Measurement and Certification of Hulls.

During the last two years the International Finn Class have submitted proposals for several Class Rule changes in the general area of Measurement and Certification, which have been rejected by CRSC. On 18 February 2011 the ISAF Coordinator, Technical & Offshore (Henry Thorpe) wrote to me as Chairman, IFA Technical Committee as follows: “Georg [Tallberg] and I are also keen for you to write a paper one or two page for the EQSC on Certification and appointment of measurers for hulls to support what you submitted. This will enable your proposal to be discussed by the appropriate Committee". This paper is prepared with two objectives:

- to explain the underlying reason for our proposals, and
- to suggest some ways ahead in the field of Measurement and Certification.

It has regard to the third draft paper “Measurer and Equipment Inspector Training Working Party” circulated by Rob Taylor to EQSC on 13 June 2011. Due to time constraints, I have not yet circulated this paper within the Class, and after doing so I may have to modify the conclusions or withdraw the paper.

Summary

1. We have developed a Measurement Database aiming to provide unrestricted information about the measurements for all competitive boats. It would run parallel to the current paper records and eventually it might be a substitute, enabling Regatta Organisers to check certification details at the time of Entry.

2. To reinforce the quality control systems for measurement (not production), we believe that inspection of hulls from new moulds should be undertaken by the Class Chief Measurer or his nominee, and that periodic inspections of the measurement process should also be undertaken.

3. To fulfil a requirement for routine measurement of equipment (especially Appendages, Spars and Sails) and to provide a reasonable starting point in a career path for measurers, it is suggested that there should be provision for OMs to be approved (with concurrence from the Class Association) for specific measurement/certification tasks within classes, rather than developing all “Class measurers” to be able to perform all measurement tasks within a Class.

Certification

The first proposal was that we should have a Class Database, giving the items on the Measurement Form and available to all. The proximate reason for this was an anxiety within our Class regarding developments in another Olympic Class, where it was rumoured that magic boats had been developed at vast expense for the Beijing Olympics. (Neither the Class Chief Measurer nor I believe that magic boats were a real issue – we believe that the rumours were largely the result of gamesmanship on the part of some coaches).

Another reason was that Equipment Inspectors frequently have difficulty when dealing with a competitor who loses or forgets to bring his Certificate to a regatta. We hope that in the fullness of time the Measurement Database or an associated database may become a substitute for the paperwork.

CRSC were sympathetic but rejected the proposal, suggesting a compromise: “ISAF would be prepared to amend the measurement form to state that a copy shall be sent to the class association. This data may then be used to create the proposed online measurement database. This wouldn’t need a rule change just a change to the measurement form”. This would place no requirement on the owners of existing boats, and most of the boats at the
next Olympics are probably already in use. Also to place the requirement outside the main body of the Rules might create a grey area concerning enforcement.

2. **Measurement**

Unfortunately, from time to time we have found that the fundamental measurement was badly done. Experience (not only from our Class!) suggests that if incorrect hulls are passed, particularly at a large builder where numerous boats may be built in a short time, the resulting damage is extremely difficult to rectify. In most cases, the problem has been in the mould itself. To address this, we proposed that builders of GRP hulls shall have prototype assembled hulls inspected by the Class Chief Measurer or his nominee whenever they bring into service new moulds for the hull, decks or inner hull.

In addition, we believe that we need a quality control system for the Measurement process, whether by OMs or IOMs, and so we proposed that “Major Builders of GRP Finn hulls are urged to arrange for periodic inspection of their hulls and a review of measurement carried out on their premises, by the Class Chief Measurer or his nominee, together with local Official Measurers. Where IHC applies, every effort shall be made to avoid duplication”. This proposal reflects good standard practice as already carried out by our major builders, and has brought benefits to the builders and to the Class. It aligns our perceived requirements for effective measurement by external OMs with those for IOMs under ISAF IHC. Several rule changes approved by CRSC recently are the direct result of feedback from this process.

CRSC rejected our proposals regarding prototype inspection etc, and suggested that we should be going down the path of having licensed builders and production control. This would require a total change of the philosophy under which our class was founded and developed. We are a measurement-controlled Class and we believe that the way ahead is to concentrate on the quality and effectiveness of measurement.

3. **Supply of Official Measurers**

Under ERS, OMs are appointed by their MNA, but in practice there seems to be a wide variety of measurement régimes in various countries. Some countries have internal IHC systems, some MNAs seem to delegate authority to National Class Associations. In order to have an option where nothing else worked, we submitted a proposal that our Class Association be allowed to Appoint OMs. This was rejected, but we are pleased to note that the working party proposes that classes be permitted to appoint ISAF recognized OMs.

In some countries we have problems regarding the supply of OMs. Full **Fundamental Measurement** of hulls is rarely required after the initial certification process. It seems unreasonable to expect an aspiring measurer to become fully trained, equipped with templates etc, for a task he is unlikely to be given. The working party report provides for modules qualifying a measurer for tasks such as Equipment Inspection etc. Perhaps a career ladder would be created if OMs were approved for individual tasks within classes. Thus, having completed the basic modular requirements, a sailor might become approved (usually by his MNA with agreement from the relevant Class Associations) to carry out fundamental measurement on Sails, Spars and Appendages, weighing etc, for specific classes in his club, and would naturally seek approval for tasks where he was needed. There would be a clear path for development of measurers and equipment inspectors, alongside the clear path that exists for development as a race officer.

The administration of International Measurers is handled by IMSC and we have no major issues. However the career target for an ambitious Measurer is presumably to become an IM. If he or she succeeds then we lose an **Official Measurer**, because under Reg. 31.13.5 “once appointed, an IM shall not act as regular official measurer at a builder for that class”. This is a particular problem for us outside Europe.