

Archambault A40rc – a French IRC flyer

Australian Yachting's editor, Barry Henson, took the Archambault A40rc, a purpose-built IRC racer, for a test sail on a blustery winter afternoon. Hold on to your hats...



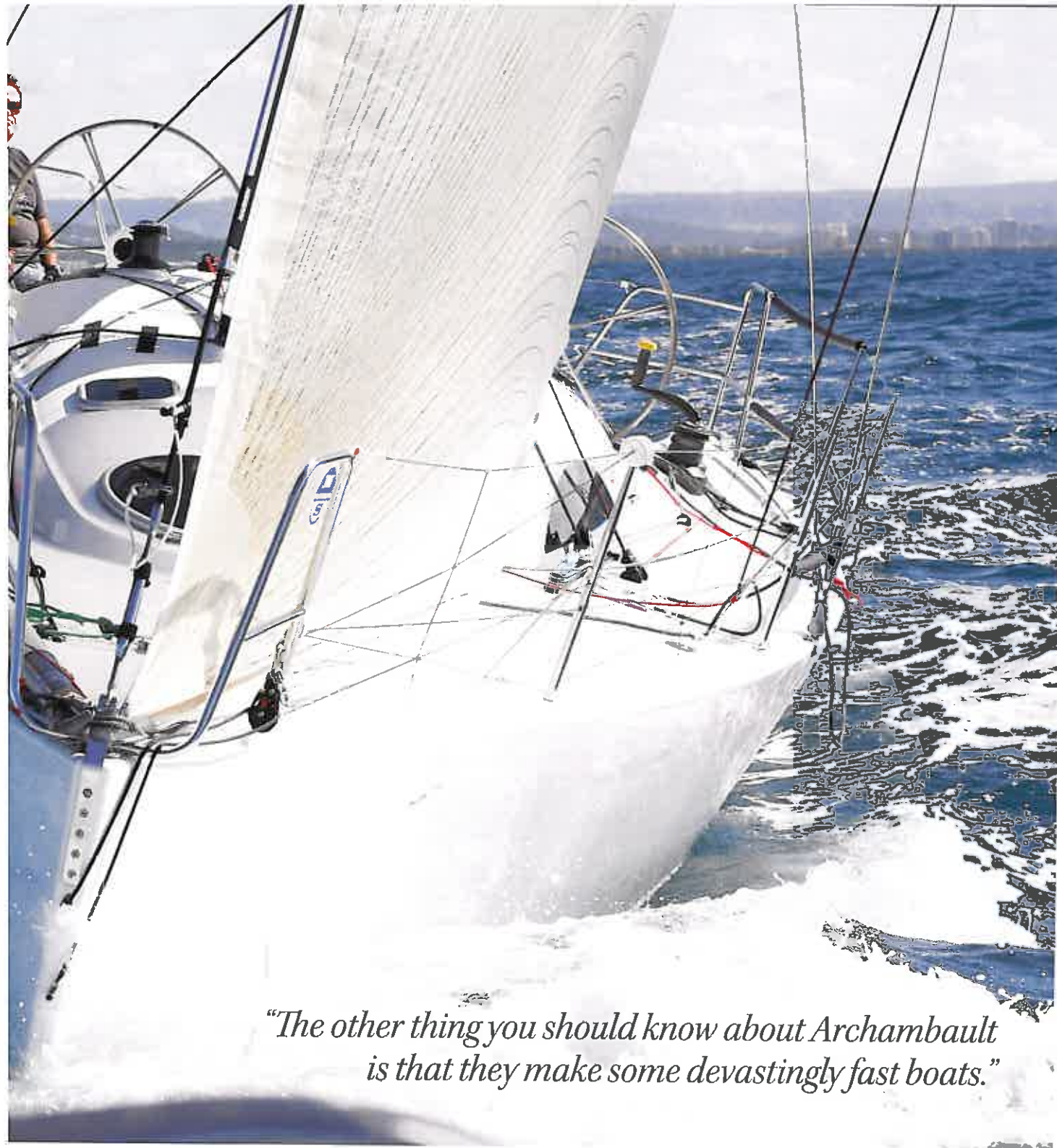
YOU HAVE TO hand it to the French. The things they do well, they do very well. For example, they make the world's best pastries, and French cuisine? Well, let's just say it makes a meat pie and chips look pretty ordinary. The French have also excelled at sailing. They've also produced some of the world's best solo sailors and – they make some extraordinarily good boats.

Archambault is a small French yacht builder with only 36 employees. Compared to Amel, Beneteau or Jeanneau (a part of the Beneteau group), Archambault is a boutique firm, small enough that its owner walks around the factory each morning and personally

welcomes each and every craftsman. The other thing you should know about Archambault is that they make some devastatingly fast boats. Their A35 has of tremendous race record in IRC regattas around the world. Would the A40rc live up to this reputation? I took the A40rc for a test sail on a blustery winter afternoon to find out.

First impressions

The first thing that strikes you as you walk up to this boat is how large and open the cockpit area is; fully a third of the boat's length is dedicated to the working cockpit. With an open stern,



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a large cockpit, dual wheel steering and a nearly plumb bow, there is little doubt that this boat is designed to race.

The design criteria

The Archambault A40rc is designed by the design team Jouvvert and Nivelt as an IRC regatta racer. There is a reference in the marketing literature about the A40rc being a 'racer/cruiser' but there's no doubt about this being anything but a race boat. Any mention of this boat as a racer/cruiser has no doubt come from the marketing director rather than the boat designer. Having said that, it does have a reasonable level of amenities

and, yes, you could spend a weekend on it, but why would you bother when there are all those meat trays to win?

The IRC

You can't really talk about the Archambault A40rc without talking about the IRC. Why? Because the Archambault 40, like her predecessors, is designed to optimise performance under IRC rules. For example, the boat we tested uses a conventional lead keel with a splay at the bottom that's designed to give maximum weight down low without attracting the penalty the IRC places on bulb keels. What Archambault is after is an

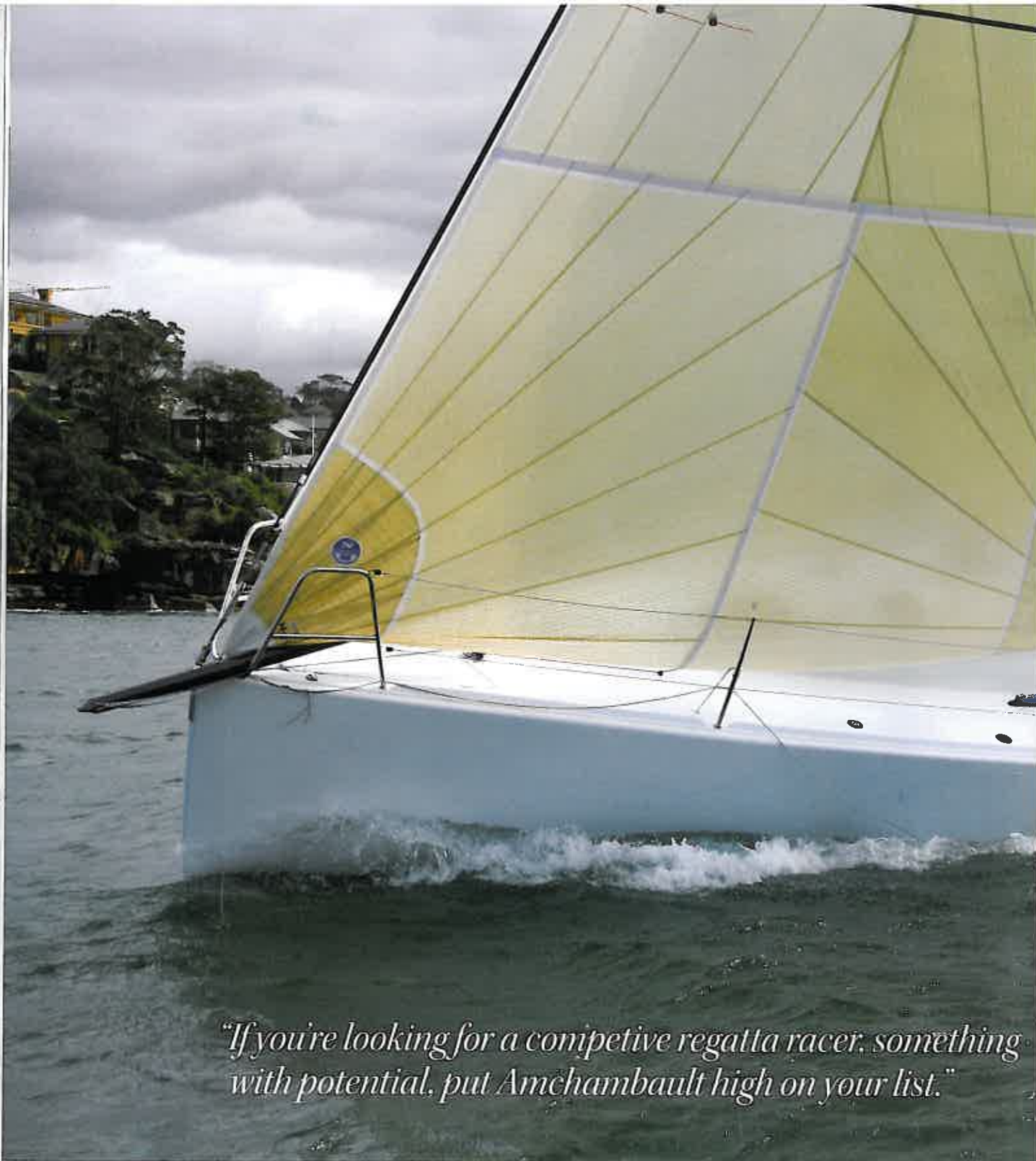
optimum mix of performance versus penalty and as you walk through this boat each aspect of its design reflects this balance. This level of focus has delivered an impressive string of race wins: *Allegría* (an A40rc) is currently leading in the Audi 2009 IRC Australian Championships. She was first in the Sydney Harbour regatta, 1st in Geelong and 6th in Southport (after a protest).

On deck

Moving from the open stern forward, the A40rc has a standard Navtec hydraulic backstay adjuster, with a remote control placed within easy reach

ABOVE: The A40rc has a string of firsts in her division in the IRC Australian Championships.

OPPOSITE PAGE: A stiff boat, the A40rc has a 48.5% ballast to displacement ratio.



"If you're looking for a competitive regatta racer, something with potential, put Amchambault high on your list."

of the main sheet trimmer. As an option you can have a second remote control (one on port and one on starboard). This is a nice feature that allows the mainsheet trimmer to easily adjust backstay tension, flattening or inducing fullness into the main; it's a design that makes good sail trim easy.

There is a large under-deck locker aft that provides easy access to the auto-pilot and steering quadrant as well as providing storage for sails. There are port and starboard titanium steering wheels

with the engine controls to starboard. The moulded steering columns are tilted to allow the helmsman to stand or sit on the coaming, equally comfortably.

Forward of the steering station is a deck-level traveller; the main sheet is trimmed via Lewmar 48s stationed to either side. The station for the mainsheet trimmer is an excellent example of good design (see pic). The trimmer sits up on the coaming, supported by an adjustable foot rest. To the trimmer's right is the traveler sheet, to their left are a mainsheet winch

and the hydraulic backstay adjuster—everything they need to trim the main—al within each reach. That, ladies and gentlemen, is intelligent design.

Moving forward there is a pair of Lewmar 50s for the genoa sheets. All remaining lines run across the cabin top through Spinlock jammers to a pair of Lewmar 46s.

The rig (mast and boom) is available in alloy or carbon fibre. There is a slight penalty for carbon fibre under the IRC rules. The boat we tested has an alloy



And down below

One of the nice things about the IRC rules is that they don't penalise you for having a reasonably comfortable interior. Compared to some race boats with Spartan interiors that look more like the inside of a jail cell than a boat, the A40rc delivers a comfortable fit-out with wood cabinets and trim and upholstered settees. There are port and starboard aft cabins. These are generous single berths or what I like to call 'one and a half' berths. The boat we tested had optional pipe berths fitted in the aft cabins in a bunk bed fashion.

Engine access is excellent via a combination of lifting companionway steps and removable panels in either aft cabin. Every thing you need to access, from batteries to belts to filters, is within easy reach.

MAIN IMAGE: With a ballast to displacement ratio of 48% this boat is stiff.

FAR ABOVE: The main sheet trimmer has the traveler, mainsheet and backstay adjuster all within each reach.

ABOVE: The aft deck locker gives you easy access to the autopilot and the steering quadrant.

rig with the optional B&G 3000 instrument package. Our running rigging had additionally been upgraded to the 'race pack' which includes a high tech mix of Dyneema, Vectran and Technora sheets and halyards, a Spectra spinnaker pole and Ronstan race-quality fittings.

The twin track aluminium forestay extrusion is standard. Carbon fibre is available as an option. Again, the IRC rating rules come into play here.

There is a decently-sized anchor locker with an anchor and rode, but

the boat we tested had neither forward cleats, nor fairleads nor a bow roller, which were surprising omissions on a boat of this standard. Reading between the lines, Newcastle Yachting has added the minimum anchor package to meet Australian standards as anything else would add 'wait', a notorious four-letter word sailors hate. There are so many things to like about the A40rc, but I would definitely want to see the anchoring package beefed up.



"Keeping in mind this is a French boat, the dining table has built-in storage for wine."

There is a forward facing nav station to starboard and a comfortably sized galley to port. The nav station has a plexi-glass panel incorporated into the nav table to accommodate your laptop. The galley has a two burner stove and oven, a refrigerator, a stainless steel sink, pressurised cold water and plenty of storage. The galley has everything you need and nothing you don't, and it's well done.

Headroom in the main cabin is 6'3", aided in part by the lack of a headliner. Instead Archambault has brought the bolts for deck hardware through the ceiling and covered them with white end-caps. It's not the Ritz, but it's functional and if you've ever changed a deck fitting, you'll appreciate the ease of access.

Moving forward in the main cabin there are bench settees to either side with a dining table with folding leaves in the middle. Keeping in mind this is a French boat, the dining table has built-in storage for wine, as you do.

Lifting up the floorboards I was pleasantly surprised to see a latitudinal and longitudinal matrix of beams glassed in to stiffen the hull, which is made from vacuum-bagged Vinylester. Archambault has put an impressive level of thought into this boat. For example, throughout the aforementioned matrix of beams they've incorporated a number of PVC pipe runs to make future wire or hose runs associated with upgrades a piece of cake.



Forward to starboard is a well-designed head with typical French design flair. The A40rc has a sewage sanitising system, hand held shower and sump. Forward to port is a double V-berth with plenty of space for the lucky couple.

So how does she sail?

We went out in a strong southerly breeze, 23-27 knots, with a full suit of sails. That was silly, I hear you say. "Yes" I reply "that was silly". The problem was that this was a demonstration boat and its only sails consisted of a main and 110% genoa. Luckily, we got some protection from the headlands around Middle Harbour, so while it was wild and woolly, we're still here to talk about it.

The first thing that strikes you about the A40rc is how responsive and well balanced she is. With a large blade rudder on a stainless steel rudder stock (carbon available as an option) this boat turns on a ten cent piece.

The A40rc is also surprisingly stiff. With gusts up to 27 knots I was surprised that she wasn't on her ear. This is largely due to two factors: she has a ballast to displacement ratio of 48.5%, which is quite high, and her hull has a fairly hard turn at the bilge and her sides flair outward, providing a lot of bouyancy outboard.

We hit speeds of 8+ knots fairly consistently and she performed well.





It would have been great to sail this boat in a 15 knot breeze, but unfortunately the weather gods didn't cooperate. Even with the adverse conditions, she performed well on all points of sail and showed exceptional qualities.

In conclusion

The A40rc is an exceptionally quick boat. She's intelligently designed, well built and she performs well. The base boat is only \$385,000. The boat we tested had a few extras, such as the carbon fibre rudder and rudder stock, the upgraded running rigging and the B&G instruments. As tested, the price is \$485,000.

In close contention for the IRC Australian Championships, the A40rc has well and truly established itself as the boat to beat. So if you're looking for a competitive regatta racer, something with potential, put Archambault high on your list. **M**

OPPOSITE PAGE COUNTER-CLOCKWISE FROM TOP CENTRE
The nav station is forward facing and functional.

The salon has two settees, a dining table and, of course, wine storage.

The galley is well equipped with everything you need and nothing you don't.

The engine access is very good. Not only can you access the engine from the front, but you can remove side panels in either aft cabin for further access.

Archambault A40rc Specifications

LOA	11.95m
Beam	3.75m
Draft	2.47m
Displacement	6400kg
Ballast	3100kg
Sail area (main + head)	91m ²

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