

July 24, 2024

X-15 Class Letter of Recommendation to World Sailing

Dear Sir, Madam,

I write to you today in my capacity as the President of the Norwegian Sailing Federation to express my support of the World Sailing Class certification of the first wingfoil one-design class, X-15. Wingfoiling is an exponentially growing discipline in the sailing world both in Norway and internationally. Experienced sailors are thrilled with the rapid learning curve of an exhilarating water sport where the equipment is manageable, easy to transport, relatively inexpensive and allows more time on the water due to the wide range of wind conditions one can foil in. New sailors are drawn to the sport for exactly the same reasons. This puts wingfoiling in the unique position of a burgeoning sport that has the potential to create vibrant sailing communities in all corners of the world.

The X-15 class is dedicated to developing wingfoil one design racing by combining youth coaching development programs with elite high performance sailors. The X-15 class foundational pillars are creating an international presence and successful participation with accessibility, sustainability, diversity and affordability rooted at their core.

I hereby express my full support of an approval of the X-15 as a World Sailing class.

Sincerely,



Guro Steine
President

Norwegian Sailing Federation
Sognsveien 73, 0840 Oslo, Norway
Tel.+47 21 02 90 00
Org. nr 952 194 488

World Sailing Chief Executive Officer 20 Eastbourne Terrace
Paddington
London, W2 6LG
United Kingdom

X-15 Class
Fiona Wohali Wylde
fiona@x-15class.org

July 14, 2024

Dear Sir / Madam,

The X-15 Class would like to make a formal application to become recognized as a World Sailing Class Member for Wingfoil One Design Racing. The X-15 Class represents a modern segment in wingfoil racing, emphasizing uniformity in equipment to prioritize skill and strategy in competition. X-15 Class seeks to develop a standardized class that facilitates equal opportunities for competitors promoting inclusivity and new entrances into the sailing world through wingfoiling.

X-15 Class is dedicated to developing wingfoil pathways for all participants in the sport promoting youth and senior development, engagement, and coaching opportunities for athletes. The following documentation proves the work X-15 Class has accomplished under Regulation 10 to establish X-15 Class under World Sailing.

Sincerely,



Fiona Wylde
X-15 Class Manager

INTERNATIONAL X-15 CLASS

ASSOCIATION CONSTITUTION

1. NAME, INSIGNIA, JURISDICTION & LANGUAGE

1.1 The official name of the class association is the “International X-15 Class Association”, otherwise known as the “X-15 Class Association”, “X-15 Class” or “Class”.

1.2 The X-15 Class Insignia shall be:



1.3 The X-15 Class is a non-profit sports association currently resident in Switzerland.

1.4 The X-15 Class may, upon the vote of its members, be affiliated to other bodies, or contract other bodies for management/secretarial services as it sees fit.

1.5 The official language of the class and all its publications is English. In this constitution the word "shall" is mandatory and the word "may" is permissive

2. AIMS

2.1 To encourage, promote and develop X-15 Class competition throughout the world.

2.2 Maintain the one-design character of the X-15 Class.

2.3 Organize International, Continental and World Championship events.

2.4 Manage class activities through the X-15 Class Executive Committee and the X-15 Class Manager.

2.5 Represent the interests of the owners and their National Class Associations at World Sailing.

3. MEMBERSHIP

3.1 The X-15 Class is an association of its Members.

3.2 Full Membership may be granted to those National X-15 Class Associations (NCA)

established in a country, and recognised as such by the World Sailing Member National Authority (MNA) for that country.

3.3 In the absence of a NCA, Full Membership may be granted to an MNA controlling the X-15 Class activity in a country.

3.4 Individual Membership may be granted by the class committee to individuals that are not represented by either an NCA or an MNA.

3.5 Only X-15 Class Full Members are entitled to vote at General Meetings.

3.6 Membership of the X-15 Class is a requirement for entry to X-15 Class Championship and other sanctioned events.

4. MEMBERSHIP FEES

4.1 Each member shall pay annual fees, as set by the General Assembly.

4.2 All subscriptions are due on 1 January each year, and shall be paid by 28th February.

4.3 A Full Member who has not paid annual fees will not be entitled to any rights or privileges of membership.

5. ORGANISATION

5.1 The X-15 Class is governed by its Full Members through its convened General Assembly and its elected Executive Committee.

5.2 The Executive Committee shall report its activities to a General Assembly.

6. GENERAL ASSEMBLY & MEETINGS

6.1 The General Assembly shall be the authoritative body of the X-15 Class which will devolve such administrative and/or executive power to the X-15 Class Executive Committee it deems relevant.

6.2 The General Assembly shall consist of delegates appointed by the X-15 Class Full Members. Persons elected to the X-15 Class Executive Committee may attend and speak, but shall not vote.

6.3 Ordinary meetings of the General Assembly shall be held annually, usually at the class World Championships, or as decided by the X-15 Class Executive Committee.

6.4 An extraordinary meeting of the General Assembly shall be held on demand of 1/3rd of the current X-15 Class Full Members.

6.5 General Assembly meetings will be chaired by the X-15 Class Executive Committee Chairman. In the absence of the Chairman, those delegates present may elect an alternate by simple majority.

6.6 The Agenda for ordinary meetings of the General Assembly shall contain:

- approval of the Minutes of the last meeting;
- reports from the X-15 Class Executive Committee, including Chairman's report;
- presentation of Financial Statements, including the previous year's accounts and current budget;
- submissions from the X-15 Class Full Members and the X-15 Class Executive Committee;
- Election of X-15 Class Executive Committee Chairman;
- Election of X-15 Class Executive Committee.

6.7 Each X-15 Class Full Member delegate has one vote, but may represent no more than two other X-15 Class Full Members from whom he or she had received a proxy vote mandate. Alternatively, X-15 Class Full Members may submit their vote by e-mail. Proxy mandates and email votes shall be received by the X-15 Executive Secretary at least 24 hours before the date and time of the General Assembly as posted on the official class website, and shall be signed by either the Chairman or Secretary of the X-15 Class Full Member.

6.8 The decisions of a General Assembly shall be by simple majority of votes, except the following which require a 2/3 (two thirds) majority of votes:

6.8.1 modification of the Constitution;

6.8.2 proposals to WS for changes and/or modifications of X-15 Class Rules or Equipment Building Specifications;

6.8.3 termination of membership of National Class Association(s).

6.9 The Quorum at a General Assembly shall be delegates and postal votes, together representing a minimum of 1/3rd of the X-15 Class Full Members.

6.10 At least 45 days' notice of a General Assembly and its agenda shall be given. This will be by email to the X-15 Class Full Members and by posting it on the class website.

6.11 X-15 Class Full Members and the X-15 Class Executive Committee shall inform the X-15 Class Executive Secretary by email, at least 30 days before a meeting of the General Assembly of:

- the items, including submissions, they wish to put on the agenda;
- the names of candidates for the X-15 Class Executive Committee in an

election year.

6.12 The X-15 Class Executive Secretary shall publish no later than 15 days before the date of a General Assembly meeting the items, submissions and nominations received.

6.13 Inaugural Meeting of the General Assembly

6.13.1 At the Inaugural Meeting of the General Assembly, the incumbent X-15 Class Steering Committee, may propose a full or partial slate of candidates for election to the X-15 Class Executive Committee, each candidate supported by a Full Member.

6.13.2 At the Inaugural Meeting of the General Assembly, the incumbent X-15 Class Steering Committee, may put forward submissions, each submission being supported by a Full Member.

7. EXECUTIVE COMMITTEE

7.1 The X-15 Class Executive Committee shall be composed of a minimum 5 and a maximum 9 persons, excluding the X-15 Class Executive Secretary and X-15 Class Manager.

7.2 Candidates for the X-15 Class Executive Committee are elected for a 4 year period, and may stand for re-election.

7.3.1 The X-15 Class Executive Committee shall be composed of:

- not more than 2 persons from the same X-15 Class Full Member;
- a minimum of 2 continents to be represented by an X-15 Class Full Member nominee;
- a minimum of 1/3rd from each gender;
- A minimum of 1 person with responsibility for Sustainability

7.3.2 Candidates for the X-15 Class Executive Committee shall be nominated by an X-15 Class Full Member.

7.3.3 Each X-15 Class Full Member may nominate a maximum of two persons.

7.3.4 The Chairman of the X-15 Class Executive Committee shall be elected by the General Assembly.

7.4 The X-15 Class Executive Secretary shall be appointed by the X-15 Class Executive Committee, and is a non-voting member of the X-15 Class Executive Committee. That position may be filled by a person from a body contracted to under 1.4.

7.5 The Election process for the X-15 Class Executive Committee shall follow the

Executive Committee Election Procedure in Appendix 1.

7.6 In case of a vacancy the X-15 Class Executive Committee may co-opt a member until the appointment is confirmed at the next general assembly.

7.7 The X-15 Class Executive Committee is responsible for the management of the X-15 Class and all matters not delegated to other bodies by the general assembly.

7.8 Decisions of the X-15 Class Executive Committee shall be by a simple majority of votes, each member shall have one vote. In the case of equality of votes, the Chairman shall have a casting vote.

7.9 Meetings may occur at major championship events, or by conference call, where a minimum of 4 present shall form a quorum. Normal business may be conducted by Email where a Quorum of 4 votes shall be the minimum.

8. CLASS MANAGER

8.1 The X-15 Class Executive Committee, may contract an X-15 Class Manager for such time, at such remuneration, upon such conditions and responsibilities as it may think fit.

8.2 The X-15 Class Manager shall be a non-voting member of the X-15 Class Executive Committee.

9. TECHNICAL COMMITTEE

9.1 The X-15 Class Technical Committee consists of a minimum of 3, and maximum of 6, persons appointed by the X-15 Class Executive Committee, plus the X-15 Class Manager.

9.2 The X-15 Class Executive Committee shall appoint the Chairman of the X-15 Class Technical Committee.

9.3 The X-15 Class Technical Committee acts under the control and responsibility of the X-15 Class Executive Committee to deal with matters relating to Race Management, Equipment Inspection & Measurement, and Judging.

9.4 The X-15 Class Technical Committee is responsible for recommending, to the X-15 Class Executive Committee, the appointment of class officials to class championships and nominations to World Sailing when requested.

9.5 The decisions of the X-15 Class Technical Committee shall be by simple majority.

10. CONSULTATIVE COMMITTEES

10.1 Consultative Committees may be established by a General Assembly.
Executive Committee.

10.3 Consultative committees shall report to the General Assembly.

10.4 Consultative committees may be established for a definite or an indefinite
period.

11. DISSOLUTION

11.1 Dissolution of the X-15 Class shall take place by a resolution of an X-15 Class
General Assembly, passed by two-thirds majority of those voting.

11.2 After confirmation by the treasurer of payment of all liabilities, the agreed assets
and funds shall be disposed of as directed by the X-15 Class General Assembly on a
simple majority of those voting.

Updated: 14 July 2024

[illegible]

Date	Country	Event	Exact Location	Type of Event	# of Participants	Completed / Scheduled
2-5 July 2023	Italy	Foiling Week	Lake Garda	Racing	15	Completed
22 July 2023	Netherlands	Surfcenter.NL Rookies Day	Steendam	Training	8	Completed
5-6 September 2023	Poland	X-15 Class Racing Polish Racing	Puck Marina, Poland	Racing	17	Completed
8-9 December 2023	Brazil	World Sailing Youth World Championships X-15 Invite	Buzious, Brazil	Demo	10	Completed
6-8 May 2024	France	Defi Wing	Narbonne France	Demo	8	Completed
19-21 June, 2024	Italy	Lake Como	Lake Como, Italy	Training + Racing	16	Completed
27-30 June 2024	Germany	Kiel Week	Kiel, Germany	Trainig + Racing	26	Completed
12-14 July 2024	APM	SUP + Wing Fest.	Fehmarn, Germany	Demo + Racing	16	Completed
5-11 August 2024	UK	Scottish Fin + Foil Championshiops	Stranraer, Scotland	Trainina + Racing	10	Completed
29 Aug - 2 Sept 2024	USA	WW&W Training + Racing Camp	Hood River, Oregon	Training		Scheduled
5-8 September 2024	USA	AWSI Trade Show	Hood River, Oregon	Demo		Scheduled
7-8 September 2024	Italy	Rome Wingfoil Classic		Racing		Scheduled
7-9 September 2024	APM	VINGELZ 2024	Switzerland	Racing		Scheduled
12-15 September 2024	Austria	X15 Demo / clinic in Austria	Attersee, Austria	Training + Demo		Scheduled
23-30 September 2024	China	Training National Team	China	Training		Scheduled
4-5-6 October 2024	EXCENS Spain	Campeona España de Wingfoil	CN Sant Antoni (Ibiza)	Racing		Scheduled
7-12 October 2024	APM	Swiss traning camp in Sardingia - PORTO POLLO 2024	Sardenga	Training		Scheduled
17-22 October 2024	USA	A1R Pensacola Trainnig + Racing	Pensacola, Florida	Training + Racing		Scheduled
21-23 October 2024	France	2024 U15 FRENCH CUP	Leucate, France	Racing		Scheduled
16-17 November 2024	EXCENS Spain	Entrega Trofeos	CN Sa Rapita (Mallorca)	Racing		Scheduled
11-15 December 2024	Thailand	X-15 World Games, Thailand	Thailand	Racing		Scheduled
2025 PROPOSED MAIN EVENTS						
April 2025	China	Asian Continetal X-15 Championships	Hainan	Racing		
June 2025	Italy	Foiling Week	Lake Garda, Itlay	Racing		
June 2025	Germany	Kiel Week	Kiel, Germany	Racing		
August 2025	USA	US Sailing National Championships	San Francisco, California	Racing		
October 2025	Spain	X-15 Spanish Championships	Mallorca, Spain	Racing		
November 2025	Mexico	X-15 Mexican Championships	Puerto Vallarta, Mexico	Racing		
December 2025	Thailand	X-15 World Championships	Pattaya, Thailand	Racing Finals		
* Additional Events TBC						

X-15 CLASS

MNA DISTRIBUTION

Country	Salesname	X-15 82	X-15 95	Grand Total	Meet WS Country Requirements	WS Continent Requirement
Thailand	Tikisports International	25				ASIA
Thailand	Amara Watersports LTD	9				ASIA
Thailand total				34	YES	ASIA
USA	Tikisport NA	10				NORTH AMERICA
USA	Tradewind Supply	10				NORTH AMERICA
USA	Seastar	1				NORTH AMERICA
USA	Total			21	YES	NORTH AMERICA
China	SHENZHEN GARZEN SPORTS EQUIPMENT CO. LTD	16	3	19	YES	ASIA
Spain	Excens Sports	18	1	19	YES	EUROPE
Germany	APM Marketing	17		17	YES	EUROPE
Italy	APM Marketing	17		17	YES	EUROPE
Israel	Freegull Sea Sports LTD	17		17	YES	ASIA
United Kingdom	Tushinham Sports	10	6	16	YES	
Martinique	Windsurf 971	8		8		NORTH AMERICA
South Korea	Ebest Korea	5	3	8		ASIA
Japan	Starboard Japan Co., LTD	7		7		ASIA
Czech Republic	Water Solutions S.R.O	6		6		EUROPE
Poland	Hydrosphera Piotr Plutowoski	6		6		EUROPE
Singapore	HAIYI SEA SPORTS CENTRE PTE LTD	3	2	5		ASIA
Norway	Durango Sports AS	5		5		EUROPE
Turkey	CAGLA KUBAT REKLAM ORG. EGITIM HIZM. SPOR M	5		5		EUROPE
Netherlands	Fox Sports	4		4		EUROPE
Mexico	DEPORTES VIENTO S. DE R.L DE C.V.	4		4		NORTH AMERICA
Brazil	MORRONE WIND ARTIGOS ESPORTIVOS LTDA	1	2	3		SOUTH AMERICA
Lithuania	MB VALHALA	2		2		EUROPE
French Polynesia	T 10	2		2		OCEANIA
Sweden	Surfspot Sweden	1	1	2		EUROPE
Australia	Starboard Australia	1		1		OCEANIA
Hong Kong	WIND N° SURF INT'L LTD - X GAME	1		1		ASIA
Bonaire	Jibe City NV	1		1		NORTH AMERICA
Chile	COMERCIAL E IMPORTADORA WSC S.A.	1		1		SOUTH AMERICA
New Zealand	SUPSNZ. COM	1		1		OCEANIA
Total		214	18	232		

X-15class

X-15class

X-15 CLASS RULES



International X-15 Class Association

The X-15 Class was designed in 2023 by [SESTAR](#) as a one-design class for wingfoil racing.

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Add standard cover page

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X-15 ***CLASS***

INTRODUCTION

This introduction only provides an informal background and the International X-15 Class Rules proper begin on the next page.

X-15 hulls, hull appendages, rigs and sails are manufacturing controlled.

All equipment shall only be manufactured by approved manufacturers – in the class rules referred to as licensed manufacturers unless otherwise permitted by these rules.

Equipment is required to comply with the International X-15 Building Specification and is subject to a World Sailing approved manufacturing control system.

X-15 hulls, hull appendages, rigs and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

Commented [2]:
Addition of index page before introduction?

X-15class

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

PLEASE REMEMBER:

THESE RULES ARE **CLOSED CLASS RULES** WHERE IF IT DOES NOT SPECIFICALLY SAY THAT YOU MAY – THEN YOU SHALL NOT.

PART I – ADMINISTRATION

Section A – General

Commented [3]:
Royalty scheme to be defined

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.1.3 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.1.4 The term ‘board’ or ‘Wingfoiler’ in these rules means boat.

A.2 ABBREVIATIONS

- A.2.1
- WS: World Sailing
- MNA WS: Member National Authority World Sailing
- X-15: X-15 Class Association
- NCA National Class Association
- RRS Racing Rules of Sailing
- ERS: Equipment Rules of Sailing

A.3 AUTHORITIES AND RESPONSIBILITIES

- A.3.1 The **Class Rules** authority of the class is World Sailing, which shall cooperate with the X-15 in all matters concerning these **class rules**. [SPARE]
- A.3.2 Neither WS nor the X-15 accept any legal responsibility in respect of these **class rules** or any claim arising therefrom.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 WS has delegated its administrative functions of the class to the X-15. [SPARE]

A.5 WORLD SAILING RULES

- A.5.1 These **class rules** shall be read in conjunction with the RRS.

Commented [4]:
Include RRS?

Commented [5R4]:
Yes, thank you for catching that. Updated to RRS.

X-15_{CLASS}

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 CHANGES

A.6.1 ~~Amendments to these **class rules** are subject to the approval of World Sailing in accordance with World Sailing Regulations.~~

A.7 INTERPRETATION OF CLASS RULES

A.7.1 ~~Interpretation of these **class rules** shall be made in accordance with WS Regulations.~~

A.8 WS PLAQUE

A.8.1 ~~Licensed manufacturers shall pay the plaque fee to WS.~~~~[SPARE]~~

A. 9 SAIL / BIB NUMBERS

A.9.1 ~~Sail / Bib numbers shall be issued by the X-15 who may delegate this to the NCA's.~~

Commented [6]:
Does this need to be repeated? It's already given above in A.1.3

Commented [7R6]:
Good point

Commented [8R6]:
Agreed. I removed it

Commented [9]:
Reflect agreement requirement - it could be as simple as:
Licensed manufacturers shall pay the plaque fee to WS.

Commented [10R9]:
Ok. See 8.1 to confirm its correct

Section B – Equipment Eligibility

For a Wingfoiler to be eligible for ~~*racing*~~, it shall comply with the rules in this section.

B.1 CLASS RULES AND CERTIFICATION

B.1.1 ~~The Wingfoiler shall:~~

(a) ~~have been manufactured by licensed manufacturers (except as otherwise stated in these class rules).~~

~~(b)~~~~[SPARE]~~

(be) ~~be in compliance with the class rules and have not been modified in any way other than permitted by the class rules~~

Commented [11]:
In italics to apply RRS definition?

Commented [12R11]:
Does it need to be in italics?

Commented [13]:
General question: do we need to list the licensed builders in the CRs?

Commented [14R13]:
Question for ERSC

PART II – REQUIREMENTS AND LIMITATIONS

The **crew** and his/her equipment shall comply with the Rules in Part II when *racing*.

Inspection to check conformity with the rules of Section C is not part of fundamental measurement.

The rules in Part II are **closed class rules**. **Equipment inspection** shall be carried out in accordance with the ERS except where varied in this Part.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

- (a) ___-RRS 50.1(b) is changed as permitted by the rule itself to specify a clothing and equipment weight as set in C.3.4 and the harness weight as set in C.3.3(i).
- (be) ___ RRS Appendix G is changed as permitted by RRS G.5 to set the Sail Identification requirements as defined in C.10.2

C.1.2 Equipment updates from manufacturer will be implemented at a minimum of two year intervals

C.1.3 At World and European Championships, International WS Events, and Class-endorsed Championships, competitors shall use current generation of X-15 equipment.

C.1.4 At Regional and local events, competitors may use older generation X-15 equipment.™

C.2 CREW

C.2.1 LIMITATIONS

- (a) ___-The **crew** shall consist of one person.

C.2.2 MEMBERSHIP

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?

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To check with ERSC

Commented [17]:
Is there a need to add a clause for PFD's in this section? Or shall RRS 1.2 just be followed as standard?

Commented [18R17]:
Only ers and rrs changes are listed here. To check with the class

X-15 CLASS

- (a) For all National Championships, World Championships, WS World Cup Series events and Continental Championships the **crew** shall be a member of his/her NCA. If there is no NCA then the **crew** must be a member of the X-15 Class ~~Class~~.

C.2.3 DIVISIONS

(a) Gender divisions

- (i) Men
- (ii) Women

(b) Age divisions

- (iii) U13/ U15 / U17 / U19: crews under the age of the division age on 31st December in the year of competition are allowed to compete in the U13, U15, U17, U19 divisions.

~~The Junior and Youth divisions will use designed equipment for their age group.~~

- (iv) Junior and Youth are allowed to compete in older age divisions, but they are not allowed to compete in younger divisions.

~~(iv) sailors must race on the equipment in the age group in which they are racing.~~

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Not for here

Commented [20]:

Any safety related issue?

Commented [21]:

To check with ersc

Commented [22R21]:

OK

Commented [23]:

Not for here

Commented [24R23]:

OK, removed it

C.3 PERSONAL EQUIPMENT

C.3.1 **Personal equipment** manufacturers are optional. ~~does not have to be produced by a licensed manufacturer.~~

C.3.2 MANDATORY

(a) For Use:

- (i) The **crew** shall wear a helmet that shall be to the minimum standard EN1385, EN1077, EN 966, ASTM 2040, Snell S98 or equivalent, with a brightly colored region of at least 300 square centimeters of the exterior surface that can be seen from above the water with crew lying face down or face up. The Notice of Race or Sailing Instructions may change this rule to prescribe alternative or additional standards.

- (ii) The **crew** shall carry a whistle

- (iii) ~~Except when the use of a personal flotation device is required by RRS 40, The crew shall wear an impact vest. An impact vest is a garment worn on the torso which is specifically designed to protect the wearer around the torso from impact. The impact vest may act as a personal flotation device if in accordance with C.1.1(a). From January 1st 2024, The impact vest shall comply with the minimum standard ISO 12402-5, or USCG Type III, or AS 4758 Level 50 or equivalent, and shall be used at all times.~~

~~An impact vest is a garment worn on the torso which is specifically designed to protect the wearer around the torso from impact.~~

~~(iv)~~

Commented [25]:

ERS definition?

Commented [26]:

Check ERS

C.3.3 OPTIONAL

X-15 *CLASS*

In addition to food and personal effects to keep warm and/or dry, and/or to protect the body, the crew may wear the following:

- (i) ___ a harness which shall have positive buoyancy and with a maximum permitted weight of 4kg.
- (ii) ___ a personal flotation device to the minimum standard ISO 12402-5, or USCG Type III, or AS 4758 Level 50 or equivalent.
- (iii) ___ additional body protection gear.
- (iv) ___ a drinking container in compliance with RRS Appendix B, B.50.1(a).
- (v) ___ an electronic or mechanical timing device.
- (vi) ___ a heart rate monitoring device
- (vii) ___ food
- (viii) ___ personal effects to keep warm and/or dry,

Commented [27]:

Please confirm what is the requirement.

Commented [28R27]:

These flotation devices are all the same flotation standards but have different names for different country requirements.

C.3.4 TOTAL WEIGHT

(a) ___ As permitted by RRS 50.1(b), the total weight of a competitor's clothing and equipment, including footwear and clothing worn below the knee, shall not weigh more than 10 kg. The harness and drinking container (empty) are considered as competitors' clothing and equipment and therefore included. When the crew is required to carry equipment supplied by the Organizing Authority, it shall be excluded from weighing under C.3.4.

C.4 PORTABLE EQUIPMENT

C.4.1 MANDATORY

(a) ___ For Use:

- (i) ___ The Notice of Race or Sailing Instructions may require a boat or crew to carry supplied recording equipment (sound and/or video), a GPS or tracking device as supplied by the Organising Authority. The Organising Authority shall provide instructions of its fitting to the boat or crew.

C.4.2 OPTIONAL

For the avoidance of doubt, when items listed here are worn or carried by the crew they shall be included for weighing under C.3.4.

(a) ___ For Use:

- (i) ___ Spare angle spacers, torque keys and spare hull appendage fittings.
- (ii) ___ Timing devices.
- (iii) ___ Recording equipment (sound and/or video) and personal GPS devices and any associated attachment fittings, when permitted by the Notice of Race or Sailing Instructions.

(b) ___ Not for Use:

- (i) ___ A towrope of minimum length 5m may be carried by the crew.

X-15class

The Notice of Race or Sailing Instruction may change this rule or make its use mandatory.

C.5 ADVERTISING

C.5.1 LIMITATIONS

Advertising shall only be displayed in accordance with WS Advertising Code.
(See WS Regulation 20).

C.6 WINGFOILER

C.6.1 REPAIR

- (a) ___ All **repairs** require written approval unless stated otherwise in these rules.
- (b) ___ Approval may only be granted by the X-15 Technical Committee:
technical@X-15class.org
- (c) ___ Permission to undertake a **repair** during an event may be granted by the Event Technical Committee. The required written approval by the X-15 Technical Committee may be granted after the event.
- (d) ___ **Repairs** shall not be used to reinforce an existing part and shall not alter the essential shape, characteristics, and function of the original equipment.

Commented [29]:
Check ERS definition

C.6.2 LIMITATIONS

- (a) ___ No more than 1 **hull**, 1 **wing**, and 1 foil system with three front wings (one of each size), may be registered for an event. When lost or accidentally damaged beyond **repair**, a replacement may be used if approved by the Event Technical Committee.
- (b) ___ Replacements to registered equipment during an event shall only be made with the approval of the Event Technical Committee unless otherwise permitted in the **class rules**.

Commented [30]:
Add a requirement for wings? Or just unspecified?

C.7 HULL

C.7.1 MODIFICATIONS

- (a) ___ A maximum of 3 foot traps shall be fitted to the existing inserts.
- (b) ___ Foot straps and fittings may be removed, replaced or added during an event without approval while in compliance with C.7.1(a). Replacements or additions may be of any type and manufacturer. The total weight of all fitted foot straps with fittings must be a minimum of 350 grams in wet condition.
- (c) ___ The hull box (where the hull appendages are fitted) lateral sides (port and starboard) may be shimmed with removable materials which shall not protrude in height above the depth of the box.

Commented [31]:
"in height above the depth of the box" would read better to me

Commented [32R31]:
Agreed. See change

Commented [33]:
Ask Svein about this tonight

Commented [34]:
Add SPARE Here

Commented [35R34]:
No need to add spare. We can always add more points if needed

Commented [36R34]:
Ok, Thanks!

~~(d) [SPARE]~~

C.7.2 MAINTENANCE

- (a) ___ **Cleaning** of the **hull** permitted.

X-15 CLASS

C.7.3 REPAIR

- (a) Repairs to the **hull** require approval as described in C.6.1 with the following exceptions:
- (i) filling and blending of chips, gouges and splits smaller than 200mm in length may be carried without approval other than those in the hull box which require approval as described in C.6.1.

Commented [37]:
Suggest to remove

C.7.4 HULL WEIGHT

- (a) The weight of the **hull** in dry condition with no foot straps shall be a minimum of 5.0 kg
- (b) The weight of the **hull** in wet condition with the minimum foot straps, as highlighted in C.7.1(a), and its fittings shall be a minimum of 5.3 kg. For the purpose of checking this rule, the measurement shall be taken after being placed in the water unaided to float for 30 seconds on each side and after left standing vertically on its aft end for a minimum of 10 minutes.

Commented [38R37]:
Removed

Commented [39]:
c.7.1 highlights the maximum. What is the minimum?

Commented [40R39]:
It states "

Commented [41R39]:
C.7.1(a) states, "must be a minimum of 350 grams in wet condition.". Would you like for there to be a maximum included too?

Commented [42]:
Check wording

Commented [43]:
Location to be defined in the CRs

Commented [44]:
Will it be part of the total correct weight?

Commented [45R44]:
Yes, if the board is too light, the weights will be added and will adjust the weight to the required weight.

C.7.5 CORRECTOR WEIGHTS

- (a) When the **hull** weight is less than the minimum required, corrector weights of lead shall be fastened to a location to be determined by the Event Technical Committee.
- (b) The total weight of corrector weight shall not exceed 200g.
- (c) Corrector weights installed by licensed manufacturers shall not be removed.

C.8 HULL APPENDAGES

C.8.1 MODIFICATIONS

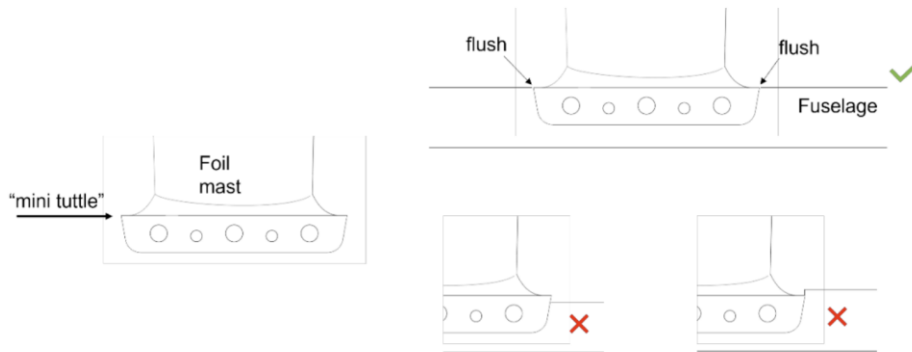
- (a) The foil mast base along all the sides that fit into the hull box may be **sanded.**
- (b) The foil system fittings (bolts and washers) may be replaced by any fittings of the same size with the following exception:
- i) The angle spacers screws may be replaced by other stainless steal screws of different length.
- (c) ~~When using a foil system,~~ the **crew** may replace the angle spacers for any of the original angle spacers listed in E.1.1.
- (d) The fuselage should be fitted so that it is installed flush with the foil mast horizontal part of the mini tuttle (see diagram below). The plastic cap covering the foil mast that goes in the fuselage may be **sanded** and may be trimmed flush with the fuselage. The foil mast base along all sides that fit into the fuselage may be shimmed.

Commented [46]:
Is it worth clarifying the extent to which they can be sanded?

Commented [47R46]:
Yes

Commented [48]:
Is this always the case? If yes, there is no need to specify and "when using a foil system" can be deleted

X-15 CLASS



~~(f)~~ (g)

(e) The plastic angle spacer edges can be trimmed flush with the fuselage.

(f) The mast base transversal connection screw holes may be modified to be aligned with the fuselage screw holes.

C.8.2 MAINTENANCE

(a) **Maintenance of hull appendages** is permitted with the following exceptions:

(i) **Coating** is not permitted ~~as part of maintenance~~.

(ii) **Sanding** ~~as part of maintenance~~ is only permitted on the paint layers and shall not reach the internal carbon fibres.

C.8.3 REPAIR

(a) **Repairs** to the **hull appendages** require approval as described in C.6.1, with the following exemptions:

(i) ~~except~~ filling and blending of small voids (chips and gouges) smaller than 10mm x 10mm ~~which may be carried out without approval~~ is permitted

C.1010 WINGS

C.1010.1 MODIFICATIONS, MAINTENANCE AND REPAIR ~~MAINTENANCE AND REPAIR~~

(a) **Repair** of wings shall not affect the shape, characteristics, function and look of the original and may be carried out without approval with the following exception:

(i) During an event, **repairs** of wings require the approval of the Event Technical Committee.

(b) Transparent tape may be placed on the wing.

(c) Any harness lines may be used

(d) ~~T~~ape may be used on the boom to mark locations

(e) ~~W~~ing leashes may be replaced

(f) ~~R~~eplacing valves are permitted if broken. ~~Valves may be replaced.~~

Commented [49]:
Check ERS definition "repair"

Commented [50]:
Not possible to police

Commented [51R50]:
Suggestion: valves may be replaced. Custom valves ok?

X-15 CLASS

- (g) ~~Cleaning is permitted~~ **Cleaning** is permitted
- (h) ~~Bladders may be replaced with FreeWing X-15 bladders~~

C.10.2 SAIL IDENTIFICATION

(a) At World Championships, WS World Cup Series events and Continental Championships, when this rule is invoked by the Notice of Race, the sail shall carry a number issued annually by the Class ("Identification disc").

(b) For all National Championships, World Championships, WS World Cup Series events and Continental Championships the sails shall display the competitor's national flag and class insignia. The display shall comply with the details included in ~~Section HRRS Appendix G. of the~~ **class rules.**

(c) The display of the competitor name and class division is permitted and required when invoked by the Notice of Race and shall comply with the details included in ~~Section H of the~~ **class rules. RRS Appendix G.**

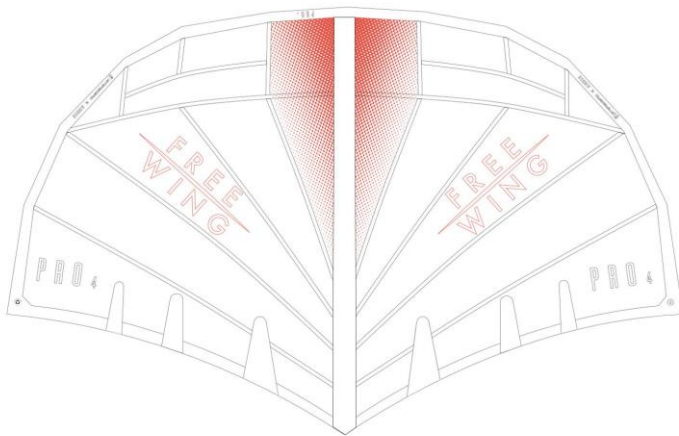
(d) Stickers shall be placed back to back on both sides of the wing. Characters shall be of font type 'Eurostile Heavy Italic' in white over a black background.

(e) National letters and sail numbers stickers are not required to be produced by licensed manufacturers.

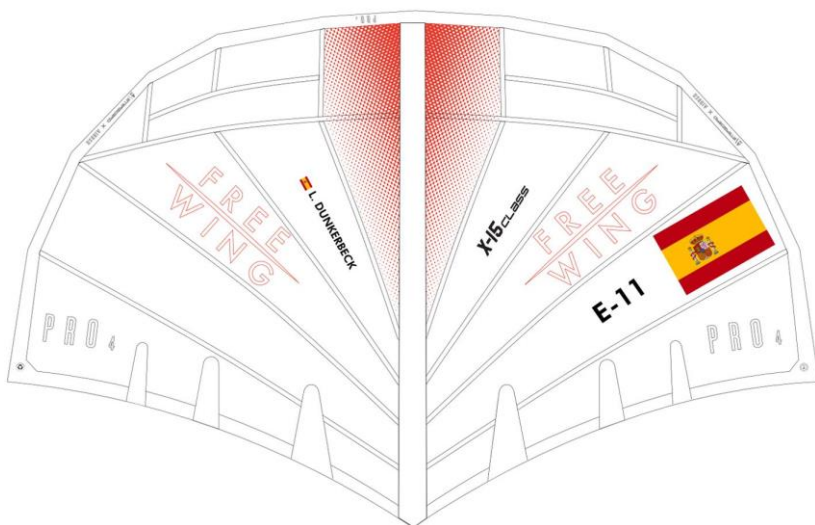
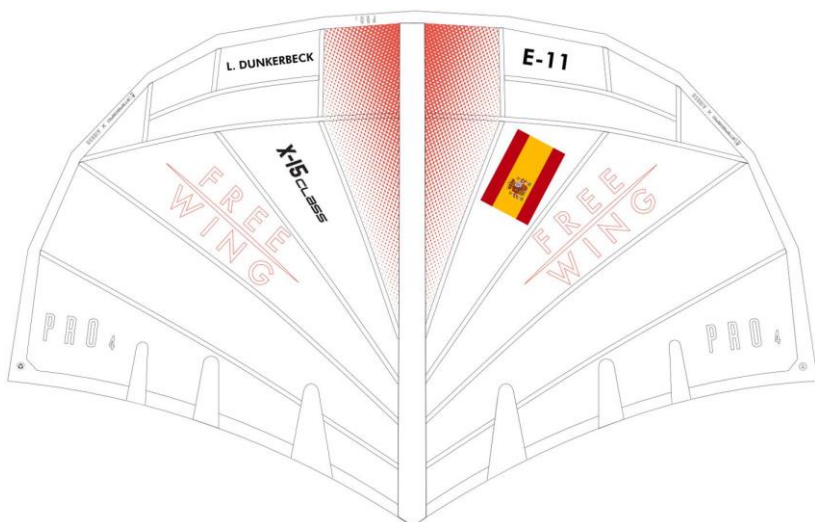
Commented [52]:
Not clear. RRS Appendix G - to define position and dimensions

Commented [53R52]:
Move diagrams from appendix to here

Commented [54]:
"are not required" to be produced?



X-15_{class}



X-15_{CLASS}

Section D – Hull

D.1 GENERAL

All parts of the **Hull** and its associated fittings are to be produced by licensed manufacturers unless specified otherwise in C.7.1.

D.1.1 PARTS

- (a) X-15 blue carbon **hull** for the Men and Women division, lite tech board for junior and youth classes divisions
- (b) Its associated fittings:
 - (i) ~~b~~ foilbox
 - (ii) ~~e~~ foot straps
 - (iii) ~~d~~ ~~f~~ Foot strap fittings
 - (iv) ~~E~~ vent plug

Commented [55]:
Divisions?

D.2 IDENTIFICATION

- (a) The **hull** shall carry a manufacturers serial number and have a unique WS QR sticker applied by the licensed manufacturer.
- (b) **Hulls** shall display the official WS logo as applied by the manufacturer.

Commented [56]:
Please share the proposed design

D.3 MATERIALS, CONSTRUCTION AND DIMENSIONS

- (a) The **hull** shall comply with the X-15 technical specifications as approved by WS.

Commented [57R56]:
Included in the email

Commented [58]:
Review technical specification

Section E – Hull Appendages

E.1 GENERAL

All parts of the **hull appendages** and its associated fittings are to be produced by licensed manufacturers unless specified otherwise in C.8.1.

E.1.1 PARTS

- (a) Aluminum foil for the Men and Women including:
- (i) foil aluminum mast 100cm
 - (ii) three front wings: 560, 820, 1200
 - (iii) tail wing 200
 - (iv) 69cm fuselage

(b) Its associated fittings.

Commented [59]:
Same for all divisions?

Commented [60R59]:
Yes

E.2 IDENTIFICATION

- (a) The foil mast, front wing, tail wing and fuselage shall carry a unique WS QR sticker issued by the manufacturer.

Commented [61]:
Specify position to avoid damage/loss?

Commented [62R61]:
OK.

E.3 MATERIALS, CONSTRUCTION AND DIMENSIONS

- (a) Hull Appendages shall comply with the X-15 technical specifications as approved by WS.

Commented [63]:
Review

Section G – Wing

G.1 GENERAL

All parts of the Wing and its associated fittings are to be produced by licensed manufacturers unless specified otherwise in C.10.1.

G.1.1 PARTS

Wings include ~~ed X-15~~ FreeWing Zipper Reef Technology

Commented [64]:
?

- (a) ___ 6.5m² for senior Men division.
- (b) ___ 6.0m² for senior Women division
- (c-) ___ 6.0m² for U19
- (d) ___ -5.5m² for U17
- (e) ___ -5.0m² for U15
- (f) ___ 4.5m² for U13

G.2 IDENTIFICATION

- (a) ___ Wings shall carry a unique sticker in the tack applied by the manufacturer.
- (b) ___ The zipper tech reef panels must have an identification sticker applied by the licensed manufacturer.

G.3 MATERIALS, CONSTRUCTION and DIMENSIONS

The wings and zipper reef technology shall comply with the X-15 technical specifications.

Effective Date: TBC

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X-15_{CLASS}

~~PART III — APPENDICES~~

~~The rules in Part III are closed class rules. Measurements shall be carried out in accordance with the ERS except where varied in this Part.~~

~~SECTION H: WING IDENTIFICATION~~

~~H.1 GENERAL~~

~~Stickers shall be placed back to back on both sides of the wing. Characters shall be of font type 'Eurostile Heavy Italic' in white over a black background.~~

~~H.2 NATIONAL LETTERS AND SAIL NUMBER~~

- ~~(a) National letters and sail numbers stickers do not require to be produced by licensed manufacturers.~~
- ~~(b) Shall comply with the following specifications (see previous image)~~

~~Effective Date: 00 June 2023~~
~~Latest Revision: 08 April 2024~~

Commented [65]:
To be removed

Commented [66]:
To be moved to C.10.2

Commented [67]:
"are not required" to be produced?

X-15 CLASS SUSTAINABILITY
FOR THE FUTURE



LCA Sustainability Breakdown

Model / Construction	MF X-15 Foil Aluminium Mast
Carbon Footprint	190.93 kg CO2e
Raw Material Emissions	128.15 kg CO2e - 67%
Auxiliary Material Emissions	0.49 kg CO2e - 0.3%
Shipping Emissions	1.23 kg CO2e - 0.6%
Electricity Emissions	56.86 kg CO2e - 30%
End of Life Emissions	4.2 kg CO2e - 2%

Model / Construction	MF X-15 Foil Carbon Front Wing 820
Middle Size	-
Avg. Carbon Footprint	54.28 kg CO2e
Raw Material Emissions	39.13 kg CO2e - 72%
Auxiliary Material Emissions	0.49 kg CO2e - 1%
Shipping Emissions	0.29 kg CO2e - 0.5%
Electricity Emissions	13.42 kg CO2e - 25%
End of Life Emissions	0.95 kg CO2e - 2%

Model / Construction	X-15 6m
Middle Size	6
Avg. Carbon Footprint	26.06 kg CO2e
Raw Material Emissions	17.1 kg CO2e - 66%
Auxiliary Material Emissions	0.6 kg CO2e - 2%
Shipping Emissions	0.61 kg CO2e - 2%
Electricity Emissions	5.28 kg CO2e - 20%
End of Life Emissions	2.4 kg CO2e - 9%

Model / Construction	X-15 Blue Carbon Sandwich	X-15 Lite Tech
Middle Size	95	82
Avg. Carbon Footprint	113.2 kg CO2e	107.2 kg CO2e
Raw Material Emissions	40.2 kg CO2e - 36%	37.5 kg CO2e - 35%
Auxiliary Material Emissions	9.7 kg CO2e - 9%	5.2 kg CO2e - 5%
Shipping Emissions	2.7 kg CO2e - 2%	2.8 kg CO2e - 3%
Electricity Emissions	47.1 kg CO2e - 42%	47.1 kg CO2e - 44%
End of Life Emissions	4.5 kg CO2e - 4%	5.6 kg CO2e - 5%
Accessories Emissions	9 kg CO2e - 8%	9 kg CO2e - 8%

X-15 Class is 10x Climate Positive Thanks to

