

# BREEZE

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**Words and Pictures By Ivor Wilkins**

**New Zealand's international offshore yachting success was built on the back of nuggety boats in the mid-30ft range, often sailed by barefoot crewmen with only cold tucker and thoughts of beer at the aftermatch function for comfort.**

The premier example remains the homebuilt Sparkman & Stephens One Tonner, *Rainbow II*, which Chris Bouzaid skippered to victory in 1969 against the cream of the European fleet. After 45 years of foreign ownership in Bermuda, *Rainbow II* has been bought back by Bouzaid and returned to New Zealand.

It will be restored and then go on public display to enjoy a well-earned place among the early crusaders that took New Zealand sailing to world prominence.

Designer Greg Elliott is part of the next generation. He grew up on tales of guts and glory a la *Rainbow II* and fashioned his own career with a line of yachts more inclined towards fast ocean passage-making than the whims of rating rules. Something of a rebel with a cause, although it should be noted he found his share of success within the confines of various rules as well.

Now he has returned to that mid-30s area again with a new *Crusader*, a 35ft all-carbon machine, stripped right back to the barest of high-tech essentials and straining to be unleashed. It is a boat that has Elliott

smiling again and full of enthusiasm after a period marked by personal tragedy and the unfathomable machinations of Olympic equipment selection.

Although *Rainbow II* is a foot longer overall, it looks tiny against the wedged brawn of *Crusader* with its towering rig and wide open cockpit.

The commission came from a South Island yachtsman wanting to move up from the highly competitive Young 88 class – where Elliott cut his boatbuilding teeth 30 years ago. “He had been sailing with a group of younger guys from the Royal New Zealand Yacht Squadron's Youth Training Programme,” says Elliott.

“He was keen to put together a programme to do some coastal offshore racing. He still has a number of round-the-buoys events in mind, but the emphasis would be towards coastal and offshore racing.”



Modern CRUSADER





Elliott's portfolio has a lot of boats with this kind of emphasis. More recent examples include *Mari Cha IV* (42m), *Maximus* (30m) down to the highly successful little canting keeler, *Overload* (9m).

One of the elements that delights Elliott about the *Crusader* project is its lack of ambiguity. It is unequivocal in its purpose. "Twenty years ago you couldn't just build a race boat," says Elliott. "It would have to be a cruiser-racer, or a racer-cruiser. Now there is a more genuine split. This is a race boat."

It represents a bold step for an owner relatively new to sailing. "I feel it suited us nicely in terms of size and budget. It is a step up from what we have been sailing before, but it is not an enormous leap," says the owner, who does not wish to be named.

Elliott has worked hard to simplify the systems, feel and handling of the boat precisely so that owners can make the transition from conventional club racers without too much difficulty. His 9m *Overload* has been a stunning performer, but he says requires a high level of skill to handle. This is a less intimidating proposition.

The pursuit of stability has seen some extreme hull forms, but Elliott has opted to go down a simpler path. Ultra-wide,

hard-chine hull shapes with twin rudders generate plenty of reaching power, but suffer in light wind and quick-fire tacks and gybes.

Instead, Elliott has gone for a canting keel, single forward canard and single rudder. The hull shape features a moderate waterline beam with smooth flare to the topsides to maximize crew weight and stacked sails.

"With a canting keel, you really don't need quite so much form stability," says Elliott. "The problem with form stability is that you increase the wetted surface dramatically and you can't get rid of it when the wind drops."

Elliott says in flat water, *Crusader* is going upwind at just under 8 knots at racing angles of 30-32° true. "That is faster than 35-footers should go upwind," he grins, adding that if you apply the standard displacement formula for a boat of this size, the answer comes out at less than 8 knots. "We are on or exceeding displacement speed all the time going upwind.

"Crack off 1° and the speed jumps to 9 knots. With the short of amount of sailing we have done so far, we are hitting VPP targets easily and equaling windspeed with sails eased."

Off the wind, the sailplan is turbo-

charged by means of a retractable prod that looks long enough to cross the finish line five minutes before the rest of the boat. "It's only 3m," retorts Elliott, who points out that for IRC racing crews can opt for a shorter prod.

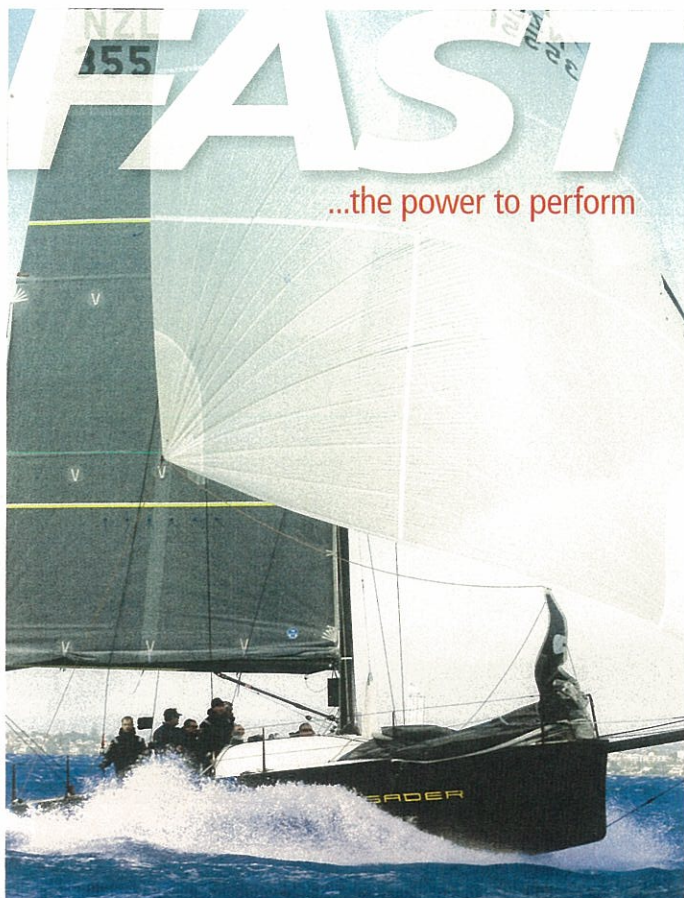
The canting keel is electric/hydraulic with the 2.7m strut and bulb able to swing out 45° either side. A simple three button control set on each side of the cockpit operates the keel, which can swing through 90° in 10 seconds.

The reason for the electric/hydraulic system was to avoid running the Yanmar engine. A gel battery system offers 200 amp/hours and in their first harbour race, with plenty of tacks and gybes, the keel consumed half that. (On that maiden outing, *Crusader* finished 2<sup>nd</sup> on line in the entire fleet beating all but one of the 50-footers around the track.)

Built by Salthouse Boatbuilders to a very high standard, *Crusader* is marketed as an Elliott 35SS – SS standing for SuperSport. Construction is all carbon over foam cores. Composite laminate design was undertaken by Giovanni Belgrano and his Pure Design and Engineering Group and exceeds ISO Category A and ISAF Category 1 regulations.

First impressions at the dock are of an





FOR THE RECORD

**10hr02:51**

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extremely clean, sculpted look, with a wide shallow cockpit and minimal clutter. The deck is lightly cambered to shrug off water and the small domed cabintop will provide some protection above decks and more volume below.

The Hall Spars carbon rig features double spreaders swept back with a single runner/checkstay, which is not required for tacking or gybing. For easy transportation, the two-piece rig can be broken down to fit into a 40ft open-top container, along with the yacht placed on edge with the keel removed. Standing rigging is Hall Spars' new SCR Airfoil technology, which resembles fettucine ribbon and is claimed to reduce windage by 50% over standard products.

The North Sails 3Di race wardrobe was designed by Gautier Sergeant, who designed for Groupama's victorious Volvo Ocean Race campaign and utilized similar concepts for this boat. Grunt comes via a Harken deck gear package comprising six top-handle cockpit winches and two cabintop winches.

The boat is intended for anything from short-handed racing to 5-6 crew for offshore events and 7-8 for round the cans.

They will find shelter but not much comfort below. The ethos is similar to the spartan barefoot days of the *Rainbow II* generation. The interior is unpainted carbon, with pipe berths under the cockpit side decks on either side. No glamour even for the navigator, whose Brookes & Gatehouse empire is a minimal panel on the portside, opposite the vestigial 'galley'. A toilet is provided in the forepeak.

If the facilities might dismay the human rights brigade, it at least offers standing headroom in the middle and the ring-frame bulkheads keep the whole structure open and spacious for the size of boat.

The engineering and detailing is impressive, with everything pared back but highly functional.

In a sense, this has brought Elliott back to his roots: fast, fun boats for exhilarating passagemaking, engineered to stand up to the demands, but otherwise free from the politics of international bureaucrats.

He is attracted to the concept of racing in size bands and approves of the fact that New Zealand's premier offshore race, the 120-mile Coastal Classic, sets records for monohulls under 30ft, under 35ft, under 40ft and over 40ft.

In 2009, his 9m *Overload* design captured the record for the under 30ft length and, incidentally, bettered the times for the next two size categories as well. This year, *Crusader* followed suit by lowering the 35ft mark that has stood for 16 years.

The owner is delighted and immediately felt comfortable handling the step up from his previous boat. "*Crusader* feels a lot bigger than 35ft. The speed is sensational and I can definitely say it has surpassed all our expectations right out of the box. Greg had this concept of fast and fun to sail and it provides all of that at a size and budget that is not exorbitant."

Following the Coastal Classic, plans include a full-on offshore experience with the Transpac Race from Los Angeles to Hawaii next July.