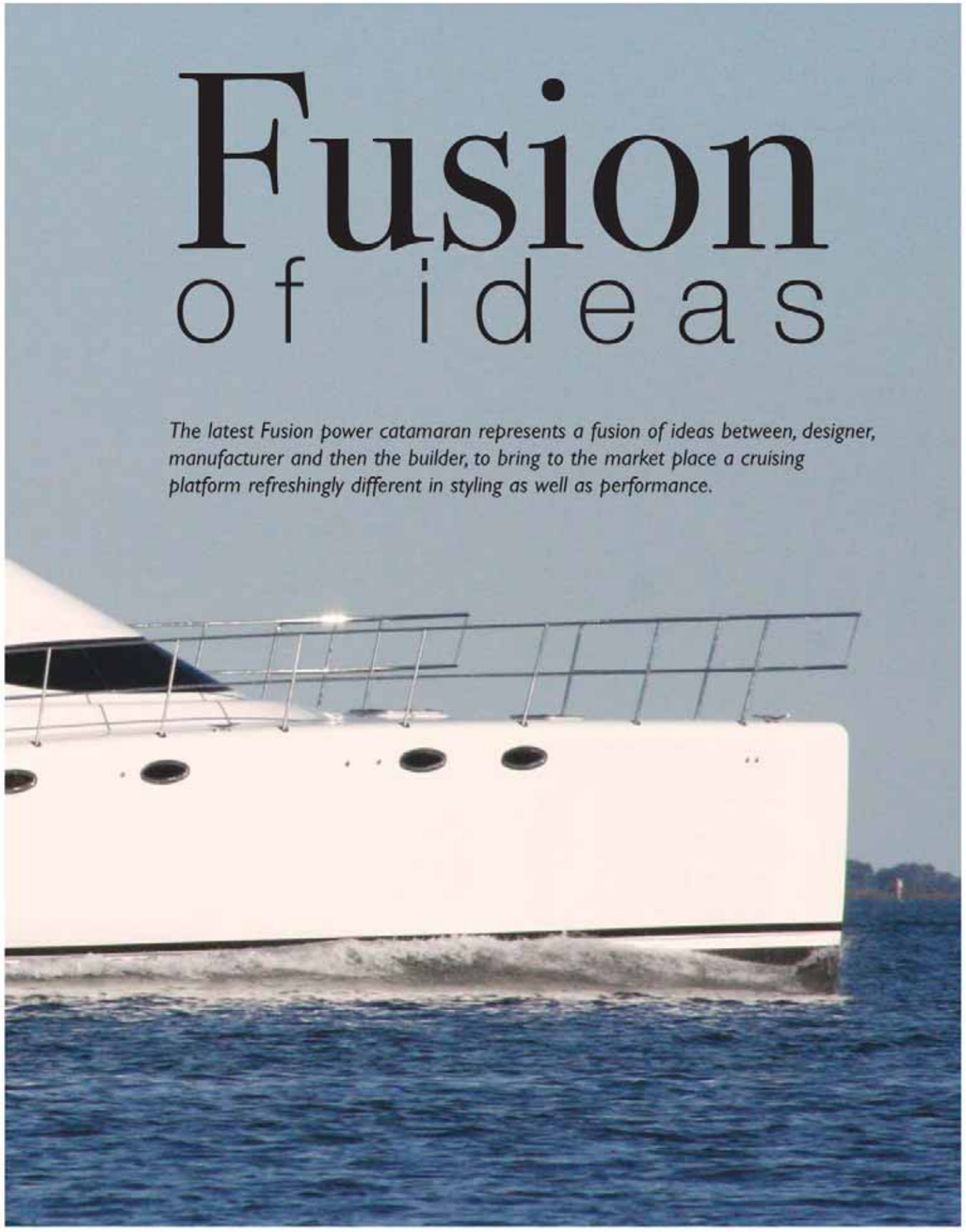
Fusion of ideas

The latest Fusion power catamaran represents a fusion of ideas between, designer, manufacturer and then the builder, to bring to the market place a cruising platform refreshingly different in styling as well as performance.



text & photos by
BARRY TYLER

Sounds confusing granted, but in this instance there was a difference between the manufacturer who produced the hull and decks only, and the builder who then presented the boat to the market, in its completed state. Boat-building company Brisbane Powercats, opened their doors 15 months ago with a simple game-plan to build under licence the recently released Fusion Powercat design. The two owners of the company, Peter Rogers and David Stacey both called full-time on careers allied to boat building and marketing and decided between them the time was right to build and market what after exhaustive research they considered to be the ultimate power catamaran design.

While they will concentrate their efforts around fostering the Fusion brand of flybridge powercats they are specialising in, they are not however confined to building only those. "As a boat-building company we have the necessary skills and infrastructure to build whatever design anyone wants us to," Peter Rogers explained, "but as the Brisbane agents for Fusion Catamarans our whole impetus really is concentrated around what we believe to be one of the most futuristic, adaptable, capable and practical power catamaran designs available, anywhere in the world.

"We believe this boat fits into a niche area of the market that no other designer or builder currently addresses! There are a significant number of baby-boomers for want of a better term, who having retired now have time on their hands and a superannuation payout, allocated pension or some form of investment, sufficient to stretch to the cost of the boat of their dreams.

"But, the problem is they no longer have a suitable income to sustain the running costs typically associated with a larger cruising vessel. This is where the catamaran and in particular the Fusion, excels. It looks the part; our example is luxuriously appointed and presented, and best of all it literally runs on the smell of an oily rag. All of a sudden they can afford to cruise the waterways of our region, for extended periods." Rogers enthused.

Completing the rich tapestry of the Fusion story are Fusion Catamarans. A stand-alone internationally recognised Airlie Beach-based company owned by Peter Schelling and administered by CEO Jim Gard, Fusion Catamarans own the actual intellectual rights if you like, to the Fusion range. They supply hulls in kit form, assembled and completed to lock-up stage, or fully completed - to a worldwide audience.

The original Fusion sailing design was handled by Naval Architects Garry Lidgard Naval Design Studio, who designed a

stylish as well as proven performer that while very much looking the part, also performed indecently well under sail. When it came time to enter the market with a power version of this design, Fusion Catamarans then contracted world renowned multihull guru, Craig Loomes, to transform the sailing version into a power version. They were not going to cut corners with any facet of design or construction – simply it had to be a completely dedicated stand-alone 'power' version!

In an absolute complement to the sailing design most above-water and interior dimensions, specifications and features remained as per the status quo, including the bow trampolines between the hulls. Where Loomes cast his magic spell was on the flybridge and below the waterline, modifying the underhull shape and adding another 100mm of bridge-deck clearance – to be able to appropriately handle the power alternative.

A pet trait of Loomes (this higher bridge deck), in a hypothetical stroke of the pen he removed the single biggest negatives of the high-speed catamaran, buoyancy and attitude within the hulls and also the noise and pressures emanating from the action of the sea against the underside of the central tunnel between the two hulls.

Luxury Fit-out

Brisbane Powercats make no secret of the fact this particular Fusion example is dressed to overkill, the very best of everything. "We are talking here, about a $250,000 fit-out," Rogers explained. "We purposely spec'd the boat very high, because we wanted to graphically illustrate to clients just what could be done with a boat such as the Fusion. It is infinitely easier to down-speck, than try and explain a possible feature to a client, via a brochure!"

From a distance even, the Fusion was noticeably different in concept, with the high bridge-deck the first prominent feature. Yet, there was still good access onto the aft boarding platforms courtesy

A very sporty and stylish profile - to match the impressive performance and handling characteristics of the Fusion 40 Powercat. (above)

A huge bridge-deck clearance, yet boarding access was not compromised. (below)

of a semi-spiral set of steps each side, which led you up onto the actual cockpit level. You didn't have to be a rocket scientist either to notice the affiliation to the sailing version for no attempt whatsoever had been made to hide or indeed reduce the layered seating arrangement that impinged on floor space within this cockpit area.

One also didn't need to be that rocket scientist to appreciate the fact there was a reason for this; I believe totally justified and indeed welcomed was the trade-off of the additional accommodation provision below - more on that later. Even with this space compromise there was still however plenty of space available for ease of movement around a cockpit that was geared towards outdoor living.

The aft lounge in front of the cockpit table spread right across the transom upright and of course the sailing-orientated seating levels provided the perfect platform for lazing around during the course of your trip. Especially

The proposed injection of Flexi-teek will add the finishing touches to a practical cockpit layout.

appreciated was the fact this area was nicely encapsulated and therefore protected from the elements by these aft and side extremities, and the full overhead flybridge overhang.

Stylish Flybridge

The other most obvious break from the traditional 'sailing' concept of design was the flybridge level. Visually well balanced and in proportion with the higher hull-side profile (remember the higher bridge-deck) and the sleek and very futuristic cabin or topsides, the designers have again stepped outside the circle' with their approach to this aspect of profile design. Instead of over-powering the visual spectacle with an upright flybridge parameter, they have continued the angle of the cabin sides, upwards onto this upper level and upwards again to the Targa arch and hard-top assembly.

It was certainly very easy on the eye, so important in my opinion if the Fusion is to indeed capture the eye and imagination - of the monohull protagonist! Like the cockpit, again there was a (slight) space compromise within the actual confines of this particular flybridge layout concept, but the reality was any extra space in the context of a genuine long-range cruising vessel - would have been what I would consider to be a waste of space anyway.

This flybridge level in fact provided all the usual trappings associated with life on the ocean waves. There was great visibility from a helm station that while comprehensive was incidentally certainly well protected from the elements courtesy of front and side clears. Zipped openings within these clears would provide good ventilation during the summer months.

The innovative fly bridge approach looked good, plus provided exceptional visibility. (top)

The 'trampoline' bow was a welcome facet of this catamaran foredeck layout. (middle)

The helm station layout was practical, comprehensive and importantly – ergonomic! (right)

Additional to this $250K extras package Rogers spoke of, was the two Raymarine G-Series screens for the integrated E120 radar, GPS, plotter and depth sounder electronics package, a 218E VHF radio and the ST001 Autopilot. As well, the upright GRP dash facia featured Yanmar remotes and instrumentation, the Seastar hydraulic steering helm and the Lewmar winch remote activation system. Completing the picture of ergonomics at the helm, two Navigator helm chairs were provided for skipper and friend, while further seating for your guests on this level came in the form of a three-person bench-seat moulded into the front of the helm module.

Let the Show Begin

As expected all these high-use areas mentioned so far, were presented in the infinitely more durable gelcoat finish. Come the inside of the vessel however and the decor transformed into an interior befitting the styling of the outside. Modern was a word that sprung to mind for while yes there were very generous lashings of American Cherry timberwork, it was the contemporary look that sold it for me.

And the associated innovation to attain this look, for while the saloon area of any catamaran is governed by the very concept and therefore parameters of the catamaran hull configuration there were so many subtle aspects the uninitiated would seemingly take for granted - that endeared me to this particular layout. First and foremost was the actual size of this room; most expansive and surely another trade-off I concluded, for the relatively conservative (but certainly not cramped) cockpit size.

More often than not we find a catamaran galley down in one of the hulls, but in this instance it was upstairs and to port. Ostensively it was an L-shaped galley on the starboard side of the saloon, albeit with part of one wall or face removed so as to provide access to the steps to the starboard companionway and accommodation areas below.

With a large amount of Corian bench-top area, everything about this galley spelled competence and ability to cope. A clever use of space without compromising the ambient nature of the saloon, the galley featured very visual stainless steel Frigo refrigerator and freezer drawers as well as a vertically elongated slide-out pantry, against what was in effect the front bulkhead of the saloon.

Aft of this, on the other side of this walkway to down below, the actual galley proper included a Smev gas oven and grille and 4-burner hob, a double sink and generous cupboard storage. Included within the end face of this spacious galley module was a shallow upright liquor cabinet and adjacent to the main (extruded aluminium) saloon doorway, Brisbane Powercats had installed a 240-Volt combo icemaker refrigerator.

Comprehensive, Capable, Appropriate

Standing at the saloon door and looking in, you saw little of this galley for the main focus of attention was surely on the plush wrap-around settee around a table which comfortably addressed the dining requirements of five adults. A light and bright area that was well ventilated courtesy of generous-sized forward-opening Lewmar hatches, the décor contrasts of wood, leather upholstery, padded panels and gelcoat – were most appealing.

Aft of this dining setting, effectively on the aft side of the portside access-way to the accommodation below, was the entertainment module which included an electrically operated 19" Teac pop-up television within the Corian 'servery' top. Below in the face of this module I noted a Fusion (no relation) stereo and a DVD player, CD and remote control storage apertures, a large Fusion speaker and off to the side of these a wine rack and a vertically elongated storage cupboard.

Included within the face of this module also was of course the all-important and certainly very easily accessed AC-DC circuit-breaker switch panel which was effectively secreted behind bi-fold smoked

The galley dove-tailed nicely into the starboard side of the saloon.

The non-intrusive dining setting comfortably catered for six adults.

As stated, this room was certainly not as expansive as the forward cabins but in saying that there was still ample space in which to freely move about the room, even with the door was shut. A bedside seat was provided, surely courtesy of the athwartship berth in place of the traditional fore and aft style of aft catamaran berth. Fittings in here included a side porthole and overhead Lewmar hatch, hanging wardrobe, neat little Cantalupi reading lights from Gineico and good drawer storage.

The stairway and companionway between the two starboard rooms was a continuation of the wood theme with vinyl panels intermingled with internal as well as external American Cherry storage cabinets which added a finite touch of class to the visual spectacle.

The workmanship and presentation of the woodwork in general was exceptional throughout the Fusion; door gaps were even, mitred corners were spot on, timber grains were consistent – I just couldn't find fault anywhere. And of course the most obvious by-product of this seemingly limitless use of wood is its inherent ability to exude the same level of opulence be adorning the saloon, companionway, master stateroom or guest accommodation – it all offered that same unadulterated look of luxury.

Interestingly the flooring material as in the case of the rest of the interior of the Fusion 40 also, was not teak and holly as I had first jumped to conclusion over. It was in fact a most durable non-slip timber look vinyl material from Kenbrock Flooring which is laid in strips the same way you would lay the original teak option.

The cockpit and fly bridge levels outside were a work in progress for Rogers was waiting for a prepared ensemble of the teak look-alike 'Flexi-teek' material to arrive, that would significantly transform and enhance these areas. While both examples of flooring were not quite 'the real thing', they were none the less very effective, very durable and significantly less labour-intensive substitutes that Rogers insists will stand the test of time!

Hard to get enthused over an AC/DC switch panel, but this one was an absolute work of art! (top)

The forward cabins embraced the traditional fore and aft berth layout, albeit very tastefully presented. (left)

Take Your Pick

The forward cabins were as expected larger in dimension than the aft cabin, but to be fair as far as décor was concerned there was visually not a lot of difference between the two cabins on the starboard side; other than features within the forward cabin such as additional space and appointments like the fore and aft king-double berths, walk-in wardrobe, television, DVD, Stereo, air-conditioning, and more storage provision.

The intriguing problem I did have though was identifying which (forward) cabin I would choose as the actual master. Brisbane Powercat's were adamant the portside cabin was the master and certainly promotes it as such. But for me, I wasn't so sure – the jury is still out for depending on your preferences, either cabin could handle the mantle.

The aft cabin was surprisingly generous in size, and certainly specification.

It went like this; in the instance of the starboard cabin, yes the berth was certainly down-spec'd from its 'master' counterpart, but balancing that out was the fact this room boasted an adjoining ensuite. A two-cubicle layout situated forward of the front bulkhead within this bedroom, there was a bathroom and shower in one cubicle and forward of that again in another cubicle, was the Tecma Quiet-flush electric macerator head.

Over on the portside yes the actual berth presentation was a little more upmarket, but it was still a fore and aft king-double. Up for'ard in this instance was an impressive walk-in wardrobe, in place of the ensuite. Which means, showers and ablutions for the master and partner entailed a dash across the companionway to what was a larger and slightly better-appointed aft bathroom – albeit a portside aft monster bathroom which was also the house bathroom.

Upon venturing up onto the foredeck I discovered yet another special and certainly very subtle feature as regards these two forward cabins. Despite the fact the actual fore-deck proper was shorter owing to the inclusion of the trampoline bow, there was still heaps of wet storage (fenders, sheets, mooring lines, deck-wash) provided within four centrally-located bow lockers. All of a sudden the 'trade-off' with the fore-and-aft forward cabin double berths became patently obvious – this additional space was utilised with water-proof and drained wet-lockers which served the two-fold purpose into the bargain, of providing inherent sound-proofing between the two forward cabins.

The bathrooms featured separate shower and head and plenty of space. (left)

The guest cabin forward, lacked little of the creature comforts of the master stateroom opposite. (right)

Performance Personified

The performance attributes of the Fusion 40 really were quite staggering – in every aspect. Granted, the hull which was constructed of a composite of multi-axial cloths, foam cores and epoxy or vinylester resin-infusion, weighed in at a modest 9,000kg in a 'heavy ships' state. But to enjoy a top speed of 22kts at the maximum 3950rpm, courtesy of a pair of 180hp BMW-based, 4-cyl, 1995cc, 4BY180A Yanmar turbocharged diesel engines, surely spoke volumes for the complete package of hull, power and the engineering features addressed by renowned marine engineering company, Rogers and Lough.

Even more meritorious, driving through ZF631V 2.48:1 gearboxes and then Vee-drives and shafts to the 4-blade AB Compu Quad 19"D x 21"P propellers, a respectable and still very fuel efficient constant cruising speed of 15kts at 3000rpm, was able to be maintained. At the rate this particular Yammer model uses fuel in that cruise mode of 15kts – under two litres per nautical mile (and 2.3LPNM at 16.5kts) - the 940-litre fuel payload would metaphorically speaking take you around the world on a tank-full of diesel. Well certainly Gold Coast to Sydney!

Further confirmation came during initial sea trials when the hull performed exactly to designer Craig Loomes figures as regards weight, waterline and performance and handling capabilities and characteristics – exactly to the letter and number! And if you want to go even faster, a 'design speed' of just on 30kts can be attained with the twin 260hp Yanmar alternatives.

Emphasising the fact it was a planing hull, albeit importantly with energy-efficient displacement characteristics at the lower speeds, when up and running at full speed the hull adopted the typical planing-hull characteristic of a very slight nose-up attitude. Even with the 'meagre' 180hp powerplants the hull rose to plane effortlessly but perhaps more importantly it glided to a halt when decelerating. Slowing therefore, rather than instantaneously halting momentum and digging its backside in!

Sadly there were no monster waves around on the day of our test but the way its 'destroyer-style' bow pierced then rode over the cruiser wakes we managed to find during the course of our test, suggested to me the age-old phenomenon of bashing and crashing through head seas would but for the most of severe conditions, be a phenomenon of the past with a hull design such as this! Encouraging also was the way the Fusion turned; no backing off on one throttle there for it turned on a dime at full speed and obviating the 'efficiency' aspect, it scrubbed very little speed off during the course of that aggressive turn.

The only almost insignificant negative I could find about the whole mechanical side of the vessel was the engine rooms. Yes the engine bays were huge, yes there was obscene space dedication around the actual engines for maintenance purposes, and yes, there was certainly plenty of available space to add such items as watermaker, dive compressor or whatever. But, if the engines needed to be removed for any reason, they were never ever going to fit through the relatively small cockpit hatches. Major surgery would be required, in the unlikely event the engines would have to be removed; a situation I hasten to add, which is not just peculiar to this vessel.

Conclusion

The Fusion 40 Powercat I believe was one of the cleverest compromises between space provision and futuristic styling, it has been my pleasure to witness. Trade-off was the operative word, for it was the designers' decisions made within these two parameters which made this vessel such a commendably-acceptable all-round proposition. It addressed well each and every facet of long-range cruising, it handled and performed well, and it was indecently miserly where fuel consumption was concerned.

I especially appreciated the high level of specification and proliferation of features – so people could see and judge for themselves what they would and wouldn't have on their particular Fusion. Maybe you would not take it to the extremes of presentation Brisbane Powercats have, maybe you would down-spec then include instead items such as a dishwasher, watermaker and/or washing machine.

If it were my boat the icing on the cake would have been a cockpit table, maybe some teak on the cockpit and flybridge levels and certainly seat pads on all seating provision on the cockpit and flybridge levels. But guess what, the boat was not quite finished prior to my test – and those 'standard-issue' items will in fact be fitted.

Contact:

Fusion Catamarans
Ph +61 414 246 535
Mob. 0414 246 535

Email: jim@fusioncats.com
Website www.fusioncats.com

SPECIFICATIONS

Boat Design Name	Fusion 40
Year Launched	2008
Designer:	Craig Loomes/ Garry Lidgard Naval Design
Interior CAD Design	Matthew Morgan
Builder	Brisbane Powercats
LOA	12.2m
Beam	7.2m
Draft	0.9m
Bridge Deck Clearance	0.96m
Displacement	9,000kg Heavy Ships
Max Speed	22 kts
Cruise Speed:	15 kts
Construction	Resin-infused GRP and Core Composite
Fuel Capacity	940 litres
Water Capacity	600 litres
Engines	2 x 180hp 4-cyl 1995cc Yanmar 4BY180A Diesels
Gearboxes	ZF631V 2.48:1
Drive System	Vee-Drive to Shaft
Propellers	4-blade AB Compu Quad 19"D x 21"P
Generator	Onan 7kVA
Inverter	Mass Combi 12V/2000W-100A Mk II
Air Conditioning	CruisAir 18,000btu
Windlass	Lewmar
Anchors	Manson 60lb Plough
Steering	Hydrive Hydraulic
Engine Controls	Yanmar
Lighting	Cantalupi/Aqualuma
Paint	Gelcoat
Paint (antifoul)	Wattyl HA120, with epoxy barrier
Hatches	Lewmar
Windscreens/windows	Alfab
Port-hole Hatches	Lewmar
Heads	Tecma
Veneer/Plywood	American Cherry
Internal Flooring	Kenbrock Timber Look Vinyl Flooring
Stainless Steel Work	Evolution Engineering (RQYS Complex, Manly, Brisbane)
Batteries	6 x 6V 225Ah House, 2 x 12V Start

ELECTRONICS

Autopilot	Raymarine ST6001
GPS/Plotter/Sounder	Raymarine E120 with G-Series Screens
VHF	Raymarine 218E
Radar	Raymarine 4kW 24NM
Entertainment Systems	Fusion/ Panasonic
Instruments	Yanmar
Software	Raymarine NMEA Seatalk
Switch Panels	Wayne Love WML Marine Electrics
Base Price of Boat	Kit 121,000 Euro
Price As Tested	