

The Open 8.5 Multihull

If you've been intrigued by the Open 8.5 Multihull class but are unclear as to what is available in terms of designs, this article is for you. We'll look at what has been produced so far, and at some alternative designs that generally pre-date the rule but will fit with little or minimal modification. We won't attempt to compare performance between different designs other than to say that in common with many classes the 'top boats' in the 8.5 class are light, down to class weight, have good rigs and sails, and are well prepared and sailed by their experienced crews. And this isn't a definitive list, if you know of other potential 8.5's lurking in sheds or the recesses of people's minds, send in a photo or drawing so it can be included in the gallery pages on the club web-site.

The Early History.

"I lived at Herald Island three houses from the ramp that Richard Pilkington used to launch all the GBEs from and I saw the bulk of the Auckland boats hit the water for the first time. Among the many he built was a one-off cruising version of the GBE called "FAT CAT" which was the precursor to the Turissimo 9m. It was a standard GBE taken from the mold and it had a 100mm or so (can't remember the exact amount) section added to the centerline of the hull to create some more internal volume, it was definitely slower than the stock one. There was also a trimaran made by his brother based on a GBE main hull with smaller floats along the lines of The Wild Thing. I also sailed the last one built from his molds in NZ, the MK3 GBE. That boat went to Noumea, with the molds I believe. The main modification was to the hulls, they were opened up at the bow and a wedge about 50mm was inserted from the bow to about halfway down the keel line.

The very first few timber boats were Mk1, like GBE on the hard at Little Shoal Bay, they had a very short cabin and we're tiny inside. The Mk2 is what Freedom is, that was the plug for the production boats and on these the cabin was made slightly taller and longer basically to give sitting headroom on the front bunk. You can see on the inside of Freedom where the main hatch was changed from side entry to a fore and aft slider for the production molds. The main beam was also raised up a bit on the Mk2 so it wasn't so hard to get underneath. Most GBEs are Mk2's, as far as I know there was only the one Mk3 built."

-Bill Barry

The Concept.

Originally based around the dimensions of the Malcolm Tennant designed Great Barrier Express the rule was developed to encourage the designing, building and racing of relatively affordable boats of a similar performance. The Open 8.5 Multihull Rule is a simple 'box' rule: as long as your boat fits within a box measuring 8.5 metres length over all x 6.5 metres max beam x 12.6 metres air-draft height (measured from the waterline to the top of the mast) then almost anything goes. To encourage robustness and the ability to compete in coastal races and possibly cruise there is a minimum weight and headroom requirement and boats need to be able to obtain a Cat 3 safety certificate.

The Designs.

So far the following have emerged designed more or less specifically to the NZMYC 8.5 rule. Also a number of GBE's have been modified with larger rigs and hull surgery to gain more buoyancy forward and longer waterline length. Alterations are usually owner designed and vary in extent.

Articles on Tigre, Penelope, Attitude and most recently Dirty Deeds (Oct 2008) have appeared in Boating New Zealand magazine in recent years. Some of these have been re-printed in the Australian magazine Multihull World. Photographs of many of these boats are in the 8.5 gallery pages on the NZMYC website. Boat names for launched examples are included to aid identification.

Designer	Model	Example Boats	Contact details/Web page
Tim Clissold	TC 8.5 R	Penelope	http://www.tcdesign.co.nz/
Ron Given	Tigre	Tigre	http://www.givencats.com/
John Tetzlaff	JT 8.5 Cat	Attitude, Epsom Salts	JT: jtspars@xtra.co.nz
John Tetzlaff	JT 8.5 Tri	JT's Tri, Lucifer	JT: jtspars@xtra.co.nz
Brett Bakewell White	Raptor	None built	http://www.bakewell-white.com/
Bob Fisher	Fisher 8.5	Dirty Deeds	http://www.bobfishermarine.com/
Andrew Eaton	AE 8.5	Borderline	Andrew Eaton: info@bakewell-white.com
Nathan Stanton	Freeflow	None Built	http://www.freeflowcatamarans.com/FF8_5.aspx
Tony Grainger	Icebox	None built	https://www.graingerdesigns.net/
Graeme Delaveau	Nicky Cruz 8.5R Tri	None built	cruz7444@ihug.co.nz
Various	Modified GBE	Voom, Ocean Pacific, Whio, Freedom	

At the time of writing (Jan 2009) most of these are represented by single examples except for the JT cat of which there are two built, the JT tri being still under construction. Some, such as Brett Bakewell -White's Raptor design, have yet to be built. The Delaveau 8.5 tri is a development of an earlier design (since sold overseas). Interest from Australia is apparent with recent 8.5 catamaran designs from Tony Grainger and Nathan Stanton.

Construction methods and materials vary. The JT cats are built from 4mm 'tortured ply', others are built of cedar strip, foam sandwich or various combinations of materials. Round bilge hull forms predominate — currently the Delaveau is the only chined ply design on offer. Crossbeams and rigs are generally alloy or carbon and the boats are usually built to be demountable. It should be noted that full build plans for some of these boats might not be available. Before settling on a design one should check with the designer to ascertain what level of information and support is available.

A quick look at these recent designs shows that they share some characteristics; light weight, minimal

wetted surface end enough cabin to meet the headroom restriction. Most have a designed sailing displacement of around 1000kg or so ready to race.

Some Alternative Designs.

Here we'll review some boats that were generally designed prior to the advent of the NZ 8.5 rule or without regard to it, that fit or would require minimal modification to comply. Many of these boats have more (relatively speaking of course; you're still not gonna hold a dance in there) interior space than current 8.5 designs. These designs have been chosen to illustrate a number of different styles of boat in the 8 to 8.5 metre size range. There are others that could also be included.

Designer	Model	Example Boats	Contact Details and Plans
Malcolm Tennant	Wildfire 8.5		http://www.tennantdesign.co.nz/
Malcolm Tennant	Sylph 8.6 Tri		http://www.tennantdesign.co.nz/
Mark Pescott	Firefly 850		https://www.facebook.com/pescottdesigns/
Ian Farrier	F 82 Tri	Need For Speed, Cubic	http://www.f-boat.com/
Roger Simpson	Backslash 8.2	Te Kooti	http://boatcraft.com.au/Shop/
Tony Grainger	Essential 8 Tri		
Kurt Hughes	26 Trailerable	similar to Creepy Crawler	http://www.multihulldesigns.com

It is appropriate here to start with two designs from the man who was indirectly responsible for the Open 8.5 rule, the late Malcolm Tennant, whose untimely passing was mourned throughout the multihull community. Malcolm referred to his Wildfire design as a GBE for the 21st Century. While it has a similar layout there is 1.8 metres headroom and the hulls have greater volume, being wider, with more full sections forward. The example shown on Malcolm's website was built in Tasmania. The Sylph trimaran at 8.6 metres would require a little surgery to fit the length restriction, but that could be easily accomplished while building. This tri can be built demountable or with folding crossbeams enabling convenient trailing.

Mark Pescott's Firefly design has been successful in Australia since it was introduced in the late- 1990's. It has a mildly flared hull which allows a couple of .9 metre wide berths. Recently the design was updated and it is available as a stock boat built by Latitude 8 yachts in Thailand. A shorter rig for the NZ 8.5 rule is an option.

The F82 was developed from the early 1990's F25 design. Incorporating Ian Farrier's well-proven folding system, for quick trailing, a great many of these boats have been built internationally. Farrier's plans are reputed to be the most detailed you can get and many first time builders have successfully completed them. The F82 R fits nicely into the 8.5 box with a little room to spare. Jon Bilger's F82R Need for Speed was one of only 3 multihulls to complete the 2008 Coastal Classic in testing conditions. Note: This design shouldn't be confused with the glass production F28 (now Corsair 28) built by Corsair Marine, which at 8.66 metres Loa is too long for the 8.5 box.

The Roger Simpson designed Backslash was popular in Australia and many were built there. Te Kooti is a NZ built example. The pronounced hull flare allows a narrow waterline and a more spacious interior than is usually seen in an open deck catamaran of this length. If three .92 metre wide berths and a separate toilet compartment are appealing, then built with an eye to weight and a sensible increase in overall beam this could be worth considering.

Tony Grainger's trimaran design's have demonstrated giant-killer performance on many occasions. The Essential 8 is a development of his earlier 075 design. This design doesn't fold but is otherwise an interesting alternative to the F82 and other flared hull designs.

Kurt Hughes has been designing minimalist performance trimarans for years and is something of a guru for the type in the US. Built using Kurt's pet Cylinder Mould method (a variant of tortured ply) the 26 T design (actually closer to 27') could be a great basis for a cost effective NZ 8.5 racing tri. The slight reduction in overall beam and increase in headroom needed to fit the box would be simple to incorporate during construction. If you've seen Creepy Crawler (Hughes 24) zooming around Auckland harbour, and wondered what a larger version would be like, this is it.

What else?

The NZ 8.5 rule is somewhat unique in that it was originally formulated around the dimensions of an existing design. Anyone who has spent time researching smaller multihulls online will have seen mention of the Micro-Multihull and Formula 28 rules. These date back to the 1980's. While original designs to the Formula 28 rule retained some cruising vestiges they quickly developed into the overgrown Tornado style prevalent today. The Micro Multihull rule was developed to cater for racing between different designs of trailerable multihulls, eventually settling on a length limit of 8 metres and requiring a certain level of accommodation. It found favour in many European countries and many designs were produced and raced there. The Dragonfly 800 is an example.

Antipodean designers also featured, with catamaran designs by Malcolm Tennant (Spyder) and Ron Given (Turbo Tiger). The original Grainger 075 was also designed with this rule in mind. The (then) Auckland Multihull Sailing Association held a Micro Multihull design symposium, organised by Gary Baigent, in the mid-1980's. Design concepts were presented by a number of New Zealand designers including Jim Young and Ray Beale. While the rule never became established in New Zealand, part of its legacy is a large number of multihull designs of 7.5 to 8 metres overall length, many of which could serve as inspiration or as a basis for a NZ 8.5 boat.

This brings up an important point — NZ 8.5 multi's don't have to be 8.5 metres long. Provided a boat is within the box dimensions and meets the other requirements it can be measured under the rule (eg. Buccaneer 24 Capricorn). There is a grandfather clause allowing boats built before the advent of the rule some leeway in terms of headroom etc (eg. Hughes 24 Creepy Crawler, TC 790 Hard Drive) however new builds of older designs would likely require modification to suit the rule. If in doubt contact the 8.5 measurer for advice.

Cost and availability.

How long is a piece of string? Most NZ 8.5s have been owner built or modified. Multihulls are labour intensive to build and while a professional build is an option if pockets are deep enough, most people have elected to DIY or buy existing.

Entry level for the class remains the venerable GBE or other older designs such as the Buccaneer 24. Note: the following is intended as a guide only and is taken from asking prices of boats recently for sale. A stock GBE needing work could probably cost in the vicinity of 10 to 20k. Better condition/equipped examples start in the high 20k's and can go up to over 40k for a really nice example with rig, sails and other equipment all in excellent condition. Modified examples with plenty of gear usually begin around the mid 30k's. Assuming one is available, a used, purpose designed and built NZ 8.5 is likely to be a 50k plus proposition.

Cost of building is beyond the scope of this article. It's difficult to give general figures as peoples abilities to build and source materials vary widely. It's an area where you have to do your own research. Talking to someone who has already built one of whatever you are interested in, or something like it, is a good place to start. If you have a 2nd cousin twice-removed, who's a boat-builder or sail-maker, it might pay to add them to your Xmas card list as well. You'll need a materials list and to ascertain how much you will pay to fill it. On the subject of materials lists, they are often very basic.

To wind-up.

As can be seen there are numerous multihull designs in the 8 -8.5 metre size range. Although at this point there are only 10 designs specifically to the NZ 8.5 rule, the class is young and as every second multihull fanatic seems to be a closet designer with a scheme tucked away yet to be published or built, there will be more in the future — self and professionally designed. If you want to publish a design then we intend to start a webpage to include these so send it in.

Choosing a design depends largely on an individual's priorities. NZ 8.5 racing is for line or handicap honours. If the intention is to blitz the fleet and only line honours will do, then that will likely lead you in a certain direction as to the type of boat that is required. If the intention is to own a boat with more amenity than a flat out racer and get out and have a bit of fun with the rest of the fleet, in a boat that could win in the right conditions if you can keep it in the groove (and if nothing breaks or falls off), then arguably, you have greater choice.

To find out more, joining the NZMYC is a great way to network with a bunch of like-minded people and get the inside information on this exciting class.