The Viper was designed in 2007 by Greg Goodall and was adopted as a Recognised class in 20xx.
INTRODUCTION

The Viper Class has been created as a strict one-design catamaran where the true test when raced is between crews and not boats and equipment. The fundamental objective of these class rules is to ensure that this concept is maintained.

Viper hulls, hull appendages, tillers, rig and sails shall only be manufactured by the licensed manufacturers. Equipment is required to comply with the Viper Building Specification.

Viper hulls, hull appendages, rig and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

Owners and crews should be aware that compliance with rules in Section C is NOT checked as part of the manufacturing process.

Rules regulating the use of equipment during a race are contained in Section C of these class rules, in ERS Part I and in the Racing Rules of Sailing.

This introduction is intended to provide a non-binding overview. The Viper Class Rules proper begin on the next page.
PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE
A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.
A.1.2 The word “shall” is mandatory and the word “may” is permissive.

A.2 ABBREVIATIONS
A.2.1 ISAF International Sailing Federation
MNA ISAF Member National Authority
AHPC Australian High Performance Catamarans
LM Licensed Manufacturer
ICA International Viper Class Association
NCA National Viper Class Association
ERS Equipment Rules of Sailing
RRS Racing Rules of Sailing

A.3 AUTHORITIES
A.3.1 The international authority of the class is the ISAF which shall co-operate with AHPC and the ICA in all matters concerning these class rules.
A.3.2 The ICA may declare ineligible any Viper, which does not conform to these class rules and the official drawings and specifications held by the ISAF.

A.4 ADMINISTRATION OF THE CLASS
A.4.1 The class is administered by the ICA which shall co-operate with the AHPC. The ICA may delegate part or all of its administrative functions to an NCA.
A.4.2 In countries where there is no NCA, or the NCA does not wish to administrate the class, its administrative functions shall be carried out by the ICA in cooperation with the MNA, or by the MNA in co-operation with the ICA.

A.5 ISAF RULES
A.5.1 These class rules shall be read in conjunction with the ERS.
A.5.2 Except where used in headings, when a term is printed in “bold” the definition in the ERS applies and when a term is printed in “italics” the definition in the RRS applies.

A.6 CLASS RULES VARIATIONS
A.6.1 At Class Events – see RRS 89.1(d) – ISAF Regulation 26.5(f) applies. At all other events RRS 86 applies.

A.7 CLASS RULES AMENDMENTS
A.7.1 Submissions for rule changes may be made in writing by the ICA after consultation with the ICA Rules Committee.
A.7.2 Amendments to these class rules shall only be made subject to approval of ISAF in accordance with the ISAF Regulations.
A.8 CLASS RULES INTERPRETATIONS
A.8.1 Interpretations of class rules shall be made in accordance with the ISAF Regulations.

A.9 INTERNATIONAL CLASS FEE AND ISAF BUILDING PLAQUE
A.9.1 The licensed hull builder shall pay the International Class Fee.
A.9.2 ISAF shall, after having received the International Class Fee for the hull, send the ISAF Building Plaque to the licensed hull builder.

A.10 SAIL NUMBERS
A.10.1 Sail numbers shall be issued by AHPC.
A.10.2 Sail numbers shall be issued in consecutive order.

Section B – Boat Eligibility
For a boat to be eligible for racing, it shall comply with the rules in this section.

B.1 CLASS RULES COMPLIANCE
B.1.1 The boat shall be in compliance with the class rules.
B.1.2 In the event of a dispute alleging non-compliance with class rules where specific dimensions are not stated, the following procedure shall be adopted:
   a) A sample of the measurements for the disputed item shall be obtained by taking the identical measurement from five boats or items of equipment, which are not the subject of the dispute.
   b) The measurement of the disputed boat or items of its equipment taken using the same technique as above shall be compared to the sample.
   c) If any of the measurements obtained from the disputed boat or item of equipment lie outside the corresponding range of measurements found in the sample, the matter together with the details of the measurement methods and any other relevant information shall be referred to the protest committee.
PART II – REQUIREMENTS AND LIMITATIONS

The crew and the boat shall comply with the rules in Part II when racing. In case of conflict Section C shall prevail.

The rules in Part II are closed class rules, where anything not specifically permitted by the class rules is prohibited. Any equipment inspection shall be carried out in accordance with the ERS except where varied by Part II of these class rules.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES
(a) RRS 50.4 shall not apply.
(b) RRS Appendix G1.3 (d) shall not apply.
(c) RRS 42.3 is changed as follows:
   Add to RRS 42.3:
   i) A boat’s crew may pump the mainsail repeatedly to release one or more battens.
(d) The ERS Part I – Use of Equipment shall apply.

C.1.2 LIMITATIONS
(a) The Viper shall only be raced with original or replacement equipment supplied by AHPC specifically for the Viper, except where otherwise authorized by these class rules.
(b) Where replacement equipment other than from AHPC is authorized, it may be obtained from any supplier provided that the replacement is of a similar weight, size and type and performs the same function.

C.2 ADVERTISING

C.2.1 LIMITATIONS
Advertising shall only be displayed in accordance with the ISAF Advertising Code. (See ISAF Regulation 20)

C.3 CREW

C.3.1 LIMITATIONS
(a) The crew shall consist of 1 or 2 persons.
(b) The crew shall use the sails in accordance with the following categories:
   (1) A 1 person crew shall sail with the mainsail and spinnaker.
   (2) A 2 person crew shall sail with the mainsail, jib and spinnaker.
(c) No crew member shall be substituted during an event without prior written permission from the Race Committee.
(d) In the event of crew substitution, the total crew weight shall not be less than the original weight and not more than 10 kg over the original weight, unless approved by the Race Committee.
(e) All crew on a boat competing at ICA World or Regional Championships shall be members of the ICA. At all other events at least one crew member on board a competing boat shall be a member of the ICA unless prescribed otherwise in the Notice of Race.

C.3.2 DIVISIONS
(a) Single-handed – there shall be 1 crew member on board.
(b) Double-handed – there shall be 2 crew member on board.

C.4 PERSONAL EQUIPMENT
C.4.1 MANDATORY
(a) The boat shall be equipped with a personal flotation device for each crew member to the minimum standard ISO 12402-5 (CE 50 Newtons), or USCG Type III, or AUS PFD 2

C.4.2 TOTAL WEIGHT
In accordance with RRS 43.1(b), the total weight of worn equipment shall not exceed 10 kg.

C.5 EQUIPMENT
Replacement or addition of the following items is permitted. Parts may be obtained from any supplier unless otherwise stated.

C.5.1 MANDATORY
(a) FOR USE
   (1) A righting line of minimum diameter 8 mm and minimum length 4 m of line be securely attached and readily accessible from each side of the boat. The righting lines be in addition to all other required equipment.

C.5.2 OPTIONAL
(a) FOR USE
   (1) Compasses or electronic devices that provide timing, heading and heading memory but which do not calculate, transmit, transfer or receive data are permitted including brackets or other ways of attachments. The use of navigation and speed metering equipment is not permitted.
   (2) Water Bottle Holders
   (3) Wind Indicators

(b) NOT FOR USE
   (1) A paddle

C.6 BOAT
C.6.1 MODIFICATIONS, MAINTENANCE AND REPAIR
The following is permitted without the approval of AHPC. Unless stated otherwise items mentioned in this section may be obtained any manufacturer or supplier.

MODIFICATIONS
(a) Replacements for any boat equipment, including but not limited to hull appendages, rig, sails, battens, tiller, spinnaker chute or fittings, whether
original or replacements shall be only those produced by the AHPC except where otherwise authorised by this section.

(b)

MAINTENANCE

(c) Replacement of the following items is permitted. Parts shall be of similar specification and may be obtained from any supplier

(1) Blocks
(2) Cleats
(3) Mainsheet swivel base
(4) Shackles, pins, bobbles
(5) Inspection hatches
(6) Tiller extensions

(d) Maintenance may include the replacement of fastenings with alternatives from any supplier, provided that the equipment is replaced in the original position.

REPAIR

(e) Repairs are permitted; however, an official measurer may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair

(f) Any work intended or with the effect of lightening the boat or improving, shape or performance beyond the original is not permitted.

C.6.2 DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull Length</td>
<td></td>
<td>5000 mm</td>
</tr>
<tr>
<td>Boat Beam</td>
<td></td>
<td>2500 mm</td>
</tr>
</tbody>
</table>

C.6.3 WEIGHT

<table>
<thead>
<tr>
<th></th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>The weight of the boat in dry condition excluding optional equipment detailed in C.5.2.</td>
<td>129 kg</td>
<td>-</td>
</tr>
</tbody>
</table>

C.6.4 CORRECTOR WEIGHTS

(a) Corrector weights of lead shall be permanently fastened to the outside of the forward beam when the boat weight is less than the minimum requirement. These correctors shall be removable for the purposes of measurement.

C.7 TRAMPOLINE

C.7.1 LIMITATIONS

(a) Only trampolines as manufactured and supplied by the AHPC are permitted.

C.7.2 CONSTRUCTION

(a) Storage pockets with closable flaps may be added
(b) Additional hiking straps may be added.

**C.8 HULL**

**C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR**

The following is permitted without the approval of AHPC. Unless otherwise stated, items mentioned in this section may be obtained from any manufacturer or supplier.

**MODIFICATIONS**
(a) Non slip material of any kind (maximum thickness 5mm) may be added to the deck.
(b) Wedges or angled pieces may be fitted under cleats
(c) Calibration marks,
(d) Not more than four, 154mm diameter inspection hatches may be added.
(e) Not more than four foot Straps

**MAINTENANCE**
(f) Replacement of the following items is permitted. Parts shall be of similar specification and may be obtained from any supplier
   (1) Blocks
   (2) Cleats
   (3) Mainsheet swivel base
   (4) Shackles, pins, bobbles
   (5) Inspection hatches
   (6) Tiller extensions

(g) Maintenance may include the replacement of fastenings with alternatives from any supplier, provided that the equipment is replaced in the original position.
(h) Waxing and polishing of the hulls is permitted provided the intention and effect is to polish the hulls only.

**REPAIR**
(i) Repairs are permitted; however, an official measurer may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair
(j) Any work intended or with the effect of lightening the boat or improving, shape or performance beyond the original is not permitted.
(k) Repairs and maintenance including but not limited to painting and sanding may be carried out provided repairs are made in such a way that the essential shape, characteristics or function of the original are not affected.

**C.8.2 FITTINGS**
(a) USE
   (1) All inspection hatch covers shall be kept closed on the water.
   (2) Fittings shall be arranged as supplied by AHPC.

**C.9 HULL APPENDAGES**

**C.9.1 MODIFICATION, MAINTENANCE AND REPAIR**
(a) AHPC, supplied rudder assemblies, rudder blades and daggerboards shall not be modified except for minimum filing to improve fit and function.

(b) Waxing and polishing of the hull appendages is permitted provided the intention and effect is to polish the hull appendages only.

(c) Repairs are permitted; however, an official measurer may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair.

(d) Anti-chafing and shimming pads may be added to the daggerboard trunk and rudder assemblies to improve fit and reduce wear. Shims shall not be used to alter the angle of the hull appendages.

C.9.2 LIMITATIONS
(a) Rudder blades, rudder assemblies and daggerboards shall be as supplied by the AHPC.

(b) Only two daggerboards and two rudder blades shall be used during an event, except when an item has been lost or damaged.

C.9.3 DAGGERBOARDS
(a) USE
(1) Top edge of the daggerboard in the down position shall not extend below the level of the deck into daggerboard trunk.

C.10 RIG
C.10.1 MODIFICATIONS, MAINTENANCE AND REPAIR
Replacement of the following items is permitted. Parts shall be of similar specification and may be obtained from any supplier:
(a) Cleats
(b) Sheave blocks

C.10.2 FITTINGS
The following may be added to the rig. Parts may be obtained from any supplier:
(a) A mechanical wind indication device may be fitted to the top of the mast or to the bowsprit.

C.10.3 LIMITATIONS
(a) Only one set of spars and standing rigging shall be used except when an item has been lost or damaged beyond repair.

(b) The mast shall not be altered in any way except for the attachment of fittings and equipment.

C.10.4 MAST
(a) USE
(1) A preventer or otherwise known as a positive mast rotator, may be added to keep the mast in rotation, and may be rigged in any manner.

C.10.5 BOWSPRIT
(a) USE
Standing rigging shall be arranged as supplied by AHPC
(b) DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bowsprit Length</strong></td>
<td></td>
<td>342 mm</td>
</tr>
<tr>
<td><strong>Bowsprit diameter</strong></td>
<td>40 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Bowsprit wall thickness</strong></td>
<td>1.5 mm</td>
<td></td>
</tr>
</tbody>
</table>

C.10.6 STANDING RIGGING

Replacement of the standing rigging is permitted. Parts may be obtained from any supplier provided it meets the following specifications:

(a) USE

Standing rigging shall be arranged as supplied by AHPC

(b) DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>minimum</th>
<th>optional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shrouds, Forestay</strong>, Forestay bridles, diamond wires</td>
<td>3.0 mm</td>
<td>-</td>
</tr>
<tr>
<td>Trapeze Wires</td>
<td>2.0 mm</td>
<td>2.5 mm</td>
</tr>
</tbody>
</table>

(c) CONSTRUCTION

<table>
<thead>
<tr>
<th></th>
<th>mandatory</th>
<th>optional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shrouds, Forestay</strong>, Forestay bridles, diamond wires</td>
<td>1x19 wire</td>
<td>-</td>
</tr>
<tr>
<td>Trapeze Wires</td>
<td>1x19 wire</td>
<td>Dynema</td>
</tr>
</tbody>
</table>

C.10.7 RUNNING RIGGING

Replacement of the running rigging is permitted. Parts shall be of similar specification and may be obtained from any supplier provided it is of equal strength or better than AHPC supplied components.

(a) USE

(1) Running rigging may be arranged at the discretion of the crew

(2) Spinnaker sheet blocks and mounting is open and additional blocks may be added.

C.11 SAILS

C.11.1 MODIFICATIONS, MAINTENANCE AND REPAIR

(a) Sails shall not be altered in any way except as permitted by these class rules.

(b) Routine maintenance and repairs are permitted provided the size and shape are not altered.

(c) Logos may be inserted into spinnakers provided this process does not alter the size or shape

C.11.2 LIMITATIONS

(a) Not more than 1 mainsail, 1 jib, and 1 spinnaker shall be carried aboard.
(b) 1 mainsail, 1 jib and 1 spinnaker shall be used during an event, except when a sail has been lost or damaged beyond repair. Such replacement may be made only with the approval of the race committee.
(c) Tell tales are permitted.

C.11.3 DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainsail area</td>
<td></td>
<td>15.0m²</td>
</tr>
<tr>
<td>Jib area</td>
<td></td>
<td>4.15m²</td>
</tr>
<tr>
<td>Spinnaker area</td>
<td></td>
<td>17.5m²</td>
</tr>
</tbody>
</table>

C.11.4 MAINSAIL IDENTIFICATION
(a) The sail number shall be displayed on each side of the mainsail in accordance with the RRS Appendix G.
(b) The Class Insignia shall be as prescribed by AHPC, and shall be displayed near the head.

Section D – Hull

D.1 PARTS
D.1.1 MANDATORY
(a) Hulls
(b) Cross Beams

D.2 GENERAL
D.2.1 RULES
(a) The hull shall comply with the class rules in force at the time of manufacture.

D.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR
(a) The hulls and beams shall not be altered in any way except as permitted by Section C of these class rules.
(b) If any hull moulding is repaired in a way other than that described in Section C, it shall be carried out by a licensed builder. The external shape shall remain the same as before the repair and no substantial stiffness, or other advantage shall been gained as a result of the repair.

D.2.3 IDENTIFICATION
(a) The hull shall carry the ISAF Plaque permanently placed on the transom.

D.2.4 BUILDERS
(a) The hull shall be built by a manufacturer licensed by the AHPC to produce hulls.
(b) All production moulds used for hull manufacture shall be approved by the AHPC.

D.3 HULLS
D.3.1 MATERIALS AND CONSTRUCTION
(a) The hulls shall comply with the Building Specification in force at the time of manufacture.

D.4 TRAMPOLINE
D.4.1 MATERIALS AND CONSTRUCTION
   (a) The trampoline shall comply with the Building Specification in force at the time of manufacture.

D.5 ASSEMBLED HULL
D.5.1 FITTINGS
   (a) Hull fittings shall comply with the Building Specification in force at the time of manufacture except when altered, added or replaced as permitted by Section C of these class rules.
Section E – Hull Appendages

E.1 PARTS
E.1.1 MANDATORY
   (a) Daggerboards
   (b) Rudders

E.2 GENERAL
E.2.1 RULES
   (a) Hull appendages shall comply with the class rules in force at the time of certification.

E.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR
   (a) Hull appendages shall not be altered in any way except as permitted by Section C of these class rules.

E.2.3 MANUFACTURERS
   (a) The daggerboards, rudder blades and rudder stock/tiller shall be made only by a manufacturer licensed by the AHPC to produce these.

E.3 DAGGERBOARDS
E.3.1 The daggerboards shall comply with the Building Specification in force at the time of manufacture.

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER
E.4.1 The rudder blades and rudder stock/tiller assembly shall comply with the Building Specification in force at the time of manufacture.

Section F – Rig

F.1 PARTS
F.1.1 MANDATORY
   (a) Mast
   (b) Boom
   (c) Standing rigging
   (d) Running rigging
   (e) Bowsprit

F.2 GENERAL
F.2.1 RULES
   (a) The spars and their fittings shall comply with the class rules in force at the time of manufacture of the spar.
   (b) The standing and running rigging shall comply with the current class rules.
F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR
(a) Spars shall not be altered in any way except as permitted by Section C of these class rules.

F.2.3 DEFINITIONS
(a) MAST DATUM POINT
The mast datum point is the point on the centreline of the mast spar on the aft face at the bottom of the mast extrusion.

F.2.4 MANUFACTURER
(a) Spars and their fittings shall be made only by a manufacturer licensed by the AHPC to produce spars.

F.3 MAST
F.3.1 The mast spar and its fittings shall comply with the Building Specification in force at the time of manufacture of the spar.

F.3.2 DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>minimum</th>
<th>maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinnaker hoist height</td>
<td></td>
<td>8135 mm</td>
</tr>
<tr>
<td>Spinnaker halyard bearing surface distance from mast spar</td>
<td></td>
<td>100 mm</td>
</tr>
</tbody>
</table>

F.4 BOOM
F.4.1 The boom spar and its fittings shall comply with the Building Specification in force at the time of manufacture of the spar.

F.5 BOWSPRIT
F.5.1 The bowsprit and its fittings shall comply with the Building Specification in force at the time of manufacture of the spar.

F.6 STANDING RIGGING
F.6.1 The standing rigging and its fittings shall comply with the Building Specification in force at the time of manufacture.

F.7 RUNNING RIGGING
F.7.1 The running rigging and its fittings shall comply with the Building Specification in force at the time of manufacture.

Section G – Sails

G.1 PARTS
G.1.1 MANDATORY
(a) Mainsail

G.1.2 OPTIONAL
(a) Jib
(b) Spinnaker
G.2 GENERAL

G.2.1 RULES
(a) Sails shall comply with the class rules in force at the time of manufacture.

G.2.2 SAILMAKER
(a) The sails shall be made only by a manufacturer licensed by AHPC to produce sails.

G.3 MAINSAIL

G.3.1 CONSTRUCTION
The mainsail shall comply with the Building Specification in force at the time of manufacture of the sail.

G.4 JIB

G.4.1 CONSTRUCTION
The jib shall comply with the Building Specification in force at the time of manufacture of the sail.

G.5 SPINNAKER

G.5.1 CONSTRUCTION
The spinnaker shall comply with the Building Specification in force at the time of manufacture of the sail.