

cover story: Lightwave 38 powercat

# PEDIGR



Lightwave have done a great job of fitting a new flybridge structure to their current 38' hull.

story and pics by BARRY TYLER

# EE CAT

*with charisma!*



THE SUN SHINES 364 DAYS OF THE YEAR IN THE WHITSUNDAY ISLANDS. THE OTHER DAY IS RESERVED FOR MY BOAT REVIEWS; AS SUCH, THE DECIDEDLY INCLEMENT WEATHER ON THIS ONE DAY I VENTURED NORTH WAS SURELY A WORTHY TEST FOR THE LATEST ADDITION TO THE LIGHTWAVE YACHTS PORTFOLIO, THE LIGHTWAVE 38 POWERCAT.



THE LIGHTWAVE 38 SAILING Catamaran has really had a stupendous rise in terms of sales in its relatively short tenure in the market-place, a global audience of boaters persuaded by this model's uniquely timeless lines, innovation, layout and all-round performance. That it appeals to the charter market also is undoubtedly testament to the vessel's practicality, versatility, durability and ease of handling. From Lightwave's perspective then, it made sense when they were about to re-invent this model as a dedicated power version, to use the sailing version as the template – then add the power-orientated features!

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They quite obviously worked on the well-worn cliché that goes along the lines of 'never try to re-invent the wheel' for with a functional internal saloon and accommodation layout that already worked well in a cruising mode, all that would be required for this new power catamaran was a new significantly modified underhull shape directly associated with the hydrodynamics of 'power' propulsion, and in this instance an upper flybridge and hardtop now inherently available once the heinous (strictly for the benefit of power protagonists) mast had been removed.

Sounds easy and from Lightwave's perspective it was, for a whole new world opened up with just the addition of these two new moulds. Having already developed a larger powercat in their range the in-house Lightwave design team led by Lightwave Yachts owner Roger Overell, were more than au fait with what was required below the waterline. The flybridge was a step into the unknown however for just one little aberration along the way could compromise the looks and therefore appeal, of the whole vessel. That they were able to incorporate a flybridge of this deceptively large dimension then, was a major bonus.

The other realisation was the obvious user-friendliness of seemingly every aspect of the boat – good ideas abounded. The Overell family are avid boaters and of course Roger Overell's exploits in ocean yacht racing are very well documented; as such they know what works and what doesn't, and they understand vividly not only the little things that make a house a home, but also the little things that make boating so much easier for all concerned. This was not only a safe boat to be aboard, it was also a 'no-hassles' boat to use!

### **Nice and easy**

This convenience factor was obvious from the moment you stepped aboard, for the boarding platform was right at water level, and the bow rail extended aft to the very extremities of the hull, so as to further aid the climb on board. Easy non-slip steps led one up onto the cockpit level, again finished in the Lightwave raised-pattern non-slip floor finish.

It is important within the rich tapestry of this article to point out at this juncture that this particular boat number one of the new 38 Powercat model was put into service the moment it was completed; Cumberland Charter Yachts were already well familiar with the competitively-priced Lightwave three cabin two-bathroom concept with the sailing cats and as such literally backed this new model straight off the plans by introducing a charter boat investor to Lightwave Yachts.

Hence then the reason then for a lack of 'teak' flooring on the steps and in the cockpit; everything has to be durable, idiot-proof and easy to clean. That was all this cockpit area was lacking though, for it was very well laid out, and spacious. Notable features included the cockpit dining setting for four people (just), the forward-facing lounge against the transom beam, the permanently mounted stainless steel barbecue and the manually operated davit and pulley system for the



Lightwave have retained the monstrous foredeck of their sailing cat version. (top)

The large dimension flybridge structure certainly doesn't look out of place on this 38-footer. (above).



Add some features, take some away; clever design work transforms a 'sailing' cockpit into a 'power' version. (top)

A safe passage up the walkways to the foredeck. The lower two steps lift for easy access to the engines. (above left)

Plenty of room around these babies, from a maintenance perspective. (above right)

tender which was mounted well above water level, against the outside of the transom beam. It was all entirely functional without being flashy, so as to continue this 'charter-orientated' theme of appointments.

Straight away I could also detect the sailing cat pedigree for the raised base (in this case modified to become an ice-box) for the yachting helm was retained in its

“ It was all entirely functional without being flashy, so as to continue this 'charter-orientated' theme of appointments ”

entirety, as the first step up to the access ladder to the flybridge. Even the fold-up bulkhead window immediately above this step was retained, in this case solely to further aid the flow of fresh air through the saloon. I do wish they would find another means of holding this window up against the roof though, when open – plastic fittings like those are very tacky!

This (flybridge) ladder assembly especially, was deserved of a mention for this whole engineering marvel that included nylon steps on the ladder; substantial pulpit-style safety surrounds bottom and atop this ladder; and a hand rail that went right the way up to the front wall of the flybridge – was very practical, and safe. If you fell up or down these steps then you would either be very careless or indeed you may well be more than a little influenced by the old amber stuff!

### Generous-sized flybridge

I alluded earlier to the deceptive size of the flybridge and it was only when I took the near vertical steps up to this level that I truly appreciated just how spacious it actually was. Lightwave's standard version of the flybridge ideal is a steering station literally recessed into the cabin top – Lightwave describe it as a 'stepped, raised steering position' – whereas this optional extra flybridge assembly was an area fully encapsulated by coamings and well protected from the elements by the hardtop and clears; clearly an area where charterers would spend most of their day-light hours.

The aft sun-pad would seat at least five people, plus there was room for the skipper and one other on the bench seat at the helm. A bench seat incidentally which doubled as a storage facility, an ice-box or a refrigerator and/or freezer combo. In charter guise again, the helm was sufficiently well spec'd with Morse (mechanical) controls, the Yanmar instrumentation, a Raymarine Autopilot (which for obvious reasons was rendered inoperable), a stereo and a chain counter; but of course it was devoid of the more expensive gadgets that someone who doesn't care that much – could/would very easily wreck.

In other words, if it was your boat it would have had a perhaps more comprehensive electronics package than

the Raymarine ST60 Tri-data (with A70D Plotter and fishfinder) combo version fitted, and maybe it would have a few more remote controls and activators for items such as a dive compressor or water-maker. This latter option though could perhaps be more cost-effectively substituted by the addition of the optional 250-litre water tank.

Interestingly, while some items were kept basic for the aforementioned reason, this boat even in charter guise still boasted big-ticket items such as a Paguro 4kVA genset, 16,000 btu of Cruise Air air-conditioning, an Outback 2000 Inverter-charger combo, 500Ah's (4 x 100Ah house: 1 x 100Ah engine – all with automatic cross-charging and isolation) of AGM deep-cycle batteries and a very upmarket Muir VR1250A rope/chain winch and capstan combo to manage the Manson anchor and chain.

**Practical saloon**

Back down on ground zero, it was time to step inside and check out the living and creature-comfort side of the Lightwave 38 Powercat. Graphically illustrating Lightwave's willingness to work with their clients, I was pleased to learn there are a number of different interior layouts available even in this saloon – upstairs or downstairs galley, entertainment modules and the like, were all reasonably flexible. Commanding instant attention in this layout was the dining setting; yes it was impressive with its solid polished beech table but it also commanded attention moreso because of its capability to seat the full passenger payload – thanks to the generous 6.67m beam. Aft and to portside of this was the condensed version of an entertainment module, again derived from the sailing catamaran but none the less just as effective in the context of a powercat saloon.

The starboard side of the saloon was in this particular layout, occupied by the open plan galley each side of the steps to the companionway below. Very cruising capable it was, with plenty of (pull-out drawer style) refrigeration and cupboard storage in the Corian-topped module against the front bulkhead. Off to the side and against the aft bulkhead was the galley proper with its twin sinks, copious bench space, appropriate cupboard and drawer storage, and substantial three-burner gas



from top:  
 It was a surprise to me, just how spacious it was up on the flybridge level.  
 Spot the number of safety issues addressed here, with this magnificent piece of engineering.  
 The Lightwave saloon layout appeals to all boaters, be they sailing or power orientated!



from top left:

The 'master' was functional without being flashy; this was a no-nonsense charter version.

There was ample room for a third person in the master cabin.

A rarity in a 40ft catamaran, a light, bright, airy and indeed respectable sized aft cabin!

stove and oven combo. I have been on some cats where it is a real battle to move in the galley, especially in a charter situation where everyone wants to impress with their own style of culinary prowess – in this instance it was very well laid out so as to avoid this scenario.

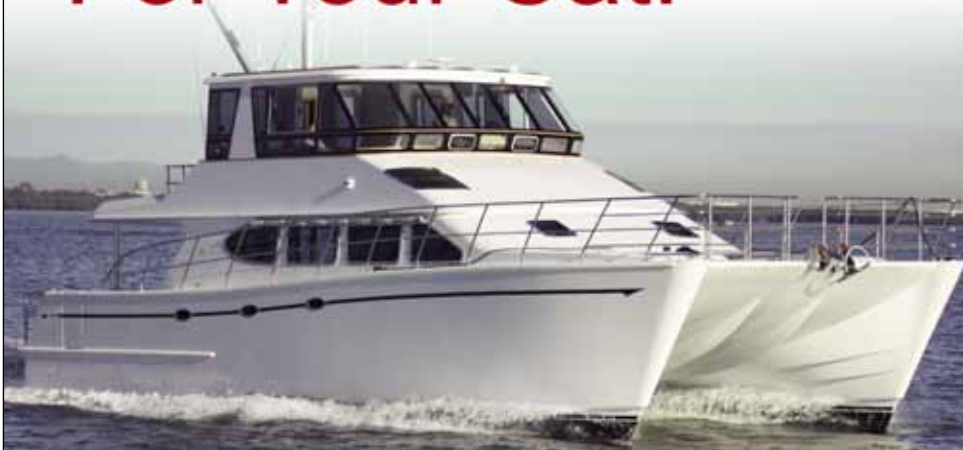
Décor in this saloon was best described as clever. Granted it was this

charter guise that was practical and durable so as to stand the test of time, but there was still a definite touch of class involved. The dining setting 'statement', the fabric lounge (Warwick Trinket Navy – no less!), the subtle use of European (steamed) Beech beadings and trimmings, the Karndeian timber plank (Canadian Maple) flooring and the plush roof panels



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All available space and voids are utilised for the all important storage provision. (above)

The open-plan galley was more than appropriate for a complement of seven people. (above right)

The 'nerve centre' in the portside companionway; it even included a chart storage drawer and table. (right)



all contrasted well with and to a certain extent softened, the sometimes bland nature of the mandatory 'easy-clean and maintain' gelcoat finish.

### Your choice below decks

As in the case of the saloon Lightwave will work with the respective owners by providing individually customised and therefore significantly differing layout configurations; in this instance however it was what Lightwave considered to be their standard layout option of three cabins with two bathrooms.

The perceived 'master' accommodation occupied the entire portside hull, offering space as well as a modicum of eloquence and certainly plenty of user-friendly ideas. The for'ard master berth was fore and aft queen-size and if it was a family situation and the other two berths on the other side were occupied, one of the cherubs

could use the additional single berth up in the bow of the boat. Décor was the same cosmic blend we found upstairs in the saloon and was complemented by easy steps up to the berth, wall lights, full-width front bulkhead lockers, the overhead hatch and utilising the space innovatively well, hull-side cupboards and locker.

Describing this as the owner's side was perhaps a little flippant for the companionway amidships doubled as a navigatorium also, complete with chart table and drawer; plus there was further storage available in the hull-side cupboards. Aft of this feature was the separate and very spacious head then further aft the shower cubicle; both of course doubling in this particular layout configuration, as the 'house' ablution department.

The starboard side was of course for the rank and file 'punters', or if you liked

them, the guests, and it was here where I indubitably enjoyed my most endearing moment aboard *Charisma*. So often the aft cabin in a catamaran borders on being a claustrophobic dungeon, but in this instance the generous double berth was in a room that was not only light, bright, well ventilated and had plenty of headroom, but the virtually water-level side viewing window also offered a uniquely nautical ambience all of its own.

Depending on your definition and expectations of 'master' accommodation, I would almost be inclined towards describing the starboard side for'ard cabin as the master; for it offered a genuinely privatised integral ensuite. Granted this cabin was a little tighter for space but it did have all the features of its counterpart on the other side, plus a hanging locker; plus this 'attached' bathroom that while certainly smaller



“Either way, accommodation for seven adults in a 38ft boat, was certainly a meritorious effort by Overell and his Lightwave Yachts in-house design team”

than the portside head – was undeniably more ‘private’ when you needed that mad dash in the middle of the night, without ya jockeys on! Either way, accommodation for seven adults in a 38ft boat, was certainly a meritorious effort by Overell and his Lightwave Yachts in-house design team.

### **The power**

Weighing in at a mere 6000kg ‘lightships’, the composite Lightwave 38 Powercat was never going to take a lot of power to move it, but I have to say the standard issue in charter guise, of a

meagre (it could obviously handle a whole lot more power) pair of three-cylinder 28.7kW (39hp) Yanmar Saildrive diesels – was stretching things just a little too far. The owner’s prudent move therefore to upgrade to the larger 54hp four-cylinder, 2190cc naturally aspirated, direct-injection 4JH4CE Yanmar diesels through the same SD50 gearbox and drive – was sensible.

The best part was it certainly made little difference to engine room space. When I lifted the walkway steps then the engine hatch (recessed into the cockpit floor each

side) and peered inside the realisation was these engines were still akin to the proverbial pimple on an elephant’s bottom, inside what was a ‘big’ engine room. Even the tankage, batteries, the genset, the electrical peripherals and the air-conditioning all failed to make a dent on the sublime space within these cavities.

A small point but I was suitably impressed also with the ready access to everything in these engine bays. In too many catamaran and indeed monohull (sorry for swearing) instances the boat is literally built round the engines; in this case engine removal at a later date would be an absolute breeze – without having to figuratively cut your boat in half to extricate them!

From a range perspective the other most impacting aspect I also alluded earlier was the potential to carry a further 250 litres of fuel, in addition to the standard 1000 litre (tankage) capacity of the 38PC – in ‘private’ guise! The 38PC as standard offers four integral 250-litre



tanks underfloor at amidships, two in each hull. These four tanks can be 50/50 water and fuel as in the case of private application, or 750 litres water and 250 litres as in the charter case. Then if you still need more fuel or indeed more water you can add this fifth 250-litre tank.

Needless to say this extra fuel equates to a significantly greater range and while there was only minimal difference between the two engine options in terms of actual performance, the extra one-third capacity again of fuel increased the range and the gap between the two ranges, markedly. Using the 'private' guise as our benchmark, with the additional 250 litres of fuel added (now 750 litres in total), the standard-issue 39hp Yanmar Saildrive packages provide a projected (a 39hp version hasn't been launched as yet) 10.5kt top speed and a mammoth 804nm range at the designated 7.5kt cruise speed.

In the case of the larger 54hp versions we returned actual figures of 9.5kts top speed (governed for charter application)

and a range at its 'cruise speed' of 8.0kts – of a still respectable 632nm (calculated using Yanmar's fuel usage figures for that pair of engines). With the 'standard' 500 litre fuel payload the figures were 535nm and 421 nm respectively. A footnote here though, none of the above figures include a percentage safety margin!

### **What a day for a boat test!**

It was cruel, seemingly sacrilege for a boat of this renown handling capability and reputation to be restricted to just 9.5kts but the bottom line was, with what eventually transpired later in the day, we couldn't have gone much faster anyway, on our return trip.

It all started off innocently enough though, for having slept aboard *Charisma* so we could get an early start the next day, the eventual trip up the bay (before the wind had risen) was almost to the point of being tedium personified, so easy was the 38PC handling the sloppy but docile half to one metre seas. Oh for some more power I lamented, only to be curtly reminded the engine 'governor' was quite prudent, where thrill-seeker often inexperienced charterers are concerned. Damn – we were lassoed and tied!

Coming back home again it was a whole new ball-game. Anyone who has ever boated in the Whitsunday region will vouch for the fact the relatively shallow nature of the 'bay' out from Airlie beach

is responsible for throwing up some hideous sea conditions at times – your typical short, sharp, steep, generally sh...y 'estuary' style of chop that necessitates a dramatic reduction in throttle(s) – well, we had the whole nine yards that day.

Hidden in our sheltered bay we had waited a good three hours for the rain to abate so we could take our photos and by the time the sun did appear in spasms and we had taken a few images that would work (just) – the wind had set in big time! It whipped the seas up to a good two metres-plus and there was just no fast way through, unless of course you had a 100-footer. The reality now was this 9.5kt maximum speed from these 54hp Saildrive Yanmars, sufficed admirably and while it was far from pleasant even at that speed, it luminously reminded me of the true handling skills, the deftness, of the Lightwave hull.

The ride characteristics were in a word – surprising! Surprisingly dry, surprisingly stable, surprisingly accurate, surprisingly quiet and surprisingly there were no inertia bumps and no tunnel banging; we braced ourselves on a number of occasions in fact, in readiness for the big bang that never came as we traversed the 'steep' seas. The centre tunnel clearance was perhaps more than most at 700mm, but still not excessive, so I concluded to myself that there must have



The starboard forward cabin was smaller in dimension; it had the ensuite bathroom attached.



This particular area was especially indicative of the clever thinking that abounded throughout the Lightwave 38.

been considerable frontal buoyancy in particular, built into the underhull shape of this Lightwave.

### Conclusion

The theme song of every charterer, give me some more speed, was consistent with my thoughts. Regardless though, what it did prove in the seas I encountered was, this baby would be at home in any storm! A very tight and rigid boat, the relatively light displacement suggested to me there was some serious engineering included in this hull design. The standard of workmanship was good, very good in fact, and the innovation, the little things, won me over.

The other impressive aspect I felt, was pricing. You could very easily make a charter boat out of this at the standard price of \$525K, and you certainly wouldn't need to add much more to the \$703K price tag if it was your own private cruising boat. It may appear a big jump from 'standard' to 'as tested', but consider the big-ticket items such as the engine upgrade, air-conditioning, the 'full' flybridge structure, a genset and of course the onerous survey (#1F – eight PAX) implications - that are all included within this \$703K price tag. Be it in charter or private guise, this Lightwave 38PC is sure to appeal to those in search of a cost-effective long-range cruising package!

### SPECIFICATIONS

Boat design name	Lightwave 38 Powercat
Year launched	2010
Designer	Lightwave Yachts
Interior designer	Lightwave Yachts
Builder	Lightwave Yachts
LOA	11.3m
LWL	11.3m
Beam	6.67m
Draft	1.15m
Displacement	6000kg
Max speed	11kts
Cruise speed	8.6kts
Construction	Full Foam composite construction vacuum bagged and some resin-infused
Fuel capacity	500 Litres
Water capacity	500 Litres
Engines make	2 x 54hp 4JH4CE Yanmar Saildrives
Gearboxes	Yanmar SD50 Saildrive
Drive train	Yanmar SD50 Saildrive
Propellers	Austral
Generator	Paguro 4kVA / Yanmar 80A Engine Alternators
Inverter / charger	Outback 2000
Air conditioning	Cruisair 160000 Btu
Anchor winch	Muir VRI 250A
Anchors	Manson 45lb Plough
Steering	Marine Control Systems
Engine controls	Morse Teleflex Mechanical
Lighting	Cantalupi
Paint (topsides)	Gelcoat Finish
Paint (antifouling)	International Micron
Hatches	Moonlight
Windscreens/windows	G James Glass - Tinted Toughened Glass
Porthole hatches	Moonlight
Heads	Sealand VacuFlush
Veneer/plywood	European (steamed) Beech
Davit crane/Passarella	Lightwave Davit Assembly
Tender	3.4m RIB Inflatable
Stainless steel fabrication	Lightwave Yachts
Saloon doors	Alfab Aluminium
Helm chair	Lightwave Yachts
Batteries	House 4 x 100Ah AGM Deep Cycle Engine 1 x 100Ah AGM Deep Cycle
Upholstery	Ashtia Upholsterers (fabric interior, vinyl exterior)
<b>Electronics</b>	
Autopilot	Raymarine
GPS/plotter/sounder	Raymarine ST60 Tri-data
VHF	Icom 411
Entertainment systems	19" Grundig Head, Wide Screen LCD DVD/TV Clarion AM/FM/CC/ Stereo System With iPod
Adaptor	2 x Interior, 2 Cockpit & 2 Flybridge Clarion Speakers
Engine instruments	Yanmar
Software system	Raymarine
Switch panel	Lightwave Yachts
Base price of boat	\$525,000
Price as tested	\$703,323

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