGES REPORTS

BLACKCAT – THE FUTURE OF PERFORMANCE SUPERYACHTS?

Performance superyacht design has taken a bold step forward with news of this radical new 50m/165ft fast cat, which, if built, could cruise at up to 30 knots.

Australian Olympic champion and multihull expert Mitch Booth has founded a new brand of luxury cruising catamarans called BlackCat. Designed by Malcolm McKeon Yacht Design, the first showcase concept would be the largest single-structure carbon fibre yacht ever built.

"This supercat concept is really exciting because there is nothing else available that combines the practicality of an enormous, stable platform with exhilarating performance," says Booth. The estimated top speeds would set a whole new benchmark for superyacht performance.

Booth insists that BlackCats remain very much luxury cruisers. "By no stretch of the imagination is it to be like a semi-racer – there'll be no pushing a bow under or flying a hull." The cats are designed to be simple to manage and sail at speed, as well as palatial to live aboard.

Large cats can lack grace, as they tend to grow vertically too, with high topsides to house accommodation and awkward flybridges. What makes the BlackCat so refreshingly different is how appealing her lines have been kept. McKeon's style and his use of glass coachroofs is one of the main reasons Booth wanted to team up with him. "He is the leader of that sleek look," he claims. McKeon spent over three decades designing for Dubois Naval Architects.

"I guess it's easier to make something look pretty when it's bigger," says McKeon. "You need a certain amount of bridgedeck height between the hulls, then you need a cabin on it for people to stand in and of course it's not until you get out to a reasonable length that you can make them look half decent. I think that's what has held people back – finding something that looks elegant."

McKeon is currently working on a range of performance monohulls (see page 07). Other than a racing multihull, however, plus research into a 50m cat some years ago, this will be his first venture into multihulls.

"There is more and more interest in multihulls," explains McKeon. He says they are aiming BlackCats at people who don't necessarily have multihull experience, including large powerboat owners.

Their target for the BlackCat range is between 30m and 60m/100ft-200ft LOA, the latter representing the upper end of engineering capabilities. "Width is a big factor – it adds stability and righting moment, but also increases loads dramatically," says Booth.

With all that beam, load and speed potential, safety will be a big concern. Booth insists the yacht will be perfectly manageable and that "no superyacht multihull should ever go close to flying a hull".

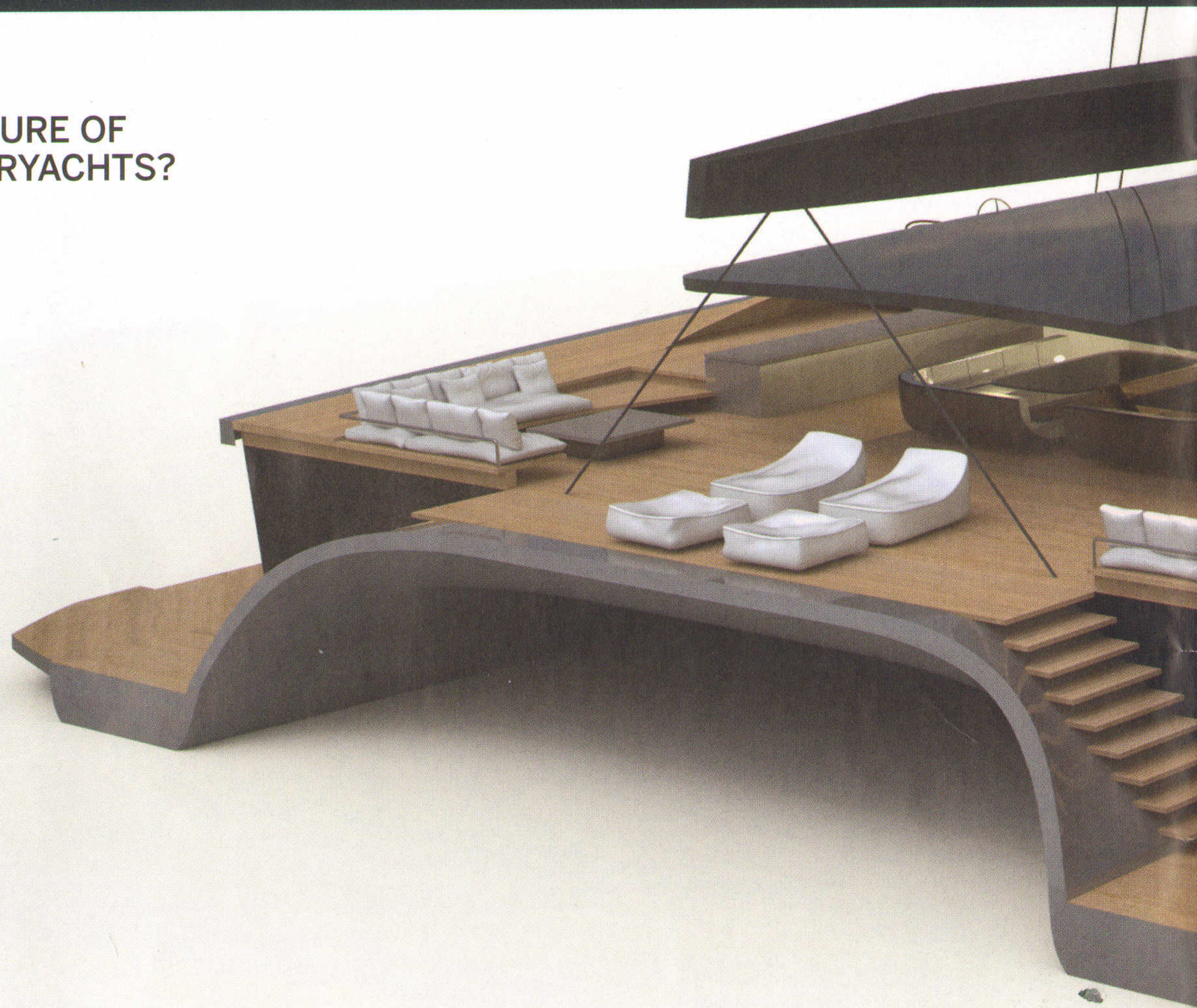
McKeon cautions that a BlackCat will still need to be sailed carefully. "We are designing the rig to withstand the full righting moment – it could fly a hull (at around 11.5°). But on a big boat like this there is so much inertia it won't be as responsive as a lighter boat."

He also points to modern automated release systems and sophisticated monitoring that can be employed. "It's like a performance car; you can still take it out and have fun without taking it to the edge."

A whopping 18.5m/60ft of beam buys an incredible amount of interior space – 340m²/3,660ft² in fact. McKeon predicts the 50m version with glass coachroof will weigh around 240 tonnes.

He has also included some innovative solutions such as fold-down aft quarters that reveal a tender garage and gym. A sunken bridgedeck provides a lowered living area and allows the helm positions to be neatly tucked in off each side of the aft coachroof – with sightlines over the glass top.

"There's been a space in the market for some time for a large catamaran design that can offer the luxury and quality of a superyacht this size," declares McKeon, "and





McKeon has given the BlackCat concave scoops in the topsides – like a classic Corvette – which he says is an aesthetic tool to break up the lines

also provide this level of stability and high performance." McKeon and Booth are now working with an interior designer.

Although a BlackCat might be able to get into shallower anchorages than most superyachts, her swinging circle will be somewhat antisocial. And a BlackCat owner would need to be happy swinging to an anchor as the width of most stern-to-marina docks will prevent her mooring in much of Europe and the Med.

But the thought of owning a small island capable of shifting at 30 knots makes you think that most owners will happily settle for the expanse of sea offered by the Caribbean and Pacific anyway.

www.blackcat-superyachts.com

