

Brothers at Heart

Mark and Brendan Matthews are building on their Cherub class development,

By Rolf Lunsmann

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In recent years the Queensland brothers, Mark and Brendan Matthews have revolutionised the design of the Cherub development class. They have turned their boat-building hobby into a design and production business setting new performance standards for the class.

Tucked away in the southern industrial suburbs of Brisbane the Matthews' factory, Brenmark Industries, is one of Australia's more unusual boat-building enterprises. With its massive cranes and piles of foundry moulds, it looks like a hangover from 1940s heavy industry. During normal working hours it is full of wood shavings, but these have nothing to do with boats. They stem from the Matthews' principal business, industrial pattern making for the steel, mining and water industries.

Stacked away at the end of the shed are moulds that give a clue to the building's second life. After hours these are pulled out and the factory is transformed into a modern boat-building venture, producing carbon and epoxy hulls for Cherubs and 12ft skiffs.

The Matthews brothers have a long association with the Cherub class. Mark explains "We first competed in Cherubs when we put a boat together for the 1983 world championship in Brisbane. Since then we have been in and out of the class but manage to put a boat together for the nationals each year."



Mark (left) and Brendan Matthews build their hulls in the unlikely setting of their Brisbane pattern making factory.



Andrew Fee and Brendan Matthews in *JW Bell* winning the 2004 Cherub nationals on their home waters of Waterloo Bay (CNCA picture).

The 1983 worlds were won by the New Zealand boat *Foreign Affair*, which set the design standard for the class for the next 15 years. It impressed everyone, including the Matthews. Mark says: "Our first boat was a Murray design. Then in 1985 we built our first boat *Axiom*. We tried to create a *Foreign Affair* but it turned out significantly different. Mark steered *Axiom* to second place in the 1985/86 nationals in Bunbury WA but, by their own judgement, the first few boats the brothers built were not design successes. You learn from your mistakes," says Mark.

Over the next few years they built three boats, each to a different design. "We got a feel for what works and what doesn't."

After a short break from the class they returned to sailing Cherubs for the 1995/96 season and the nationals at Belmont, NSW. Their new boat *Rope City* started a new direction in their design thinking.

Cherub design rules changed significantly following the 1995 world championships in Sydney. The new rules introduced asymmetric kites, false floors and self-draining hulls. A number of designers searched for a shape that would take advantage of the higher overall speeds of asymmetric kite sailing, but the *Foreign Affair* hull shape continued to dominate championships.

Dissatisfied with the performance of *Rope City*, the Matthews brothers cut the bottom off the boat and rebuilt it with a new shape

from the chines to the keel. It performed better and a new design thread started to emerge. Their next hull *The Lairy Canary* was a further improvement and a fast boat. The evolution was leading to a shape that was narrower on the waterline in the aft sections and finer in the bow than the *Foreign Affair* design. "Our design generates more lift at higher speeds and is quicker when planning, not necessarily upwind or in light airs," Mark says.

By 1997 the brothers were confident that they had a fast shape and, in response to demand from fellow sailors for hulls to their design, they built a set of moulds for production.

The 1998/99 season saw them start to earn success in championships. Brendan won the nationals with Joel McDonald, while Mark and former world Taser champion Russell Ford won two races before mast fractures ended their challenge. Three of the first five boats were Matthews' hulls. Since then they have produced close to 50 boats. Seventy percent have left the factory as hull shells destined to be completed by home builders. For the remainder, the Matthews fit floors and decks for a complete hull. All the hulls are constructed of carbon and epoxy.

Do-it-yourself boat-building has been a strong theme throughout the history of the Cherub class. "With all the DIY shows on TV, people are starting to realise what you can create in your own garage. People are finding out just how easy it is to finish your own boat in foam sandwich," Brendan explains, "We have a lot to be thankful to Jamie Durie for"; jokes Mark.

The Cherub class is a restricted development class where experimentation has always been encouraged yet controlled under a structured set of rules. Primarily sailed by young people stepping out of junior classes such as Flying Ants, Flying Elevens and Cadets, Cherubs provide an opportunity to try different ideas in hull design, rigs and sails. "It is definitely a class that appeals to people who like to tinker with their boats," says Mark.

Matthews built hulls currently dominate the top end of the strong Cherub fleets in Perth and Sydney and the top boats from Victoria, South Australia and Queensland are also from their mould. At the last nationals in Brisbane, nine of the top ten places were filled by boats from the Matthews mould and the tenth was a variation of *The Lairy Canary*. "The success of these boats has made Cherub racing a bit like a one design class at the moment. There is a strong second-hand market because the false floors make the boats very stiff and the boats that we have built last very well," Mark says.

The Matthews use carbon fibre masts from Clive Watts at Composite Spars and Tubes in Sydney on their own boats, with sails from their long-term sailmaker Clive Allwood in Brisbane. Mark uses a standard set of CST mast sections, while Brendan uses a stiffer top section created by CST.



Andrew Stewart and Amy Smith sail their Matthews hull as a part of the strong Cherub fleet at Georges River in Sydney (Rolf Lunsmann photo)

"The fleet in Perth have highly developed rigs," Mark says. Leigh Ashwood while working at the Halsey- Lidgard loft in Perth was the Cherub national champion in 2002 and 2003. The rigs with their sails are going fast in all conditions."

At last year's nationals in Brisbane the NSW boats with sails from the Ullman Sydney loft were also right in the top bracket speed-wise, along with the fastest WA boats and the eventual winner JW Bell sailed by Andrew Fee and Brendan Matthews.

"A lot of sail development work has gone into the kites," Mark says. In the early days of asymmetries there was a bit of experimentation. At the time the Allwood sails had an advantage, but now most of the major sailmakers are working to the same ends."

Brendan has also been sailing a 12ft skiff with Joel McDonald. *Propaganda* is one of three 12ft skiffs the brothers have built. "*Propaganda* is a different concept for 12s;" Brendan says,"It has smaller but more efficient rigs and is an attempt to allow us to sail a more tactical race. The hull is flatter and wider than the more common Woof design it goes all right in a limited range of conditions"



The Matthews Cherub mould features straight lines aft and is narrow on the waterline at the transom. (Rolf Lunsmann photo)

Michael Spies will be racing a Matthews 12 footer in the Interdominion series at the Sydney Flying Squadron in mid January, while a third boat, *Katoomba Adventure Centre*, is being campaigned in Sydney by Cameron McDonald and Russell Ford.

While Brendan will contest the 12ft skiff Interdominions he is determined to keep sailing Cherubs. "You don't get any better ride in 12s than you do in a Cherub he says." "The Cherub has the same sensation of speed."

In early January he will defend the Cherub national championship at Georges River in Sydney again with Andrew Fee in *JW Bell*. Mark will also have his boat *Laughing Sans Dice* in Sydney for the nationals, but his longer-term plans lie in yachts.

In 2001/02 he and Brendan built the Reichel/Pugh Super 30 *The Cone of Silence* for James and Jenny Neill, and Mark foresees more yacht building projects ahead.

For more information cm Cherubs, visit www.cherub.org.au.

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