

OCEAN
RACING

sea horse

N°70 MAY/JUNE 1982 80p

32444

The magazine of the Royal Ocean Racing Club



THE SIX METRES

Designer Ian Howlett on the growth of the class

In Britain the Sixes have yet to re-establish themselves as a premier racing class, but in mainland Europe growth has been steady and encouraging — hence the 45 yachts that took part in last summer's World Championship in

She was designed as an all-round performer for fleet racing and was constructed in GRP balsa sandwich by Armstrong Mouldings of Southampton.

Typical proportions for 1950's and modern craft are as follows:

	1950's	Modern
LOA	36'3"	33'6"
LWL	23'9"	23.9
DISPLACEMENT	9,300 lb	9,250 lbs
RATED SAIL AREA	450 sq ft	450 sq ft
'J' DIMENSION	10'6"	10'9"

Switzerland. This fleet was as remarkable for the quality of the yachts, skippers and sails as for the large number of participants and some of the celebrations. The season continued in Cannes where the impressions from Romanshorn seem to have been confirmed — the series developing into a battle between Kirlo skippered by Lawrie Smith accompanied by a speedily recruited crew, and one of the latest Peter Norlin designs, Sea Travel. As is only right and proper in Six Metre racing, the result was determined by a tactical lapse in the critical race which left Sea Travel a worthy winner of the series. Interestingly Kirlo had particularly shone in conditions of heavier wind and wave.

The variety of the breed in this country makes a brief description of the Class worthwhile. Fig 1 shows a sketch of Kirlo which was built for Mr. Erik Maxwell in the spring of last year and was the 1982 Championship Winner.

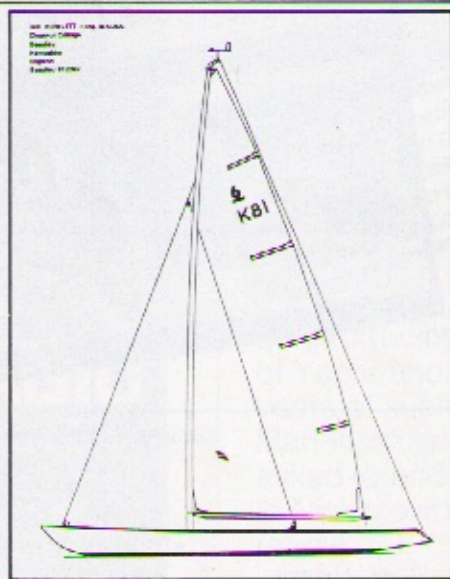
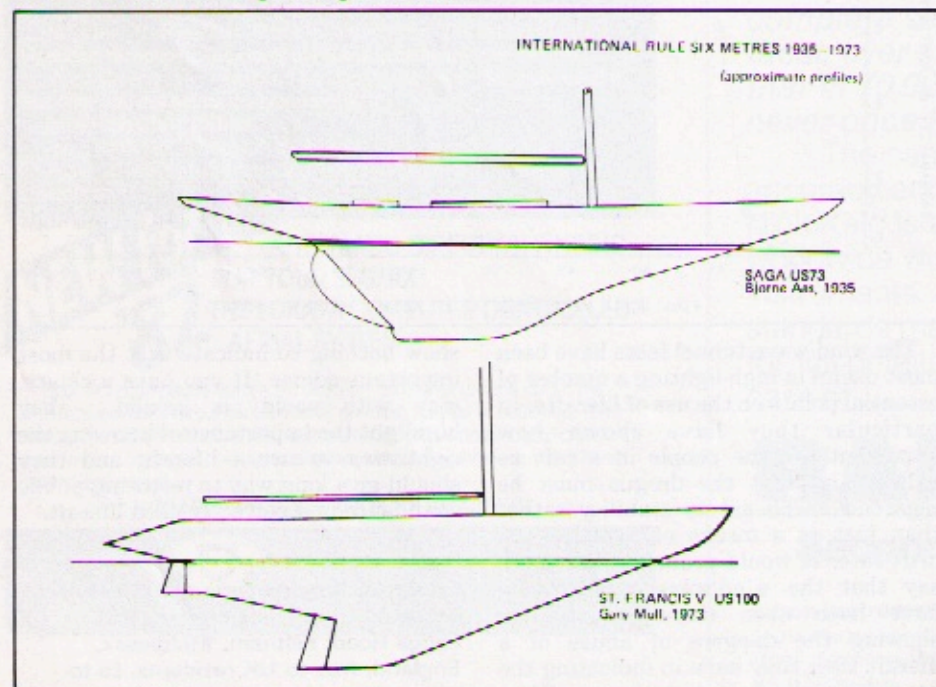


Figure 1, above
Figure 2, below



In view of the closeness of the proportions of these it would be surprising if there were any dramatic differences, in smooth water anyway. The two hull types are illustrated well by Fig 2. The full keel type tended to have very low slung lead and here there was perhaps a tendency to over-emphasise the stability requirement relative to that of resistance.

Ballast ratios have remained sensibly constant at some 75% this a result of hull scantling requirement which calls for equivalent weights regardless of the method of construction, and this is based on traditional plank on frame methods. All structural drawings are approved by Lloyd's Register in Southampton and the yachts built under Lloyds survey; the hulls are extremely strong. Mast dimensions, weights and centre of gravity are all controlled.

This aspect of the rule guarantees structural integrity and longevity whilst, as the small changes of thirty years indicate, the unchanging measurement rule itself assures a stability of the basic parameters. This protection of the owner's interests is also likely to protect his investment, which at the present time is likely to total some £30,000 for a new yacht. Measurement, of course, will always bring debate, but there is sense in a rule with very few basic measurements and flotation marks defined by these. It should be noted that as early as the 1948 Olympics a flotation tank was employed to guarantee exactness of water specific gravity and equivalence of scales — as equitable a method as one might hope for.

The rule is much the same as that for the Twelve Metres, but the Sixes are required to be fuller bodied, have more draft for their length and are allowed more genoa overlap. The effect of the Metre Rule is to provide a trade off of sail area and length — the longer yacht having less sail area and being forced to greater displacement. As with the Twelves in the early 1970's some very long waterline yachts were developed, but like the Twelves these did not seem to give full satisfaction. Interestingly, the wetted surfaces of these boats were as great as those of the traditional long keel yachts — often with less sail area — not a normal recipe for light airs performance.

In the past, the Sixes were the driving force in Metre and, indeed, all keel-boat racing developments, but the movement of the America's Cup to Twelve Metres in 1958 and the Six Slump has now put

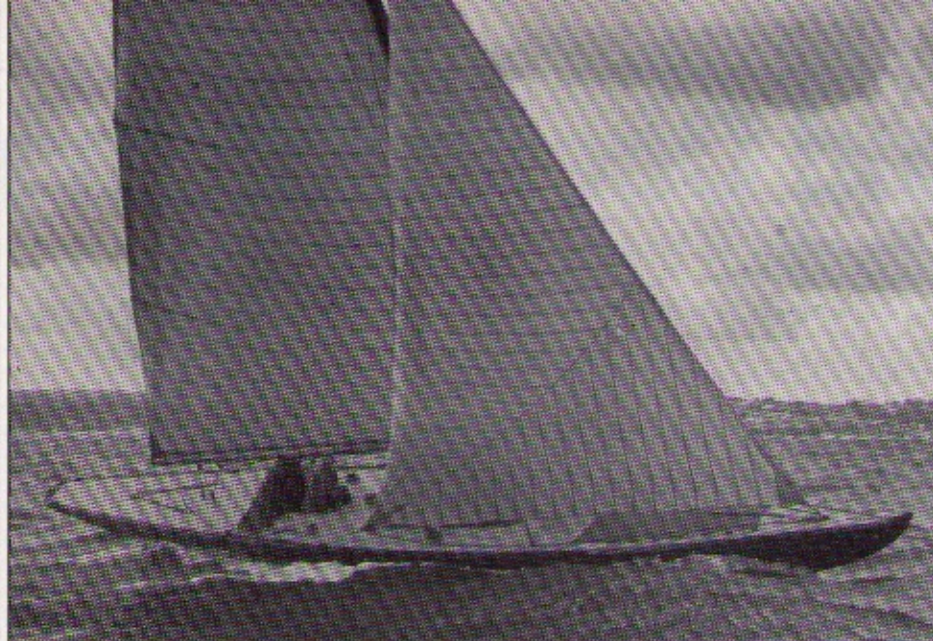


Figure 3: Llanoria with her keyhole cockpit

the boat on the other foot. The similarity of the yachts and their problems in both sailing and design is likely to bring about increasing use of Sixes as testbeds for Twelve ideas — particularly to evaluate more extreme ideas. It should be remembered also that the master himself, Olin Stephens, first made his reputation and developed his ideas in the Sixes of the 1930's.

A world which has grown up used to offshore racing finds the Sixes very strange. In particular, requirements for sails are quite different — hanks are

used on genoas, not primarily for reasons of nostalgia but because for short course racing they are best. Mainsails are not reefed — spinnakers are not maximum sized and are quite different in shape.

On Kirlo the instrumentation system initially consisted of a waterspeed indicator and a windex but it was soon decided that the speedo was an unnecessary distraction.

The yachts, of course, have open cockpits and underdeck winching; they are crewed by five persons. Pelle

Petterson, the World Champion in 1977 and 1979, in particular, has developed some very nice arrangements for genoa/spinnaker sheets and genoa foot blocks and there is no doubt that by detail design of this type, the boat handling may be improved and weight saved. Kirlo was arranged unusually for a modern yacht with a keyhole cockpit aft for the helmsman and mainsheet/runner man — much the same layout as that of Llanoria 1948 (Fig 3). Whilst it may not look as racy as some layouts it does possess advantages and undoubtedly makes life for the mainsheet man more relaxed — an important factor when he is the designer.

All Six Metre sailors owe a great deal to the International Six Metre Association which has sustained interest over the lean years and which published an excellent regular magazine and is responsible for arrangements for the World Cup, held biennially. The Puget Sound Six Metre Association is the guardian of this trophy and controls the deed of gift governing the event. With such an Association and the increasing re-interest in inshore racing the future of the Sixes seems assured. Eric Twiname credited the Sixes with the first organised Team Racing (1921) and it would be hard to imagine a keener form of International Competition. How fine it would be if the British fleet could be reactivated and the team events restored.

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