

SPECIFICATIONS

- Length: 9.68m
- Beam: 5.54m (8.35m with wings)
- Mainsail: 52sq m
- Gennaker: 61sq m
- Weight: 510kg (inc sails)
- Upwind sail area: 52 sq m
- Gennaker: 61 sq m



THE M32: A WILD CAT TAMED

The aim of the M32 is to bring high octane, full throttle multihull fleet racing to a broader range of abilities and budgets.

RUPERT HOLMES

travelled to Bermuda to find out more...

The basic concept behind the M32 is to provide cutting edge, high speed multihull fleet racing that is accessible to sailors operating outside that elite, fully professional level. Consequently, there has been a balance struck between creating a high performance yacht and one that can cater for a wider range of technical abilities.

CONCEPT 8/10



The M32 is an all carbon, lightweight and extremely powerful boat, yet it was designed with simplicity in mind and is intended to appeal to a wider audience than other high-performance multihulls. Each hull weighs just 82kg, and the whole boat is only 510kg, yet it has the sail area of a 35ft monohull displacing four or five tonnes.

The result is an astounding sail area to weight ratio in a boat that's

1 The deck layout is simplicity itself, with the high, curved traveller a dominant feature

2 The boat only has three winches in total, with the gennaker trimmed from an AC45 style pit

3 Rig tension is equalised across the fleet during match racing, but can be tweaked for fleet racing

not as difficult to sail as a full foiling catamaran. The hulls have generous forward buoyancy to reduce nose diving, while the C-shaped daggerboards provide a degree of vertical lift.

The boat is a 2011 design by Swedish Olympic medallist Göran Marström. He has an enviable record as a catamaran builder – for decades his Tornados dominated the Olympic fleet and he also built Extreme 40s. In 2013, Marström sold the M32 design and production rights to Aston Harald AB, a company led by Håkan Svensson, a long-standing supporter of high profile yachting projects including the Green Dragon and Puma Volvo Ocean Race teams.

Having sold his previous manufacturing company to the Caterpillar corporation, Svensson had money to invest in a new vision for the M32. In December last year the company launched 'M32 World' as a marketing brand for a new event portfolio including

M32 owner events, the M32 Series, and the World Match Racing Tour, which Aston Harald bought last summer.

At the same time, a new 3,700 sq m state of the art carbon composite manufacturing facility was opened. This has capacity to build two M32s each week and is run by legendary Irish boat builder Killian Bushe, who among many other accolades, was responsible for the two Ericsson boats

in the 2008/9 Volvo Ocean Race.

The M32 is built entirely in prepreg carbon fibre, including high modulus fibres with 70 per cent greater stiffness than standard carbon fibres, over a Nomex core. All carbon parts are vacuum bagged and cured at 120°C in a pressurized autoclave, at a pressure of 6-8 bars for single skin elements and 2-3 bars for sandwich laminates.

Running costs are impressively

Above In full flight, the M32 provides an exhilarating ride

contained to a fraction of that normally associated with very high performance craft. This is partly thanks to the simplicity of the boat, the ease with which it can be transported, the closed class rule, and a very tight sail replacement policy. The sails, particularly the fully-battened main, tend not to get flogged in the way that monohull sails do, while owners are allowed to buy one sail per year. This →



helps to keep costs well below those of typical performance designs.

DECK, LAYOUT AND RIG 9/10

★★★★★☆☆☆☆

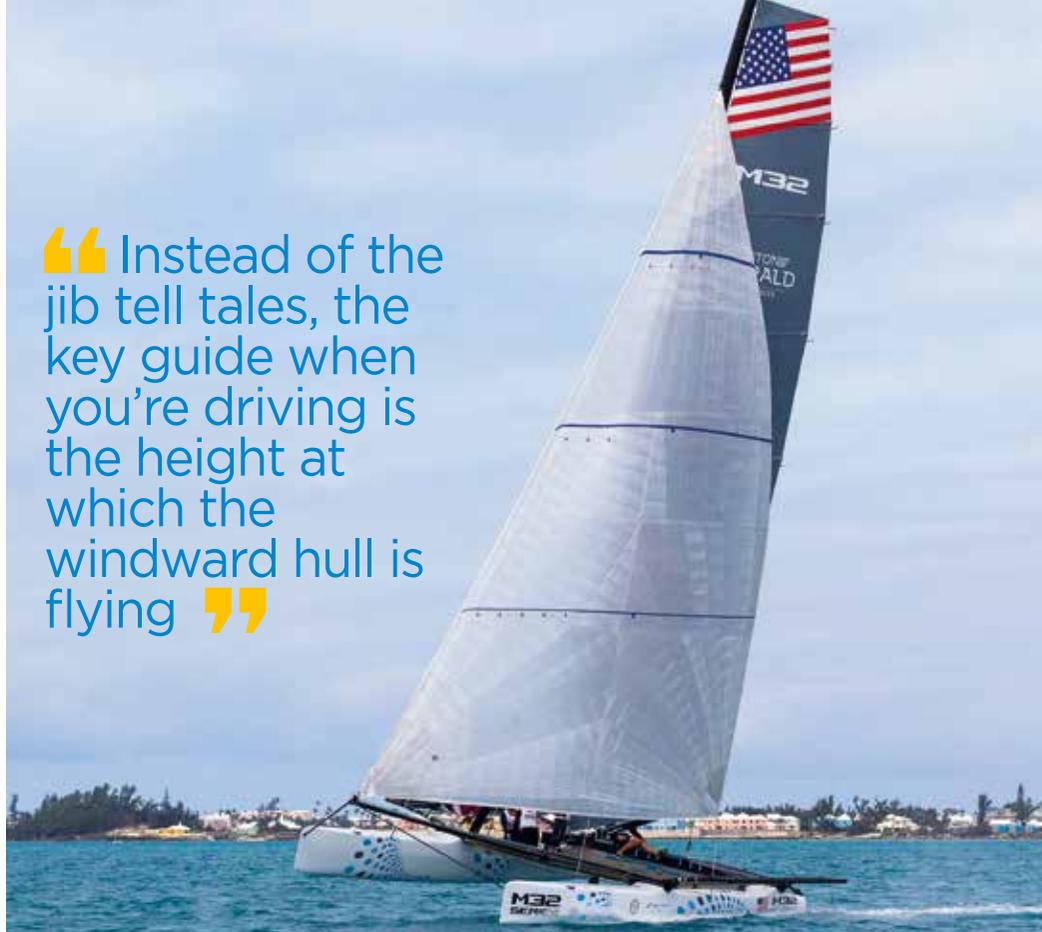
Even though this is a performance boat, the deck layout and rig are an object lesson in simplicity. To some extent it helps that the lack of a jib means there are only two sails, with the gennaker furled but left hoisted when sailing upwind. Mast bend on the rotating carbon rig is controlled by the diamonds, which are adjustable for length and angle of sweep. For match racing, rig tension is equalised across the fleet, although for fleet racing teams can choose their own settings.

The mainsheet effectively acts as a giant vang, controlling twist, while the angle of the boom to the centreline of the boat is controlled by the traveller running on a curved track. In light to moderate airs the traveller is more or less on the centreline and the mainsheet used to help the helm keep the windward hull at an optimum height just above the water. As the breeze builds, the traveller is eased instead to prevent too much heel.

The mainsail has two reefs, enabling the boat to be raced in wind speeds of up to 25 knots, although the gennaker can't be used with the second reef, which makes downwind legs in these conditions comparatively sedate. Reefing is an easy process, with halyard lock



“ Instead of the jib tell tales, the key guide when you're driving is the height at which the windward hull is flying ”



Above
There is no jib on the M32, but the Gennaker provides plenty of thrills

Below
The lack of foils means that the M32 is relatively simple to handle and also keeps costs down

positions at each point. There are only three winches on the boat, one for the cunningham, the other pair for the gennaker sheets, which are cross sheeted and trimmed from an AC45 style pit.

While the beam measurement without the distinctive fold-out wings is a modest 5.54m, the wings extend this to 8.35m. This enables crew to be easily used for stability (arguably more so than with trapezes) while keeping a sufficiently narrow overall beam to make marina berthing easier during events.

The boat is quick and easy to assemble, thanks to the bolt-on beams and two-piece mast. It's also light enough to be slipway launched, so the four crew plus the boat can get to events with a medium/large estate car. For competition further afield, two boats will fit in a 40ft container.

UNDER SAIL 10/10

★★★★★☆☆☆☆

The first part of our test took place on Bermuda's Great Sound in around 8-12 knots of wind. I was sailing with Christopher Poole's Riptide Racing team from the Oakcliff Sailing centre in New York. Moving around the boat is easy, including up and down the wings, although shuffling aft when the lee bow digs in downwind is not as quick as it might be if the crew are trapezing.

It's immediately noticeable that this is a very physical boat to sail. Part of the trade-off for the simplicity is that coordinated muscle power is

needed to efficiently handle the loads generated. This highlights the need for good teamwork and it's clear the teams that get the best results will be those that get this aspect sorted quickly.

What about the lack of a jib? It really doesn't appear to be an issue. Instead of the jib tell tales, the key guide when you're driving is the height at which the windward hull is flying. As a result, even though I am primarily a monohull sailor, it didn't feel at all odd not to be focusing on the luff of the headsail while driving. Instead, when sailing upwind, it quickly became intuitive to luff in the gusts to control the ride height, then bear away for more power in the lulls.

Although you don't tack on shifts in the manner in which monohull sailors must, the acceleration of the M32 is such that each gust represents an opportunity for a significant speed build. This is not the extra 0.2 or 0.3 knots that a monohull might see upwind – it can easily be a 40 per cent boost to speed. You therefore still need to be absolutely locked into what the wind is doing to get the best out of the boat and ensure that everyone on board – particularly helm, mainsheet trimmer and traveller trimmer – respond in a coordinated and optimal manner.

Steering downwind, a planing monohull sailor's instinct to bear away in the gusts will keep you in good stead, although acceleration is such that the apparent wind builds quickly, so course changes often need to be much more aggressive, especially in →



appealing, yet at the same time everyone on board has to be intimately involved in sailing it efficiently. There's absolutely no scope for idly sitting on the rail while others put in the effort to sail the boat hard, which is certainly part of the appeal compared to a large performance monohull.

Until now, biggish multihulls such as GC32s and Extreme 40s have almost exclusively been the preserve of professional sailors at the very highest levels of the sport internationally. However, the M32 brings this style of sailing to a wider audience, encompassing everything from owner drivers to aspiring pros, up to the highest levels of match racing outside the America's Cup.

This is clearly not a boat for the kind of weekend warrior who's unable to find the time for sufficient practice and coaching. Similarly, it's not an ideal boat for most UK waters, although with both Scandinavian and Mediterranean circuits planned for 2016, a British team would not have to travel far to race at some spectacular venues.

While the M32 may not be quite as cool as a foiling catamaran, it's one that's accessible to many more sailors and arguably optimises the boat work/maintenance ratio in a way that no other performance boat can manage. By the time I stepped ashore it was clear this could be a hugely addictive boat – one that is reassuringly manageable, while offering the enticement of a clear path towards the high level of skill required to compete at the elite end of sailing. □

Above
The hiking wings can be folded in once racing is over for easier marina berthing

gusty conditions. At all times there was instant response on the helm, with plenty of feel and never any hint that the rudders might be close to stalling.

At the time of our test there had been few capsizes, even in the heavy air match race conditions for the first 2016 World Match Racing Tour event in Fremantle, which saw gusts into the upper 20s. Those that have happened have been down to easily identifiable sailor error, such as easing mainsheet instead of traveller, rather than lack of control from the helm. There's a clear system for righting after capsize, with support RIB crews taught how to deal with the righting lines to tow the boat back into an upright position.

In the conditions we enjoyed there was never a problem tacking – the boat went through the wind positively on each occasion. In strong winds and with a bigger sea, if the bow needs help to get through the wind, a small amount

of the gennaker can be unfurled and backed. This has less of a drag on speed than a flogging jib, although having the gennaker permanently hoisted has an effect on efficiency upwind.

Perhaps surprisingly, I didn't get a huge sensation of speed, although the only other boats out on the Great Sound were three foiling AC45s, so my reference point was somewhat skewed. Had we been at a venue dominated by heavier monohulls, you'd certainly get the buzz of a significant speed differential – our chase boat recorded us at speeds of 14-15 knots upwind and around 25 knots downwind. North American class manager Dave Doucett likens the experience of sailing the M32 in his home port of Newport, Rhode Island to skiing past trees.

VERDICT 9/10



The simplicity of this boat is hugely

COMPARISONS



Farr 280

Grand Prix performance in a compact package. Cheaper to buy than an M32, but more expensive to run and a lot slower.

- LOA:** 8.7 m
- LWL:** 8.0 m
- Beam:** 2.9 m
- Draught:** 2.1 m
- Displacement:** 1,598kg



GC32

State of the art foiling catamaran with stunning performance, but a very big leap for all but the very best monohull sailors.

- LOA:** 12m
- Hull length:** 10m
- Beam:** 6m
- Draught:** 1.60/2.10m
- Displacement:** 850kg

ANSWER BACK

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