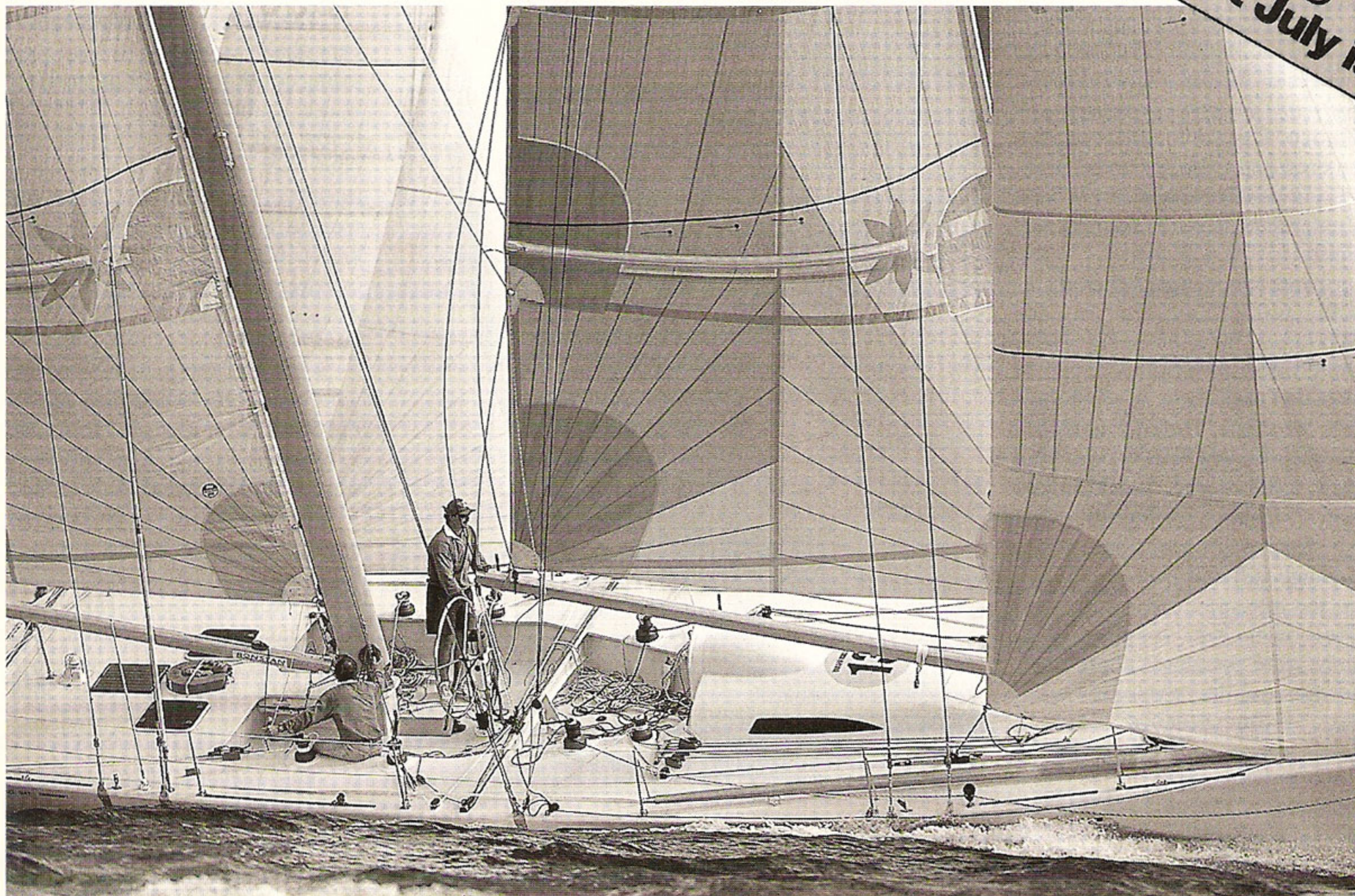


YAMAHA OSAKA CUP

Stop Press:
Wild Thing Wins
Full report July issue



gun to a fist fight

**Greg Elliott dropped
a vastly different
machine into the
Melbourne-Osaka race fleet.**

By Bob Ross

THE MELBOURNE-OSAKA double-handed race for the Yamaha Osaka Cup, conducted every four years, has from its inception encouraged interesting yacht designs and gear-handling ideas.

Some followers of short-handed sailing have been critical of its class parameters as being out of step with other short-handed events in

**Elliott Marine powering
away from the Portsea
start. Her gear is easy
to handle on long hauls
(Jun Arata/Kazi).**

Europe and the BOC Challenge around-the-world race.

But the class limits and the racing without handicap concept, followed since the inception of the race in 1987 by the Nippon Ocean Racing Club, have encouraged some comfortable and fast moderately-sized passage makers, built and campaigned at reasonable cost.

The fleet — 29 starters this year — is divided into racing and cruising divisions. Within each division are three classes: Class A: yachts

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of more than 14m to 16m length overall; Class B, 12m to 14m; Class C, 10m to 12m.

Keen competition shaped among the biggest boats with the winner of the two previous races, *Network Resort Nansei/Nakiri* Kaoru Ogimi's *Daio*, again entered and expected to be highly competitive, crewed by New Zealanders Ross Field and Jeff Scott.

Field was rolling on from his win with *Yamaha* in the Whitbread 60 class of the 1993-94 Whitbread around-the-world race and with Scott, his first mate off *Yamaha*, looked strongly competitive on *Nakiri Daio*. But they were doubly handicapped before leaving Melbourne: first by starting 42 hours late while damage suffered from a roll-over on the passage from Auckland to Melbourne was repaired. And they were penalised eight hours for missing the "exhibition race" leg, from Station Pier to Blairgowrie in Port Phillip on May 25 before start of the 5500n mile leg to Osaka from Portsea the following day.

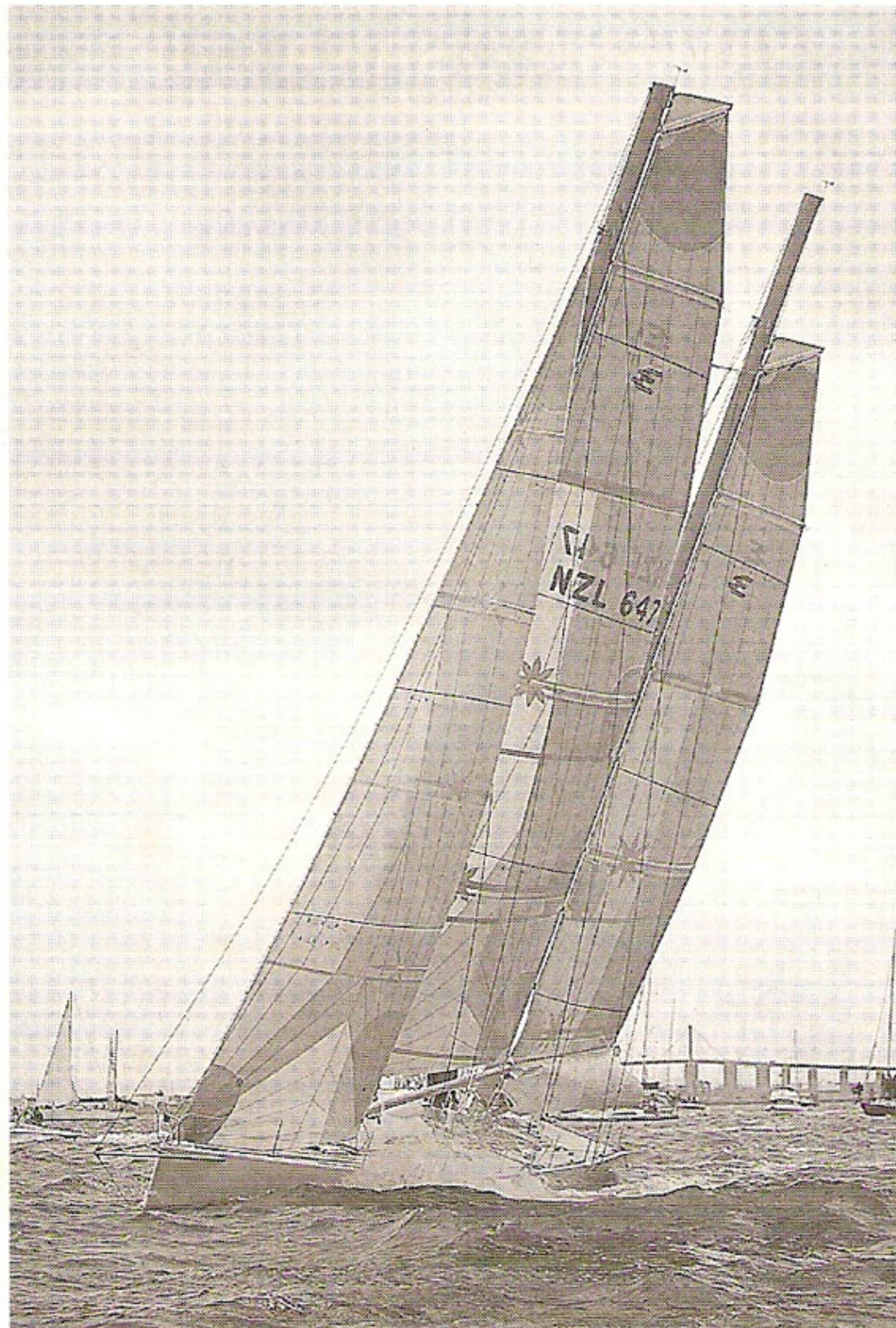
But by April 7, they had moved through the fleet to hold third place, 284n miles behind the leader, the 16m schooner *Elliott Marine*.

Ogimi, who with Warwick Tompkins won the first Melbourne-Osaka with the Farr design Tompkins modified for the race, had sent the boat to Auckland for a refit, mainly to have the engine position and propulsion method changed. In the 1987 race, *Nakiri Daio* utilised a retractable bow-thruster, with hydraulic drive, for the 65hp Yanmar diesel engine. In the 1991 race, *Nakiri Daio*, raced by Field and Hideo Sugai, had to survive a protest over that arrangement.

The sail plan was modified to include new asymmetric gennakers and have a little more roach put into the mainsail. "The speed potential is markedly improved over the '91 configuration," Ogimi said before the start.

Nakiri Daio needed all that extra speed to overcome the self-imposed handicap. Field explained that on the voyage across the Tasman, the keel/hull join had become unstable and *Nakiri Daio* had been motoring without sail into a sou'-wester of 55 knots.

In shallow water, nearing Wilsons Promontory, the boat was overwhelmed by a huge breaking wave which caught it on the starboard side. "We got to about 50 miles east of Wilsons Promontory and got into winds of up to



ABOVE: Mainsail reefed down on *Elliott Marine* for the windy Port Melbourne to Blairgowrie leg (Arata/Kazi).

OPPOSITE PAGE
ABOVE: Fast Forward at the Portsea start. She built up a long lead in Racing B for Simon Kellett and Ian Rushton (Arata Kazi).

65 knots and we just had to close it down because the waves were very close together," Field said.

"The waves were very steep ... very shallow water. The boat was riding it out well until a breaking wave came through. I dived below and told Scotty to hold on. And over we went. It was just a massive knockdown. Whether we did a 180 or a 360, I don't know. But I remember standing on the cabin roof inside. She wasn't that quick in coming back up. We took a lot of water."

Soon after the knockdown, the wind abated to 40 and then 25-30. Field and Scott managed to motor to Wilsons Promontory and then were able to sail on to Port Phillip.

The hull had to be trucked to boatbuilder Mal Hart's shed in Mornington to have three broken and cracked frames repaired. The mast, fabricated from fore and aft sections riveted together and with separate upper and lower sections, was twisted and had to be repaired.

Sharp but short-lived southerly fronts were moving through Bass

Strait at the time of the main start, from Portsea on Sunday, March 26. The fleet shot away on one which died on Monday. *Nakiri Daio*, which started at 9am on March 28, was pushed out of Bass Strait and was chasing hard on another, late Tuesday.

Schooner early leader

Leader from the start to the half-way point was the 16m schooner *Elliott Marine*, a truly radical craft from the innovative Auckland designer Greg Elliott who, with co-owner Brian Petersen, was crewing the boat.

The third owner is long-time New Zealand offshore stalwart Tom McCall, who was shore manager for the Melbourne-Osaka campaign. The boat was inspired by an on-the-rail conversation between McCall and Elliott during an Auckland-Fukuoka race on the need for a passage racer aimed at pure speed for line honors and breaking records rather than handicap wins.

It carries a pair of rotating carbon fibre masts, with the main mast much more obviously raked than the fore mast, supported by Kevlar rigging. The masts have supporting diamonds and jumper stays but no spreaders.

The deckline is extremely wide, mainly to provide a workable shroud base, while the waterline beam is deceptively narrow. Both travellers span the deck. A trimming fin, of high



aspect, is located ahead of the foremast.

Freeboard is low and the accommodation is minimal — so much so that the boat cannot qualify for an International Measurement System certificate. The boat is obviously extremely light; at Victoria Dock, Melbourne, it heeled readily to gusts with the airfoil-shaped masts generating force enough to make it want to sail free from the restraining mooring lines.

It's probably a good deal lighter than the

BELOW: The fleet assembles in Victoria Dock, Port of Melbourne. A "Seafood Harvest" at the dock on the weekend before the start drew big crowds. It was the central feature of a number of Japan/Australia festivities associated with the Melbourne start (Arata/Kazi).



seven tonnes Greg Elliott will admit to. The hull is just a shade under 16m overall, is 4.5m wide and draws 4m.

Elliott explains the concept: "I have designed quite a few boats and a lot of other designers around the world have all started off with this theme where you put a whole lot of sail on and oppose the sail area with more ballast or water ballast or something like that.

"I thought I would do it a bit more efficiently and try and reduce the drag instead of increasing the power. The whole boat is a drag-reduction exercise in relation to a monohull.

"It's not a very wide boat; medium beam but certainly narrow on the waterline. Overall beam is down as well so it doesn't generate any massive reserve buoyancy when you're pushing it.

"The underwater appendages are kept to what's required. There's no excess area there. We're not carrying any luggage. We have a retractable forward fin to give us a slightly better windward performance. When it's retracted, it obviously reduces the drag. It's there to make sure the rig is balanced against the underwater appendages. If it's up, the boat has virtually no helm so it can reach and run with no signs of weather helm for long periods of time. But it's essential to have it down when you are hard on the wind."

The hull is constructed of a carbon/Kevlar outside skin and Kevlar/E glass internal skin

sandwiching a 25mm Divinycell foam core. The fins are carbon fibre and the keel has a three tonne lead ballast bulb.

"We paid a lot of attention to construction details, to keep the boat as light as possible. Light-weightness is efficiency and less drag because you are pushing less boat through the water. Then I just moved up top and worked out a new sort of rig concept.

"There have been plenty of rotating masts over a number of years but not many of them have been put on monohulls. They work well in association with the boat. It's not the sort of thing you want to put on any boat. But if you've got a light-weight boat that's easily driven you can make some reasonable gains by going to this type of rig.

"For example, you don't have the configuration with a whole bunch of spreaders and diagonals and stuff like that. It keeps rigging to a minimum. And because of the lack of spreaders, I am able to use Kevlar for stays. It's about a third of the weight of rod and reduces the overall weight again."

Elliott explains the extra rake in the main mast as assisting balance and to maximise the separation between the two rigs. "And it gives us the option of putting an extra between the two rigs," Elliott adds. "One of the gennakers we have is utilised in that area. We have not had to go to specialist staysails and our reaching staysail, besides being set ahead of the foremast, can be tacked in there on the centreline and sheeted to the tuck. You can have two headsails and two mainsails on at one time."

After launching last year, the owners trialled the schooner in a number of coastal races from Auckland, taking line honors in five of them. A few weeks before she left Auckland, the boat broke the 18-year-old record for the Auckland to Kawau race, covering the 27n miles in 2hr 2min, three sail reaching with the wind speed no greater than 25 knots.

"It's not so much top-end speeds we are chasing as high average speeds," Elliott says. "It's hard to sail around the buoys but once you get on a long passage race, it's very easy to sail. All the sails are manageable sizes."