

Section 7 – Sails

7.1 PARTS

7.1.1 MANDATORY

- (a) Mainsail
- (b) Headsail

7.1.2 OPTIONAL

- (a) Spinnaker

7.2 GENERAL

7.2.1 RULES

- (a) **Sails** shall comply with the **class rules** in force at the time of **certification**.

7.2.2 CERTIFICATION

- (a) The **official measurer** shall **certify** mainsails and headsails in the **tack** and spinnakers in the **head** and shall sign and date the **certification mark**.
- (b) An MNA may appoint one or more persons at a sailmaker to measure and **certify sails** produced by that manufacturer in accordance with the ISAF In-house Certification Guidelines.

7.2.3 DEFINITIONS

- (a) LMP Luff Measurement Point – the point on the mainsail **luff** 1245mm from the **tack point**.

7.2.4 SAILMAKER

- (a) No licence is required.

7.2.5 LIMITATIONS

- (a) Not more than 1 mainsail, 1 jib and 1 spinnaker shall be carried aboard.
- (b) Not more than 1 mainsail, 1 jib and 1 spinnaker shall be used during an event of less than 14 consecutive days, except when a **sail** has been lost or damaged beyond repair.

7.3 MAINSAIL

7.3.1 IDENTIFICATION

- (a) The class insignia shall conform to the dimensions and requirements, and be placed in accordance with the diagram contained in Part C – Class Insignia. The insignia may be placed back to back, if placed back to back the points of the insignia shall point towards the leech.
- (b) The full boat/plaque number shall be carried.
- (c) The insignia, letters and numbers shall be black.

7.3.2 MATERIALS

- (a) The **ply** fibres shall consist of woven polyester.
- (b) **Sail reinforcement** shall consist of materials as permitted in the **body of the sail**.
- (c) The colour of the **ply** shall be red within the range of Pantone Warm Red and its derivatives 179, 185, 187, 192, 193, 200 and 201, of the Pantone Colour Formula Guide 747XR.
- (d) **Tabling** on the **luff** may be white.

7.3.3 CONSTRUCTION

- (a) The construction shall be: **soft sail, single ply sail**.
- (b) The **body of the sail** shall consist of the same **woven ply** throughout.
- (c) All panel plies shall run from **leech to luff**, or **leech to foot**, or **leech to luff and foot**.

- (d) At least one **seam** shall intersect the **leech** within 1000mm of the **half leech point**
- (e) The **sail** shall have three (3) **batten pockets** in the **leech**. The intersection of the centreline of each **batten pocket** and the **leech** shall be within ± 50 mm of the **quarter, half** and **three-quarter leech points**.
- (f) The following are permitted: Stitching, glues, webbing, woven tapes, bolt ropes on the **luff**, corner eyes, luff lacing eyes, **batten pocket patches**, batten pocket elastic, batten pocket end caps, batten retaining devices, **windows**, tell tales and items as permitted or prescribed by other applicable *rules*.
- (g) The **leech** shall not extend aft of straight lines between:
- (1) the **aft head point** and the intersection of the **leech** and the upper edge of the nearest **batten pocket**,
 - (2) the intersection of the **leech** and the lower edge of a **batten pocket** and the intersection of the **leech** and the upper edge of an adjacent **batten pocket** below,
 - (3) the **clew point** and the intersection of the **leech** and the lower edge of the nearest **batten pocket**.
- (h) The shape of the **foot** shall be convex.
- (i) Not more than three **tucks** or **darts** are permitted along the **foot**, and these shall not touch the **seam** of the next panel nor exceed a maximum length of 360 mm.
- (j) **Double luff sails** are prohibited.
- (k) There may be a maximum of six (6) eyelets in the **luff** below the LMP.
- (l) There may be not more than one corner eye at the **head**, one at the **tack** and one at the **clew**.
- (m) The number of **windows** is not restricted.
- (n) **Primary and Secondary reinforcement** of any area and **tabling** of any width is permitted.

7.3.4 DIMENSIONS

	minimum	maximum
Leech length	-	4520 mm
Luff length	-	4052 mm
Foot length	-	2135 mm
Foot median	-	4340 mm
Upper width at upper leech point 1067 mm from head point	-	725 mm
Top width	-	55 mm
Length of boltrope from the head point	2810 mm	-
Half leech point to LMP	-	1650 mm
Distance from clew point to LMP	-	2530 mm
Batten pocket length:		
uppermost pocket:		
inside	-	560 mm
intermediate and lowermost pockets:		
inside	-	660 mm
Batten pocket width:		
inside	32 mm	60 mm
Window to luff	250 mm	
Window to leech	800 mm	

	minimum	maximum
Window to foot		500 mm

7.3.5 USE

- (1) The **sail** shall be hoisted on a halyard. The arrangement shall permit hoisting and lowering of the **sail** whilst afloat.
- (2) The highest visible point of the **sail**, projected at 90° to the mast **spar**, shall not be set above the lower edge of the mast **upper limit mark**. For boats equipped with a gunter rig, the highest visible point of the **sail**, projected at 90° to the gaff shall not be set above the lower edge of the gaff measurement band. The intersection of the **leech** and the top of the boom **spar**, each extended as necessary, shall not be behind the fore side of the boom **outer limit mark**.
- (3) The **sail** shall be loose footed.

7.4 HEADSAIL

7.4.1 MATERIALS

- (a) The **ply** fibres shall consist of woven polyester.
- (b) **Sail reinforcement** shall consist of materials as permitted in the **body of the sail**.
- (c) The colour of the **ply** shall be red within the range of Pantone Warm Red and its derivatives 179, 185, 187, 192, 193, 200 and 201, of the Pantone Colour Formula Guide 747XR.
- (d) **Tabling** on the **luff** may be white.

7.4.2 CONSTRUCTION

- (a) The construction shall be: **soft sail, single ply sail**.
- (b) The body of the sail shall consist of the same woven ply throughout.
- (c) Except in the lowermost panel, all other panel plies shall extend from **leech** to **luff**, or **leech** to **foot**, or **leech** to **luff** and **foot**. One seam passing through the **foot** is permitted in the lowermost panel.
- (d) At least one **seam** shall intersect the **leech** within 1000mm of the **half leech point**.
- (e) Not more than three tucks or darts are permitted along the foot, and these shall not touch the seam of the next panel nor exceed a maximum length of 360 mm.
- (f) The **leech** shall not extend beyond a straight line from the aft **head point** to the **clew point**.
- (g) **Double luff sails** are prohibited.
- (h) The following are permitted: Stitching, glues, webbing, woven tapes, corner eyes, hanks and associated eyes, one **window**, tell tales, and items as permitted or prescribed by other applicable *rules*.
- (i) There shall be not more than one attachment point at the **head**, one at the **tack** and one at the **clew**.
- (j) **Primary** and **Secondary reinforcement** of any area and **tabling** of any width is permitted.

7.4.3 DIMENSIONS

	minimum	maximum
Luff length	-	2782 mm
Leech length	-	2442 mm
Foot length	-	1540 mm
Foot median	-	2545 mm
Top width	-	35 mm
Window dimension in any direction	-	460 mm

6.1.2 All standing rigging shall be attached to the gunter mast by being looped over the top of the mast not more than 50mm from its top. A plastic or GRP cap to protect the gunter mast from the rigging is permitted.

6.1.3 The forestay shall be attached to the forestay attachment fitting.

6.1.4 The method of attachment of the **forestay** shall be

- (i) directly to the forestay attachment fitting
- (ii) by a rigging adjuster plate or link.
- (iii) by a rigging screw
- (iv) by a shackle or shackles
- (v) by rigging which may include a purchase, blocks and a cleat which shall be attached to the **forestay** attachment fitting or the **forestay** only.

6.1.5 Each **shroud** shall be attached to one of the **shroud** plate fittings identified in rule 1.7.1.

6.1.6 The method of attachment of the **shrouds** shall be

- (i) directly to the shroud plate fitting
- (ii) by a rigging adjuster plate or link.
- (iii) by a shackle or shackles
- (iv) by a rigging screw

6.1.7 The shrouds and the forestay shall not be altered while racing.

6.2 **Running Rigging**

6.2.1 The type and material of running rigging and associated fittings are optional subject to the following limitations:

- (i) Main and jib halyards must be made fast on the mast below the gooseneck. The main halyard may be tightened using a 2:1 purchase. No other mechanical advantage may be used to tighten either halyard.
- (ii) The mainsheet shall have a maximum of 5 turning blocks. The mainsheet or turning blocks shall be attached to the transom, via the mainsheet attachment points only, inside the cockpit adjacent to the thwart, or on the boom. If the mainsheet runs along the exterior of the boom it shall pass through at least one constraining loop or sleeve that does not protrude more than 50 mm from the surface of the boom.
- (iii) There may be one ratchet block for use in the mainsheet system only.
- (iv) The kicking strap shall have a purchase not greater than 8:1.

OR

The kicking strap shall be a gnav strut arrangement with a control line purchase of not more than 8:1. The angle of the lower edge of the strut to the upper edge of the **boom** shall not be greater than 45°, measured with the boom at 90° to the aft edge of the **mast spar**.

- (v) Other apparatus which controls mast bend is prohibited.