



*POLICY DOCUMENT*

## **AUSTRALIAN TRAILABLE YACHT AND SPORTS BOAT RULE**

*FOR TRAILABLE YACHTS AND SPORTS BOATS WITH A CLASS BASED HANDICAP (CBH)*

**September 2016**

### **1.0 OBJECTIVE**

- 1.01 The objective of the Australian Trailable Yacht and Sports Boat Rule (ATYSBR), hereinafter called "the Rule", is to provide a national system for even and fair racing on handicap in a mixed fleet of trailable yachts and/or sports boats, resulting in racing success being primarily determined by the skills of the crew.
- 1.02 This Rule shall apply to the conduct of national and state-level Trailable Yacht and Sports Boat championships, and should apply for club and other events.

### **2.0 DEFINITIONS**

#### **2.01 Class Based Handicap:**

The Class Based Handicap (CBH) is a calculated rating applicable to an individual trailable yacht or sports boat, or a class of trailable yachts or sports boats, to achieve the objective at Section 1 when sailing in a mixed fleet.

#### **2.02 Trailable Yacht or Sports Boat:**

For the purpose of this Rule a trailable yacht or sports boat is a monohull, ballasted yacht with a retractable keel, being of 9.40 metres LOA or less, which can be transported on the road on the same trailer used to launch and retrieve it without the assistance of external equipment or detachment from the towing vehicle and without requiring a special road permit.

#### **2.03 Standard Trailable Yacht or Standard Sports Boat:**

A Standard Trailable Yacht or Standard Sports Boat is a trailable yacht or sports boat having a cabin of solid construction enclosing at least two functional berths. The cabin shall have minimum headroom measured vertically and continuously over the total area of one square metre of the cabin sole with hatches, pop tops etc closed off.

- For craft less than 6.00 m LOA - 0.90 m
- For craft of 6.00 m LOA or longer - 1.05 m

#### **2.04 Open Trailable Yacht or Open Sports Boat:**

An Open Trailable Yacht or Open Sports Boat is a trailable yacht or sports boat that does not necessarily conform to the requirements for a Standard Trailable Yacht or Standard Sports Boat. There shall be a cockpit and provision for stowage of sails, equipment and crew effects below deck, except that: -

- Berths are not required.
- The bow section of the boat shall be decked in at least level with or higher than the gunnels, with the aftermost edge of the deck being no more than 100 mm forward of the leading edge of the centreboard case.

### **3.0 GENERAL**

- 3.01 This Rule shall be known as the Australian Trailable Yacht and Sports Boat Rule (ATYSBR), otherwise referred to in this document as the "Rule".
- 3.02 The Custodian of this Rule shall be Australian Sailing (AS).
- 3.03 The Rule shall be used in conjunction with the Racing Rules of Sailing and the rules of individual class associations. In the event of a conflict, interpretation of these rules is the responsibility of the Custodian to ensure the intention of fair and even racing is upheld.
- 3.04 It is not the purpose of this Rule to restrict any individual yacht class from development within their own class rules.
- 3.05 This Rule is intended to support Australian Sailing in its work to promote trailable yacht and sports boat racing activities within the states and territories and at the national level.
- 3.06 In this Rule the word `shall` is mandatory and the word `may` permissive.
- 3.07 Australian Sailing and its subordinate bodies shall not be held liable for any accident or injury occurring in a race organised under the ATYSBR.

#### **4.0 VARIATIONS**

- 4.01 This Rule shall only be amended in accordance with Australian Sailing Policy SPO.15.2016.

#### **5.0 CLASS BASED HANDICAP**

- 5.01 A CBH shall be allocated by the Custodian, based on the information relating to the basic dimensions of an individual boat or class of boat provided by a measurer appointed by Australian Sailing and shall be recorded in Appendix `A` of this Rule.
- 5.02 Any change to the details provided for a boat or class at Section 5.01, upon which its CBH was calculated, shall be advised to the Custodian by an Australian Sailing appointed measurer, and the Appendix `A` shall be amended to include the new or changed CBH.
- 5.03 Where the specifications of a boat or a class are altered from those upon which its CBH was calculated, the boat's owner or class association shall immediately notify its Australian Sailing appointed measurer and shall be re-measured for review of its CBH by the Custodian.
- 5.04 A designer, manufacturer, class association or owner shall comply with the spirit and intent of the ATYSBR and shall not seek means of artificially reducing an allocated CBH or seek to increase performance without a corresponding increase in CBH.
- 5.05 The CBH is for racing events. The CBH does not give any concessions for additional equipment or fittings that exceed those required by the Category of Event in Australian Sailing Special Regulations Part 1 as specified by the Organising Authority of an event, or for the age of any boat.
- 5.06 The CBHs listed in Appendix `A` are regarded as the National CBH of any Class or One of a Kind (OAK), Trailable Yacht or Sports Boat. These CBHs shall be used for the National Championship and open mixed fleet racing.
- 5.07 Each boat's CBH or classification and CBH shall be reviewed annually by the Custodian, at least 3 months prior to each National Championship, and posted 60 days prior to the event.
- 5.08 The Custodian may undertake a review of the CBH applying to any class or boat, on the request of Australian Sailing. Any revised CBH shall remain provisional until the next annual review.
- 5.09 Any alteration referred to at Section 5.03, or breach of that Section that is decided by a protest committee, shall be advised to the Custodian, which shall then amend Appendix `A` and notify Australian Sailing for distribution to Organising Authorities.
- 5.10 The method of obtaining a CBH as set out in Appendix `B` shall be included in the annual review provided for at Section 5.06.
- 5.11 Types of CBH

- Affiliated one-design class (Australian Sailing affiliated class association with registered Class Rules).
- Non-affiliated one design (no affiliated class association).
- Individually modified one design or one of a kind (OAK).
- Provisional handicap until reliable performance data is obtained with validity for up to two years.

## **6.0 NATIONAL AND STATE CHAMPIONSHIP**

- 6.01 The national and state Trailable Yacht and Sports Boat Championships shall be conducted using this Rule.
- 6.02 The eligibility requirements for the National Championship shall be as set out in Section 7.0.
- 6.03 The classifications as set out in Section 7.0 shall be used by the Organising Authority to provide a Division of Trailable Yachts and a Division of Sports Boats at the National Championship. Additionally, the classifications at Section 7.0 may be used for other events as chosen by the Organising Authority.
- 6.04 To be eligible to sail in a National Trailable Yacht and Sports Boat Championship an entry must have an allocated CBH as listed in Appendix `A`.
- 6.05 An entry not listed in Appendix `A` may be allocated, for the Championship, a provisional CBH as determined by the Custodian or its nominated representative, plus a penalty of (+) 0.020. The allocated CBH shall not be subject to appeal by the owner or his/her representative and is not transferrable to other events.

## **7.0 CLASSIFICATIONS**

Trailable boats, including sports boats, shall conform to the following classifications.

- 7.01 Standard Trailable Yacht  
     Maximum beam 2.5 m  
     CBH as specified in Appendix `A`
- 7.02 Open Trailable Yacht  
     Maximum beam 2.5 m  
     CBH as specified in Appendix `A`
- 7.03 Standard Sports Boat  
     Maximum beam 2.5 m  
     CBH as specified in Appendix `A`
- 7.04 Open Sports Boat  
     A maximum hull beam of 2.5 m while towing  
     A maximum extended wing beam, while sailing, of 3.5 m  
     CBH as specified in Appendix `A`
- 7.05 The Custodian shall classify all such boats under this Rule.

## **8.0 VARIATIONS TO LAUNCHING AND RETRIEVING**

- 8.01 Owing to the effect of shallow angled ramps and tides, and for the purpose of launching or retrieving with a crane (for ease of launching or retrieving but not the sole purpose due to boat design), the trailer may be detached from the towing vehicle without invalidating the status of a trailable yacht or sports boat under this Rule at Section 2.2. The design or construction of a boat or trailer shall not be the determining factor for detaching from the towing vehicle or the use of a crane.

## **9.0 ELIGIBILITY**

- 9.01 Eligible boats are as described in Section 7.0, and may be fitted with either drop or swing keels, centreboards, canards or other movable appendages, provided that they are mechanically locked down in their designed sailing position, as determined by their allocated CBH.
- 9.02 A trailable yacht or sports boat issued with a CBH by Australian Sailing prior to the entry into force of this Rule in July 2007 shall be accepted as an eligible boat and as complying with the Rule.

## **10.0 DIMENSIONS**

### **10.01 Sailing Configuration**

Hull length overall	-	Minimum	4.60 m
		Maximum	9.40 m
Hull width		Maximum	2.50 m
Hull width with wings:		Maximum	3.50 m
Mast length	-	Maximum	12.50 m from top of cabin to mast tip
		Maximum	13.50 m from sheer
Draft	-	Maximum	2.50 m

## **11.0 EQUIPMENT RULES**

- 11.01 Standard equipment as described in individual class rules shall not be relocated or removed when racing.
- 11.02 Outboard motors shall be fitted in their operating position, but may be retracted out of the water while racing.
- 11.03 Unless otherwise specified and approved by class rules, or use of hiking devices has been included in the original request for CBH by the builder/owner and reflected in the CBH, no crew member shall sail or manoeuvre the boat with his/her torso outboard of a vertical line from the gunnel with the boat in its sailing position at the time.
- 11.04 Open Sports Boats may use hiking straps, trapezes, or hiking wings (maximum beam 3.5 m) to increase stability. This rule excludes Open Sports Boats from Section 11.03.
- 11.05 Open Sports Boats with a sailing beam exceeding 2.50 m shall not use a trapeze(s), or sliding beams.
- 11.06 A boat may use hiking devices to increase stability if allowed by the registered individual class rules.
- 11.07 Standard Sports Boats and Open Sports Boats shall be single masted.
- 11.08 Standard Trailable Yachts/Open Trailable Yachts and Standard Sports Boats shall not use any attachments to the hull in a manner to move the crew beyond the maximum beam of the hull unless permitted by Section 11.03.

## **12.0 SAILS**

- 12.01 Sails shall be constructed and measured in accordance with the individual class rules.
- 12.02 If no class rules apply sails shall be measured in accordance with the ISAF Equipment Rules of Sailing in relation to sail measurement, but shall not exceed the dimensions of the CBH measurement.

## **13.0 CREW**

- 13.01 The maximum crew number shall be six (6) or less if specified in individual class rules while racing using CBH and this Rule.
- 13.02 Minimum crew numbers shall be two (2) while racing.

- 13.02.01 Australian Sailing Special Regulations, Category 5  
One (1) member of the crew shall be 18 years or over.
- 13.02.02 Australian Sailing Special Regulations Category 6  
All crew members are to be 14 years or older, unless one (1) crew member is over the age of 18 years.

#### **14.0 STABILITY**

- 14.01 Boats may comply with the Horizontal Stability Factor (HSF) as defined for Trailable Yacht races by the Australian Sailing Special Regulations Category 6
- 14.02 Determination of the HSF shall be at the owner's risk and cost and no liability will be accepted by the club, the State authority, Australian Sailing or any of its members, officers or servants.
- 14.03 All boats not complying with Rule 14.01 HSF shall have a minimum keel / overall boat weight ratio i.e., (weight of keel fin and bulb assembly / weight of boat empty) of : -
- 0.20 : 1            All boats with CBH less than 0.801
  - 0.35 : 1            All boats with CBH of .801 and greater
  - Or comply with Section 9.02 of this Rule
- Fastenings and other components of the keel assembly not permanently fixed to the keel shall be excluded from the keel weight.

#### **15.0 BUOYANCY**

- 15.01 Boats not complying with the HSF at Section 14.01 shall have sufficient buoyancy to support the boat, its crew and stores above the water when fully swamped.

#### **16.0 REVIEW**

- 16.01 This Rule shall be reviewed at least every four years.

## APPENDIX `A`

### ATYSBR NATIONAL CBH LIST 2016/17

#### GENERAL:

Trailable Yachts and Sports Boats use the Class Based Handicap system (CBH). Class Based Handicaps shall be used in conjunction with the Australian Trailable Yacht and Sports Boat Rule (ATYSBR).

#### NOTES:

1. Unlisted classes and OAK's will require full measurement to obtain a CBH rating.
2. All allocated CBH's are subject to amendment in light of reliable performance data being available.
3. Boats with a symmetric spinnaker and spinnaker pole being changed to an asymmetric spinnaker (with same sail area) and bowsprit shall increase the allocated CBH by a minimum of 0.010.
4. Asymmetric spinnakers and poles not fitted to the mast (such as bowsprits) may only be used if explicitly permitted in the boat's class rules.
5. No hiking devices are to be fitted to a boat and no type of hiking is allowed while using these CBH's, unless specified in individual class rules.

#### KEY:

The following symbols may be associated with a CBH and represent the following configurations.

With genoa	+G
With spinnaker	+S
Masthead spinnaker only	MHS
Masthead (usually Genoa and Spinnaker)	MH
Fully battened mainsail	FB
Bilge keel	BIK
Bulb keel	BK
Swing keel	SK
Drop keel	DK
Water Ballast	WB
Modified boat	Mod or M
Provisional CBH	P
One of a kind	OAK

#### CLASS KEY:

Elliott 7.8 MK 1	Asymmetric spinnaker $\frac{3}{4}$
Elliott 7.8 MK 2	Asymmetric spinnaker MHS
Sonata 6.7 MK 2	Taller rig and increased sail area than MK 1
Sonata 760 Sports MK 2	Lighter hull weight than MK 1
Spider 22 MK 2	Taller mast same sail area as MK 1
Spider 24 MK 2	Different keel than MK 1
Spider 28 MK 2	Taller mast, same sail area as MK 1
Young 7.8	Timber hull, $\frac{3}{4}$ spinnaker
Young Rocket MK 1	Timber hull, MHS
Young Rocket MK 1	Glass hull, $\frac{3}{4}$ spinnaker, short keel
Young Rocket MK 2	Glass hull, MHS, short keel
Young 780 Rocket MK 3	Glass hull, MHS, longer keel

# ATYSBR NATIONAL CBH LIST 2016/17

## STANDARD TRAILABLE YACHT CBHs

CLASS	CBH	CLASS	CBH
Adams 21	0.690	Clifton 700 DK	0.660
Adams 8	0.809	Clipper 17	0.531
Admiral 21	0.641	Clipper 21	0.592
Adventure	0.661	Coastal 868	0.734
Adventure 22	0.628	Cole 19	0.610
Alien 21 Cat Rig	0.700	Cole 23	0.665
Alien 21 Sloop Rig	0.740	Colson 750 OAK	0.834
Allegro	0.630	Comet 20	0.638
Aloora	0.630	Compass 750	0.698
Aloora (Junk Rig)	0.610	Compass 750 MK 2	0.699
Aloora MK 2	0.640	Compass 750 MK 3	0.721
Austral 20	0.650	Court 550*	0.553
Austral 24 DK	0.675	Court 650	0.624
Austral 24 SK	0.665	Court 750	0.657
Austral Clubman 8	0.805	Cross 830	0.850
Austral Clubman 8 Adventurer & Classic Models Only	0.795	Cumulus	0.650
B 63	0.645	Cunningham 19	0.640
Baroness 22	0.611	Dancer	0.562
Beale 740 (Frac. Rig)	0.790	Davidson 26	0.778
Beale 740 (MH Rig)	0.800	Dennis TS 500	0.560
Beale 780	0.807	Dennis TS 600	0.617
Beale 860	0.850	DH Rambler	0.626
Beneteau 235	0.715	Diamond/Rasmussen	0.750
Beneteau 7	0.730	Duncanson 22	0.669
Binks 25	0.672	Duncanson 25	0.675
Blazer 23	0.790	Eclipse 17	0.592
Blazer 740	0.780	Elliott 5.9	0.775
Bonito 22	0.650	Embassy 5.5	0.572
Bonito 580	0.630	Explorer 16	0.580
Bonito 750	0.710	Explorer 21	0.627
Bonito 25	0.700	Farr 5000	0.570
Boomaroo 22	0.640	Farr 6000	0.640
Boomaroo 25	0.656	Farr 740 Sports	0.755
Boomerang 20 DK	0.640	Farr 7500	0.708
Boomerang 20 SK	0.620	Farr 940/Noalex 30	0.825
Brolga 17	0.602	Firebird 19	0.600
Bush Ranger	0.700	Flinders 7.8	0.648
Capri 18	0.567	Freedom 21	0.639
Capri 21	0.620	Gazelle	0.720
Caprice 11 BK	0.579	Gem 550	0.685
Careel 18	St'd TY Prov. CBH List	Griffin 17	0.589
Careel 22 L	0.690	Hartley 16	0.635
Careel 22 S	0.665	Hartley 18 (3/4)	0.620
Careel Sonata 26	0.728	Hartley 18 MH	0.620
Caribou 20	0.619	Hartley 21`	0.610
Castle 20	0.651	Hewitt 20	0.576
Castle 550	0.675	Highway 21	0.658
Castle 650	0.725	Highway 8	0.730
Catalina 25	0.650	Hood 20*	0.605
Cherry 16	0.590	Hunter 19	0.600
Clifton 700 SK	0.650	Hunter 19 (Fixed Keel)	0.610

## ATYSBR NATIONAL CBH LIST 2016/17

### STANDARD TRAILABLE YACHT CBHs

Hutton 24	0.671	Sonata 8	0.728
Inga 5.5	0.600	Sonata 760 Sports	0.760
Investigator	0.594	Southern Cross 23	0.650
JS 6.7	0.672	Spacesailer 20	0.624
Jedda 20	0.610	Spider 22 MK 1	0.788
Jedda 22 BIK	0.575	Spider 22 MK 2	0.798
Kalaroo 780	0.764	Spider 24 MK 1	0.754
Kestrel BIK	0.650	Spider 24 MK 2	0.764
King 780	0.815	Spider 28 ¾ S	0.830
Koala 24	0.659	Spider 28 MHS	0.850
Lancer 25	0.637	Star 22	0.600
Lidgard 25	0.715	Status Slipstream	0.710
Magnum 8.5	0.767	South Coast 22	0.715
Masrm 720	0.770	South Coast 25	0.625
Masrm 720C	0.725	Stratus 747	0.723
Masrm 750	0.797	Sunbird 24 MS	0.585
Matilda	0.590	Sunbird 25	0.635
Maxi 20	0.586	Sunmaid 20	0.600
McGregor 26	0.663	Swarbrick 20	0.660
McGregor 26 WB	0.715	T26	0.738
Narwahl Is. Sharpie	0.705	Timpenny 670	0.685
Norwalk Islands Sharpie (NIS 23)	0.705	Timpenny 770 DK	0.740
Noelex 25	0.725	Timpenny 770 SK	0.716
Noelex 30/Farr 940	0.825	Tropic 5.2	0.572
Nomad 20	0.572	Ultimate 16	0.580
Pacific 747	0.607	Ultimate 18 DK	0.600
Penn 707	0.687	Ultimate 18 SK	0.590
Princess	0.580	Ultimate 23	0.615
Quintet 5	0.586	Van Der Stadt 7	0.715
Quintet 7	0.715	Venture 6	0.662
Randell 20	0.626	Victory 22	0.620
Red Jacket*	0.561	Vivacity	0.625
Red Witch	0.605	Waratah	0.613
Resolution	0.725	Wildfire	0.674
RL 24 DK	0.760	X 770 Sport	0.730
RL 24 SK	0.725	Young 6.0	0.705
RL 28	0.692	Zeeman 6.5	0.680
Ross 650	0.746		
Ross 780 MK 1, 2, 3	0.795		
Sabre 20	0.625		
Sabre 22	0.639		
Scorpion 7	0.635		
Sea Bita	0.595		
Seaway 25	0.725		
Seaway 25 MHS	0.730		
Serena TY 22*	0.617		
Sonata 6	0.630		
Sonata 6.3	0.650		
Sonata 6.7	0.710		
Sonata 7	0.650		
Sonata 26	0.728		



## ATYSBR NATIONAL CBH LIST 2016/17

### STANDARD TRAILABLE YACHT INDIVIDUALLY MODIFIED CBHs

CLASS & NAME		CBH	CLASS & NAME		CBH
Elliott 5.9	Elle	0.780M	Young 6.0	Wednesdays Child	0.720M
Elliott 5.9	Jaffa	0.785M			
Hartley 18 Mod	Rani	0.632M			
Hartley 18 Mod	Kari	0.632M			
Masrm 720	Sailagere	0.795M			
Masrm 720	Salty Tiger	0.795M			
Masrm 720M	Men With Wind	0.785M			
Masrm 750	Monkey Business	0.845M			
MW Sharpie	Slippery When Wet	0.790M			
RL 28	Blackbeard	0.725M			
RL 28	Distraction	0.710M			
RL 28	Exotic	0.721M			
RL 28	Foul Play	0.710M			
RL 28	Impulse	0.750M			
RL 28	Moonbird	0.700M			
RL 28	Pepsea	0.710M			
Ross 780	Men At Work	0.805M			
Ross 780	Radical	0.805M			
Ross 780	Risky Business	0.800M			
Sonata 6.7	Flash Point	0.795M			
Sonata 6.7 MK 2 (Five O'clock Somewhere)		0.755M			
Sonata 760 Sports	Awesome	0.790M			
Spider 24	Party Maniac	0.785M			
Status Slipstream	Grey Ghost	0.720M			
Timpenny 770 DK	Genia	0.758M			
Ultimate 23 Mod	Tranty	0.705M			
Wildfire	Upfront	0.681M			

### STANDARD TRAILABLE YACHT PROVISIONAL CBHs

CLASS & NAME		CBH	CLASS & NAME		CBH
Careel 18	All of Class	0.615P			
Spider 28 MOD	Kause I Can	0.830P			

**ATYSBR NATIONAL CBH LIST 2016/17**

**OPEN TRAILABLE YACHT  
CBH's**

<b>CLASS</b>	<b>CBH</b>	<b>CLASS</b>	<b>CBH</b>

**OPEN TRAILABLE YACHT  
INDIVIDUALLY MODIFIED  
CBHs**

<b>CLASS</b>	<b>CBH</b>	<b>CLASS</b>	<b>CBH</b>

**OPEN TRAILABLE YACHT  
PROVISIONAL CBHs**

<b>CLASS</b>	<b>CBH</b>	<b>CLASS</b>	<b>CBH</b>

## ATYSBR NATIONAL CBH LIST 2016/17

### STANDARD SPORTS BOAT CBHs

CLASS	CBH	CLASS	CBH
Bull 7000	0.850	Melges 24	0.890
Egan 6	0.835	Metcher 8	0.874
Elliott 6.5	0.840	PG 8000	0.880
Elliott 7 All of Class; P/T & S/T Mainsail	0.845	Scorpion 8	0.893
Elliott 7.4	0.805	Thompson 7	0.895
Elliott 7.8 MK 1	0.860	Thompson 8	0.950
Elliott 7.8 MK 2	0.880	Young 6.6 Rocket	0.779
Elliott 770	0.864	Young 7.8 ¾ Spin	0.805
Flying Angel 9.1	0.822	Young 7.8 MHS	0.844
Inglis 27	0.870	Young 780 Rocket MK 1	0.840
Lyons 750	0.860	Young 780 Rocket MK 2	0.869
Lyons 8	0.910	Young 780 Rocket MK 3	0.890
Masrm 750	0.797		

### STANDARD SPORTS BOAT INDIVIDUALLY MODIFIED CBHs

CLASS & NAME	CBH	CLASS & NAME	CBH
Elliott 7.4 Never Again	0.810M	OAK Penguins On Parade	0.925M
Elliott 780 Dri- Deck Escapade	0.867M	OAK Stiletto	0.875M
JS30 Obsessed	0.835M	OAK Lightning 8	0.870M
Selmor 7.8 Elastic Limit	0.794M	OAK Nothing To Serious	0.900M
Lyons 750 Wicked	0.875M	OAK Orphan	0.800M
Young 780 Grey Ghost	0.820M		
Young 780 MK 2 Flaps	0.900M		
Young 780 Getahobbi	0.820M		
Young 7.8 The Terrar	0.825M		

### STANDARD SPORTS BOAT PROVISIONAL CBHs

CLASS & NAME	CBH	CLASS & NAME	CBH
Cruise Missile No Name	0.935P	Young 770 Freestyle	0.810P
Edmonds 7500 No Name	0.910P	OAK Tonka	0.800P
Elliott Escape No Name	0.864P		
Lyons 740 No Name	0.850P		
Spider 550 All of Class)	0.833P		
Thompson 750 No Name	0.935P		
Thompson 6.5 Stormy	0.850P		

**ATYSBR NATIONAL CBH LIST 2016/17**

**OPEN SPORTS BOAT  
CBHs**

CLASS		CBH	CLASS		CBH
Magic 25	All of Class	0.925			

**OPEN SPORTS BOAT  
INDIVIDUALLY MODIFIED  
CBHs**

CLASS		CBH	CLASS		CBH

**OPEN SPORTS BOAT  
PROVISIONAL CBHs**

CLASS		CBH	CLASS		CBH

## **APPENDIX `B`**

## **INFORMATION FOR OWNERS**

### **INTRODUCTION**

Trailable Yachts and Sports Boats use the Class Based Handicapping system (CBH). The Class Based Handicap was conceived by the Victorian Yachting Council (VYC) Trailable Yacht Division, now Yachting Victoria (YV), in 1985 to cater for open fleet racing of differing classes of trailable monohull yachts.

The CBH rating uses a system derived from the Junior Offshore Group (JOG) measurement system. Performance information and empirical evidence provide a de-rating factor, which varies between classes (even similar types); due to the inability of the measurement system to take into account subtle variations in things such as hull form.

The CBH for each class of yacht is set such that only a well sailed yacht, in top racing condition, would have an equal chance of winning a series of races over varying conditions against equally well sailed yachts from other classes.

Where club racing consists of trailable yachts and sports boats, sailing with "off the beach" boats it is recommended that back calculated personal handicaps are used and that the CBH system is used as a starting point for handicappers to rate the different boats.

It is therefore recommended that in club mixed fleet TY & SB racing and at National, State and Class Championships the CBH system is used. The elapsed time for a race is multiplied by CBH to obtain the corrected time.

### **APPLYING FOR A CBH**

Detailed, accurate measurement data will be required to obtain a CBH. This technical information is usually obtained from the designer/builder.

To obtain a CBH an owner/builder/designer or class association must: -

- Submit an application on the prescribed form provided by the Measurer of the applicable state office, along with the class rules
- Submit the appropriate measurement fee to the Measurer of the applicable state office
- Make available the boat for measurement

To ensure the manufacture of class yachts complies with the original specification as supplied to the Custodian, the first boat built after five (5) years of receipt of the CBH certificate, or the first boat built by a new manufacturer shall be measured as if applying for a new CBH.

### **APPLYING FOR RE-MEASUREMENT**

Any alteration or modification to a trailable yacht or sports boat, or its equipment that does not accord with class rules will require re-measurement and the re-allocation of a suitable Provisional CBH

\*\*\*\* Modified boats are required to carry a `MOD` symbol on the mainsail next to the class insignia.

## MEASUREMENT ACRONYMS

LOA	Length Over All (mm)	LPG	Longest perpendicular of largest Genoa (mm) (Luff to Clew at a right angle to the luff)
LWL	Length of Water Line (mm)		
B	Rated Beam (mm)	P	Mainsail Hoist (mm)
MASS	Total Mass (kgs)	BLM	Batten Length Maximum (mm)
BM	Maximum Beam (mm)	E	Mainsail Foot Length (mm)
I	Fore Triangle Height (mm)	EPF	Effective Propeller Factor
SL	Spinnaker Luff (mm)	KF	Keel Factor
J	Base of Fore Triangle (mm)	OAML	Over All Mast length (mm)
SPL	Spinnaker Pole Length (mm)	IM	Sheer line to Hounds
SMW	Spinnaker Maximum Width (mm)		

## PREPARATION OF YACHT FOR MEASUREMENT

- All the above items must be measured for a handicap to be produced.
- To determine waterline length, it may be necessary for the boat to be floated in its racing trim. Briefly, everything required for racing shall be in the locations where it will be stowed or used while racing.
- This will not include batteries, anchors and chain, navigational instruments and cooking appliances (unless required under the Class rules). No food, clothing, stores, toolkits PFD's or additional ballast, etc. shall be aboard. Fuel and water tanks shall be empty.
- Dimensional bands shall be painted on the mast and boom in a contrasting colour ("black bands").
- Spinnaker poles shall be in the normal stowage position.
- All sails used whilst racing shall be stowed below deck on the cabin sole and not forward of the mast.
- All mattresses, cushions and pillows as required by class rules shall be stowed in their normal positions.
- Centreboards, swing keels and drop keels shall be in the fully lowered position.
- If the yacht motor is an outboard motor, it shall be fitted in the operating position.
- The yacht shall be rigged completely and ready to sail.
- The yacht's bow shall not be depressed through lying to a mooring and the bilges shall be dry.
- Major hull measurements may be taken ashore, with the yacht approximately level.
- The longitudinal trim should be established from freeboard measurements taken from the yacht afloat in measurement trim. Large overhangs may be taken into account in assessing waterline length or de-rating factor.

- For the measurement of fore-triangle height, (the “I” measurement), the distance shall be measured from the midpoint of a line taken athwart ships, through the sheer of the hull directly below the mast, to the intersection of the forestay with the mast.
- The weight of the boat (mass) shall be measured with the boat in racing trim. It will not include the fuel, anchors, chains, and safety equipment (unless required by the Class Rules), food, clothing, stores, tool kits, etc. but shall include the motor. Measurement of Mass will be determined during the measurement process by use of the applicable state’s weighing equipment.
- The applicant for measurement will be required to sign the measurement certificate and a declaration as to the validity of all measurements listed on the certificate. Subsequent infringement of any of the measurements may lead to disqualification in a particular race(s) in which the infringement(s) occurred and any other previous races as may be determined, resulting in possible withdrawal of the CBH to prevent further race entries.
- Supplementary measurement information/class rules, in accordance with the attached guidelines, will be required before a Class Based Handicap will be provided.
- Where no class association exists for a particular design, the state office may assist the owner, if necessary, to prepare this information.
- In addition to undertaking measurements, which are the basis of the handicap formula, checking the measurements against those contained in the class rules / supplementary measurement information questionnaire shall be required.

***Australian Sailing or any of its members, officers or servants will not accept liability for any damage or injury how so ever incurred during the entire measurement process.***

# **AUSTRALIAN SAILING TYSB TECHNICAL COMMITTEE**

## **Guideline for Submission of Result Information**

Race results gained over a wide range of races, i.e., mixed open fleet regattas as well as club racing are essential. A full sailing season will provide for the best comparison of results.

Races conducted over windward/leeward courses as well as triangular courses are preferred, whereas "Passage Races" are considered unacceptable as they do not provide reliable race result data suitable for the evaluation of a provisional CBH.

Ideally, race result data will contain the following elements.

- a) Yacht Club, Event Name and Location
- b) The CBH rating allocated to each class of boat, OAK, or modified boat in the race or division.
- c) The CBH shall accord with the CBH allocated to each class of boat, OAK, or modified boat in the relevant section of the National CBH List. (ATYSBR Appendix `A`).
- d) The Elapsed Time for each boat in the race or division shall be recorded in the results.
- e) The Corrected Time for each boat in the race or division shall be recorded in the results.
- f) The Final Place for each boat in the race or division shall be recorded in the results.
- g) Where possible wind velocity, sea state and tidal flow shall be recorded.
- h) The owner of a boat whose provisional CBH is being reviewed is requested to supply a Statutory Declaration stating that the boat, its equipment including all sails, has not been modified since the provisional CBH was issued.

### **HARD COPY**

**Race Results must be supplied to the**

**AUSTRALIAN SAILING TYSB Technical Committee and posted to:-**

**THE CHAIRMAN**

**AUSTRALIAN SAILING TYSB TECHNICAL COMMITTEE**

**C/O PO BOX 380**

**SUNBURY**

**VIC 3429**



## APPENDIX `C`

## CBH APPLICATION FORM

NAME OF APPLICANT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

PHONE NO: Bus \_\_\_\_\_ Home \_\_\_\_\_

Fax \_\_\_\_\_ Mobile \_\_\_\_\_

STATUS OF APPLICANT: \_\_\_\_\_

(e.g. Club or association, manufacturing or agent, private owner)

CLASS OF BOAT: \_\_\_\_\_ NAME OF BOAT: \_\_\_\_\_

SAIL NUMBER: \_\_\_\_\_ YEAR BUILT: \_\_\_\_\_

DESIGNER: \_\_\_\_\_ DESIGN DATE: \_\_\_\_\_

NAME & ADDRESS OF OWNER: \_\_\_\_\_

(If not the Applicant)

\_\_\_\_\_

Is a set of Class Rules attached?	Yes	No
	(Please circle)	
If no Class Rules attached, have Class Rules been established?	Yes	No
	(Please circle)	
Is this application for a modification? If yes attach details.	Yes	No

**NOTE:** If no Class Rules are attached Appendix F **must** be completed

Applications should be submitted with the details required and should be accompanied by any supporting or evidentiary information regarding the yachts performance against other known Classes.

All handicaps issued are "Provisional" until the next annual CBH review, except that a boat may remain on a "Provisional" handicap for a maximum of two years. Provisional handicaps are subject to adjustment, upwards or downwards, at the discretion of the Custodian.

Application form to be returned to Australian Sailing by emailing [sailingservices@sailing.org.au](mailto:sailingservices@sailing.org.au)

## APPENDIX `D`

## MEASUREMENT PROCEDURES

1. It is the purpose of the CBH to encourage, where possible, the rating of boats as a class rather than individually, although this does not preclude the measurement and rating of “one of a kind” (OAK) designs.
2. Applications for measurement and CBH calculation should come from the class association, or the manufacturer or his agent and a set of class rules should be lodged with the application for measurement.  
The owners of OAK designs should submit their applications in as much detail as possible and provide similar information as that required for class boats.
3. Applications should be directed to Australian Sailing by emailing [sailingservices@sailing.org.au](mailto:sailingservices@sailing.org.au) on the prescribed form and shall be accompanied by the prescribed fee, as determined by Australian Sailing.
4. Australian Sailing will allocate the task to an appointed measurer. Australian Sailing will advise the applicant of the name, email address and telephone number of the Measurer.
5. A mutually satisfactory appointment will be made between the applicant and measurer.
6. On completion of measurement, the measurer will forward the data to the Custodian for calculation and preparation of the measurement certificate.
7. Four (4) copies of the measurement certificate will be distributed as follows:
  - Two copies to the applicant. One of the copies must be signed (preferably on behalf of the Class Association) and returned to Australian Sailing.
  - One copy to the Custodian.
  - One copy to the Measurer
8. By signing a copy of the measurement certificate and returning it to Australian Sailing, the applicant expresses his acceptance of the work.
9. The application fee may be set by Australian Sailing.
10. Part-measurements and checking of alterations must be applied for in the same way as a full measurement and a measurement fee (up to the full amount) paid.
11. All new measurements and CBH results will be circulated by the Custodian to Australian Sailing for distribution to Organising Authorities.
12. All handicaps issued are “Provisional” until the next annual CBH review, except that a boat may remain on a “Provisional” handicap for a maximum of two years. Provisional handicaps are subject to adjustment, upwards or downwards, at the discretion of the Custodian.
13. If travel incurred is more than 50 km from the capital city GPO, or from the Measurer’s home address, the Measurer shall be paid an additional \$25.00 per 50 km or part thereof. Payments will be made by the state office when measurement certificates are issued.

## APPENDIX `E`

### GUIDELINES FOR PREPARATION OF CLASS RULES

The Custodian recommends that the following information be included in Class Rules for Trailable Yachts and Sports Boats.

#### 1. General

Name of class, objects, authorised builder, etc

#### 2. Class Certificates

It is recommended that each class undertake their own measurements to ensure that class rules are complied with and certificates issued to owners. Queries concerning measurement methods must be directed to the applicable state office.

#### 3. Measurements

Details of class measuring procedures, designation of class measurer etc.

#### 4. Hull and Deck

Specification of material of construction permitted (a) hull, (b) deck, and reference to hull plans and dimensions. A diagram of the boat should be appended containing the main hull and deck dimensions. Deck layout if prescribed. Internal ballast, weight and position. Waterline marks required and their measured location prescribed.

#### 5. Keel/Centreplate

Type (*swing/drop/bilge*), weight (*where located*), dimensions and shape (*aerofoil/flat plate etc*), method of raising and lowering, whether lockdown device is fitted (Refer to Australian Sailing Special Regulations). If swing keel, whether any devices (i.e., centreplate flaps or blocks) are permitted to fill the slot opening. A diagram should be appended with dimensions.

*(Note: where flaps/blocks or similar devices designed to reduce drag are fitted to classes with swing keels, they will, for measurement purposes, be treated as a drop keel).*

#### 6. Rudder

Type allowed (*swing/dagger etc*), how to be mounted. A diagram should be appended showing dimensions and mounting details.

#### 7. Masts and Spars

Section size and material allowed for mast, boom, spreaders, spinnaker pole etc., dimensions, reefing system for sails etc.

#### 8. Rigging

Type of standing rigging and wire size, location of intersection with mast, position of chain plates etc., halyards (wire or rope), dimensions, internal or external, where attached to mast, location of halyard blocks on mast, spinnaker ring etc. A diagram should be appended. Spars should have dimensional limit bands painted on in contrasting colour.

#### 9. Sails

Number and type permitted, materials allowed, detailed sail plan to be attached indicating:

<b>Main</b>	Foot, luff measurement, area, roach and batten types, lengths, headboard width. A diagram showing shape and dimension should be appended.
<b>Genoa</b>	Foot, luff measurement, area. A diagram should be appended showing shape and dimensions. Any restrictions on type of cut (mitre, crosscut, etc).
<b>Jibs</b>	As per Genoa
<b>Bloopers</b>	If permitted
<b>Spinnaker</b>	Width, height, area, diagram should be appended showing shape, restrictions on cut (cross, radial head, asymmetric etc). Maximum number of spinnakers to be used during a race.

## 10. Optional Devices

Details of what is permitted under class rules, e.g. Boom vang, mainsheet traveller, tiller extension, main luff down haul (Cunningham), backstay tension device, barber haulers, mainsail foot outhaul, flattening reef etc.

## 11. Prohibitions

Any items specifically prohibited such as trapeze, crew hiking out, rotating masts, etc.

## 12. Fittings required in cabin

Details of essential furniture to be contained in the boat, e.g. bunks, stove, sink etc.

## 13. Auxiliary Power

Type of motor permitted (*outboard / inboard*), minimum horsepower, if outboard where carried (*in well / on transom*). Note: Motors must be mounted in the normal operating position whilst racing (*refer to Australian Sailing Special Regulations, Part 1*), except that the motor may be tilted such that the propeller and leg are clear of the water.

## 14. Safety

At a minimum, class rules shall meet the requirements of Australian Sailing Special Regulations; any additional requirements of the class must be specified, e.g. PFD's to be worn at all times, whether lifelines are required, buoyancy requirements etc.

## 15. Crew

Minimum number required for sailing, minimum age, etc

## 16. Association Insignia

Diagram to be attached

## 17. Any other requirements

Please list.

# APPENDIX `F`

## SUPPLEMENTARY MEASUREMENT INFORMATION

Name of Class \_\_\_\_\_

This questionnaire is taken from the guidelines issued for the preparation of class rules. Where class rules do not exist (such as where there are only a few boats of a particular type and there is no association) the owner(s) of the boat type presented for measurement should endeavour to supply as much of the information as possible.

It should be noted that the questionnaire has an alternative title of "Supplementary Measurement Information" and it is suggested that the information should be supplied by classes although it may not be listed at the present time in the "official" class rules.

It should also be noted that the numbering system is based on the guidelines and as the first measurement listed in the guidelines is number 4. The same numbering system has been used in the questionnaire.

All measurements shall be supplied in millimetres and weights in kilograms.

### 4. Hull and Deck

#### 4.1 Construction Material Allowed

(a) Hull Marine Ply   Solid GRP

Other (specify) \_\_\_\_\_  
(e.g. airex foam, balsa core etc)

(b) Deck Marine Ply   Solid GRP

Other (specify) \_\_\_\_\_  
(e.g. airex foam, balsa core etc)

#### 4.2 Dimensions (attach diagram with dimensions if possible)

LOA \_\_\_\_\_ LWL \_\_\_\_\_ MAX. BEAM \_\_\_\_\_

If skeg, or shoal draft keel etc., specify \_\_\_\_\_

Approx. shape and dimensions \_\_\_\_\_

#### 4.3 Other hull / deck prescriptions, if applicable.

*(If your class has mandatory deck layout, please specify)*

\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**4.4 Weight**

Total minimum weight as per CBH requirements for measurements \_\_\_\_\_ kgs

If available, specify separately weights of:

Hull \_\_\_\_\_ kgs

Deck \_\_\_\_\_ kgs

**4.5 Ballast**

Keel weight \_\_\_\_\_ kgs Describe (e.g. lead shot, bulb, solid lead in steel keel etc)

\_\_\_\_\_  
\_\_\_\_\_

Internal ballast weight \_\_\_\_\_ kgs Describe (e.g. steel punchings, lead, etc and where material is positioned. e.g., throughout the keel, at the foot of the keel or other.)

\_\_\_\_\_

**5. CENTREPLATE**

Type: (please tick)

Swing

Drop

Bilge

Drop

Swing

Other (specify) \_\_\_\_\_

Shape: Aerofoil  Flat Plate  Other (specify) \_\_\_\_\_

Dimensions: Max.Thickness \_\_\_\_\_ mm Width \_\_\_\_\_ mm Length \_\_\_\_\_ mm

Method of raising and lowering describe (e.g. wire winch, hydraulic ram, sheet winch, electric winch. Method of locking centreplate in the down position.)

\_\_\_\_\_

If bilge keels, can keels be raised separately? \_\_\_\_\_

If swing (or swing bilge), do class rules allow flaps or other device to block off hole when keel in down position?

Describe \_\_\_\_\_

Attach diagram of keel case showing above information.

**6. RUDDER(S)**

Type:            Swing                            Dagger            Other

(specify) \_\_\_\_\_

If option allowed, specify \_\_\_\_\_

Shape:            Aerofoil             Flat Plate

Other (specify) \_\_\_\_\_

Dimensions:    Max thickness \_\_\_\_\_ mm width \_\_\_\_\_ mm length \_\_\_\_\_ mm

*Attach diagram of rudder showing above information*

## 7. MAST AND SPARS

### 7.1 Mast

Shape (*round, oval or pear shape*) \_\_\_\_\_

Section Dimensions:

Fore & Aft \_\_\_\_\_ mm

Width \_\_\_\_\_ mm

Gauge \_\_\_\_\_ Section size \_\_\_\_\_

Tapered \_\_\_\_\_ Length \_\_\_\_\_ mm

Material \_\_\_\_\_

### 7.2 Boom

Shape \_\_\_\_\_

Section Dimensions:

Width \_\_\_\_\_ mm Thickness \_\_\_\_\_ mm

Gauge \_\_\_\_\_ Section size \_\_\_\_\_ mm

Material \_\_\_\_\_

**7.3 Spreader/s:**

No. of \_\_\_\_\_

Length \_\_\_\_\_mm

Material \_\_\_\_\_

Others specifications \_\_\_\_\_

**7.4 Spinnaker Pole:** Length \_\_\_\_\_mm

Material \_\_\_\_\_

*(For boats with bowsprit poles for asymmetric spinnakers, measure length from jib tack to pole end). On these boats, for rating purposes, the "SPL" will be the pole length + "J" (fore triangle base).*

**8. RIGGING** (Diagram must be attached)

**8.1 Standing Rigging**

Describe (e.g.). *Single fixed backstay, upper masthead shrouds, lower shrouds, 7/8 height forestay etc* and show measurements where attached to mast and hull.

\_\_\_\_\_  
\_\_\_\_\_

Running backstays fitted? \_\_\_\_\_

Twin groove head-sail foil or other similar device allowed? \_\_\_\_\_

Describe: \_\_\_\_\_

Variable tension devices allowed on backstay?

Describe: \_\_\_\_\_

**8.2 Halyards:** internal or external? \_\_\_\_\_

**8.3 Location of spinnaker ring?** (e.g.). *900 mm from mast step* \_\_\_\_\_

**8.4 Height of spinnaker halyard block.** \_\_\_\_\_mm

*(The distance shall be measured from the intersection of the forestay with the mast to the spinnaker halyard exit ("l" + dim?)*



**8.5 Black Bands** (or bands of contrasting colour)

**8.5.1** Mast distance apart (inner of both bands – underside of top mast band to inside of Sail track when boom fitted) \_\_\_\_\_mm

**8.5.2** Boom (fore-side of black band to foreside of mast track) \_\_\_\_\_mm

**9. SAILS**

**9.1 Main and Headsails** (Sail Plan shall be attached)

Note: measurements taken from re-measured boat – notify if any variations exist (suggest check class measurements for foot and luff).

	<b>Main</b>	<b>Jib /Genoa</b>
Maximum area:	_____	_____
Luff:	_____mm	_____mm
Foot	_____mm	_____mm
Genoa LPG		_____mm
Roach	_____mm	_____mm
No. of Battens / total length	_____	_____

*If only largest headsail specified in class rules and no restriction on size or number of smaller sails, specify (i.e. number of sails allowed, etc.)*

**9.2 Spinnaker:** Type allowed (symmetrical / asymmetrical) (If no restriction, state)

Max Area \_\_\_\_\_ Max Luff \_\_\_\_\_mm\_ Max. Width \_\_\_\_\_mm

Leech (asymmetric) \_\_\_\_\_mm Foot (asymmetric) \_\_\_\_\_++\_\_\_\_\_mm

**9.3 General**

If any other restrictions in class rules such as material type, material weights, second smaller spinnaker, etc. specify

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**10 OPTIONAL DEVICES**

Any devices specified in class rules; e.g. 8:1 boom vang, mainsail reefing, jib barber haulers, spinnaker, flattening reef on main (*slab foot*), rotating mast, lifelines mandatory in class rules, etc.

**11 PROHIBITIONS**

Any devices etc. not permitted, e.g. rotating mast, trapeze (*not permitted in Trailable Yacht races*).

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**12 INTERNAL FITTINGS – FURNITURE - BUOYANCY**

**12.1** Specify any mandatory requirements contained in class rules, e.g. four bunks, sink, stove, toilet etc.  
(Note trailable yacht requirements in Australian Sailing Special Regulations Part 1).

**12.2** Buoyancy – required in class rules, specify and describe (*e.g. front and rear sealed air tanks, foam (amount and location)*) etc.

\_\_\_\_\_  
\_\_\_\_\_

If not buoyant, specify: \_\_\_\_\_

**13. AUXILIARY POWER** (*inboard / outboard*) \_\_\_\_\_

If Inboard, propeller type (*fixed / folding*) \_\_\_\_\_

**14. SAFETY EQUIPMENT**

Specify any mandatory requirements contained in class rules

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**15. CREW**

Specify minimum number required for racing and minimum age etc

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**16. ASSOCIATION INSIGNIA**

Diagram shall be attached

**17. ANY OTHER REQUIREMENTS NOT SPECIFIED ABOVE BUT CONTAINED IN CLASS RULES**

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**SIGNED:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**TITLE: DESIGNER / BUILDER / CLASS ASSOCIATION / OWNER / OWNERS REPRESENTATIVE.**

(Please circle applicable title)