# Appendix I

# Hull Construction Standards (Scantlings)

1.8.1

a) A yacht of less than 24m (78.74 feet) in hull length with the earliest of Age or Series Date on or after 1 January 2010 shall have:

• been designed, built and maintained in accordance with the requirements of ISO 12215 Category A.

• on board a certificate of building plan review from a Notified Body recognized by ISAF.

• on board a declaration signed and dated by the builder to confirm the yacht is built in accordance with the plans reviewed by the Notified Body.

A list of Notified Bodies recognized by ISAF can be found at http://www.sailing.org/classesandequipment/offshore/plan\_review.php.

b) A yacht of 24m (78.74 feet) or greater in hull length with the earliest of Age or Series Date on or after 1 January 2010 shall have:

been designed, built and maintained in accordance with the requirements of a Classification Society recognized by ISAF.

• on board a certificate of building plan review from a Classification Society recognized by ISAF.

• on board a declaration signed and dated by the builder to confirm the yacht is built in accordance with the plans reviewed by the Classification Society.

A list of Classification Societies recognized by ISAF can be found at http://www.sailing.org/classesandequipment/offshore/plan\_review.php.

# 1.8.2

a) A yacht of less than 24m (78.74 feet) in hull length, with the earliest of Age or Series Date on or after 1 January 2010, if subject to any significant repair or modification to the hull, deck, coachroof, keel or appendages on or after the 1 January 2010, shall have:

the repair or modification designed and built in accordance with ISO 12215 Category A.

• on board a certificate of building plan review for the repair or modification from a Notified Body recognized by ISAF.

• on board a declaration signed and dated by the builder to confirm that the repair or modification is in accordance with the requirements of ISO 12215 Category A.

b) A yacht of 24m (78.74 feet) in hull length and over, with the earliest of Age or Series Date on or after 1 January 2010, if subject to any significant repair or modification to the hull, deck, coachroof, keel or appendages on or after the 1 January 2010, shall have

the repair or modification designed and built in accordance with the requirements of a Classification Society recognized by ISAF.

• on board a certificate of building plan review for the repair or modification from a Classification Society recognized by ISAF.

• on board a declaration signed and dated by the builder to confirm that the repair or modification is in accordance with the plans reviewed by the Classification Society.

A monohull with the earliest of Age or Series Date before 1 January 2010 shall comply with ISAF OSR 3.03.1 and 3.03.2 and above or with 3.03.4.

### 1.8.4

a) A monohull with the earliest of Age or Series Date before the 1 January 2010 not complying with ISAF OSR 3.03.1, 3.03.2 and 3.03.3 shall have been designed built, maintained, modified and repaired in accordance with the requirements of one of the following:

the ABS Guide for Building and Classing Offshore Yachts in which case the yacht shall have on board either a certificate of plan approval issued by ABS, or written statements signed by the designer and builder which confirm that they have respectively designed and built the yacht in accordance with the ABS Guide.

ISO 12215 Category A, with written statements signed by the designer and builder which confirm that they have respectively designed and built the yacht in accordance with the ISO standard, except that a race organizer or class rules may accept, when those standards described above is not available, the signed statement by a naval architect or other person familiar with the standards listed above that the yacht fulfills the above requirements. except that a race organizer, when that described above is not available, may permit a yacht to compete if there is successful past race or passage making history for the yacht.

### Appendix II

### Moveable and Variable Ballast

Notwithstanding the maximum length limit of 24m in the standard, this Appendix invokes International Standard ISO 12217-2, Small craft - Stability and buoyancy assessment and categorization - Part 2: Sailing boats of hull length greater than or equal to 6m. The functions KFR (Knockdown Recovery Factor) and FIR (Inversion Recovery Factor) are defined in ISO 12217-2, except as modified by this Appendix.

This Appendix applies to Monohull Yachts only.

1 Stability

#### 1.1 Boat Condition

In the calculation of stability data:

(a) Deck and other enclosed volume above the sheerline andcockpit volume shall be taken into account.

(b) Mass shall be taken as Minimum Operating Mass as defined by ISO 12217-2, paragraph 3.5.3.

1.2 General Standards

In the assessment of ISO category for yachts fitted with moveable and/or variable ballast, ISO 12217-2, paragraph 6.1.4 b) shall not apply. Boats shall comply with paragraphs 6.2.3, 6.3.1 and 6.4. Calculations shall be for the ballast condition that results in the most adverse result when considering each individual stability requirement. ISO 12217-2 Annex C, paragraph C.3.3, first sentence, the word 'may' is replaced with 'shall'. ISO 12217-2 Annex C, paragraph C.3.4 shall not be used in the calculation of righting lever.

1.3 Knockdown Recovery

Boats with moveable/variable ballast shall comply with the following minimum values of Knockdown Recovery Factor (FKR) calculated in accordance with ISO 12217-2 paragraph 6.4.4 with the modification that the reference to ISO 8666 paragraph 5.5.2 changed to incorporate actual mainsail area and centre of effort. The lesser of FKR90 and FKR-90 shall be used:

SR Category FKR Ocean Coastal Nearshore 0.9 0.8 0.7

Boats with age date prior to 11/04 may seek dispensation from this section 1.3 by application to US Sailing.