

THE MOST EXCITING LAUNCH OF 2012  
IS IN HER ELEMENT AT LAST

TEXT AND PHOTOGRAPHS BY GUY NOWELL



# FOR S A D A



This is 'Wow! Factor' personified. It doesn't matter what sort of boating or sailing enthusiast you may be, Adastral turns heads. Queen Amidala's royal star cruiser has come to life, and is in Hong Kong right now. 140ft of pure form, with the lines of a pedigree racer and the appetite of a supermodel on a diet. Breathtaking. Unique. Beautiful.

Adastral ("To the stars") comes from the drawing board of the legendary John Shuttleworth, and he is well pleased with the product. "I first drew this boat about 20 years ago," he told us, "and I've been trying to get her built ever since." Owners Antony and Elaine Marden shared the vision, and with a little help from renowned builders McConaghy International (in Zhuhai, China) and Jepsen Design (Hong Kong) a two-decade dream has become reality. She's a cruising boat – not any sort of a racer – but that doesn't mean she is slow. On the contrary, Adastral is specifically designed to be a fast cruising boat, and one that slips along with maximum efficiency and economy. Shuttleworth says that although almost everyone says she looks like a spaceship, "the irony is that spaceships don't – and never will – look like that because there is no air in space and hence no air resistance.

Adastral has an extremely small wetted surface area, and the absolutely top design priority was to minimize air drag."

Keep him talking, and he'll tell you about the challenge of balancing the design demands of the wave piercing hulls that give Adastral her efficiency with providing the luxurious interior accommodation expected on a world-class superyacht. "We had to substantially re-think the parameters of stability and sea-kindliness, and initial designs underwent extensive tank testing. Eventually we arrived at a formula with which we can specify almost everything from the optimum (ie safest and most comfortable) angle for driving the boat into heavy weather, to maximum efficient fuel loading for specified distances, and more." Adastral is believed to be the biggest motor trimaran ever built, and her sheer size generated many new challenges for the designers. Finite Element Analysis was used extensively to assess the effects of side slamming loads, wave impact and twisting effects on the structure supporting the outrigger floats.

McConaghy International were chosen as builders for a number of reasons – proximity to Hong Kong, where Adastral's owners live, and of course the yard's unrivalled experience with

PREVIOUS PAGE:  
Waiting for the off:  
Adastral is a leashed  
animal at the dock

OPPOSITE:  
Stairway to heaven

ABOVE:  
Double-decker. The  
helm station is in the  
pod above the saloon



and reputation for advanced composite construction. The superstructure of this minimum weight/maximum strength vessel is fabricated from carbon fibre on Nomex honeycomb core, and the hull is a glass/Kevlar sandwich encasing Corecell foam. The miserly weight allowance programme continues with the interior trim of oak veneer on honeycomb panels, and custom-built fittings ranging from lightweight hatches and portholes to carbon fibre ladders and toilets.

Managing Director Mark Evans acknowledges that “Adastra has been an awesome undertaking in both complexity and scale. There are many more electrical and mechanical systems in this boat than in the hi-tech racing yachts that McConaghys are famous for, and – quite literally – it’s the biggest boat we have ever built!” Especially challenging were the design-and-build programmes for a number of systems components such as the 700mm diameter carbon fibre drum for the bow anchor, which was built in situ, and the automatic feed flaking system that keeps the line tidy on the windlass (think of the back-and-forth mechanism on a fishing reel). The main anchor deploys from underneath the starboard wing, and necessitated the creation of a system in which a hatch opens to reveal an extendible roller over which the anchor can run – keeping the chain away from the paintwork. The front window-door is also a good deal more complicated than it looks. The window ‘pops’ out on a pantograph arrangement before it slides sideways, and closes with a pneumatic seal when shut. Down in the starboard float is one of the most ingenious systems of all – the auxiliary engine is connected to a split gear box, turning two belt drives through a magnetic clutch to a lay shaft, allowing power to go to either the prop shaft, or the generator... or both. All designed, engineered and built by McConaghy’s.

Naturally, the super-slim wave-piercing hulls potentially make for super-slim interiors. But Adastra’s hull flares sharply out from the waterline, allowing for substantial additional space in the suites and guest rooms. The main deck level has a beam of fully 30ft, plenty of space for a gloriously light, airy and expansive saloon with spectacular wrap-around panoramic windows, separate lounge and dining areas, and a navigation station. A door through the front window opens onto a generously proportioned sunbed on the foredeck, and sliding doors leading to the open aft deck give access to a sofa and bar area, and another dining space. That’s not all: there’s still room for a 16ft tender on the aft deck - and Adastra also carries another, 10ft, dinghy in the garage which opens out to a swim platform.

When Yachtstyle last visited Adastra during construction at McConaghy’s in Zhuhai, in 2011, the interiors were all ‘structural black.’ Now, the lights have been switched on, and all the interiors have come to life in shades of beige, cream and a whole palette of blues.

Noted Danish marine interior designer Inge Strompf-Jepsen and Peggy Fung, have created the most elegant accommodation for the owners and a maximum of seven guests. The full beam master suite is aft and accessed from the main deck saloon, with the guest suites and cabins forward of the engine compartment.

CLOCKWISE, FROM OPPOSITE TOP: A saloon just flooded with light; organic shapes, and not a straight line to be seen; indoor dining area continues with the flowing curves; main guest cabin; entrance to the saloon and bridge (up the steps) from the aft deck;



## TECH SPECS



<b>LOA</b>	139' 5" (42.5M)
<b>BEAM</b>	52' 6" (16M)
<b>DRAFT (RUDDER/HULL)</b>	5' 3"/3' 7" (1.6M/1.1M)
<b>DISPLACEMENT (MAX/LIGHT)</b>	84.9 TONS/54 TONS
<b>ENGINE (MAIN)</b>	1 X 1,150 CATERPILLER C18
<b>ENGINES (OUTRIGGERS)</b>	2 X 110HP YANMAR
<b>SPEED (MAX/CRUISE)</b>	22.5/17 KTS
<b>NAVAL ARCHITECT</b>	JOHN SHUTTLEWORTH
<b>INTERIOR DESIGN</b>	JEPSEN DESIGNS
<b>LIGHTING CONSULTANT</b>	MICHAEL HUGGINS
<b>TECHNOLOGY DESIGNER</b>	PALLADIUM TECHNOLOGIES

## THE DESIGNERS



INGE STROMPF-JEPSEN AND JOHN SHUTTLEWORTH

### THE NAVAL ARCHITECT

John Shuttleworth built his first boat when he was twelve, and since then has gained a reputation for designing fast and strong boats. He has a particular interest in aerodynamic efficiency, his successful racing multihulls are beautifully styled and streamlined,

and many have broken and still hold some of the toughest long distance ocean records. Now he is convinced that efficient, environmentally friendly boats such as Adastra are the future of power multihulls.

### THE INTERIOR DESIGNER

Inge Strompf-Jepsen boasts a portfolio that includes offices, residences, boats, and private clubs. She brings to all her projects a Danish sense of minimalism that shows a taste for simplicity rather than austerity. No doubt being a blue water sailor herself helps with an innate understanding of 'what works' afloat. Practicality above all - "we incorporated the saloon lighting into the headliner, the edge of which doubles as a grab rail." Looks and comfort follow on easily after that.

Blond wood and neutral tones are perfectly accented by darker coloured soft furnishings. "It's classic east-meets-west: clean Danish minimalism with antique Asian fabrics." The lines of the cabinet installations in the main saloon are standing waves, and tables and couches flow in delightful organic lines that reflect the egg-like shape of the interior. There's not a straight line in the place, and it feels marvellous. "We allowed the wonderful outside shape of Adastra to come inside... this was never going to be the standard 140ft box," says Strompf-Jepsen, whose versatility has been proven over and over again in projects both ashore and afloat. "I think of this boat as the ultimate exercise in space planning," she adds, "for example, the sweeping cabinet units on each side of the saloon not only provide storage and conceal the longitudinal structural beams of the boat, but - by virtue of their position - they also prevent anyone from bumping their head on the ceiling where it begins to swoop downwards."

Before Adastra was even launched, she was hailed as "the future of efficient long-range cruising," so how do the numbers stack up? The single 1,150hp Caterpillar C18 engine consumes a very frugal 31.7 gallons per hour when cruising at 17kts. With a fuel capacity of 8,435 gallons in double-bottom tanks, that gives the boat a range in excess of 4,000nm. (If you are concerned about being late at the next deserted anchorage, warp speed of

22.5kts is always available). Compare this with a 45m superyacht that visited Hong Kong recently - packing twin 1,055hp MTU engines and with 10,566 gallons in the tank, and the answer is that Adastra goes 'a long way, and fast.'

Up above the saloon is the bridge, or flight deck if you prefer, accessed by stairs from the aft deck. This is a unit in its own right, a pod elevated above the great arching sweep that connects the two sponsons, accessed by steps up from the aft deck. From up here the view and visibility are magnificent, with Captain and First Officer comfortably accommodated in Recaro seats and with a miniature version of the famous McConaghy's 'Y' spoke carbon wheel to point you where you want to go. Alternatively, the whole vessel can be controlled from an iPad through the Palladium 'iiCaptain' system. Direction, throttles and anchoring operations can all be accessed via a touch screen.

Taking this Royal Space Cruiser to the stars and beyond requires an integrated complex set of technologies. Four years ago, Mark Evans of McConaghy approached Mike Blake, President of Palladium Technologies, at a trade event in Amsterdam to assist with designing and providing the latest technology that would be the operational heart and nervous system of John's designs. "I thought he was kidding," said Mike, until he kept calling.

Mike and his engineering team took a step back, and

designed a system that is complementary to the hull design and electrical power generation and management, bridge navigation electronics, security, propulsion, AV entertainment, full automated controls throughout the yacht, including iiCaptain. iiCaptain, a custom Apple iPad application for Adastra, allows the owner to have a single wireless control for all three engines, anchor control (three very custom hidden systems), and more for his iPad. The real-time graphics actually depict waves of energy coming from each of the hulls, which is proportional to how fast the engines are turning. Not unlike the plasma drives on a Star Cruiser...

Says John Shuttleworth, "This boat takes the power trimaran concept further than has ever been attempted before. The challenge of turning the concept into a luxury yacht (forerunners in the large and long-range motor trimaran 'class' such as Earthrace and Cable and Wireless, were emphatically stripped-out race machines) was huge: it caused us to research and develop entirely new thinking on matters such as stability and comfort at sea for this kind of craft. What we have created is something entirely new, and I do believe that, yes, this could be an indication of the future of long-distance, fast, fuel efficient cruising." Captain, lay a course for the Riau Archipelago - the one in the Andromeda Galaxy. 🦋

OPPOSITE TOP:  
The long-distance  
cruiser is also a  
party boat