

# Wild Oats XI



## Supermaxi Wild Oats XI is a “totally different animal” following hull modifications

The dramatically modified supermaxi yacht, Wild Oats XI, was a “totally different animal” according to skipper, Mark Richards, after the yacht had completed the 24-hour qualifying run for this month’s Rolex Sydney Hobart race.

“She just lifts her bow and goes like she’s never gone before,” an enthused Richards added. “It’s still early days, but I think we’ve got the yacht we wanted.”

Richards and his 18-man crew had pushed the 30-metre-long sloop as hard as possible during the trial that took the yacht onto the open ocean off Sydney, and across the smooth waters of Sydney Harbour.

The near 300 nautical mile passage was the first solid test for Wild Oats XI since she was re-launched ten days ago following “surgery” which saw the hull almost cut in half and a new, 14-metre long, bow section fitted. It was a carefully calculated modification which it is hoped will lead to Wild Oats XI leading the 110 yacht fleet into Hobart for the ninth time in 11 starts in the 628 nautical mile Hobart classic, which starts on Sydney Harbour on Boxing Day.

Her next test will come in the Solas Big Boat Challenge, a Hobart race curtain-raiser which will be staged on Sydney Harbour starting at 12.30pm tomorrow.

The modifications to Wild Oats XI came as a result of a “think tank” involving owner, Bob Oatley AO, and his son Sandy, the yacht’s original designer, John Reichel, of the American company Reichel-Pugh, Mark Richards, representatives from the builders, McConaghy Boats, and key members of the crew.

Richards said that the new, more buoyant forward sections of the hull, combined with the larger and more powerful sails the champion yacht can now carry, had contributed to a noticeable increase in speed on almost every point of sailing. However, he was quick to add that Wild Oats XI’s arch rivals for line honours in the Hobart race – the American yachts Comanche (Jim Clark and Kristy Hinze-Clarke) and Rambler 88 (George David), plus local entries Perpetual Loyal (Anthony Bell) and Ragamuffin (Syd Fischer) – would be hard to beat to Hobart, especially if they get strong cross-wind reaching conditions.

“We’ve done everything possible to make Wild Oats XI a better all-round yacht”, said Richards. “The Hobart race usually sees a real mixed bag of conditions: you get to sail upwind and down in light winds and strong. Wild Oats XI’s strength has been her ability to be competitive on all points of sailing, and now we think she’s even faster. While we are far from confident about being first to Hobart, we believe we will be hard to beat if we get our conditions.”

Using the world’s most advanced computational fluid dynamics computer program, it was revealed to designers that the most efficient new shape for Wild Oats XI required the bow to be extended forward by two metres. However, to comply with Hobart race regulations, where the maximum length of a competing yacht cannot exceed 100ft, two metres would have to be cut from the stern.

“We were left in no doubt that had we decided to build a new yacht it would not be a lot different from Wild Oats XI,” Sandy Oatley explained. “Considering that, we then knew it was more logical to modify the existing yacht and have her ready for this year’s Hobart race, rather than spend a year, and a lot more money building a new yacht over a 12-month period.”

An additional bonus that came with the modifications was that the key internal structure that accommodated the keel, rudder, daggerboards, DSS wing, rig and overall sailplan need not be changed.

When the design was finalised there were six significant changes planned:

- The section of the hull forward of the mast would become more streamlined and provide additional buoyancy. This feature would greatly reduce the tendency to nose-dive, so the yacht could then be driven downwind faster and more safely in strong winds. It would also present the opportunity to increase the sail area (horsepower) and make the sail-plan more efficient.
- Upwind speed in light winds (up to eight knots) would improve as a considerably larger headsail (a J1) could be set. The new sail measures in at 280sq metres – 20sq metres larger than a doubles tennis court, and 23% larger than the existing J1!
- The bowsprit was redesigned to be significantly longer than its predecessor. This meant the spinnakers being carried downwind would be more efficient, and therefore provide more drag-reducing lift.
- The longer bowsprit would also allow for the largest spinnaker to be increased in area by 120 square metres to 965 square metres. Its total area is now greater than the wing area of an Airbus A380 passenger aircraft!
- The DSS (Dynamic Stability System) hydrofoil wing has been modified to provide more lift forward and contribute to a reduction in hull drag. This will also result in an increase in speed when sailing downwind. New, deeper, daggerboards have also been fitted.

- Through the removal of some old non-structural internal components from the hull, and the use of the most modern materials, the new-look Wild Oats XI hull is more than 500 kilograms lighter. An additional 300 kilograms has been saved through the use of new, ultra-light cloth for the manufacture of the new sails. This fabric is the same as that being used in the construction of some components for the Boeing Dreamliner aircraft.

Wild Oats XI is recognised as the most successful yacht in the 71-year history of the Rolex Sydney Hobart race, but this year she is likely to face her stiffest competition since being launched in 2005. For example, Jim Clark's Comanche set a 24-hour monohull sailing distance record of 621 nautical miles during the recent Trans-Atlantic race. The distance covered was just seven nautical miles shy of the total course length for the Hobart race. Wild Oats XI is the current record holder for the Hobart race with a time of one day, 18 hours, 23 minutes and 12 seconds.

**Rob Mundle**

Wild Oats XI Media Manager

- **Image caption:** The new-look Wild Oats XI is unveiled at Woolwich Dock, on Sydney Harbour. The hull is now more buoyant in the forward sections, and the bowsprit is longer and more streamlined. Part of the 14-metre section of the bow that was cut from the yacht is in the background. (Image credit: Andrea Francolini/AUDI)

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