2008 Olympic Sailing Competition – Measurement Regulations

1. General Requirements

1.1 All boats entered for the 2008 Olympic Sailing Competition may be inspected in accordance with their class rules and any special rules contained in the Notice of Race, Sailing Instructions and these Measurement Regulations. In the case of conflict between the class rules and measurement regulations, the latter shall prevail.

1.2 A Measurement Committee (OMC) appointed by the International Sailing Federation (ISAF) shall be the final authority for interpreting the class rules for the regatta, and for determining whether equipment complies with the class rules.

1.3 The OMC shall have the right to change these Measurement Regulations. Such changes will be posted on the official notice board.

1.4 Athletes are reminded that in accordance with RRS 78.1 they are responsible for ensuring that the boat is maintained in accordance with the class rules and that the measurement certificate remains valid. (For the purpose of RRS 78.1 athletes are considered to be the boat’s owner).

2. Pre-race Equipment inspection

2.1 The dates and times of equipment control will be published before the regatta. The designated time of equipment control may be subject to alteration by the Class Chief Measurer. Boats and equipment as indicated below shall be presented at the designated time. Equipment Inspection will be scheduled from the 30 July to 14 August.

2.2 All classes shall be presented for inspection with the full equipment, including sails, personal buoyancy and personal equipment. Personal buoyancy shall comply with the specific class rules. Where not specified in class rules, personal buoyancy in compliance with EN 393 or ISO 12402 – 5, level 50 or an equivalent will be accepted as a minimum. Personal buoyancy which rely on inflation devices to achieve 50N of buoyancy are not accepted.

2.3 470, Finn, Tornado, Yngling and Star shall be presented for equipment control with their valid certification documents. These shall be retained by the OMC for the duration of the equipment control period. If any document is a photocopy its authenticity shall be confirmed with an original stamp and signature from the issuing authority.

2.4 Boats and equipment shall be presented for equipment control in a dry, clean and salt-free condition. Any item, which is not in dry condition to the satisfaction of the measurer, may be impounded by the OMC for up to 48 hours prior to the boat or its equipment being re-examined.

2.5 Only the team leader or nominated delegate, the boat’s crew and one interpreter, may be present during the boat’s equipment control. At least one of these persons shall be present and shall be authorised to remedy any deviations from the rules or to withdraw the boat from the regatta. Only one hull (Tornado two hulls) may be presented for equipment control by an entry in each class.

2.6 When equipment is found to contravene the Class rules the class measurer shall make a report and hand a copy of this report to the boat’s representative. The boat may then be resubmitted for inspection at a time arranged through the class
measurer. If a boat is found to have measurement defects which cannot be corrected prior to the end of equipment control, that boat will not be permitted to race.

2.7 Should the OMC consider that a boat has been submitted for equipment control knowingly not complying with the Class Rules or the Sailing Instructions the OMC may submit a report to the Jury, which shall initiate a hearing.

2.8 Unless authorised by the class measurer, repairs or alterations to boats or equipment shall not be made in the inspection areas.

2.9 All equipment shall be certified and marked as required by the Class Rules. For items not permitted, including boat name, home port or club name see Notice of Race 2. When specified in the relevant class rules, all sails supplied by athletes shall have undergone fundamental measurement and shall be certified in accordance with the class rules before being presented for event equipment control.

2.10 All mainsails shall be presented for equipment control without national letters and numbers. Mainsail national letters and hull letters, national flag mainsail insignias, crew name-sail stickers and hull – Beijing 2008 ‘Look of the Games’ stickers will be issued to athletes. Assistance with the application of these stickers will be available if requested, however failure of anything applied to the sails or hulls or any impact these stickers may have on performance will not be grounds for RDG.

2.11 All items of equipment subject to Event Limitation Control will be marked with the official event stamp or sticker. Some items will receive two control marks, one in a readily visible position when afloat, and a second in a position protected from wear and tear. Marked equipment must not be substituted without the prior approval of the OMC. If a mark becomes unclear, insecure or lost, this shall be reported to the class measurer so that the mark may be replaced before the next race.

2.12 The OMC will report to the race committee all boats that have satisfactorily completed equipment control by the end of the scheduled pre-race equipment control period. Only those boats will be permitted to race.

3. Laser and Laser Radial

Competition Lasers with the equipment listed below will be supplied by the organising authority for use during the regatta:

- hull, with bailer fixed
- centreboard, complete with stopper (Holes for a rope handle may be drilled by the organising authority representatives on request.)
- rudder,
- lower mast and top mast
- boom, complete with all fittings attached
- sail, complete with three letter country code, national flag, athletes name and battens
- padded toe straps, shockcord and toe strap line, fitted
- mainsheet side cleats
- deck block fitting without blocks
- deck cleat base with two cleats
- launching trolley

3.2 Lasers will be issued by a draw at 14:00 29 July, as detailed in the Notice of Race.

3.3 Only the organising authority supplied and identified equipment listed in 3.1 shall be used during the regatta. Athletes shall supply and use their own control lines and control line blocks, mainsheet block, mainsheet block spring (if required), boom vang and traveller blocks, tiller and tiller extension, centreboard rope
handle, toe strap shock cord and line, conforming to the class rules. These items will be subject to inspection and identification at equipment inspection.

3.4 Differences between hulls, or equipment supplied by the organising authority, should they exist, shall not be grounds for redress.

3.5 Failure of equipment supplied by the organising authority shall not be grounds for redress unless, in the opinion of the Jury, it was the result of a manufacturing defect that could have been reasonably anticipated by the organising authority.

3.6 Athletes shall report any loss or damage of supplied equipment to the Laser Chief Measurer as soon as possible. Applications for repairs or replacements shall be made by filling out the appropriate form available at the protest desk and approved by the measurement coordinator. Repairs shall only be carried out by the organising authority representatives.

3.7 No alterations shall be made to any part of the boat, its equipment, spars or fittings, or fittings removed, even if subsequently replaced, without the written approval of the Laser Chief Measurer except for those fittings and items of equipment, defined in 3.3, that athletes may bring and use.

3.8 Hull, sail, mast and boom, centreboard and rudder may be washed with soap and water only and wiped down manually. No reshaping or sanding of the centreboard, rudder or any portion of the hull shall be allowed.

3.9 Athletes may adjust the centreboard friction pad and use adhesive tape according to the class rules.

3.10 Wind indicators, a timepiece (clock), a compass and containers for food and drink may be carried on board in accordance with the class rules. These items may only be attached to the boat with rope, shockcord or adhesive tape. Telltales may be fitted to the sail provided that they do not pierce or permanently mark the sail. No other additional fittings will be permitted without prior approval from the Laser Chief Measurer. Personal buoyancy shall be presented.

4. Finn

4.1 Each boat shall be presented for equipment control with the mast down and shall be accompanied by mast, boom, one set of sheets, rudder, tiller, centreboard and all other equipment required by the class rules on board for the purpose of weighing. All inspection hatches and covers shall be open. Personal buoyancy shall be presented.

4.2 No more than two mainsails, two masts and two booms shall be presented for equipment inspection.

5. RS:X

5.1.1 RS:X equipment will be issued by a draw at 10:00 hrs on 29 July, as detailed in the Notice of Race.

5.1.2 RS:X windsurfers with the equipment listed below will be supplied by the organising authority for use during the regatta:

- hull, centreboard, fin, centreboard cover
- lower mast, top mast and mast extension
- boom, complete with all fittings attached (athletes may supplied outhaul)
- sail, complete with three letter country code, national flag, athletes name, battens,
camber inducers and red diamond for women’s sails.

5.1.7 Nine toe straps,

5.1.8 Only the organising authority supplied and identified equipment listed in 5.1 shall be used during the regatta. Athletes may supply and use their own control lines and control line blocks, conforming to the class rules. These items will be subject to inspection and identification at equipment inspection.

5.1.9 Differences between hulls, or equipment supplied by the organising authority, should they exist, shall not be grounds for redress.

5.1.10 Failure of equipment supplied by the organising authority shall not be grounds for redress unless, in the opinion of the Jury, it was the result of a manufacturing defect that could have been reasonably anticipated by the organising authority.

5.1.11 Athletes shall report any loss or damage of supplied equipment to the RS:X Chief Measurer as soon as possible. Applications for repairs or replacements shall be made by filling out the appropriate form available at the protest desk and approved by the RS:X Chief Measurer. Repairs shall only be carried out by the organising authority representatives.

5.1.12 No alterations shall be made to any part of the boat, its equipment, spars or fittings, or fittings removed, even if subsequently replaced, without the written approval of the RS:X Class Measurer except for those fittings and items of equipment, defined in section 5, that athletes may bring and use.

5.1.13 Hull, sail, mast and boom, centreboard and rudder may be washed with soap and water only and wiped down manually. No reshaping or sanding of the centreboard, skeg or any portion of the hull shall be allowed.

5.1.14 Wind indicators, a timepiece (clock), a compass and containers for food and drink may be carried on board in accordance with the class rules. These items may only be attached to the boat with rope, shockcord or adhesive tape. Telltales may be fitted to the sail provided that they do not pierce or permanently mark the sail. No other additional fittings will be permitted without prior approval from the RS:X Chief Measurer. Personal buoyancy shall be presented.

5.1.15 Supplied boats and equipment shall not be removed from the Sailing Marina except for sailing to the course areas and their surrounds.

5.1.16 On completion of the regatta all equipment supplied to athletes shall be returned to the organising authority.

6. 49er

6.1 Each boat, including wings, daggerboard and rudder blade (but excluding spars, sails and other equipment) shall have been built after 1 March 1999.

6.2 Each boat shall be presented for equipment control with the mast down and shall be accompanied by mast, boom, gennaker pole, one set of sheets, rudder stock including tiller, daggerboard and all other equipment required by the class rules on board for the purpose of weighing. The wings shall be removed and laid on the hull. The hull shall be stripped of all loose equipment, rigging and ropes, with the exception of the spinnaker sock, rudder frame and stock. The mast shall be stripped of all standing and running rigging, and fittings not attached by the builder with rivets, screws or other permanent fastenings. The running rigging may be replaced by light feeder lines. Personal buoyancy shall be presented.

6.3 The number of sails and spars which may be approved during inspection of the boat shall not exceed one mast, one boom, one bowsprit, one mainsail, one jib and one gennaker.
6.4 As an amendment to Class Rule C.2.3 (b), hull mouldings shall not be painted or filled. Hull mouldings shall not be coated in any material other than polish of negligible thickness. Local scratches or damage may be filled provided that the original shape is retained to the satisfaction of the measurer.

6.5 The gennaker shall display a representation of the relevant national flag and be manufactured by the official. In alteration to Class rule G.5.1, the gennaker may have graphics which extend to any point of the sail. The sail shall have been purchased from the approved manufacturer.

6.6 During equipment control a spare gennaker may be controlled and placed in the custody of the Class Measurer. On days when back-to-back races are scheduled the spare gennakers will be carried afloat in the Measurer's boat. In the event of the first spinnaker being damaged after the start of the first race and accepted by the Measurer as being accidental and significantly affecting performance, the spare spinnaker may be retrieved with the authority of the Measurer and used for any further races on that day. The spare spinnaker must be returned to the Measurer after the last race of the day, and the first spinnaker must be repaired for all subsequent races. A spare gennaker shall comply with the requirements of 6.5.

7.470

7.1 Each boat shall be presented for equipment control with the mast down and shall be accompanied by mast, boom, spinnaker pole, one set of sheets, rudder, tiller, centreboard and all other equipment required by the class rules on board for the purpose of weighing. All inspection hatches and covers, including the cockpit forward bulkhead covers, shall be open. Personal buoyancy shall be presented.

7.2 Each boat shall have been built from a mould approved by ISAF and in accordance with a specification a sample of which has been approved by ISAF.

7.3 Each 470 spinnaker shall carry the national flag of the competitor displayed in dense contrasting colours on the forward face of the spinnaker. The flag shall be rectangular in shape, with a minimum total area of 4.00m² (suggested sizing is 2600mm x 1550mm). It shall be located equidistant from the leeches and with the base approximately 1800mm from the foot of the sail. The body of the sail shall be constructed of white sail material.

7.4 Any area of the flag which is the same colour as the cloth of the body of the sail shall be overprinted in that same colour in order to achieve uniformity of print area between boats. Where there is no colour contrast between the body of the sail and the edge of the flag, a dark border shall be applied to the edge of the flag. This shall be of a minimum thickness of 10mm. The National Letters code shall be placed horizontally 200mm below the bottom edge of the flag and on the forward face of the sail only. The height of the letters shall be minimum 400mm. The application method of the National Letters on the spinnaker may vary but the colour shall be either black or blue.

7.5 During equipment control a spare spinnaker may be controlled and placed in the custody of the Class Measurer. On days when back-to-back races are scheduled the spare spinnakers will be carried afloat in the Measurer's boat. In the event of the first spinnaker being damaged after the start of the first race and accepted by the Measurer as being accidental and significantly affecting performance, the spare spinnaker may be retrieved with the authority of the Measurer and used for any further races on that day. The spare spinnaker must be returned to the Measurer after the last race of the day, and the first spinnaker must be repaired for all subsequent races. A spare spinnaker shall comply with the requirements of 7.3 and 7.4.

8. Tornado

8.1 Tornado Class Rule C.1.1(b) Appendix C – ITA Championship Rules and Appendix D – Event Organisation, shall not apply.
8.2 Each boat shall be presented for equipment control as follows: the Assembled Hulls, Hull Appendages, and Rig, as defined in Sections D, E, & F of the class rules:

(a) The two hulls and crossbeams assembled with the trampoline arranged to permit the application of templates. Beam end covers shall be arranged to enable the measurer to view inside the beams.

(b) Standing rigging and trapeze wires shall be disconnected from the mast. The mast shall be complete with spreaders, diamonds, halyards and gooseneck.

(c) Accompanied by two rudders, two tillers, one gennaker pole, trapeze harnesses and personal buoyancy.

8.3 The number of sails and items of equipment that will be approved during the equipment control of the boat shall not exceed one mainsail, one headsail, one gennaker, one mast, one boom, two rudders and two centreboards.

8.4 Each Tornado gennaker shall display a representation of the relevant national flag in dense contrasting colours. The method of application is optional but shall comply with the following requirements:

- The flag shall be orientated on the starboard side of the sail as shown in Appendix A.
- The top left corner of the flag shall be located at a point on the luff, between 5100mm and 5300mm from the tack point.
- The top right corner of the flag shall be located at the tack point.
- The lower right corner of the flag shall be located at the clew point.
- The lower left corner of the flag shall be located at a point on the leech, between 4800mm and 4900mm from the clew point.

Between these four points, the entire surface area of the sail shall be covered by the image. The top of the sail shall be of a white ply. Tablings may be of any colour.

8.5 During equipment control a spare spinnaker may be controlled and placed in the custody of the Class Measurer. On days when back-to-back races are scheduled the spare spinnakers will be carried afloat in the Measurer’s boat. In the event of the first spinnaker being damaged after the start of the first race and accepted by the Measurer as being accidental and significantly affecting performance, the spare spinnaker may be retrieved with the authority of the Measurer and used for any further races on that day. The spare spinnaker must be returned to the Measurer after the last race of the day, and the first spinnaker must be repaired for all subsequent races. A spare spinnaker shall comply with the requirements of 8.4.

9. Star

9.1 Each boat shall be presented for equipment control as follows:

a) The boat with the mast down, boom, rigging and all equipment (including removable floorboards) on board for the purpose of weighing. Inspection/access ports shall be open, but with their covers in the boat. Lifting eyes or bolts are compulsory. Personal buoyancy shall be presented.

b) Star Class Association Rules 1-20 and Championship Rules 21-30 and 34-40 shall not apply. Championship Rules 31, 32 and 33 shall apply.

c) The number of sails and spars which may be approved during measurement of the boat shall not exceed two masts, two booms, two whisker poles, two mainsails and two jibs.
d) Crew weight – in accordance with Notice of Race 12.10 - Star class crews shall present themselves for weighing on each racing day between 0900 and 1100. Failure to be weighed within the times specified shall result in a report to the Jury.

10. Yngling

10.1 All boats shall comply with the current class rules.

10.2 Each boat shall be presented for equipment control as follows:

(a) The hull shall be empty, in dry condition, all covers, hatches and buoyancy material removed for inspection.

(b) The mast shall be down, with halyards fully hoisted and rigging tied to the spar at the lower limit mark with the lower ends hanging free.

(c) All equipment on board for the purpose of weighing.

(d) Personal buoyancy and equipment.

10.3 The number of sails, spars and appendages which may be approved during measurement shall not exceed one mainsail, two jibs, two spinnakers (see 11.15), one rudder, one mast, one boom and one spinnaker boom.

10.4 Boats shall have been built in Official Moulds approved by ISAF for Olympic Competition. Currently these moulds are those by Abbott (CAN), BB Sailing (DEN), deWolfe(USA), Mader (GER), Nautivela (ITA), Petticrow(GBR), Smidmore Yachting Services (AUS) and Sunburst Marine (AUS).

10.5 Boats shall have been fitted with a raised floor by a Licensed Builder in accordance with the Class Rules.

10.6 Hull mouldings may be checked for evidence of intentional changes to the shape of the hull. Hull mouldings may be sanded and/or polished, but the original gel coat shall not be removed to expose the glass reinforcement. As an amendment to Class Rule C.7.1 (f), hull mouldings shall not be painted or filled. Hull mouldings shall not be coated in any material other than polish of negligible thickness. Local scratches or damage may be filled provided that the original shape is retained to the satisfaction of the measurer.

10.7 The keel casting may be surfaced and faired to comply with the Class Rule dimensions and templates. As an amendment to the construction manual, only polyester or epoxy filler and glass-fibre reinforcement are permitted. Further checks, in addition to the application of templates, may be made by the measurer.

10.8 Crew weight – Yngling Class Rule C.2.2 – Yngling class crews shall present themselves for weighing on each racing day between 0900 and 1100. Failure to be weighed within the times specified shall result in a report to the Jury.

10.11 Each Yngling spinnaker shall carry the national flag of the competitor displayed in dense contrasting colours on the forward face of the spinnaker. The flag shall be rectangular in shape, with a minimum total area of 5.4m² (suggested sizing is 3000mm x 1800mm). It shall be located equidistant from the leeches, and the base approximately 1800mm from the foot of the sail. The body of the sail shall be constructed of white sail material. Any area of the flag which is the same colour as the cloth of the body of the sail, shall be overprinted in that same colour in order to achieve uniformity of print area between boat. Where there is no colour contrast between the body of the
sail and the edge of the flag, a dark border shall be applied to the edge of the flag. This shall be of a minimum thickness of 10mm. The National Letters code shall be placed horizontally 200mm below the bottom edge of the flag and on the forward face of the sail only. The height of the letters shall be minimum 450mm. The application method of the National letters may vary but the colour shall be either blue or black.

10.12 During equipment control a spare spinnaker may be controlled and placed in the custody of the Class Measurer. On days when back-to-back races are scheduled the spare spinnakers will be carried afloat in the Measurer's boat. In the event of the first spinnaker being damaged after the start of the first race and accepted by the Measurer as being accidental and significantly affecting performance, the spare spinnaker may be retrieved with the authority of the Measurer and used for any further races on that day. The spare spinnaker must be returned to the Measurer after the last race of the day, and the first spinnaker must be repaired and used for all subsequent races. The spare spinnaker shall conform to the requirements as set out in 11.12.

11. Boats and Equipment after Equipment Control

11.1 After equipment has passed through Equipment Control it shall not be removed from the defined boat park in the Sailing Marina at Qingdao, or from the race course areas and the area between the shore and the race courses without the written permission of the OMC. Failure to observe this regulation may lead to disqualification from the regatta.

11.2 Alterations - After boats have completed Equipment Control, no alterations shall be made without the written approval of the OMC.

11.3 Repairs - Athletes wishing to make repairs to equipment after it has passed through equipment control shall make an application to the Class Measurer for consideration by the OMC. If permission is granted the Class Measurer will arrange a time for such repairs to be inspected.

11.4 Replacements Ashore - Applications for replacement equipment shall be made on forms available on the Race Office. Approval will only be given if the equipment is severely damaged, was not deliberately mistreated, and cannot be repaired satisfactorily. The relevant class measurer will be available at the boat park or via the Measurement Office until at least 30 minutes after the expiry of the protest time limit for that Class.

11.5 Replacements Afloat - When an item of equipment is lost or damaged immediately prior to a race and is replaced or repaired, the athlete shall notify the race committee at the first reasonable opportunity. All replacement equipment must be certified in accordance with Class Rules before use. Any item repaired or replaced under this provision shall be submitted to the OMC immediately upon coming ashore after racing for that day. Should the OMC consider that the item could have been used in the race or had been purposely damaged or lost by the athlete or any person associated with their team, the OMC may protest under RRS 2.

12. Equipment Control during the regatta

12.1 A boat may be checked at any time during the regatta. Any irregularities will be reported to the OMC.

12.2 After any race, a boat may be informed by a measurement official that it has been selected for post-race inspection. When hailed the boat shall return directly to the designated area at the Sailing Marina. No person shall join or leave the boat and no equipment or other item shall be taken on or off the boat. A competitor so notified, shall not leave the measurement area without the permission of the
12.3 At least one representative of the crew is required to be present during the inspection of their boat and clothing. A measurer may require the boat be impounded in order to dry out before it’s weight is checked.

12.4 If any aspect of the boat does not comply with the class rules, or if the measurer has reason to believe that an item of equipment has been altered, repaired or replaced without prior approval, the measurer shall submit a report to the OMC. The time limit for filing reports to the international jury is two hours after the inspection of the boat has been completed.

12.5 Clothing may be weighed in accordance with RRS-Appendix H unless varied by class rules.

13. Medal Race Quarantine Procedures

13.1 On completion of the opening series the ten boats assigned to compete in the Medal Race for each event will be quarantined and subject to equipment inspection. Boats which may be eligible following the results of protests shall go to the quarantine area.

13.2 Boats eligible for the medal race for each Class will be held in a Quarantine Area as follows:

- a. RSX Men
- b. RSX Women
- c. Laser Standard
- d. Laser Radial
- e. Finn
- f. 470 Men
- g. 470 Women
- h. 49er
- i. Tornado
- j. Star
- k. Yngling

The boat park Quarantine Area.

For the duration of the quarantine period sails and other loose equipment shall either be kept with the boat or stored in the measurement tent.

13.3 If for any event there is no racing the day before the medal race, assigned boats and their equipment shall be parked in the Quarantine Area no later than 18.00hrs that day (or two hours after racing has been abandoned for that class if this is later than 18.00 hrs.)

If racing is held the day before the medal race, the assigned boats shall be parked in the Quarantine Area no later than 30 minutes after the expiry of the protest time limit for that event except where assignment is subject to protest.

Where assignment is subject to protest a boat shall be in the Quarantine Area as soon as practicable after her place in the medal race is confirmed.

13.4 Should a boat or equipment need repairs that necessitate its removal from the Quarantine Area, a request for approval may be made in writing to the Measurement Committee. In approving such a request the measurement Committee may include such restrictions as it sees fit.

13.5 On the scheduled day of the Medal Race boats shall be made ready for inspection not less than three hours before the scheduled start time of their race,
unless otherwise instructed.

The team leader (or a nominated delegate) and the boat’s crew may be present during the equipment inspection. At least one such person must be present at all times during the inspection. An interpreter, if approved, may also be present.

13.6 The Measurer will signal the release of the boats from the Quarantine Area.

13.7 A breach of this Instruction will not be grounds for protest by a boat. This changes RRS 60.1(a). The penalty for a breach of this Instruction will be at the discretion of the International Jury and may include ranking the boat tenth in the regatta. If there are two such boats they will be ranked ninth and tenth, in order of their opening-series ranks, etc.