

Worth the wait

This cruiser from production moulds has one-off attention to detail, says Bob Ross

Week in, week out, every Friday the cruising husband and wife from Port Stephens would drive down to Cardiff to check on the progress of their new yacht with the builder.

They would discuss the fitout with Bluewater Cruising Yachts every step of the way, incorporating their own very special requirements and attention to detail.

So the boat became named Friday's Child, born from a process that took three years in planning and building. This Bluewater 450M is an eye-pleasing cruiser with a home away from home interior, some ingenious features, and she sails well.

The owners, after a year with a new production boat that had short-comings, looked at buying a secondhand Wayworld 45, a production boat of about 12 years back. They learned that BCY had the moulds. While they were happy with the hull design, they wanted the superstructure modernised to look "sporty" and they wanted a high-quality

fitout that suited their individual needs.

JF Arnott Design spent three months on the superstructure and styling, submitting about 20 drawings before the owners were satisfied with the basic look of the boat.

The key to the new look was the streamlined cored fibreglass targa top associated with a 50mm stainless-steel tube arch that carries the mainsheet traveller track across the top of the targa. The targa sits over the dodger of Strataglass clear vinyl, with a centre-opening panel, which protects the companionway and forward area of the cockpit.

A bimini top with two solar panels is supported by a pushpit arch of 50mm stainless-steel tube that incorporates two seats and davits for the tender. It can be linked to the targa by zip-in top and side clear panels for pilothouse-style protection from the sun and the elements with 1.95m of clearance from the cockpit floor.

There is just enough room to move

under the tender hoisted in the davits to the transom boarding steps and platform, where a shower with hot and cold water is available.

Big cockpit

The cockpit has seating for six to eight people on cushioned seats with good backrests along the high coamings. A partial bridgedeck, cut away at one side to facilitate quick access to the companionway, doubles as a handy seat under the dodger for the crew member tending the cabin-top winches and rope clutches, or keeping lookout.

Small lockers are installed port and starboard at the cockpit's forward edge to neatly stow the tails of halyard and other control lines leading back to banks of rope clutches and two Andersen 46 stainless-steel, self-tailing cabin-top winches, one of which is electric-powered. The primary winches are two electric Andersen 58 self-tailers.

The pedestal for the Edson steering



She remained well balanced and powerful in gusts of 15-17 knots.



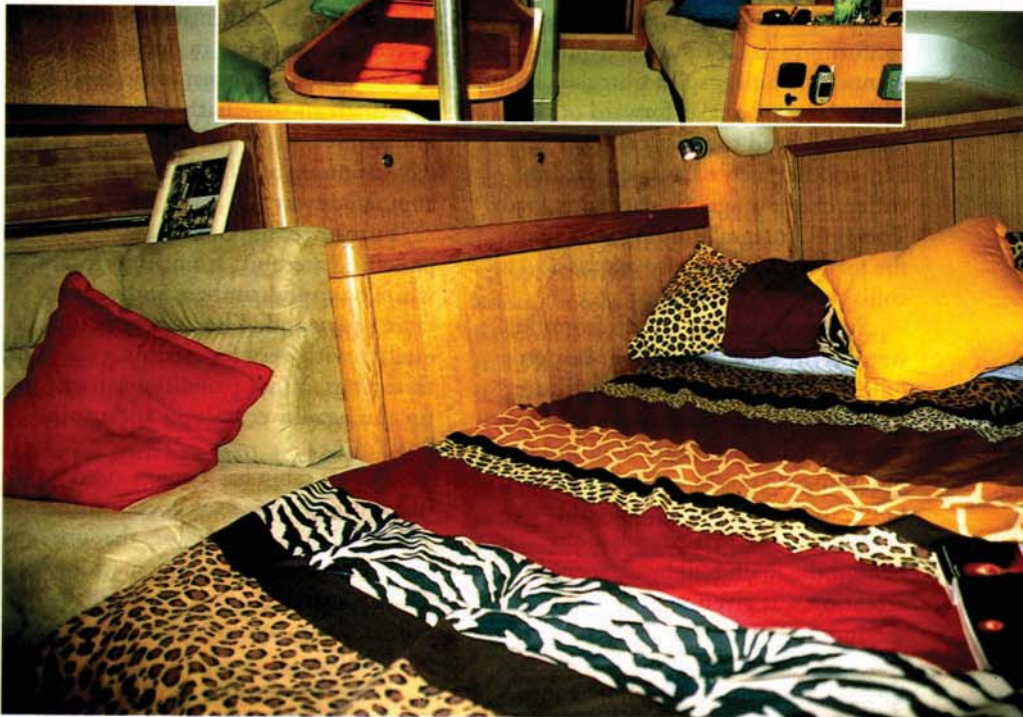
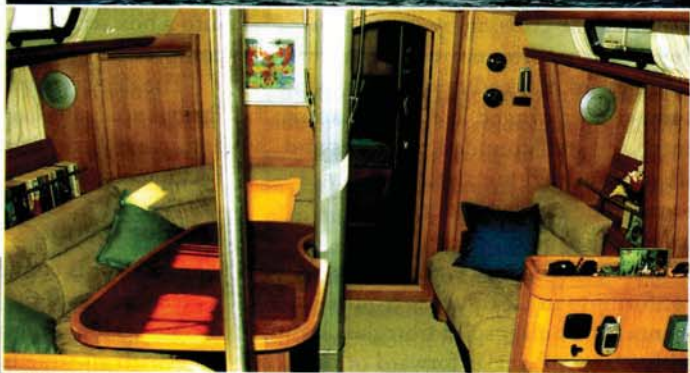
Big sail area on a tall rig gave good light-air performance.

system also carries a bank of instrumentation: chartplotter, radar, sonar, VHF radio, autopilot, B&G wind/speed/depth, anchor windlass control and chain counter and stereo music controls. A table with folding leaves swings from it.

Two cockpit lockers plus two under the helm seat provide stowage. A large locker in the foredeck, just aft of the anchor locker, also serves to stow mooring lines, fenders and the deck-wash unit.

Moving around the boat is easy with broad side decks, flat cabin top, stainless-steel grabrails, recessed hatches and the halyards and control lines leading aft from the mast out of the way through a garage top. The 50mm-high alloy toerail, besides enhancing crew safety, provides handy tie-off points.

The decks, cockpit floor and seat are covered with Flexiteek, a composite PVC-based product that looks like teak but requires little to no maintenance.



MIDDLE: Looking forward, dinette to port.

ABOVE: Owners' cabin aft has a queen-sized bed and two lounge seats.

New Boats: Bluewater 450M

Strong rig

The mast, by Allyacht Spars, is keel-stepped and strongly supported, with forward and aft lowers: cap shrouds and intermediates over two pairs of swept-back spreaders continuous to the deck and permanent backstay.

Friday's Child carries a 122-percent radial-cut genoa and a self-tacking staysail for stronger winds, both on furlers. Spectra running backstays are rigged to oppose the inner forestay when the staysail is in use. The radial-cut main can be electrically reefed to any size with a Leisurefurl boom system. Sails are by Hood.

The pole for the MPS stows on the mast and the MPS halyard winch is on the mast.

Hull design and construction

The hull, originally designed by Ron Holland for ocean racing, was modified for cruising by Australian Peter Cole to offer more internal volume and reduced draught by using a low-aspect winged keel. It has a fine entry and well-rounded midships and aft sections that are also relatively broad. The rudder is a counter-balanced spade type.

The construction is quite massive, conforming to USL survey requirements. The hull is solid fibreglass layup with a layer of Kevlar forward of the main bulkhead to resist collision damage. Balsa core has been used to stiffen the bow against slamming loads. The 350L integral holding tank under the forward V-berth also acts as a collision void.

Stringers run full length from the stern to the bow. Every floor bearer, bulkhead, chainplate knee, furniture structure and the mast step and engine mount are bonded to the hull and deck mouldings to create a strong honeycomb structure.

Because the mast stands alone, behind the main bulkhead, special attention was given to the structure around it. The chainplates attach with stainless-steel straps to solid fibreglass knees, 25mm thick, which lock into the full-length stringers. The mast step of 25mm anodised alloy is bolted to the floor bearers, which are formed

RIGHT: Targa and bimini top can be linked by zip-in panels for a pilothouse effect



LEFT: Mainsheet trimmer can sit on the bridgedeck.

into a box section for maximum compressive strength.

The deck is foam-cored. All deck fittings are under laid by solid fibreglass and in high load areas have large backing plates.

Interior layout

The interior is conventional in layout with some ingenuity in detail. It has an owners' cabin aft, guest cabin forward, both with en-suite bathrooms, saloon lounge area, L-shaped galley and navigation station flanking the companionway.

Furniture, bulkheads and panelling are built from American white oak solid timbers and veneers facing plywood. The joinery is top quality with very few visible fastenings. Vinyl panelling is used for the headliner, saloon and cabin hull lining.

The aft cabin has a queen-sized island bed, lounge seats in each corner and hanging lockers so deep that one of them also houses a washing machine. There's a small dressing table with mirror, six storage lockers and bookshelves.

The aft bathroom is reached via doors from both the aft cabin and the saloon. It has an electric toilet, vanity with Corian top, moulded hand basin,

cupboards overhead and underneath and built-in mirrors. It has a separate shower tap and head and a Mylar shower curtain on a circular track. You pull the shower curtain around the body to act as a shower stall, keeping the rest of the bathroom dry.

The galley has a Corian bench top, Broadwater LPG stove/oven/griller, microwave, twin deep-bowl stainless-steel sinks with covers, front-opening fridge and top-opening (minus 13°) freezer and plenty of storage for plates, utensils and food.

The navigation station opposite has a half-sized chart table with a hinged lid to which is attached a computer keyboard. A small printer slides out of the chart table and underneath are two filing cabinet drawers for the manuals. The seat is big enough for two people. Surrounding the station are instrument repeaters and screens, radios, autopilot, tank gauges and circuit board.

The saloon to port has a U-shaped dinette, remarkable for the quality of its mirror-finished bookmatched veneer table.

Unusually to starboard, instead of a settee are twin armchairs separated by a small table, which has controls for the stereo and a bookshelf behind. The armchairs are well positioned for watching the flat-screen television

screen built into the cupboard aft of the dinette opposite.

The guest cabin forward has an en suite toilet/shower compartment, similar in fitout to the aft one with the wrap-around shower curtain but with a manual toilet.

The cabin, besides a double berth, hanging locker and six overhead lockers, has upper and lower bunks opposite the en-suite, so it could sleep four at a pinch or, by lowering the top bunk to form a settee, create a commodious private cabin for two.

In an interesting belt-and-braces safety measure, Bluewater has built the door to the forward cabin so that in the event of serious damage forward, the whole area would serve as a collision bulkhead. The door is balsa-cored and mounted on special hinges, so water pressure would force it shut tightly against surrounding rubber seals.

Water supply

Friday's Child can carry 1100 litres of water, in two integral tanks built within the fibreglass structural floors (650 litres) and two stainless-steel tanks (450 litres) under the saloon seating.

The integral tanks can be filled using built-in deck drains, which can be diverted to send water overboard or into the tanks. As Friday's Child lives on a mooring, once the decks have been cleaned rainwater can be funnelled into the fibreglass tanks below. "It's fantastic," said one of the owners. "Since we've had the boat (June 2005) apart from the initial fill-up we haven't had to put any water in."

Another plumbing feature is having the engine water pump available to pump the bilge if necessary, supplementing the two electric and one manual bilge pumps. The 50L hot-water service can be heated by the main engine, genset inverter or shore power.

Ventilation and lighting

Cross-flow ventilation is provided by eight cabin side ports, two large opening hull ports and two cockpit hatches. Flow-through ventilation is achieved by seven deck hatches and two more cockpit ports.

Friday's Child has 50 separate lights

SPECIFICATIONS	
Length overall	13.725m
Waterline length	12.20m
Beam	4.20m
Draught	1.90m
Displacement	14,170kg
Ballast	4820kg
Sail area	
Main	41.3sqm
#2 Genoa	64sqm
Sail area/displacement	.17
Displacement/length ratio	.218
Ballast/displacement ratio	.34 percent
Estimated angle of vanishing positive stability	approx 120° half-loaded.
Engine	.75hp Yanmar
Water	1100L
Fuel	560L
Price	\$1.2 million approx.
Design	Ron Holland, Peter Cole.
Builder	Bluewater Cruising Yachts Pty Ltd, 39B Munibung Rd, Cardiff, NSW 2285, ph (02) 4956 8522, fx (02) 4956 8524, email david@bwcy.com.au, website www.bwcy.com.au



catering for all needs from reading below to night-vision cockpit and deck lights. She has four 240V double power points and six 12V outlets throughout the yacht.

Let's go sailing

The opportunity to sail Friday's Child came while the boat was in Sydney to be judged for the Australian Marine Industries Federation Boat of the Year awards, where it won a commendation. We motored out of the CYCA marina at Rushcutters Bay doing 7.25 knots at 2500 revs cruising speed.

The engine is a Yanmar 75hp diesel shaft-drive coupled to a 508mm-diameter Seahawk feathering three-blade propeller. Top speed is 9.3 knots. She has a range of 1000nm at 6.5 knots with her 560L fuel capacity in four stainless-steel tanks.

The husband and wife owners did all the crew work after we raised sail in a patchy light-moderate westerly. She shot the mainsail up with the electric halyard winch and then ran the mainsheet. He unfurled the genoa and trimmed it, also with little sweat, thanks to the electric self-tailers.

The boat was pleasant to steer, responsive to puffs and with good

acceleration out of tacks even in the low side of the wind range, on the day down to under four knots, up to 15-17 knots in the gusts. She spreads a generous sail plan on her 19.4m-tall mast.

She was well balanced – easy to keep on track through the gusts. The steering system, an Edson CD-I pushrod, would have helped but the hull shape was the main contributor. Angled footrests are well positioned for the helmsman when the boat is heeled.

Upwind, we were doing 5.75 knots in 7.4 knots of true wind speed at 28° apparent wind angle; 7.48 knots in 11 knots; 7.66 in 13 knots of true wind. Reaching, the numbers were 7.66 knots in 13 knots; 8.10 in 15 knots and 8.35 in 17 knots.

These numbers suggest that the boat could be a good club racer as well as a cruiser. The owners may consider racing although for now their preference is coastal cruising and later possibly over more distant horizons.

Bob Ross, the founding editor of *Australian Sailing* magazine, is a features writer for the Yaffa Marine Group.

