Version 8 2015

Graduate™ Dinghy Association Rules

PART A – ADMINISTRATION

1. General

The Graduate™ Class is a one-design racing dinghy. To ensure the administration and objectives of the Graduate Dinghy Association (GDA) Rules are maintained, before any Graduate may be raced, the following documents must have been issued and endorsements obtained:

(a) Building Fee Receipt/Sail Number Issue
(b) Measurement Certificate
(c) Sail and Buoyancy Endorsements
(d) An endorsement to show the owner to be a current member of the GDA

2. Building Fee Receipt

A Building Fee must be paid on each boat at the commencement of building whether or not it is subsequently measured and certified. Payment should be made by the builder to the RYA and on receipt of payment the RYA will issue a Building Fee Receipt and Sail Number.

3. Measurement Certificate

First Certification

For boats not previously certificated, the owner shall apply to have the boat measured in accordance with Part C of these Rules. Only an Approved GDA Measurer shall undertake measurement.

The owner must complete a Boat Measurement & Registration Application Form and send it to the GDA with the appropriate Fee. Upon receipt of these the GDA will issue to the owner the Measurers' contact details, it will then be necessary for the owner to make suitable arrangements with the Measurer for the boat to be measured.
On completion of satisfactory measurement, the Measurer will supply the owner with a Measurement Form completed and signed in respect of Part C.

Unless a certificate of conformity is presented for each of the items listed below for boats out of a certified mould the following items shall be measured.

Part	Items
Centre Board	59, 60, 61, 62
Rudder	63, 64
Weight of Hull	65
Correctors	66
Standard Rigging	68, 73
Mast	67, 69, 70, 71, 72, 74, 75, 76
Boom	76, 77

The owner shall ensure that the Measurement Form has been completed correctly and then apply to the GDA for a Measurement Certificate, enclosing the completed Measurement Form, Boat Measurement & Registration Application Form and the appropriate Fee. Upon receipt of these the GDA will issue the First Measurement Certificate to the owner.
Upon receipt of the certificate this shall be endorsed by the owner in relation to Rule 9, Buoyancy Tests.

Re-Certification

Should the Certificate become invalid due to the reasons (I) or (VI) below, then the owner shall apply to the GDA for a new Certificate returning the old Certificate, a completed Boat Measurement & Registration Application Form including the details of all changed particulars and the appropriate fee. Upon receipt of these the GDA shall issue a new Measurement Certificate to the owner.

Should the Certificate become invalid due to the reasons (V) or (VI) below, then the owner shall have the necessary items of the boat re-measured in accordance with Part C of these Association Rules.

The owner must apply to the GDA for re-measurement by completing a Boat Measurement & Application Form and sending it to the GDA together with the appropriate Fee, only an Approved GDA Measurer shall undertake measurement. Upon receipt of these the GDA will issue to the owner the Measurers' contact details, it will then be necessary for the owner to make suitable arrangements with the Measurer for the boat to be measured. On completion of satisfactory measurement, the Measurer will supply the owner with a Measurement Form completed and signed in respect of the necessary changes.

The owner shall ensure that the Measurement Form is completed correctly and then apply to the GDA for a Measurement Certificate, enclosing the completed Measurement Form, Boat Measurement & Registration Application Form and the appropriate Fee. Upon receipt of these the GDA will issue the First Measurement Certificate to the owner.

Validity of Measurement Certificate

A Measurement Certificate is only valid provided:-

I. There is no change of ownership.

II. All sails have been measured and endorsed in accordance with Part A Rule 4 and comply with these GDA Rules or the RYA National Graduate Class Rules effective at the time when they were endorsed.

III. A buoyancy endorsement is current.

IV. The hull, spars, and equipment comply with these GDA Rules.

V. No alteration, replacement or repair is made to the hull, spars, or equipment which might change the dimension of an item in Part C of these Rules.

VI. No alteration is made to the weight of the boat or its corrector weights, if fitted.

VII. An endorsement showing the owner to be a current member of the GDA is attached to Measurement Certificate.

4. SAIL AND BUOYANCY ENDORSEMENT

Sail

Owners shall have all sails measured in accordance with Part B of these Rules. Only an Approved GDA Sail Measurer or RYA Registered Sail Measurer shall undertake measurement. Upon completion of satisfactory measurement, the Measurer shall endorse the sail by signing and dating it near the tack.
Where sails are purchased from a sail-maker who operates IHC (In House Certification) and is licensed by the AA (Authorising Authority), in the U.K. the RYA, the sail-maker may endorse the sail using his Sail-Makers ISAF Label to show that the sail complies with the Class Rules. No further measurement by a GDA or RYA Sail Measurer will be required in this case.

Buoyancy

Owners shall carry out a buoyancy test/inspection in accordance with Part B of these Rules. On completion of satisfactory test/inspection, the owner shall sign and date the buoyancy endorsement on the Measurement Certificate and arrange for such signature to be witnessed and endorsed by a club official. Subject to Part A Rule 5, buoyancy endorsements shall remain valid only for a period not exceeding twelve months from the date of the last endorsement.

5. ALTERATIONS, REPLACEMENTS AND REPAIRS

To comply with these Rules, all hulls, spars, sails and equipment shall comply with either these GDA Rules or the RYA National Graduate Class Rules effective at the time of First Certification or effective at the time of Re-Certification or endorsement subsequent to re-measurement after alteration, replacement or repair.

6. CHECK MEASUREMENT

All hulls, spars, sails and equipment shall be liable to re-measurement at the discretion of the GDA or a Race Committee at any time and it is the owner's responsibility to ensure that they comply with the appropriate GDA Rules at all times.

Notwithstanding anything contained herein, the GDA has the right to refuse to grant or withdraw a Measurement Certificate and/or a sail endorsement at any time.

7. NOTES ON RESPONSIBILITY

The GDA or an approved Measurer is under no legal responsibility in respect of these Class Rules, plans or accuracy of measurement and no claim arising there-from can be

entertained. It shall also be made clear that it is the owner's responsibility to contact an appropriate measurer and to make his own contractual agreement with that Measurer.

8. ADVERTISING CODE

Category A; only advertising is permitted as outlined in the Current ISAF Regulations.

PART B – MEASUREMENT RULES

1. GENERAL

1.1. The intention of these Rules is to ensure that in hull shell form, hull weight, sail plan and rig of all boats are as alike as possible.

1.2. Any interpretation of these Rules shall be made only by the GDA.

1.3. In the event of discrepancy between these Rules, the measurement form, and/or any plans or drawings, the matter shall be referred to the GDA.

1.4. All boats shall be built in accordance with the GDA Rules.

1.5. A number of words such as fore, aft, above, below, height, depth, length, beam and freeboard acquire a precise meaning in measurement as they are all taken to refer to a hull in normal trim. Unless specifically required by the GDA Rules to be taken another way, all measurements denoted by these or similar words shall be taken parallel to one of the three major axes of the hull - (vertical, horizontal or transverse) - related to the waterline, and the fore and aft centreline of the hull.

1.6. Where a measurement is to be taken 'from A to B' the straight line distance joining A to B shall be measured whether or not the line is parallel to an axis.

1.7. Width, thickness, length, etc. of a component shall be measured as appropriate for that component, without reference to the hull axes.

1.8. Sheerline: the Sheerline is the intersection of the lines of the top of the deck and the outside of the skin, projected if necessary.

1.9. Aft Measurement Point (AMP): The Aft Measurement Point is the point on the keel band on the fore and aft centreline where the transom intersects the underside of the keel band. On boats out of certified moulds having a registered number of 3000 or later the AMP is to be taken as the aftermost point on the keel band, projected as necessary, in a plane at 90^0 to the base line.

2. CONSTRUCTION

2.1. Any reference to FRP specifically excludes the use of carbon fibre and, with the exception of use in sails, aramids.

2.2. Hulls, excluding fastenings, shall be constructed from wood, fibre reinforced plastic (FRP), foam sandwich or any combination of FRP or foam sandwich and wood.

2.3. FRP or wood mouldings shall be manufactured only by builders who have been approved by the GDA.

2.4. Hulls, constructed substantially of wood, shall conform to either the “Graduate Traditional Construction Plans" or to the “Graduate Kit Boat Construction Plans". For hulls constructed to the ”Graduate Kit Boat Construction Plans", owners shall arrange for the completion of Part A1 of the Measurement Form and enclose a

receipt of purchase of the Plans and a copy of the receipt for the building/sail number allocation fee when applying to the GDA for registration in accordance with Part A Rule 3.

2.5. Apart from the restriction details in Part B Rule 2.2, hulls may be built and/or finished by amateur or professional builders.

3. IDENTIFICATION MARKS

3.1. The hull shall carry the sail number as issued by the Royal Yachting Association cut into the upper face of the thwart in figures not less than 25mm in height.

3.2. The mainsail shall carry identification marks as detailed in Rule B10.4.

4. HULL MEASUREMENT

4.1. A keelband of any cross section but not less than 2mm nor more than 5mm in depth and not less than 6mm nor more than 13mm in width shall be fitted to the underside of the keel on each side of, and over the full length of, the centreboard slot.

4.2. In addition to the requirement contained in 4.1 on a wooden hull a keelband of any cross section but not less than 2mm nor more than 5mm in depth and not less than 6mm nor more than 13mm in width shall be fitted to the underside and over the length of the keel and to, and over the length of the stem.

4.3. In addition to the requirement contained in 4.1 on FRP shells a metal or FRP moulded keelband of any section but not less than 2mm nor more than 5mm in depth and not less than 6mm nor more than 13mm in width shall be fitted to or moulded into the underside and over the length of the keel and to, and over the length of, the stem.

4.4. The exposed depth of the keel, including keelband and centreboard slot gaskets, if fitted, shall be not less than 20mm nor more than 26mm.

4.5. Bilge rubbing strips are optional. One bilge rubbing strip of not less than 1345mm in length, not less than 20mm nor more than 50mm in width and not less than 12mm in thickness may be fitted on or moulded into each side of the outside bottom planking or FRP skin. Bilge rubbing strips, when fitted, may be faired or rounded.

4.6. Where the hull or decking is constructed from wood then the following shall apply: -

Plywood shall be to BS 1088.

4.6.1. The bottom planking shall be of plywood of 6mm nominal minimum thickness.
4.6.2. The side planking shall be of plywood of 4mm nominal minimum thickness.
4.6.3. The deck planking shall be of plywood of 4mm nominal minimum thickness.

4.6.4. The transom shall be of solid wood of 14mm nominal minimum thickness or of plywood of 12mm nominal minimum thickness.

4.6.5. The centreboard case sides shall be solid wood of 14mm nominal minimum thickness or of plywood of 12mm nominal minimum thickness.

4.6.6. The keel shall be of solid wood. The hog shall be of solid wood or plywood. The hog aft of the aft end of the centreboard case shall be not less than 92mm or more than 105mm in width.

4.6.7. The thwart shall be of solid wood and shall extend between the inside skin or longitudinal bulkheads one either side of the centreline. The thwart shall be not less than 100mm in width nor less than 14mm in thickness.

Where a FRP hull is used then the following shall apply: -

4.6.8. The thwart may be of solid wood or FRP, but if of solid wood shall comply with Rule 4.6.7. If of FRP the thwart shall not less than 100mm in width.

The following shall apply to all forms of construction unless otherwise stated.

4.7. The overall length of the hull measured from the AMP to the fore side of the stem band at sheerline shall be not less than 3760mm nor more than 3825mm.

4.8. A base line set at a distance of 216mm from the underside of the keelband at both the AMP and 3050mm forward of the AMP shall be not less than 76mm nor more than 108mm from the keelband at a point 1525mm forward of the AMP.

4.9. The stem including stem band shall be aft of a straight line extending between a point on the base line, as defined in Rule 4.8, 3505mm forward of the AMP and a point at stem head level, 3825mm forward of AMP.

4.10. The beam measured between chines at the aft face of the transom, or in a FRP boat in the plane of the AMP, shall not be less than 863mm or than 893mm.

4.11. The height of the chines at the aft face of the transom, or in a FRP boat in the plane of the AMP, measured vertically from the underside of the keel band or FRP equivalent shall be not less than 115mm nor more than 134mm.

4.12. The beam measured between sheerlines at the aft face of the transom, or in a FRP boat in the plane of the AMP, shall be not less than 955mm or more than 991mm.

4.13. The distance between chines 1525mm forward of the AMP, measured with a tape measure stretched around the outside hull and over the keelband, shall be not less than 1247mm nor more than 1274mm.

4.14. The height of the chines 1525mm forward of the AMP measured vertically from the underside of the keelband shall be not less than 149mm or more than 175mm.

4.15. The distance between chines 2425mm forward of the AMP, measured with a tape measure stretched around the outside hull and over the keelband, shall be not less than 1035mm nor more than 1061mm.

4.16. The height of the chines 2425mm forward of the AMP measured vertically from the underside of the keelband shall be not less than 178mm or more than 204mm.

4.17. The beam measured between sheerlines at 2425mm forward of the AMP shall be not less than 1220mm or more than 1270mm.

4.18. The beam measured between sheerlines at its greatest dimension shall be not less than 1385mm or more than 1435mm.

4.19. The vertical depth, 1830mm forward of the AMP measured between level of sheerlines and the underside of the keelband shall be not less than 533mm nor more than 592mm.

4.20. Between the AMP and 2425mm forward of the AMP, the athwartships curvature of the bottom planking shall be not more than 10mm between points on the bottom planking15mm from the plank edge at chine and 60mm from the hull centreline.

4.21. Between the AMP and 2425mm forward of the AMP, the athwartships curvature of the side planking shall be not more than 6mm between points on the side planking 15mmfrom the plank edge at chine and 75mm from the sheerline.

4.22. Between the AMP and 2425mm forward of the AMP, the chine radius shall be not more than 15mm.

4.23. The internal width of the centreboard case at any point shall be not less than 20mm or more than 28mm.

4.24. An athwartships watertight forward bulkhead shall be fitted.

4.25. The aft face of the forward bulkhead on hull centreline shall be not less than 2400mm or more than 2450mm forward of the AMP.

4.26. The aft face of the forward bulkhead at its intersections with the side planking or longitudinal bulkheads if fitted shall be not less than 2184mm or more than 2450mm forward of the AMP. For FRP boats out of certified moulds and constructed after 1st January 2009 this rule does not apply.

4.27. An athwartships watertight aft bulkhead shall be fitted.

4.28. The forward face of the aft bulkhead shall be not less than 405mm or more than 625mm forward of the AMP.

4.29. Longitudinal watertight bulkheads shall be fitted in boats having an aft bulkhead that is positioned less than 570mm forward of the AMP, these should extend to a minimum of 2400mm forward of the AMP.

Longitudinal watertight bulkheads are optional in boats having a back tank that extends more than 570mm from the AMP. If fitted, the upper edge shall meet the side decks

4.30. FRP hulls may be fitted with a single interconnecting buoyancy compartment but if so fitted then not less than 0.086m³ of rigid foam buoyant material shall be securely fixed to either the deck or bulkheads within the buoyancy compartment. Such rigid foam buoyant material shall be evenly distributed both fore and aft.

4.31. In hulls fitted with integral side buoyancy located between the fore and aft bulkheads, a watertight stowage compartment with access to the cockpit may be fitted to the foreside of the forward bulkhead.

4.32. Where a watertight stowage compartment as detailed in Rule 4.31 is fitted, such compartment shall be not more than 915mm in width or more than 356mm in height and shall not extend more than 2590mm forward of the AMP.

4.33. Each independent buoyancy compartment shall be fitted with at least one hatch with watertight cover. Drain hole(s), with stopper(s), may be fitted to each compartment.

4.34. The internal dimension of any hatch opening fitted in a buoyancy compartment shall be not more than 360mm square or less than 95mm in diameter.

4.35. The edge of any hatch opening fitted within the forward or aft bulkheads shall be not more than 255mm from the hull centreline.

4.36. A tube of maximum internal diameter 80mm may be fitted into the forward bulkhead but shall be so fitted as to maintain the watertight integrity of the forward buoyancy compartment.

4.37. Hulls shall be fitted with continuous decking extending from the sheerline and forming watertight joints with the shell and bulkheads as follows:

Between the transom and aft bulkhead.
Between the stem and forward bulkhead.
Subject to Rule 4.29 between the aft and forward bulkheads and, where fitted, longitudinal bulkheads.

4.38. The plan width of decking fitted between the forward and aft bulkheads shall each be not less than 100mm measured athwartships from the sheerline.

4.39. The height of the upper surface of the decking at the aft face of the transom or, in a FRP boat, in the plane of the AMP, measured vertically from the junction of the bottom planking and keel or FRP equivalent shall be not less than 280mm or more than 355mm.

4.40. Between the aft face of the transom or, in a FRP boat, in the plane of the AMP, and 405mm forward of AMP the decking shall be not more than 65mm below the level of sheerlines.

4.41. Between the forward and aft bulkheads the decking at points 100mm inboard from the sheerline shall be not more than 26mm below the level of sheerlines.

4.42. The height of the upper surface of the decking at the aft face of the forward bulkhead on hull centreline shall be not more than 680mm measured vertically from the underside of the keelband.

4.43. The inside of the bottom planking or FRP skin shall form the floor of the cockpit.

4.44. The plan width of any outboard deck overhang, including rubbing strake, if fitted, measured athwartships from the sheerline, shall be not more than 40mm.

4.45. Shroud plates shall be securely fastened on to the outside of the side planking or FRP skin. On FRP boats out of certified moulds, constructed after 1st January 2009, the shroud plates may be securely fastened to the hull/deck jointing flange.

4.46. The distance between an athwartships line joining the centre of the eyes of the shroud plates and the aft face of the forward bulkhead centreline shall not be less than 355mm.

4.47. The mast which may rotate, shall be stepped on the fore deck on the hull centreline so that the aft surface of the mast including the sail track and extended if necessary, shall be not more than 35mm forward of or more than15mm aft of the aft face of the forward bulkhead on centreline.

4.48. Two additional awthwartships floor stiffeners may be fitted, one forward and one aft of the thwart. The additional awthwartships floor stiffeners, if fitted, shall be not more than 20mm in thickness, or more than 50mm in height.

5. CENTREBOARD

5.1. The centreboard shall be made from solid or laminated wood and/or FRP and/or foam or any combination of these materials except within 10mm of its profile edge where any material may be used.

5.2. When fully extended below the keelband, no part of the centreboard shall be more than 1070mm from the underside of the keelband.

5.3. When fully extended below the keelband the fore and aft width of the centreboard at keelband shall be not less than 254mm or more than 380 mm.

5.4. When fully extended below the keelband, the fore and aft width of the centreboard 765mm below the keelband at its intersection with the leading edge of the centreboard shall be not less than 228mm or more than 306mm.

6. RUDDER

6.1. The rudder shall be made from solid or laminated wood and/or FRP and/or foam or any combination of these materials except within 10mm of its profile edge where any material may be used.

6.2. When fully extended below the line of the keelband, no part of the rudder shall be more than 765mm below the keelband at transom.

7. WEIGHT

7.1. The weight of the hull in a dry condition including essential fixed fittings which are those normally screwed, glued or bolted in place, the centreboard and corrector weights if fitted but excluding rudder, tiller, sails, spars and all other removable items shall be not less than 84kg.

7.2. Correctors, if required, shall be fitted to the underside of the thwart. The weight of the correctors shall be cut or stamped into the corrector and recorded on the measurement certificate. The total weight of correctors shall be not more than 10kg.

7.3. A boat measured before the 1st January 2009 and complying with the measurement rules then in force, shall not be required to comply with the marking or positioning requirements of Rule 7.2.

8. RIG

8.1. MAST

8.1.1. The mast shall be made of wood or metal and when un-stayed shall be straight in way of the sail track or groove.

8.1.2. The mast, with all fittings removed, shall be able to pass through a 100mm diameter circle.

8.1.3. Distinctive coloured measurement bands of not less than 13mm or more than 26mm in width shall be painted on the mast as follows: Lower Band - with the mast stepped in its normal position the upper edge of the lower band shall be not less than 1015mm or more than 1170mm measured vertically above the underside of the keelband in way of mast. Upper Band - the distance between the upper edge of the lower band and the lower edge of the upper band shall be not more than 5185mm.

8.1.4. The weight of the mast with all fitting and rigging secured along the length of the mast shall be not less than 6kg.

8.1.5. The height of the centre of gravity of the mast from the heel, measured with all fittings, rigging and halyards in position and secured along the mast shall be not less than 2,000mm.

8.1.6. When stepped, the height of the mast heel above the underside of keelband shall be not less than 580mm.

8.2. BOOM

8.2.1. The boom shall be made of wood or metal and when unsupported shall be straight along its length in all planes.

8.2.2. The boom with all fittings removed, shall be able to pass through a 100mm diameter circle.

8.2.3. A distinctive coloured measurement band of no less than 13mm nor more than 26mm in width shall be painted on the boom so that, when the boom is fitted in its normal position to the mast and at right angles to the mast, the forward edge of the band shall be not more than 2135mm from the aft side of the mast sail track or groove or its extension.

8.3. JIB STICK

8.3.1. The materials and dimensions of the jib stick are optional.

8.4. STANDING RIGGING

8.4.1. The following standing rigging shall be fitted:

8.4.1.1. One forestay
8.4.1.2. Two shrouds

8.4.2. The following standing rigging may be fitted:

8.4.2.1. One set of either diamonds or crosstrees or spreaders.
8.4.2.2. One set of lower shrouds. The arrangement used shall not be adjustable whilst racing. The material used is optional.

8.4.3. No other standing rigging is permitted.

8.4.4. The forestay shall be of stainless or galvanised steel multi-strand wire of minimum diameter 1.5mm. With the mast stepped in its normal position, the intersection of the forestay, extended if necessary, and the surface of the mast shall be not more than 4500mm above the level of sheerlines in way of mast.

8.4.5. Mast Datum Point – the mast datum point shall be taken as the heel point.

8.4.6. The shrouds shall be of stainless or galvanised steel multi-strand wire of minimum diameter 2.5mm. The distance between the intersection of the shrouds, extended if necessary, and the mast datum point shall be not more than 4600mm.

9. BUOYANCY TESTS

9.1. The tests shall be carried out at intervals not exceeding twelve months.

9.2. The tests shall be carried out by the owner.

9.3. Test 9.4.1, 9.4.2 or 9.4.3 shall be undertaken.

9.4. The owner shall test the buoyancy as follows:

9.4.1. With the mast stepped, but with sails, boom, rudder, tiller and all loose gear removed, the boat floating on its beam end to port and to starboard with the mast horizontal shall support a minimum crew weight of 128kg not immersed above the knees for a period of15 minutes on each side or such longer periods as the owner may require. For this test, the mast may be supported above the top measurement band.

9.4.2. With the mast stepped, but with sails, boom, rudder tiller and all loose gear removed, the boat, when swamped shall float for15 minutes with its sheerline approximately parallel to the waterline with 128kg of weight distributed as uniformly as possible between 680mm and 2400mm forward of the stern. The weight shall be made up of persons immersed not above the knees and/or cast iron or denser material. Upon satisfactory completion of the above the weights shall be removed and the boat shall be rolled through 180 degrees from its port beam end to its starboard beam end or vice versa and maintained on such beam end for a period of not less than 2 minutes.

9.4.3. Boats presented for inspection shall be provided with at least one hole of 20mm nominal diameter in each built-in compartment. Such hole may be within a hatch cover. In this case the hole shall be stopped whilst sailing. The hatches of the compartment being tested shall be closed normally using only the boat's hatch covers and fastenings and all other compartments shall be open. Draining holes shall be closed with their normal stoppers except where tubes to a pressure source and gauge are connected. Equipment for producing a press differential between the compartment and atmosphere and a water gauge for measuring the differential shall be connected to the compartment.

Air pressure shall be applied to the compartment to produce a differential reading of at least 125mm on the water gauge.

After isolating the compartment from the pressure source, the pressure differential shall not reduce from 125mm to 50mm in less than 30 seconds.

9.4.4. For the boat to comply with the requirements of this Rule after completion of either test 9.4.a, 9.4.b or 9.4.c, not more than four litres of water in total shall have entered the buoyancy tanks.

10. SAILS

10.1. General

10.1.1. Anything not specifically permitted by these GDA Rules is PROHIBITED.

10.1.2. Sails shall be made and measured in accordance with the current ISAF Rules, except where varied herein. Where a term defined or a measurement given in the ISAF Equipment Rules of Sailing is used in these GDA Rules it is printed in "italic" type.

10.1.3. The manufacturer of *sails* is optional.

10.1.4. *Sails* to be used for Racing must be measured by a Registered RYA Sail Measurer or a GDA Sail Measurer who shall sign and date each *sail* at its *tack*.

10.2. Mainsail

10.2.1. Construction

10.2.1.1. The construction shall be: *Soft sail, single ply sail.*

10.2.1.2. The *body of the sail* shall consist of *woven* and/or *laminated ply* throughout. The *ply* shall be of polyester and/or Aramids. *Sail* r*einforcement* shall consist of the same materials permitted in the *body of the sail. Windows* are permitted.

10.2.1.3. The *sail* can be of one of two forms. **'Traditional'** having 3 *batten pockets* in the *leech* or **'G07'** having 4 *batten pockets* in the *leech*.

10.2.1.4. In a *sail* having 3 *batten pockets*, the uppermost *batten pocket* shall extend from the *leech* to within 30mm of the *luff*. In a *sail* having 4 *batten pockets*, the upper and second *batten pocket* down shall extend from the *leech* to within 30mm of the *luff*.

10.2.1.5. The following are permitted: stitching, glues, woven and PTFE tapes, bolt ropes, corner eyes, tack strap and buckle, Velcro® or other fabric based hook and loop fastening, headboard with fixings, Cunningham eye/pulley, *batten pocket* elastic, *batten pocket* end caps, *batten* retaining/bending devices, mast and boom slides, *leech* line with cleat, *window*/*windows*, sail makers' labels as permitted by the ISAF, sail numbers and Graduate Dinghy Class insignia, tell tales.

10.2.2. **'Traditional' Mainsail Dimensions**

	Minimum	Maximum
Leech length		5550mm
Quarter Width		1950mm
Half width		1415mm
Three-quarter width		830mm
Upper width from the *upper leech point* 300mm from the *head point*		250mm
Top width		140mm
Primary reinforcement		300mm
Secondary reinforcement:		
from *corner measurement points*		900mm
for *flutter patches*		100mm
for *chafing patches*		900mm
for *batten pocket patches*		150mm
Tabling width at *luff* and *foot*		65mm
Tabling width elsewhere		30mm
Seam width		15mm
Greatest dimension of the headboard from *head point*		140mm
Batten pocket length:		
Inside		785mm
Outside		795mm
Batten pocket width:		
Inside		50mm
Outside		80mm
Head point to intersection of *leech* and centreline of uppermost *batten pocket*	1200mm	1250mm
Clew point to intersection of *leech* and centreline of lowermost *batten pocket*:	1200mm	1450mm
Foot median (for a loose footed *sail*)		5440mm

Window:
The shortest distance from the *window*/*windows* to the edge of the *sail* shall not be less than 150mm

The *window*/*windows* must not extend above the *batten pocket* nearest the *Half width point*.

10.2.3. **'G07' Mainsail Dimensions**

	Minimum	Maximum
Leech length		5550mm
Quarter Width		1995mm
Half width		1630mm
Three-quarter width		1165mm
Upper width from the *upper leech point* mid-way between the *head point* and the *three-quarter leech point*		780mm
Top width		140mm
imary reinforcement		300mm
Secondary reinforcement		
from *corner measurement point*/s		900mm
for *flutter patches*		100mm
for *chafing patches*		900mm
for *batten pocket patches*		150mm
Tabling width at *luff* and *foot*		65mm
Tabling width elsewhere		30mm
Seam width		15mm
Greatest dimension of the headboard from *head point*		140mm
Batten pocket length, except *batten pocket* closest to *Three-quarter width* point:		
Inside		890mm
Outside		900mm
Batten pocket width:		
Inside		50mm
Outside		80mm
Position of uppermost *batten pocket*:		
Head point to intersection of *leech* and centreline of *Batten pocket*	650mm	700mm
Head point to intersection of extension of centreline of *batten pocket* and *luff*		570mm
Position of the second *batten pocket* down:		
Head point to intersection of centre line of *batten Pocket* and *leech*	1300mm	1350mm
Head point to intersection centre line of *batten pocket* and *luff*		1270mm

	Minimum	Maximum
Clew point to intersection of *leech* and centreline of lowermost *batten pocket*	1200mm	1450mm
Foot median (for a loose footed *sail*)		5440mm

Window:
The shortest distance from the *window*/*windows* to the edge of the *sail* shall not be less than 150mm

The *window*/*windows* must not extend above the *batten pocket* nearest the *Half width point*.

10.3. Headsail

10.3.1. CONSTRUCTION

10.3.1.1. The construction shall be*: Soft sail, single ply sail*.

10.3.1.2. The body of the *sail* shall consist of woven or laminated *ply* throughout. The *ply* shall be of polyester and/or Aramids. Reinforcement shall consist of the same materials permitted in the body of the *sail*. Except for stiffening as detailed in Rule 10.3.2 the body of the *sail* shall be flexible and be capable of being folded flat in any direction without permanently damaging the *sail* or its reinforcement.

10.3.1.3. The *sail* shall have one *window* located below the *half width* measurement.

10.3.1.4. The shape of the *leech* shall not be convex.

10.3.1.5. The shape of the *foot* shall be a continuous convex curve.

10.3.1.6. The following are permitted: stitching, glues, woven and PTFE tapes, luff wire, corner eyes, hanks, sail makers' labels as permitted by the ISAF, tell tales.

10.3.2. DIMENSIONS (to be measured as *a headsail*)

	Minimum	Maximum
Luff length		3710mm
Leech length		3710mm
Luff perpendicular		1590mm
Foot median (see Rule 10.3.3)		
Top width		50mm
Primary reinforcement		300mm
Secondary reinforcement:		
from *corner measurement points*		900mm
for *flutter patches*		100mm
for *chafing patches*		900mm
Tabling width at luff		65mm
Tabling width elsewhere		30mm
Seam width		15mm
Total *window* area	0.1 m^2	No maximum
Shortest distance from *window* to edge of *sail*	150mm	

10.3.3 The *foot median* shall be not more than 50mm plus half the sum of the *leech length* and 3710mm

10.4. Class Insignia, Letters and Sail Numbers

10.4.1. The Graduate™ Dinghy Class insignia and the sail number and letters, as issued by the RYA shall be in accordance with the current ISAF Rules of Sailing, except where varied herein.

10.4.2. Numbers and letters shall be of the following dimensions:

	Minimum	Maximum
Height	300mm	
Width (except number"1" or letter "I")	200mm	
Thickness	40mm	55mm
Spacing between adjoining numbers or letters or edge of sail	60mm	

10.4.3. The Graduate™ Dinghy Class insignia shall conform with the dimensions and requirements as detailed in the Diagram 1 of these GDA Rules.

10.5. Additional Association Rules

10.5.1. Only sails endorsed in accordance with rule Part A4 shall be used.

10.5.2. Not more than 1 mainsail and 1 headsail shall be carried on board.

10.5.3. The mainsail shall be set so that the highest visible point at the head is lower than the lower edge of the upper mast measurement band and so that the aftmost visible part of the leech is forward of the inner edge of the boom measurement band.

10.5.4. Loose footed mainsails are permitted.

11. CREW

11.1. There shall be two persons on board when racing except where it is specifically stated to the contrary in the sailing instructions for the event.

12. CLOTHING AND EQUIPMENT

12.1. The maximum weight of clothing and equipment worn by each crew member shall be not more than 15kg when saturated with water.

12.2. The current ISAF Rules of Sailing shall apply.

13. PROHIBITIONS

13.1. Spinnaker.

13.2. The use of any apparatus or contrivance outboard or extending outboard, the purpose of which is or may be to support or assist in supporting a crew outboard or partly outboard.

13.3. Any deviation of the design not specifically permitted by the GDA Rules which may affect the performance under sail.

13.4. Alteration of the effective length of the standing rigging whilst racing.

13.5. The attachment to the mast of any strut or struts or spars other than the boom, boom control strut, jib stick and a pair of spreaders, crosstrees, one set of diamond struts or lower shrouds if fitted.

13.6. Electronic wind direction indicators.

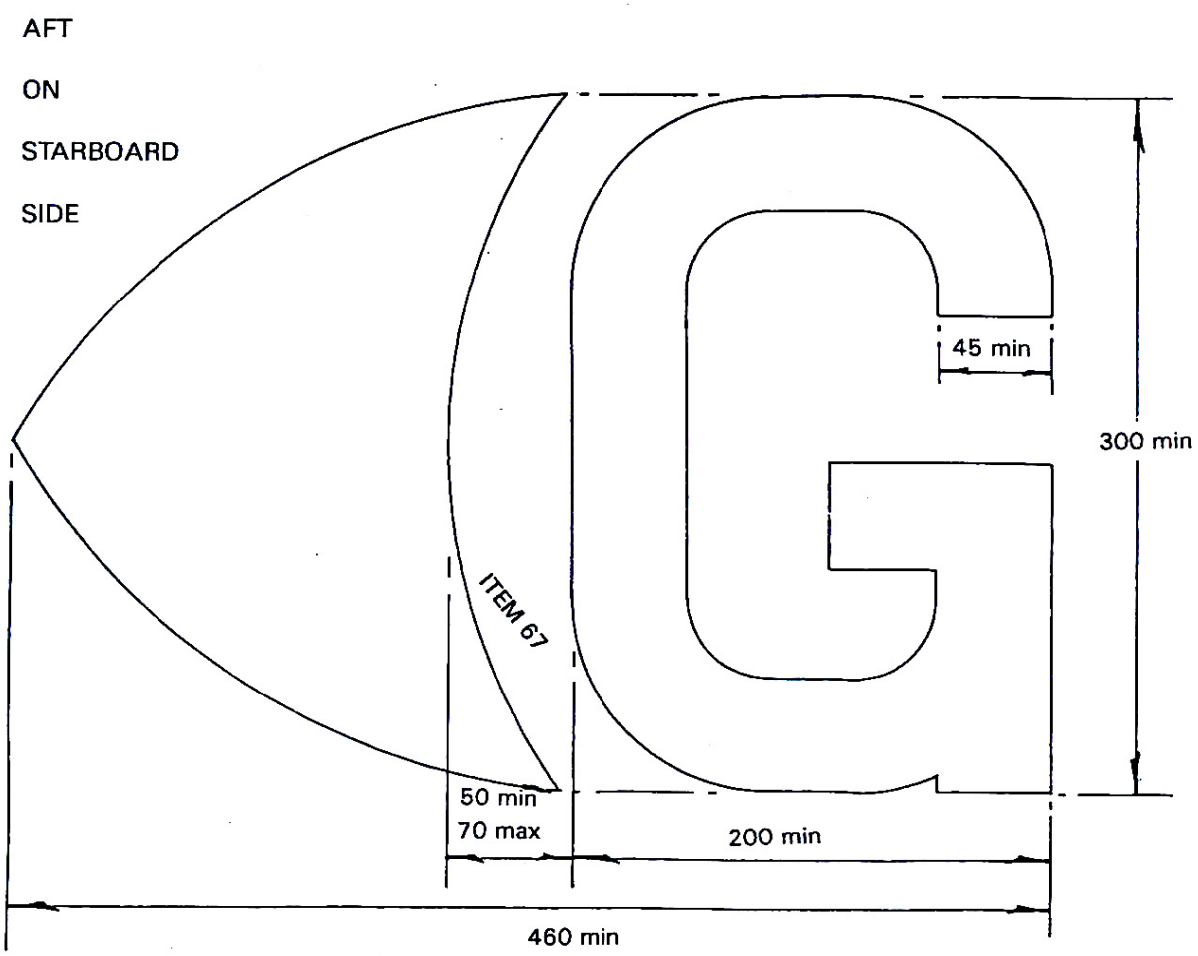
Electronic or mechanical devices for correlating wind direction data to boat heading.

Electronic position finding devices**.**

DIAGRAM 1

SAIL INSIGNIA

All dimensions in mm



PART C - DIMENSIONS

The following are those dimensions required to be measured by Approved GDA measurers and entered on the approved measurement form. On completion of measurement a measurer will supply the owner with the completed and signed measurement form which shall be forwarded to the GDA secretary with the application for certification, in accordance with Part A of these Association Rules. No boat is entitled to use the GDA name Graduate until such time as a duly completed and signed measurement certificate has been issued.

No	Rule	Dimension	Minimum	Maximum
1	3.1	Height of Sail Number in thwart	25	
2	4.1	Depth of keel band in way of centreboard slot	2	5
3	4.1	Width of keel band in way of centreboard slot	6	13
4	4.2	Depth of keel band over stem	2	5
5	4.2	Width of keel band over stem	6	13
6	4.3	Depth of keel band FRP hull	2	5
7	4.3	Width of keel band on FRP hull	6	13
8	4.4	Depth of keel	20	26
9	4.5	Length of bilge rubbing strips	1345	
10	4.5	Width of bilge rubbing strips	20	50
11	4.5	Depth of bilge rubbing strips	12	
12	4.6	Is thickness of bottom planking in accordance with the rule?		Yes/No
13	4.6	Is thickness of side planking in accordance with the rule?		Yes/No
14	4.6	Is thickness of deck planking in accordance with the rule?		Yes/No
15	4.6	Thickness of solid wood transom	14	
16	4.6	Thickness of plywood transom	12	
17	4.6	Thickness of solid wood centreboard case	14	
18	4.6	Thickness of plywood centreboard case	12	
19	4.6	Width of hog aft of centreboard case in traditional wood hulls	92	105
20	4.6	Width of main thwart	100	
21	4.6	Thickness of main thwart	14	
22	4.7	Length overall	3760	3825
23	4.8	Base line to keel at 1525mm forward of AMP	76	108
24	4.9	Is stem in accordance with rule?		Yes/No
25	4.10	Beam between chines at measurement point	863	893
26	4.11	Height of chines at measurement point	115	134
27	4.12	Beam between sheerlines at measurement point	955	991
28	4.13	Distance between chines over keelband at 1525mm forward of AMP	1247	1274
29	4.14	Height of chines at 1525mm forward of AMP	149	175
30	4.15	Distance between chines over keelband at 2425mm forward of AMP	1035	1061
31	4.16	Height of chines at 2425mm forward of AMP	178	204

No	Rule	Dimension	Minimum	Maximum
32	4.17	Beam between sheerlines at 2425mm forward of AMP	1220	1270
33	4.18	Maximum beam between sheerlines	1385	1435
34	4.19	Depth at 1830mm forward of AMP	533	592
35	4.20	Curvature of bottom planking		10
36	4.21	Curvature at side planking		6
37	4.22	Chine radius		15
38	4.23	Internal width of centreboard	20	28
39	4.24	Forward bulkhead to AMP on centreline	2400	2450
40	4.25	Forward bulkhead at intersection with side planking or bulkheads to AMP	2184	2450
41	4.28	Aft bulkhead to AMP	405	625
42	4.31	Is buoyancy in accordance with Rule 4.31?		Yes/No
43	4.32	Is stowage compartment, if fitted, in accordance with rule 4.33?		Yes/No
44	4.33	Is each buoyancy compartment fitted with a hatch?		Yes/No
45	4.34	Are hatch dimensions in accordance with rule?		Yes/No
46	4.35	Distance of edge of forward or aft bulkhead hatches from centreline		255
47	4.38	Plan width of side decks	100	
48	4.39	Height of decking at transom	280	355
49	4.40	Depth of aft deck below sheerlines		65
50	4.41	Depth or side decks below sheerlines		26
51	4.42	Height of fore deck above keelband		680
52	4.43	Does bottom planking form the floor of cockpit?		Yes/No
53	4.44	Width of deck overhang		40
54	4.45	Are shroud plates securely fastened to the outside Planking or FRP skin?		Yes/No
55	4.46	Distance of shroud plates aft of forward bulkhead	355	
56	4.47	Aft surfaces of mast aft of forward bulkhead	-35	15
57	4.49	Additional awthwartships floor stiffeners if fitted: thickness		20
58	4.49	Additional awthwartships floor stiffeners if fitted: height		50
59	5.1	Is the material of the centreboard in accordance with Rules?		Yes/No
60	5.2	Depth of centreboard from keel band		1070
61	5.3	Width of centreboard at keel band	254	380
62	5.4	Width of centreboard 765mm below keel band	228	306
63	6.1	Is rudder material in accordance with Rules?		Yes/No
64	6.2	Depth of rudder below keel band		765
65	7.1	Weight of hull	84kg	
66	7.2	Weight of correctors		10kg
67	8.1.1 8.2.2	Diameter of spars		100
68	8.4.1	Is standing rigging in accordance with rule?		Yes/No

No	Rule	Dimension	Minimum	Maximum
69	8.4.6	Height of forestay intersection with mast above sheerlines		4600
70	8.1.6	Height of mast heel above keel band	580	
71	8.1.4	Weight of mast	6kg	
72	8.1.5	Centre of gravity of mast from heel	2000	
73	8.4.4 8.4.5	Are shroud and forestay diameters in accordance with Rules?		Yes/No
74	8.1.3	Distance between mast measurement bands in accordance with rule 8.1.3		5185
75	8.1.3	Height of upper edge of lower mast measurement band above heel	1015	1170
76	8.1.3 8.2.3	Width of measurement bands	13	26
77	8.2.3	Distance of forward edge of boom measurement band from aft side of mast		2135
78	9	Does the boat comply with the requirements of Rule 9?		Yes/No

Document Issue Status.

Changes to this document will normally be indicated with a vertical line adjacent to the amended item.

Effective:

1st March 2012 Issue 7

PART A
Measurement Certificate, First Certification Page 3 of 29, Sail and Buoyancy Endorsement, Page 5 of 29
Part B
Measurement Rules, Section 4.11, 8.4.4, 8.4.5, 8.4.6.
Changes relating to the endorsement of sails and measurement of the standing rigging.
Part C
Item No. 26, Rule 4.11, Item No. 69, Rule No. 8.4.6

1st March 2011 Issue 6. PART A.
Measurement Certificate, First Certification Page 2 of 28,
Measurement Rules, Section 1.9, 2.3, 2.3, 2.4, 2.5.
Hull Measurement, Section 4.7, 4.8, 4.26, 4.28, 4.29, 4.45.
The changes in the above Sections relate to adoption of the modified cockpit and hulls manufactured from certified moulds.

Measurement Certificate, Re-Certification Page 3 of 28.
Para 1 will changed from will to shall
Para 2 Wording changed, Association removed and Part D amended to read Part C.

Validity of Measurement Certificate, Page 4 of 28
Para VII Wording changed, Measurement, added

Sail and Buoyancy Endorsements, Section 4, Sail
Wording changed from will to shall.

PART B.
General, Section 1.2 'only' inserted between made & by.
Section 1.9
AMP definition relating to Certified Mould boats added.
Construction, Section 2.4 Para inserted to qualify hulls constructed of wood.

	Construction, Section 2.1 – 2.3 & 2.5 Identification Marks, Section 3.2, B10.4.b amended to B10.4 Hull Measurement, Section 4.3, Para amendment related to Certified Mould boats Hull Measurement, Section 4.7 & 4.8, rewritten to allow for AMP measurement change see Section 1.9 Hull Measurement, Section 4.9, Wording changed, Rule 4.6 to Rule 4.8 Hull Measurement, Section 4.29, Amendment to include smaller back tanks. Hull Measurement, Section 4.3, 4.5, 4.6.8, 4.30, 4.39 GRP changed to FRP. Section 4.40 Changes made to cater for hulls constructed from certified moulds. Centreboard, Section 5.1 Rudder, Section 6.1 PART C. No 6, Rule 4.3 & 7 Rule 4.3 & No 54 Rule 4.45 The changes in the above Sections relate to the term GRP (Glass Reinforced Plastic) being changed to FRP (Fibre Reinforced Plastic) and/or amendments due to FRP construction. Weight, Section 7.2, 7.3 The changes in the above Sections relate Corrector Weights. Boom, Section 8.2.1, Para re-written as booms may not have a sail track or groove. Standing Rigging, Section 8.4.2.2, & Prohibitions, Section 13.5 The changes in the above Sections relate the adoption of Lower Shrouds. Headsail Construction Section 10.3.1.2, Para reworded to ensure that fabric can be folded without permanent damage. Section 10.3.2 The change relates to Window maximum measurement being removed. PART C. No 25 Rule 4.10, No 26 Rule 4.11, No 27 Rule 4.12 Changes to point of measurement from Transom to measurement point.
1st February 2009	Issue 5. Mainsail Construction, Amendments, Section 10.2.1 Page 15–18 of 26. These changes relate to the adoption of the 'G07' Mainsail. Prohibitions, Amendment, Section13 Page21 of 26. The inclusion of 'boom control strut'.
30th June 2008	Issue 4. Upper Batten Pockets, Amendment, Section 10.2.2 Page 16 of 24.
19th February 2008	Issue 3. Design Administrative Corrections, Section 10.2.2 Page 16 of 24.
23rd October 2007	Issue 2. Typographical Error, Section 10.2.2: Page 16 of 24.
1st October 2007	Issue 1.