

ILCA *International Laser Class Association*



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2020 Handbook

Constitution and Class Rules



ILCA HALL OF FAME

The ILCA Hall of Fame includes builders of the class and champion sailors who have made an extraordinary impact. The ILCA World Council established the selection criteria for entry as individuals who, over the course of their sailing careers, made an outstanding impact on the Laser Class and the sport of sailboat racing by virtue of the excellence of their achievements as sailors and/or contributors to competitive sailing through technical expertise, design, writing or vision. Inductees receive a unique Hall of Fame Laser Cube.

Nominations to the Hall of Fame are welcomed from any Laser Class member, with a selection vote to be taken annually by the ILCA World Council.



Ian Bruce
(Canada)



Bruce Kirby
(Canada)



Jeff Martin
(Great Britain)



Marit Söderström Nord
(Sweden)



Robert Scheidt
(Brazil)



Peter Seidenberg
(USA)

International Laser Class Association 2020 Handbook

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This Handbook is published every year by the International Laser Class Association (ILCA) and distributed to class members throughout the world. Any changes to the information contained in this Handbook, including changes to the class rules and By-Laws, are published on the ILCA web site www.laserinternational.org.

If you are not an ILCA member consider joining us by contacting your national Laser Class association through the contacts list on our website.



Eric Faust
ILCA World Executive Secretary



From our President

A boat for Life in a Lifetime Sport

2020 sees the Laser Class enter its 48th year of existence and starting to look forward to its 50th anniversary! 2020 will also see the games of the XXXII Olympiad with the world's best sailors, both men and women, gathering in Fujisawa, Japan to crown the next Olympic champions. This will mark the seventh games for the Laser Standard since its first appearance at the XXVI Olympiad in Atlanta, Georgia. This will also be the fourth appearance for the Laser Radial since its first appearance in the XXIX Olympiad held in Beijing, China in 2008. The competition level has never been higher in either class and this Summer is shaping up to be a true battle of the best! Even better, this is not the last Olympiad for either boat as both have been selected by World Sailing to participate in the XXXIII Olympiad in Paris, France in 2024!



With the Olympics this Summer the World Championships for both the Standard Men and the Radial Women will be held in Melbourne, Australia in the Winter of 2020 where the class will see its 47th World Champion in the Standard Men (since the first in Bermuda in 1974) and its 40th female world champion in the Radial Women (having first recognized a female world champion in 1980 in Kingston, Canada). In addition to these two events there will also be championships for the Radial men and the Masters, also in Australia before moving back to Summer, and to Europe, for the remaining championships. In all, between the 4.7, Radial and Standard classes, some 11 champions will be crowned in 2020! This is quite an achievement for what is now the most popular single-handed sailing dinghy in the world. And be sure that as the Laser Class looks forward to its 50th birthday it is also working hard to make sure the next 50 years see continued growth.

The Laser was not a young class when it was first chosen for the Olympics but it was certainly ready. It has opened the door to Olympic sailing for a number of new countries and continues to do so year on year. The "Laser Formula" of three rigs for one hull has developed into 3 classes (4.7, Radial and Standard) for different weight ranges of sailors. It provides a low-cost pathway through age and weight growth and sailing development from the Optimist to the Olympics. This has helped the Laser Class grow to where it is today - with many of the over 200,000 Lasers still in action in over 120 countries.

The Laser is the boat for life. It has a special charm that excites the holiday maker sailing off a sunny beach and technically challenges the racing sailor to continually develop their boat and sail trim to get to the front of a racing fleet. The one design rules are a great leveller where the competition is close – respect must be earned and friendships are born that last a lifetime.

Not everyone will make it to the front of a Laser fleet but the racing is fun and lessons learned will always serve them well. Some will go on to try their hands at Olympic level competition in other classes. Many will continue to sail their boats at the club level and eventually move into Masters sailing where they will find new competition and friends on national and international circuits.

All of this is held together by the true strength of the Laser Class - its members, in particular the many who share their love of Laser sailing by volunteering their time to organize and run events and help to keep Laser sailing the best racing to be found anywhere!

We have something very special in sailing.

A handwritten signature in black ink that reads "Tracy Usher". The signature is fluid and cursive, with a large initial 'T' and 'U'.

Tracy Usher
ILCA President

In the pages of this handbook you will find an enormous amount of useful information:

- ★ The Laser Class Rules to help you understand what you can (and can't) do to rig your boat for racing,
- ★ Contact information for District Associations, Class Measurers, Class Officers and the ILCA office,
- ★ ILCA guidelines and policies for major championship events,
- ★ The ILCA Constitution to better understand the organization of the association,
- ★ Useful hints and tricks gleaned from years of experience,
- ★ And, finally, a list of all champions from ILCA World Championships to help provide incentive!

Go Sailing, Go Racing

Sailing is great but Laser sailing is a little bit more special. You are completely in control and when you want a challenge you go out in stronger and stronger winds until you are flying across waves and through spray, experiencing the most exhilarating ride of your life. When you are able to do that while comparing your skills against other sailors in competition, the excitement is multiplied. The simple joy of Laser sailing is what launched the boat to success when it was introduced. And it is the fact that you can find active ILCA sailors all over the world to sail with and compete against that keeps the Laser the most popular boat of its type world wide.

If you need a little help learning about the boat there are a number of books and many on-line resources covering all aspects of Laser sailing and racing. But for many of us, the best way to get to know your boat better is to go racing. It also means you can meet like-minded sailors.

Most of us start by racing in a local fleet. Contact the Laser Association in your country for details about how racing is organised and where the nearest group of Laser sailors are (see page 22 or check out the contact list on the ILCA website). Over 90% of Laser racing takes place during a couple of hours in an evening or on a weekend. Most racing takes place from sailing or water sports clubs and you are almost certain to see a full range of experience at the local club where beginners and experts are welcome. Your club may even organise training weekends and bring in visiting coaches and you will certainly benefit from talking to and watching others.



After a while you may wish to enjoy a weekend or week away sailing at a different venue against other Laser sailors. This could be 50 or 500 kilometres away but for sure you will find other places to race. Again, your national Laser association can help you identify opportunities.

A National Championship is often the highlight of the annual racing calendar. These events usually are open to all comers and all levels of skill. You can experience the excitement of racing in a large fleet of between 30 and 100+ Laser sailors. You probably will not become national champion (at least not at the first attempt) but you will certainly have a great time.

With the exception of most World and European Championships, Laser racing generally has open entry and there are many national and international regattas you can go to with only a limited amount of experience.

In many countries there are events organised specifically for different Laser rigs (Standard, Radial and 4.7) as well as events for youth and master sailors. Some countries organise extra National Championships for these rigs and age groups.

Contact your national Laser Class association to find out what activities are available. Check out the contact list on our website at www.laserinternational.org.

The Laser Class Formula

A choice of rigs for different size sailors - 3 boats in one

- *Are your children reaching the age when they want to go sailing in a Laser by themselves?*
- *Does your husband or wife fancy the occasional sail in your Laser?*
- *When you drive 2 hours to get to the water have you found it is too windy for you to go sailing?*
- *Maybe you are too light to sail a Laser with the Standard rig?*

The **Laser Class Formula** is the answer to all these questions. By changing only the sail and lower mast a Laser Class boat can be sailed comfortably in a great variety of wind conditions and provide exciting but controlled sailing even for sailors weighing as little as 35 kg. The Laser Class Formula is a 3 rig option that has been adopted by a number of sailing schools as a simple and economical way for sailors of different size and ability to sail in a wide range of winds and reduce the amount of 'down time'.

The **4.7 rig** uses a short pre-bent lower mast to maintain a balanced helm and a sail area that is 35% smaller than the Standard. It is ideal for the lighter weight sailor graduating from Optimist.

The **Radial rig** is the next step up in size. It uses a more flexible and slightly shorter lower mast together with a sail area 18% smaller than the Standard. The Radial has a large following with national and international regattas and World Championships for Men, Women & Youth attracting as many countries and competitors as the Standard Rig. In addition to having a strong following among lighter weight sailors, the Radial is also used for youth, women and masters racing. Many countries support a full Radial Youth program.

The **Standard rig** can be sailed by any weight in light winds, but as the wind increases it is better suited to higher sailor weights.

Apart from the strong second hand market in Lasers with the Standard rig, there is an even stronger second hand market for Radial and 4.7 lower mast and sails as a separate package from the hull.

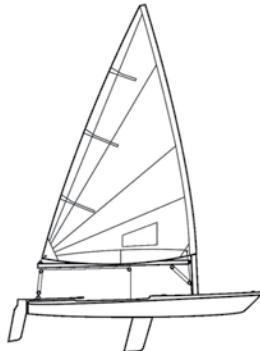
4.7 Rig

SAIL AREA: 4.70m²



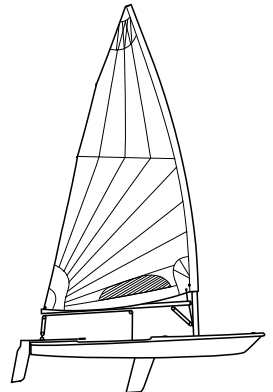
Radial Rig

SAIL AREA: 5.76m²



Standard Rig

SAIL AREA: 7.06m²



Age Policy and Useful Information

WORLD CHAMPIONSHIPS - general

As a result of high demand, the majority of ILCA World Championships are allocated place events. The number of places a country receives for their sailors to participate in a World Championship is based on the number of paid members in that country.

YOUTH AGE CHAMPIONSHIP POLICY

The Laser Class dinghy is widely used as a youth training and racing boat. The chart below illustrates a typical progression and suggested age limits for prizes at youth events. The stepped progression maintains interest throughout youth years for different rates of growth.

Age*	12	13	14	15	16	17	18	19	20
Birth Year**	2008	2007	2006	2005	2004	2003	2002	2001	2000
4.7	UNDER 16				UNDER 18				
Radial Youth				UNDER 17		UNDER 19			
Radial Women						UNDER 21			
Standard Men						UNDER 21			

* The age the competitor **becomes** in the year of the Championship

** The year during which the competitor must have been born **FOR A 2020 CHAMPIONSHIP** using this guide

Within these age limits there will be a wide variation in weight for a given age, therefore some overlap is necessary. The age bands for each rig show suggested main prize categories even when the total entry for a rig is starting together. In larger events, prizes for more age groups within the band limits should be awarded to generate even greater interest.

In general, ILCA recommends that youth events be held in 4.7 and Radial rigs. ILCA also supports an "Under 21" category (17 - 20 years old in the year of the championship) for the Standard Men and Radial Women categories.

In 2020 ILCA will organise Youth World Championships in the Radial and 4.7, following the above age limits, as well as an "Under 21" World Championship for the Standard Men and an "Under 21" World Championship for the Radial Women.

Competitors in Youth World Championships will normally be in the upper age limits and will be capable of sailing at a high level. They should be experienced in big fleets and able to sail well in all conditions, including waves and high winds. Entering a World Championship without experience and ability in all racing conditions is not recommended, especially if a sailor is not heavy or strong enough to handle the rig.

WOMEN - policy

ILCA's recommended policy is that Women's championships should be held in the Radial.

For identification purposes, sails used at certain women's events shall carry a red rhombus above the top batten pocket on both sides, see class rule 4(g).

Red rhombi shall conform with ILCA Rules, Part Two, section 4(g)(i) RED RHOMBUS.

4.7 - policy

Although the 4.7 rig is used primarily as a youth class, at times it may be appropriate to run "open" 4.7 regattas for lighter weight sailors of all ages. At these events, separate category prizes for youth and women should also be considered, in a format similar to the Radial.

RADIAL - policy

With the exception of world and some continental championships most Radial regattas are mixed gender and ages. However, if there are two or more categories (e.g. category men, category women) with 35 or more sailors in each, then these categories should race separately and have separate prizes. Where there are separate prize categories, each category should be identified by either a masthead streamer or a colour band on the mast. When two or more categories race in one fleet, then the individual category results should be extracted from the overall results without rescoring.



MASTERS - policy, age limits and identification

ILCA's recommended policy for Masters events is that the sailor must reach the ages given in Fig. 1 (below), which shall be defined in the Notice of Race. The following colours in Figure 1 are recommended for identification stickers on the mast below the gooseneck so that different category masters know who they are sailing with when they sail in mixed fleets. Overall prizes will be awarded in accordance with the ILCA Honour Award By-Law in each category.

Fig. 1

Age Group	Masters Category	Fleet Colour
35 to 44	Apprentice Master (Standard / Radial)	Green
45 to 54	Master (Standard / Radial)	Red
55 -64	Grand Master (Standard / Radial)	Blue
65 - 74	Great Grand Master (Standard / Radial)	Yellow
75 and over	Legends (Radial)	White

HANDICAP NUMBERS

Sometimes we get asked: "What are the handicap numbers for Lasers in mixed class racing?" The numbers used by the Royal Yachting Association (GBR) in their Portsmouth Handicap system are:

Laser Standard 1080 Radial 1104 4.7 1175

The numbers can be used for handicapping different Laser rigs within a mixed fleet. To use the numbers, convert the elapsed time into seconds. Divide the elapsed time by the handicap number and multiply by 1000 to achieve a corrected time.

The handicap numbers work best on races around 100 minutes long. Further information on Portsmouth Numbers can be obtained on the internet at: www.rya.org.uk

Personal Handicaps

The handicap numbers take into account the difference in boat speed as a result of the different size rigs but take no account of an individual's ability. If the finishes are timed, a personal factor can be applied to the handicap number so that each person has a Personal Handicap Number.

The handicap numbers are based on race times. In a theoretical race, where a Laser finished in 60 minutes, a Radial should finish in 61 minutes 17 seconds if all the sailors were the same standard and made the same mistakes! A Personal Handicap can be introduced by adjusting the handicap numbers.

For example, changing the Radial handicap number from 1101 to a Personal Handicap of 1102 would mean that in the same race the Personal Handicap would give an extra 4 seconds advantage on someone sailing a Radial without a Personal Handicap.

Personal Handicaps can be fixed for a set number of races or adjusted in any number of ways based on the performance of the last race. For example, if you win a race you are handicapped by 30 seconds in the next race. Second could be handicapped by 15 seconds etc. Similarly, the last placed boat could be given a handicap advantage of 1 minute, second to last 30 seconds etc. A simple time or place penalty system like this can also be used instead of handicap numbers.

It is best to keep race by race changes simple and restrict changes to a maximum of the first two and last two places.

If you decide on a Personal Handicap System don't forget someone has to manage it so KEEP IT SIMPLE.



COACHING AND COACHES

The Laser Class has been one of the most important platforms for developing sailing talent around the world. Many sailors who have had long and successful careers in Laser sailing have become coaches to help develop the next generation of Laser sailors.

On the ILCA website, we maintain contact information for a list of individuals, arranged by country, who have identified themselves as Laser coaches. There is a good chance you can find someone in your part of the world who could provide coaching if you are looking for it.

If you are a coach and would like to be listed on the website, please send your contact details and other related information to the ILCA office: office@laserinternational.org

ADVERTISING/SPONSORSHIP

Advertising, including competitor advertising, is permitted in accordance with World Sailing Regulation 20 – Advertising code; except that the sail window shall be kept free of advertising or other graphic material (Class Rule 10). Information about Regulation 20 is available through the World Sailing Website at: <http://www.sailing.org/documents/regulations/regulations.php>

ANTI-DOPING

The latest information about the World Sailing Anti-Doping Code can be found on the World Sailing website: <http://www.sailing.org/sailors/antidoping/index.php>

POLICY FOR TRANSLATING THE HANDBOOK

It is possible to translate the ILCA Handbook into your native language.

If you are interested in translating this handbook, please email your translation to ILCA at office@laserinternational.org. Once the translation has been approved, we will make the translated version available on our website.

If you have any questions or would like to translate this handbook, please contact the ILCA office.

What is the International Laser Class Association (ILCA)?

The International Laser Class Association (ILCA) is a worldwide sailing organization specifically for owners of Laser class sailboats and people interested in the sailing them. Like most sailing clubs it is run by volunteer sailors who employ staff to run a dedicated class office.

For easier administration the Laser Association is divided into 4 main levels of activity, each with elected volunteers:

FLEETS - normally sailing clubs or small groups of Laser class sailors sailing together on a local basis. Fleet activities are normally co-ordinated by a Fleet Captain who has been elected by the sailors in that Fleet.

DISTRICTS - In North America and Australia these are single states or an amalgamation of states. For the rest of the world, district boundaries are normally the same as national boundaries, although occasionally small countries either amalgamate with other small countries or get looked after by larger countries. District activities are co-ordinated by a committee, elected by class members at the district's annual general meeting.

REGIONS - these are a number of districts grouped together on a continental basis. Regional activities are co-ordinated by officers elected by the District representatives.

INTERNATIONAL (World Council) – The World Council operates like the board of directors of a company. It is responsible for directing the work of the association and maintaining the objects of the association as they are expressed in the association's constitution. The World Council consists of the President and Vice President, the Chairman of each region, the Executive Secretary appointed by the council and 2 builder representatives. Our World Council is truly international, currently consisting of officers from Argentina, Australia, Canada, France, Singapore, Switzerland, UK and USA - all are active sailors and between them have a wealth of experience spread over all levels of sailing.

Contact information for the ILCA office, each Region and all active Laser class Districts can be found on the contacts page of the ILCA website at www.laserinternational.org/contacts. Please do not hesitate to contact any officer if you need help or information about Laser class sailing or the Association.



ILCA Goals

The objects expressed in the constitution of the association are:

- To enhance the enjoyment of Laser Class sailboats and sailing.
- To provide a means of exchanging information among Laser sailors throughout the world.
- To promote and encourage Laser Class racing in all countries under uniform rules.
- To promote and encourage the sporting and recreational aspects of sailing.

ILCA's Work

For the majority of members, the work done by Class officers is not directly apparent, but it is vitally important for the continuation of our class and the very existence of the Laser sailboat as we know it. It is all too easy to go to a dealer, buy a Laser, and go sailing with lots of other identical Lasers without even thinking about how it all happened or if it will continue to happen.

The existence of a strong International Laser Association is important to all Laser owners, whether they are occasional weekend sailors or aiming for an Olympic gold medal. If you doubt this, think back to the reasons why you were originally attracted to the Laser:

A good design?

ILCA cannot take credit for that. However, ILCA plays an important part in protecting that design and making sure it isn't devalued by manufacturing changes. The construction of Laser Class equipment is controlled by an agreement between the manufacturers, ILCA and World Sailing, and by the class rules. Monitoring this agreement is an important part of ILCA's work.

Strict one design?

When the Laser was first introduced a set of rules were drafted which, at the time, were very different to other existing classes. These other class rules listed a number of prohibitions, which led to developers trying out new ideas if the idea was not specifically prohibited. The result of this is that quite often older boats became outdated with a subsequent loss in value. The class rules are different in that they prohibit ANY changes unless the rules specifically allow a change. This means that a 10 year old Laser is the same as a brand new one and, as a result, holds its resale value far better. ILCA plays an important part in keeping the class rules strictly one design by preventing changes and providing a measurement structure that maintains the one design.

Good racing?

The International Office of ILCA is responsible for organising World Championships for the class. Although these events may only involve a relatively small proportion of class members, the organisation of top quality championships has an effect on all sailors around the world. The qualification and training for major championships can only take place at lower level regattas. This results in increased participation at lower levels, which in turn attracts more people to the class. Standards that are set in sailing, racing and organisation at international level filter down throughout our organisation.

Good communication and website?

The amount and quality of communication throughout the Laser Class is very important. ILCA maintains an active website (www.laserinternational.org) to keep members up to date with important announcement and news about Laser sailing around the world and serve as repository for helpful information, class rules and historical records. The ILCA maintains a social media presence to engage with sailors worldwide through facebook, twitter and instagram. The office also sends out to all Districts world wide notices with information to be distributed to sailors. Many Districts send out their own newsletters or maintain a website with information of local interest. Sailors who have questions can easily contact their District representative or the ILCA office through the website. And District officers can of course contact the ILCA office for assistance on matters relating to the class.

Low price?

Mass production keeps the price of Laser Class equipment relatively low. An active class association encourages more people into the class, therefore making mass production viable.

Activity

Whatever reasons made you become an Laser Class boat owner, they are all a result of ACTIVITY. The Laser Association plays an important part in promoting and maintaining this activity and keeping the Laser at the top of the sailing world for sailors and sailing authorities.

The International Office, together with the regional and district officers, ensure a strong and healthy future for the ILCA Class.

The International Office also deals with correspondence and communications from individuals, fleets, sailing clubs, district committee members, national yachting authorities, the World Council, World Sailing and the various manufacturing plants - in fact anything concerning Laser!

***ILCA is working for each individual Laser Class sailor
no matter where they are in the world.***



FINANCES

Being a large class, there is a considerable amount of administration. At District level, membership numbers are often so big that part time secretarial help is needed to assist the volunteer officers! Multiply the number of countries by 120 and add together all the memberships from each country, and it is easy to see why we need a full-time International Office.

Any club or association needs a small fee to cover costs. Your membership fee would normally include an amount for the district and sometimes regional administration, plus a contribution towards the international costs of the association. The international accounts are audited each year, and a summary income and expenditure account, including an accumulated reserve funds carried forward, is made available to members.

The association's finances and administration are independent of the builders, although we work closely together on a number of things. The World Council believes that our continued strength is related to having sound finances, therefore it tries to maintain a small operating surplus each year, which is put in a reserve fund.

ILCA

- A self-administered international organisation
- Provides co-ordination, organisation and communication for the class worldwide
- Liaison with national and international authorities
- Maintains one design rules
- Protects the design and ensures consistency
- Monitors building agreements
- Self-funded
- Positively promotes Laser sailing worldwide
- Publishes annual handbook
- Organises World Championships at international level
- Administers the class worldwide
- Sets the standard that others aspire to achieve

Website: www.laserinternational.org

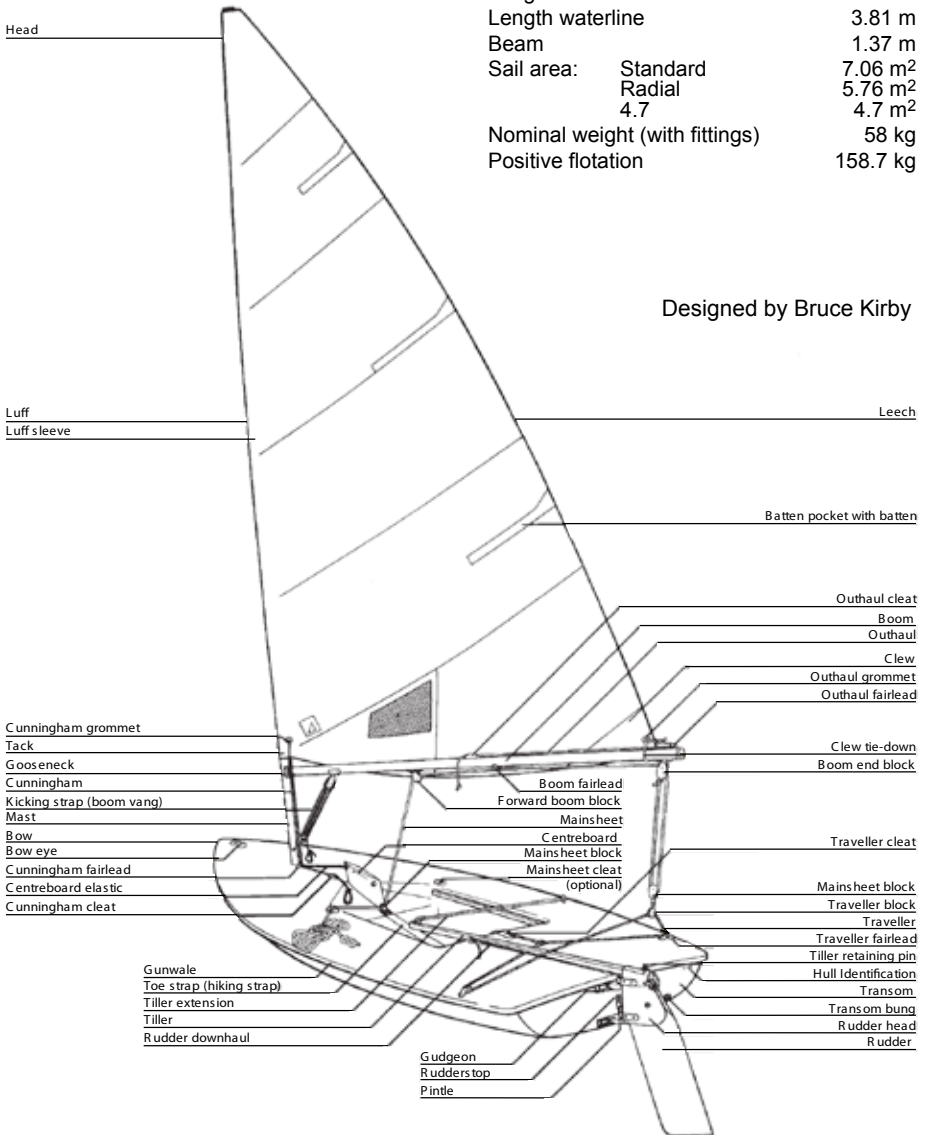
The ILCA website contains a large amount of regularly updated information useful to Laser owners and sailors, including:

- Event information for all Laser Class world championships, including dates, allocations, Notice of Race, Charter Terms & Conditions and links to event venue websites.
- Full results, daily results and reports from all ILCA Class World Championships.
- Archive of results from Laser World & Regional Championships since 1971.
- RSS Newsfeed, to keep you in the loop with breaking news from ILCA.
Facebook.com/intlaserclass, Twitter: ILCA @intlaserclass
- Bid pages - want to host an ILCA championship? You can find all the bid documents for World championships online.
- Past issues of LaserWorld, are available for all to download or view online.
- Tips and How-to guides that can help you become a better sailor.
- Regularly updated list of addresses for Laser contacts in each country.

Parts of the Laser Class dinghy

Length overall	4.23 m
Length waterline	3.81 m
Beam	1.37 m
Sail area:	
Standard	7.06 m ²
Radial	5.76 m ²
4.7	4.7 m ²
Nominal weight (with fittings)	58 kg
Positive flotation	158.7 kg

Designed by Bruce Kirby



INTERNATIONAL LASER CLASS ASSOCIATION

Constitution

© International Laser Class Association, Texas, USA

Amended 3 May 1974, 18 March 1993, article 12 amended 1 June 1995, articles 6 (1), 7 (4), 8 (3) and 9 (3) amended 1 January 2000, head office amended 1 January 2016.

NAME

1. The name of the association shall be the INTERNATIONAL LASER CLASS ASSOCIATION, with head office at PO Box 49250, Austin, Texas 78765, USA.

INSIGNIA

2. The emblem of the Class shall be the recognised Laser symbol, and the insignia of the officers shall be those prescribed by By-Law.

OBJECTS

3. The objects of the Association are
 - (1) to provide a medium of exchange of information among Laser sailors throughout the world and to enhance the enjoyment of these sailboats;
 - (2) to promote and develop Laser class racing in all countries, under uniform rules; and
 - (3) to encourage and foster the enjoyment of the sporting and recreational aspects of sailing.

POLICY

4. It shall be the policy of the Association to maintain the Laser as the epitome of a strict one-design class of sailboat.

JURISDICTION

5. The Association has authority over all activities of the Laser Class throughout the world, and its powers shall be vested in and carried out by the World Council, Regional Executive Committees, District Associations and Fleets as provided in this Constitution and any By-Laws passed pursuant to the provisions hereof; all subject to and in accordance with the General Rules and By-Laws of World Sailing.

ORGANISATION

World Council

6.
 - (1) The Association shall be governed by the World Council comprised of the Chairman of each Regional Executive Committee from time to time holding office, the immediate Past President of the World Council, the Executive Secretary, the two appointed members of the Advisory Council, and such additional officers to be appointed by the Council for such term as it may from time to time determine. Each officer shall be a member of the Association.
 - (2) The World Council shall meet not less frequently than once per year and the first meeting shall take place within two months of the election of the Regional Chairmen. The time and location of meetings shall, if possible, coincide with the holding of a world or a regional championship meet.
 - (3) The World Council shall elect from amongst themselves, the President and Vice-President of the Association who shall hold office until their successors are elected to office; and the World Council may appoint Honorary Commodores from time to time as they shall see fit.
 - (4) The Executive Secretary shall be appointed by the elected members of the World Council and shall hold office for such term and upon such conditions as the World Council shall decide. He shall be situated at the Head Office of the Association and shall be responsible for the management of all business of the Association, subject to and in accordance with the Constitution, By-Laws and the direction of the World Council, including
 - (a) the co-ordination of all inter-regional activities,
 - (b) the organisation of all activities relating to World Championships,
 - (c) liaison between the Association, World Sailing and all other yachting authorities, and
 - (d) liaison between the membership and the Chief Measurer.
 - (5) The World Council shall appoint, for such term as it shall decide, a Chief Measurer for the Association who shall rule on all questions and challenges relating to the Rules, and shall issue Interpretations thereof deemed necessary by him. All such Interpretations shall be binding until approved, rejected, or modified by decision of the World Council, duly published to the members of the Association.

Regions

7.
 - (1) The World Council may, as and when it deems it convenient for the administration of the affairs of the association within a substantial area where several Districts are or may be established, constitute such area as a Region.

- (2) The World Council, upon establishing a Region, shall appoint a Regional Executive Committee comprised of a Regional Chairman, Vice Chairman, and Executive Secretary, to hold office until their successors are elected.
- (3) The Regional Executive Committee shall have those powers, vested in the World Council by this Constitution (other than the power to amend the Rules or this Constitution) as are specifically delegated to the Regional Executive by the Regional By-Law, including the power to appoint additional officers for such term as it may from time to time determine.
- (4) The Regional Executive officers, other than the Executive Secretary, shall be elected annually by vote of the Chairman (or other officer authorised by him if he is unable to attend) of each District at the annual Regional meeting to be held at the head office of the Region or such other place as the Regional Executive Committee shall determine, and shall hold office until their successors are elected, and nothing shall preclude one of the District Chairman as also acting as the Regional Chairman. Each officer shall be a member of the Association.
- (5) The Regional Executive Secretary shall be appointed by the elected members of the Regional Executive Committee, and shall hold office for such term and upon such conditions as the Regional Executive Committee shall decide. He shall be responsible for the management of the business of the Region, subject to and in accordance with the Regional Executive By-Law and the direction of the Regional Executive Committee, including
 - (a) the co-ordination of inter-District activities and events,
 - (b) liaison with the Executive Secretary of the World Council,
 - (c) issuance of Fleet Charters,
 - (d) maintenance of all records of the Region, and
 - (e) maintenance of all membership records and information, unless such duties are delegated to the District Secretary.
- (6) The World Council may subdivide a Region into one or more Regions, may amalgamate two or more Regions or may add Districts to or delete Districts from any Region from time to time as may be required for the effective administration of the Association.
- (7) In the event that a Regional Chairman shall be unable to attend any meeting of the World Council, the Executive Secretary of the Region or such any other member of the Regional Executive Committee nominated for that purpose may attend and represent the Chairman and vote at such meeting of the World Council.
- (8) Nothing shall preclude the Executive Secretary of a Region also serving as Executive Secretary of the World Council.
- (9) The Regional Executive Committee may make By-Laws, subject to the provisions of this Constitution and the Regional Executive By-Laws of the World Council, for any purpose necessary to carry out the functions and responsibilities of such Region, and copies of all such By-Laws as are from time to time passed by any Regional Executive shall be filed with the Executive Secretary of the World Council.

Districts

8. (1) The World Council, on the recommendation of a Regional Executive Committee where applicable, shall by By-Law establish Districts in distinctive areas deemed appropriate and relevant, having regard to all considerations, including geography, language, distance, and population, for the development of the Laser Class and the fulfilment of the objects of the Association.
- (2) The World Council, upon establishing Districts, shall appoint District Associations comprised of a District Chairman, a Vice-Chairman, a Secretary, and a Treasurer, to hold office until their successors are elected.
- (3) The District Association shall consist of the foregoing officers, and may appoint such additional officers to hold office for such term as it may determine. Each officer shall be a member of the Association.
- (4) Each District shall be administered in accordance with and subject to the provisions of a Constitution of the District, approved by the World Council, or if the District has no Constitution, the District Association By-Law of the World Council; and the officers of each District Association shall be elected annually by the members of the Association within the District in accordance with the provisions of the District Constitution, or, in the absence thereof, the District Association By-Law.
- (5) The boundaries of Districts may be varied by the World Council on the application of any District concerned, and one or more Districts may be amalgamated or any District may be subdivided into one or more Districts with the approval of the District Associations concerned.
- (6) A District Association with the approval of the Chief Measurer may appoint a District Measurer for a District to assist the Chief Measurer in the conduct of his responsibilities and the enforcement of the Rules; and nothing precludes a District Measurer from acting as Measurer for more than one District. A District Measurer shall have the authority to rule on all questions and challenges relating to the Rules and Interpretations of the Chief Measurer, but he may not issue Interpretations except with the prior approval of the Chief Measurer.

- (7) A District Association may make By-Laws, subject to the provisions of this Constitution, the Regional Executive By-Laws, and the District Association By-Law or District Association Constitution (as the case may be), for any purpose necessary to carry out its functions and responsibilities in the management of such District.
- (8) If any District is within the jurisdiction of a National Authority, such District Association shall, in addition to any other requirements of this constitution, be subject to such rules, regulations and directions of such National Authority.

Fleets

9. (1) A Fleet may be granted a charter upon application to the Regional Executive Committee (or the World Council where the locality is outside a Region) by 6 or more members of the Association who are individual owners of Lasers within any area or club deemed appropriate, having regard to the locality where regular racing activity is easily accessible to members of that Fleet.
- (2) Notwithstanding paragraph (1), a special Fleet may be chartered in any locality for the purposes of accommodating specific members of the armed forces, an educational institution, a junior programme or any other non-profit organisation.
- (3) A Fleet Captain, and such other officers if any as the Fleet may deem necessary, shall be elected annually from among the members of the Fleet in such manner as is prescribed by the Fleet, unless otherwise provided by the By-Laws, and shall be responsible to the District Association for the organisation of the Fleet and the due compliance by the members of the Fleet with the provisions of the Constitution and By-Laws of the Association. Each officer shall be a member of the Association.

MEMBERSHIP AND DUES

10. (1) Any person may become a member of the Association by making application to the Executive Secretary, or the appropriate Regional Executive Secretary or District Secretary, as the case may be, and payment of the prescribed Association dues, provided that he has not been disqualified from membership for cause by decision of the World Council or under suspension from membership.
- (2) An application for membership implies that the applicant undertakes and agrees to be bound by the Constitution and By-Laws of the Association upon being accepted to membership.
- (3) A member of the Association *ipso facto* belongs to the District in which he normally sails, even though such place may not be his permanent residence; but such member, for valid reason and with the approval of both District Chairmen, may select instead the District in which he has permanent residence.
- (4) A member of the Association may become a member only of the Fleet in his District where he normally sails for the purpose of qualification, where required, for sanctioned events; and any dispute shall be settled by decision of the District Association which decision shall be final.
- (5) The World Council may grant honorary membership in the Association, for such period as it determines, to any person who, through special contribution to the Class or through special relationship to the Association, is considered meritorious.
- (6) The World Council may grant an honorary life membership to any member who has achieved, in the opinion of the World Council, international stature as a result of his yachting achievements.
- (7) An honorary and an honorary life member are entitled to full privileges of membership, but are not required to pay the annual dues of the Association.
- (8) Membership in the Association shall not be open to any company, partnership, group or other association unless specifically authorised in any case or class of cases by the World Council; and the World Council may impose such terms, conditions or qualifications to any such membership as it shall deem appropriate.
11. (1) Association dues shall be in the amount determined by and shall be payable within the time prescribed by By-Law of each Region or District, as determined by the World Council, and shall include all amounts required for World Council, Region and District purposes as determined by each authority.
- (2) The Association may ask for special contribution in addition to dues, provided any such contribution shall be for a specific purpose and shall not be mandatory.
- (3) Dues shall be collected by the Regional Executive Secretary, but the World Council may direct the District Secretary to collect such dues under such terms and conditions as to reporting and accounting as may be required.

SUSPENSION AND REMOVAL FROM OFFICE

12. A member may be suspended by the World Council, on the recommendation of a District Association, for gross violation of the Rules and By-Laws, for committing an unlawful act in relation to the Association or one of its members, or for any unsportsmanlike conduct contrary to the interests of the members of the Association. The duration of the suspension shall be fixed by the World Council and a suspended member shall during such period be precluded from racing or enjoying any other rights of membership.
13. A Regional or District officer may be removed from office by the World Council for a wilful and unjustifiable act of commission or omission detrimental to the Association or to its members.

APPEALS

14. Any dispute arising in relation to fleets, districts, regions, eligibility to race, the interpreting of this Constitution, the By-Laws or similar matter, other than any dispute as to the interpretation of the Rules or any protest within the jurisdiction of the applicable racing rules, may be made to the World Council whose decision shall be final and binding.

ADVISORY COUNCIL

15. The President and Vice President of the World Council and two persons nominated by those builders who are also Trademark owners shall constitute the Advisory Council and shall assist and co-operate with the World Council in the carrying out of their responsibilities, and shall have the responsibilities as set forth in paragraph 17 hereof and the paragraph entitled "Amendments" of the Rules.

BY-LAWS

16. The World Council may make By-Laws for the purpose of carrying out the objects of this Constitution and of the Association and, without restricting the generality of the foregoing, may make By-Laws
 - (a) amending the Rules of the Laser Class, hereby established as By-Law 1 of the Association, as provided in paragraph 29 thereof;
 - (b) respecting the establishment of Regions, and the powers of the Regional Executive Committees;
 - (c) delegating specific powers of the World Council to Regional Executive Committees;
 - (d) respecting the establishment of Districts and the powers of District Associations;
 - (e) respecting the Constitution and By-Laws of District Associations;
 - (f) respecting registration of members and collection of dues;
 - (g) respecting the measurement of boats and measurement fees;
 - (h) respecting the conduct of championship and other regattas, including the classification of regattas and the eligibility of members for major racing events;
 - (i) respecting the acceptance of deeds of gift of trophies;
 - (j) changing the Headquarters of the Association; and
 - (k) respecting the procedures for meetings of the World Council and Regional Executive Committees, including the conduct of business by mail or other means of communication.

AMENDMENTS

17. Amendments to this Constitution shall be approved by each of:
 - (a) the World Council
 - (b) the Advisory Council
 - (c) at least two thirds of the membership replying in writing to the International Office of the Class in response to a postal ballot published by the International Office. Only those postal votes returned to the International Office within 6 months from the date of publication of the proposed change shall be valid.

TRANSITION PROVISIONS

18. (1) This Constitution shall come into force on the date of the approval thereof by the Association in accordance with the provisions of Article XVIII of the Laser Association Constitution enacted September 30, 1972; and thereupon the said Constitution enacted September 30, 1972, shall be repealed and the officers of the Association elected and appointed under the provisions of the Constitution enacted September 30, 1972, shall be deemed to be the first officers of the World Council under the within Constitution, to hold office until their successors are appointed or elected, as the case may be.
 - (2) On the coming into force of this Constitution each District and each Fleet established under the Constitution enacted September 30, 1972, shall be deemed to be Districts and Fleets within the meaning of this Constitution, and all officers and Fleet Captains of such Districts and Fleets shall be deemed to be the first officers and Fleet Captains of such Districts under this Constitution until their successors are appointed or elected, as the case may be.
 - (3) All Actions of the Executive Committee or other officers of the Association, including any District officer, made or performed pursuant to the said Constitution enacted September 30, 1972, shall be deemed to be validly done for the purpose of the within Constitution to the same extent as though same were carried out in accordance with the provisions hereof.

Protecting the One Design Principle

An overview of the tools we have to protect the One Design Principle and how each member of ILCA can influence changes to the Rules and the ILCA Build Manual

The one-design principle is the most important asset of the ILCA Class. Its protection is therefore a prime concern for the class. A number of instruments are in place to assure that protection. The most important ones are the ILCA Build Manual (IBM) and the ILCA Class Rules.

The IBM is a proprietary, protected document that specifies the manufacturing procedures, standard plugs and tools as well as the raw materials and parts supplied by third parties for the hull, sails and spars. Periodic factory inspections by the class make sure that the manual is strictly adhered to by the builders. These factory inspections are the “measurements” in the traditional sense of sailing. The class rules specify that nothing can be changed by a sailor on the hull, sail and spars except what is specifically and positively allowed by the rules. At major ILCA regattas, there is no measurement in the traditional sense. Instead, a simple inspection is made to assure that only original parts are used and that the boat is rigged according to the rules.

The one-design principle means that all Laser Class boats produced by the approved builders are the same. There should be no differences in performance, quality and fittings used between boats from different manufacturers. The IBM is the instrument to assure this. It defines in detail the manufacturing procedures, the materials used and the quality assurance procedures mandatory for each builder.

Several years ago, the ILCA undertook a major revision of the IBM to bring it into compliance with current practice. Wherever possible tolerances were reduced, more detailed descriptions were added and the whole manual was put into a properly secured electronic form. The IBM is continuously reviewed as part of an ongoing process to further tighten tolerances and specifications where possible.

During the revision of the IBM much thought was given to the basic principles on how the Laser should evolve. The following principles were approved by all the builders and the ILCA and are now part of the IBM:

Evolution in quality and ease of use:

The builders have made and will continue to make a sustained effort to improve the quality, durability and ease of use of the Laser – but without changing its basic performance. Where tolerances exist in the quality assurance procedures for incoming materials and for the manufacturing process, a continued effort will be made to reduce them, but avoiding significant cost increases.

The concept of a “lead builder”:

For each proposed project a “Lead Builder” will be nominated, who will report periodically to the other builders and ILCA. Changes can only be introduced after the appropriate testing and with the approval of all of the parties concerned.



Availability of options in materials and fittings:

If the IBM or the class rules allow options in the fittings, boat parts and material used, then all options should be made available worldwide at the same time and at comparable prices.

Evolution of the Laser Class dinghy:

Allow only for changes that are not too expensive, do not affect the performance of the boat and can be easily fitted by a sailor without professional help.

Parts or fittings that have been produced in compliance with the IBM and are therefore legal under the rules cannot be subsequently made illegal, but restrictions on the use of particular equipment (in the interest of minimising differences) may be made.

The control of the adherence to the IBM is governed by the Approved Builder Agreement which defines the procedures for the periodic factory inspections by the class and the measures necessary in case of deviations. This agreement, alongside the Class Rules, holds the whole "ILCA one-design system" together.

The Rules:

The basic principle is that nothing can be changed by a sailor on a Laser Class dinghy, which was built according to the tight specifications of the IBM. Only a few changes, which are positively described in the rules, are allowed. The rules also describe how a boat must be rigged to be class legal. Sometimes a rule may seem ambiguous, with different people disagreeing about the meaning of a rule. In these situations, the Chief Measurer of the Class publishes in the Handbook as well as on the ILCA website interpretations to certain rules. Some of these interpretations may end up becoming a permanent part of the class rules through the rule change process.

Over the years changes have been made to the Laser and the IBM and the rules have evolved. When considering changes, the class and the builders have been very careful that:

- The changes do not affect the basic performance of the boat, but
- Only the ease of use, durability and safety were improved and
- Older parts, fittings and sails remain legal

How can each member of ILCA influence these changes?

Firstly, be aware that only changes which improve the ease of use, durability and safety of the boat, have the chance to be passed.

Rule changes:

If you have a good idea for a rule change, talk first to some other sailors and also to class officials to see whether they share your opinion. If this is the case, then formulate the rule change as precisely as possible and add a justification. Next, send your proposal to the ILCA office. Proposals will be forwarded to the Chief Measurer and the members of the Technical and Measurement Committee who, after considering the proposal, may put the matter before the World Council. Finally, if the World Council and the Advisory Council agree, the rule change must be approved by two thirds of the membership. It may seem like a lengthy process but it helps insure that the one design nature of the class is maintained while still allowing for improvements in ease of use, durability and safety in order to enhance our sailing and racing experience.

Changes in the ILCA Build Manual:

In view of the protection of the one-design principle, there is always much hesitancy to change the IBM. Any change must have clear and important advantages in terms of usability, quality, durability or safety. Any proposal must be duly justified.

The best way to get some attention is to present a detailed proposal to the Technical and Measurement Committee through the ILCA Technical Officer, Clive Humphris, e-mail: technical@laserinternational.org.) Be aware that any change requires the unanimous approval by all the builders, the International Laser Class Association and World Sailing, but is not subject to a member vote. Despite the high hurdles a change must overcome before it can take effect, there are several examples in the last few years of important changes that were initiated by ILCA members. If you have a good idea for improving the Class boat, do not be scared away by this process.

ILCA Member Districts 2020

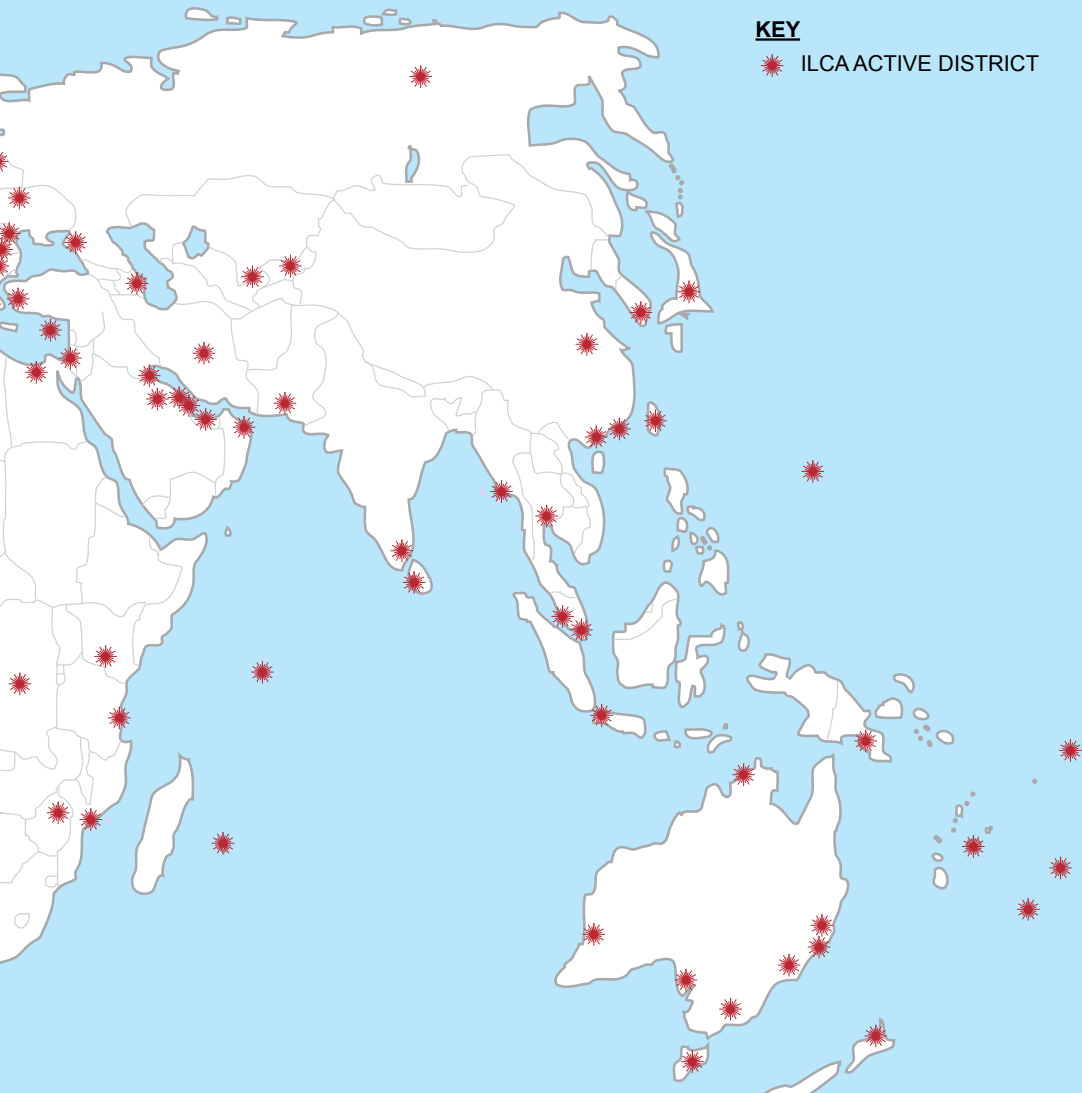


ALGERIA
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BAHRAIN
BARBADOS
BELARUS
BELGIUM

BELIZE
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BULGARIA
CAYMAN ISLANDS
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GUAM
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IRAN
IRELAND
ISRAEL
ITALY
JAPAN
KAZAKHSTAN
KENYA
KOREA
KUWAIT
KYRGYZSTAN
LATVIA



KEY

 ILCA ACTIVE DISTRICT

LITHUANIA
LUXEMBOURG
MACAU
MALAYSIA
MALTA
MAURITIUS
MEXICO
MOLDOVA
MONACO
MONTENEGRO
MOROCCO
MOZAMBIQUE
MYANMAR
NETHERLANDS
NETHERLANDS ANTILLES

NEW ZEALAND
NIGERIA
NORTH AMERICA
NORWAY
OMAN
PAKISTAN
PARAGUAY
PAPUA NEW GUINEA
PERU
POLAND
PORTUGAL
PUERTO RICO
QATAR
REPUBLIC OF
- NORTH MACEDONIA

ROMANIA
RUSSIA
SERBIA
SEYCHELLES
SINGAPORE
SAMOA
SLOVAKIA
SLOVENIA
SOUTH AFRICA
SPAIN
SRI LANKA
ST LUCIA
SWEDEN
SWITZERLAND
TAHITI

TANZANIA
THAILAND
TRINIDAD & TOBAGO
TUNISIA
TURKEY
TURKS & CAICOS
UGANDA
UKRAINE
UNITED ARAB EMIRATES
UNITED KINGDOM
URUGUAY
US VIRGIN ISLES
VENEZUELA
ZIMBABWE

COUNTRY AND DISTRICT CONTACTS (In Alphabetical Order)

Correct as at 01.01.20 Updated regularly on the ILCA website: www.laserinternational.org

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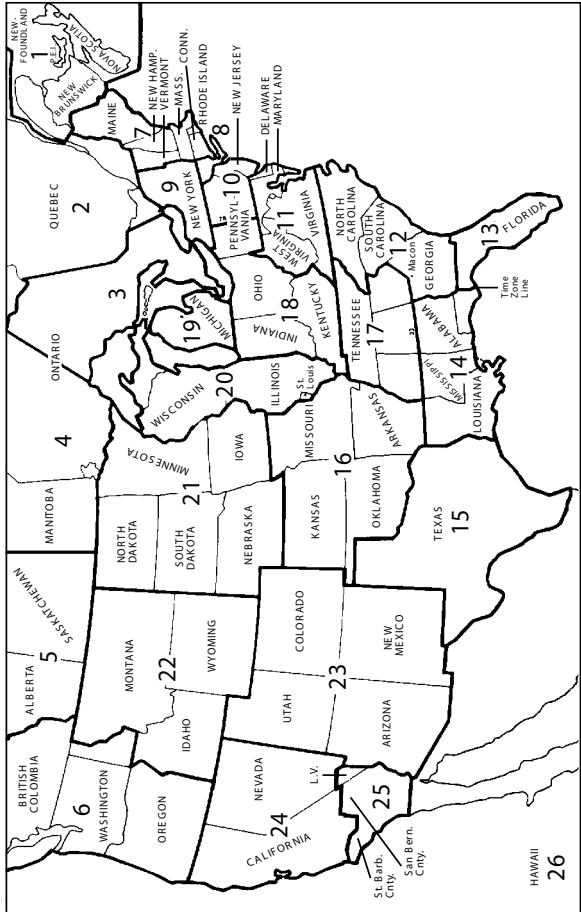
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Boat Care - Stresses and Strains

The Laser Class dinghy has an excellent record of durability but like any piece of equipment it can break if overstressed. Weight for weight it probably has one of the strongest constructions of any boat of its type, a fact we are all aware of on occasions when we see Lasers over 10 years old, sailing happily when other boats are retired to the scrap heap. Further, the Laser has proved itself in very strong winds when other classes are reduced to wreckage. It never ceases to amaze us to see Lasers sailing in 40 knots plus.

Over the years, small changes have been made to the boat to strengthen it as we sail in increasingly challenging conditions. However, there is a limit to the number or kind of changes that can be made before performance is affected.

Mast

When the Laser was introduced, and for many decades after, the two part aluminium mast design involved a trade-off between strength, stiffness and weight. Any increase in strength of the mast would dramatically affect stiffness and therefore performance, which would be totally undesirable.

The Laser Class masts are produced to a high manufacturing standard in the aluminium trade for the specified wall thickness. Within this standard the Class requirements demand an even tighter tolerance. Even with this high standard it is possible, when sailing, to stress the mast beyond its yield point which causes a permanent bend.

Some of the biggest causes of bending are sailing with a lot of boom vang on and:

- 1) capsizing at speed;
- 2) catching a wave with the boom end, either offwind or while gybing; or
- 3) sailing into the back of a wave causing rapid deceleration.

Recognising these causes tells us that it is very important to release the boom vang before sailing offwind, ideally just before you round the windward mark. In strong winds, this will reduce the risk of bending with the added advantage that you will open up the leech of the sail which is fast for offwind work! As a guide for letting off the boom vang, trim the mainsheet tight until the rear boom and traveller blocks are just touching then release the vang until there is no pressure on it.

While the above can help you reduce the chance of causing a permanent upper mast bend, sailors seem intent on pushing the Laser harder and longer in ever more challenging conditions.

In 2017 Class equipment manufacturers introduced a class approved composite upper mast section. The composite mast, while having performance characteristics similar to the aluminium top mast, is not subject to permanent bending. Like any piece of sailing equipment, it is not indestructible, but the composite top mast should provide sailors with a longer mast life and consistently reliable performance when out racing, training or pleasure sailing. Likewise, in 2020, the approved builders will be introducing a composite lower mast for use with the Radial rig.



Rudder and Tiller

Rudders and tillers like everything else are not indestructible. On the very few occasions when we have seen damage to either the rudder or the tiller, it has been caused by trying to bear away at speed while the Laser is heeled to leeward. When a Laser is heeled over it takes on severe weather helm. If you try and bear away whilst heeled, you place great loads on the rudder and tiller. The simple answer is to bring the boat upright first before attempting to bear away. This can be done by either hiking more and/or releasing the mainsheet.

Laser Class Rules - One Design

One of the attractions of the Laser Class for most owners is that the class rules are very strict and that the boat is one design. The Class philosophy incorporated in the rules is that we want to go sailing, not waste time fiddling with boats. We want to win races on the water using our skill, not by trying to find a way round the rules that will give us an advantage.

The class rules are written to prevent any changes from the manufactured boat that might affect performance, so that on the water each boat is the same. The few changes to the standard boat that are allowed are minor and only to allow for a few options that make racing the Laser more comfortable and enjoyable.

Over the years the class has refused to make changes to the rules that allow more expensive or complicated equipment or which makes older boats redundant.

If you feel you want to change something on a Laser Class boat - STOP. Ask yourself why you want to do it? If the answer is "to make me go faster" there is a very good chance the modification or addition is illegal!

Take a look at the Class Rules.

- Part One explains the Fundamental Class Rule which covers the philosophy and any item not specifically written into the rules.
- Part Two tells you what you must do to have a legal boat.
- Part Three details a few optional changes and additions you can make.

If Part Three does not specifically allow a change or addition - IT IS ILLEGAL!

If you race a Class boat that has a change or addition not allowed by the class rules you will be disqualified from the race. Ignorance of the rules is no defence.

Cheating

In our sport in every club and class there is the odd person who needs to cheat to win. Cheating is doing something that you know is against the rules. Whether you gain an advantage or not is irrelevant.

Our class is strong and popular because we believe in a strict one design and our sailors want to know that they are racing on equal terms. ILCA takes a very strong line with competitors who do not sail according to the Class rules. There have been cases in the past where sailors who have sailed with illegal boats have been banned from competing in Laser Class events. Such a ban can be for life. If action is also taken under the racing rules, the ban can cover racing in any boat.

Our class is much bigger than the odd person who wants to gain advantage by illegally changing the Laser or its equipment. They can sail in other classes where the rules allow changes to a boat to get an advantage. We do not want them with us.

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The latest edition of the Laser Class Rules and By-Laws are available at www.laserinternational.org.

ILCA By-Law 1: Rules (Parts one to five inclusive)

Valid from 1st January 2020. Cancels all previous rules and interpretations.

RECENT CHANGES:

1 January 2020

Definition of Builder modified. Other class rules affected by this rule change were modified to be consistent with the amended definition of Builder.

1 January 2019

Part One modified to clarify that all sails used in competition shall have an ILCA supplied sail button to be class legal. (previous interpretation.)

Rule 3(b)i modified to remove the restriction on the use of aramid fibre rope for control lines. (previous interpretation)

Rule 3(b)ii modified to allow for local variation in thickness of control lines that is not specifically restricted to tapering. (previous interpretation)

Rule 3(b)vi modified to enable clam cleats to include a through hole attachment point. (previous interpretation)

Rule 19(a) modified to clarify that mast step abrasion tubes or collars may be in separate pieces. (previous interpretation)

Rule 31 modified to shorten the rule voting process from six months to one month and removing "votes to be sent by post".

1 January 2017

Rule 22 Compasses, Electronic Equipment and Timing Devices modified to allow use of digital compasses that are not GPS enabled.

New Rule 28 Added to allow boat or body mounted cameras.

Rule 3(f)vi modified to remove restriction on the attachment points of the shock cord inhaul.

Rule 17(c) modified to allow for the addition of one cleat and one turning point in the hiking strap support line that are not attached to the hull or hiking strap.

INTRODUCTION

The principle of the Laser Class Rules is that no changes to the boat are allowed unless they are specifically permitted by the class rules.

The English text of the Laser Class Rules shall govern.

PART ONE

OBJECT

The boat is a strict one-design dinghy where the true test, when raced, is between helmspersons and not boats and equipment.

FUNDAMENTAL RULE

The boat shall be raced in accordance with these Rules, with only the hull, equipment, fittings, spars, sail and battens manufactured by a World Sailing and International Laser Class Association (ILCA) approved builder in strict adherence to the boat design specification (known as the Construction Manual) which is registered with World Sailing.

No addition or alteration may be made to the hull form, construction, equipment, type of equipment, placing of equipment, fittings, type of fittings, placing of fittings, spars, sail and battens as supplied by the builder except when such an alteration or change is specifically authorised by Parts 2 or 3 of these Rules.

HULL IDENTIFICATION

All boats shall have an identification number moulded into the deck under the bow eye or into the transom, which shall be either the sail number or a unique production number.

Boats with sail numbers from 148200 shall display a unique

World Sailing Building Plaque that has been purchased by the builder from the International Laser Class Association. The plaque shall display the sail number of the boat issued by the International Laser Class Association and shall be permanently fixed in the rear of the cockpit by the builder.

SAIL IDENTIFICATION

Sails manufactured after 1 January 2001 shall have attached near the tack of the sail an ILCA authorized sailmaker button purchased from the International Laser Class Association. Standard MKII sails shall have orange buttons and Radial, 4.7 and Standard MKI (cross-cut) sails shall have red buttons.

DEFINITION OF BUILDER

A Builder is a manufacturer that is manufacturing the hull, equipment, fittings, spars, sails and battens in strict adherence to the Construction Manual, and has been approved as a Builder by each of World Sailing and the International Laser Class Association.

PART TWO

1. MEASUREMENT DIAGRAMS

The Measurement Diagrams are part of these Rules.

The spars, sails, battens, centreboard, rudder, and the placing of fittings and equipment shall conform to the Measurement Diagrams. The measurement tolerances are intended to allow for necessary manufacturing tolerances and shall not be used to alter the design.

2. MEASUREMENT

In the case of a dispute alleging non-compliance with the Construction Manual, the matter, together with any relevant information, shall be referred to the Chief Measurer of the International Laser Class Association at the International Office who shall give a final ruling in consultation with a World Sailing Technical Officer.

In the case of a measurement dispute on the hull, spars, sail, battens, centreboard and rudder, rigging, type of fittings and equipment and the placing of same not explicitly covered by these Rules, Measurement Diagrams and Measurement By-Laws the following procedure shall be adopted:

A sample of 10 other boats shall be taken and measured using identical techniques. The dimensions of the disputed boat shall be equal to, or between the maximum and minimum dimensions obtained from these 10 boats. If the boat in question is outside these dimensions the matter, together with any relevant information, shall be referred to the Chief Measurer of the International Laser Class Association at the International Office, who shall give a final ruling. If any of the dimensions of the sample are considered to be unusual, all relevant information shall be referred by the Class Association to World Sailing.

3. CONTROL SYSTEMS, CONTROL LINES AND FITTINGS

(a) Control System Definitions


- i The Cunningham, outhaul, vang, traveller and mainsheet are the **Control Line Systems**. The cunningham, outhaul and vang **Control Line Systems** may include more than one **Control Line** as allowed in Rules 3(d), 3(e) and 3(f).
 - i. Each **Control Line** shall be a single piece of uniform thickness and material. A line is a **Control Line** if any of the line moves along its axis during adjustment of the **Control Line System**. A line that exclusively attaches items together is a **Tie Line**.

- ii For the purpose of these definitions, the **Standard Fittings** are the:


Plastic cunningham fairlead	Vang cleat block
Plastic cunningham clam cleat	Vang key block
Plastic outhaul clam cleat	Vang key
Plastic outhaul fairlead	Plastic traveller clam cleat
Plastic traveller fairleads	Mainsheet block

- iii An “**Optional**” fitting is a fitting or block that replaces, or is additional to, a **Standard Fitting** as allowed by these Rules.
- iv A “**Builder Supplied**” fitting replaces a **Standard Fitting**, and is supplied only by the Builder, as allowed by these Rules.
- v A “**Turning Point**” is a sheave (pulley) in a block, a rope loop, a rope loop reinforced with a thimble, the outhaul fairlead, a shackle, part of a fitting, sail cringle, mast or boom around which a moving **Control Line** passes, **except that** the cunningham fairlead, the “**Optional**” blocks attached to the “**Builder Supplied**” deck block fitting, the cunningham clam cleat, and the “**Optional**” cam cleats attached to the “**Builder Supplied**” deck cleat base **will not be counted** as “**Turning Points**” in Rules 3(e) and 3(f).
- vi When an “**Optional**” block, or shock cord is **attached** to a fitting, line, mast, boom or the sail, it may be attached either with or without a shackle, clips, balls, hooks and/or a tie line.


(b) Control Lines and Fittings

- i. Control lines shall be natural or synthetic rope.
- ii. Control lines shall be of uniform thickness, but may vary in thickness for the purpose of a splice at the load bearing attachment point. 
- iii. In a control line system where more than one control line is permitted, lines of different diameter shall not be joined together.
- iv. “Optional” blocks allowed in cunningham, vang or outhaul control systems, shall have sheaves of diameter not less than 15 mm and not more than 30 mm.

Thimbles allowed to reinforce rope loops used as “Turning Points” in the cunningham, vang and outhaul control line systems shall not exceed 40mm in length.

- v. Only single or double “Optional” blocks shall be used. A single block means a block with one sheave; a double block means a block with two sheaves. “Optional” blocks may include a becket, a swivel and/or a shackle.
- vi. The fairleads and clam cleats may be replaced in the same position with an identical size and shape fitting. Clam cleats may include a through hole attachment point. 
- vii. The plastic cunningham fairlead may be replaced with one of the same type which has a stainless steel insert, and has the same screw hole positions.

viii. “Builder Supplied” Deck Fittings (Deck Block Fitting and Deck Cleat Base)

- a) The cunningham fairlead may be replaced in the same position with a “Builder Supplied” deck block fitting which may have one or two single “Optional” blocks attached. 

“Optional” blocks shall not be attached to the cunningham fairlead.

Either the cunningham fairlead alone, or the “Builder Supplied” deck block fitting with single “Optional” block(s) attached may be used to lead the cunningham and/or outhaul control lines to the deck cleat(s)

- b) The “Optional” deck blocks may be supported with a spring, ball, plastic tube or tape.
- c) The cunningham clam cleat may be replaced

in the same position with a “Builder Supplied” deck cleat base for attaching two “Optional” cam cleats (cunningham and outhaul) which have fixing hole centres of 27 mm.



The two cam cleats may include a bridge and a fairlead with or without rollers on the aft exit.

- d) Control lines shall not be tied to any of the cunningham fairlead, the “Builder Supplied” deck block fitting and the “Optional” blocks attached to it, the cunningham clam cleat or the “Builder Supplied” deck cleat base and the “Optional” cam cleats, cleat bridge and fairleads attached to it.
- ix. Rope loop handles covered with plastic/rubber tube end/or tape may be included anywhere on the free end of a control line.
- x. The free ends of different control lines (except mainsheet) may be tied together and/or tied to any deck fitting or the centreboard, the centreboard handle or a rope loop used to attach a retaining line. Free ends of control lines shall not be tied to shock cord (except mainsheet).
- xi. To secure the mast in the event of a capsiz, a loose retention line or shock cord (that will allow 180 degree plus mast rotation) shall be tied/attached between the cunningham fairlead or the deck block fitting and the mast tang or gooseneck. Clips, hooks, shackles and balls may be used to attach the retention line.
- xii Reference points (marks) may be placed on the deck, spars and ropes.

(c) Mainsheet – also see Rules 3(a) & 3(b)

- i. The mainsheet shall be a single line, and be attached to the becket of the aft boom block, and then passed through the traveller block, the aft boom block, boom eye strap, forward boom block and the mainsheet block. After the mainsheet block it shall be knotted, or tied, so that the end of the mainsheet cannot pull through the mainsheet block. The mainsheet shall not be controlled aft of the forward boom block except to facilitate a tack or gybe.
- ii. The tail of the mainsheet may also be knotted or tied to either the base of the mainsheet block, the hiking strap, the hiking strap support line, or the hiking strap shock cord. This option, if used, satisfies the knotting requirement in 3(c).
- iii. The mainsheet block may be replaced by any type of single block with or without an internal or attached jamming device, and mounted in the position shown on the measurement diagram. The block may be supported by a spring, ball, plastic tube or tape.
- iv. One mainsheet clam or cam cleat of any type may be mounted on each side deck in the position shown on the measurement diagram.

(d) Vang – also see Rules 3(a) & 3(b)

- i. The vang system shall be between the mast tang and the boom key fitting and shall be comprised of the vang cleat block, the vang key block, a maximum of two control lines, loops and/or “Optional” blocks for additional purchase with a **maximum of 7 “Turning Points”**.
- ii. The vang cleat block shall be attached directly to the mast tang, or to an “Optional” swivel that shall be attached to the mast tang.
- iii. A shackle may be used to attach the vang cleat block or the swivel to the mast tang.
- iv. The swivel, shackle or swivel/shackle combination shall not exceed 80 mm in length when measured under tension.

- v. The vang key block may be fitted with a spare key.
- vi. The key may be straight or bent, and it may be held in the key way with either tape, elastic or velcro.
- vii. The vang key block may be replaced with an "Optional" vang key block which may have a spare key.
- viii. "Optional" single blocks may be attached to one or both sides of the vang cleat block, using a clevis pin or bolt through the attachment hole in the vang cleat block.
- ix. The mast tang hole may be drilled to take a larger pin.
- x. "Builder Supplied" Vang Cleating Fitting
 - a) The vang cleat block may be replaced with a "Builder Supplied" vang cleating fitting which incorporates "Turning Points" and a cam cleat. These photos show the 2 Class legal "Builder Supplied" vang cleating fittings:



- b) The fitting shall be attached directly to the mast tang.
- c) The fitting shall not be modified in any way.

(e) Cunningham – also see Rules 3(a) & 3(b)

- i. The cunningham system shall consist of a maximum three control lines. "Optional" blocks or loops for purchase with a **maximum of 5 "Turning Points"**.
- ii. The cunningham control line shall be securely attached to any of the mast, gooseneck, mast tang, swivel or shackle that may be used to attach the vang cleat block to the mast tang, the cunningham attachment point on the "Builder Supplied" vang cleating fitting or the becket of an optional becket block fixed on the cunningham attachment point on the "Builder-supplied" vang.

The cunningham control line shall pass through the sail tack cringle as a moving line.

The sail tack cringle shall be at least one of the **maximum of 5 "Turning Points" permitted by Rule 3(e)**.

- iii. Additional purchases may be obtained using rope loops, "Optional" blocks and using any of the boom, sail tack cringle, gooseneck fitting, mast tang, shackle attaching vang cleat block or swivel, the swivel, or the cunningham attachment point on a "Builder Supplied" vang cleating fitting.

iv. Deck Block Fitting and Deck Cleat Base

The cunningham control line shall pass only once through the cunningham fairlead or "Optional" single block attached to the "Builder Supplied" deck block fitting and shall pass only once through the cunningham clam cleat or "Optional" cam cleat attached to the "Builder Supplied" deck cleat base.

(f) Outhaul – also see Rules 3(a) & 3(b)

- i. The outhaul system shall consist of a maximum of two control lines, "Optional" blocks or loops for purchase and a **maximum of 6 "Turning Points"**.
- ii. The outhaul control line shall be attached to either the end of the boom, the outhaul fairlead, the sail, or a quick release system, and shall pass through the boom outhaul fairlead as a moving line at least

once. The outhaul fairlead shall be at least one of the maximum of 6 "Turning Points" permitted by Rule 3(f).

- iii. Additional purchases may be obtained by forming rope loops in the line or adding "Optional" blocks to the line, and/or using the outhaul fairlead, the outhaul clam cleat, the boom, the mast or gooseneck fitting.

An "Optional" block may be attached to the outhaul fairlead, **provided** Rule 3(f)ii is also satisfied.

An "Optional" block may be attached to the outhaul clam cleat.

- iv. An "Optional" block may be attached to the clew of the sail, or to a quick release system, or be part of a quick release system.
- v. One or two "Optional" blocks may be attached to the gooseneck fitting, or at the mast/gooseneck junction with their "Turning Points" not more than 100mm from the centre of the gooseneck bolt. (The gooseneck may be inverted.) The blocks in this rule may also be attached to the gooseneck with a bolt or a pin.
- vi. A shock cord may be used as an inhaul on the clew
- vii. Shock cord and/or rope loops (rope loops may be part of the control line) can be tied around the boom and/or the outhaul control lines to retain the outhaul lines close to the boom.

viii. Deck Led Outhaul System

- a) When led to the deck, the outhaul control line shall pass only once through the cunningham fairlead or the outhaul "Optional" single block attached to the "Builder Supplied" deck block fitting and shall pass only once through the "Optional" cam cleat attached to the "Builder Supplied" deck cleat base.

- b) The boom outhaul clam cleat shall not be removed.

(g) Clew Tie Down – also see Rules 3(a) & 3(b)

- i. The clew of the sail shall be attached to the boom by either a tie line or a webbing strap with or without a fastening device wrapped around the boom and through the sail cringle, a quick release system attached to a tie line or soft strap wrapped around the boom, or a "Builder Supplied" stainless steel boom slide with quick release system. An additional outhaul extension tie line may be added between the clew of the sail and the outhaul or the quick release system.



- ii. If the clew tie down is a tie line, it may be passed through solid balls with holes and/or tubes to reduce friction.

(h) Traveller – also see Rules 3(a) & 3(b)

- i. The traveller shall be a single line. It shall be rigged as a simple closed loop through the traveller eyes and the free end passing through the traveller cleat. A splice that does not extend through the nearest traveller eye may be used at the non-free end.
- ii. A spring, ball or tape may be used between the traveller blocks.

4. SAIL REGISTRATION NUMBERS, NATIONAL LETTERS AND NATIONAL FLAG

(For Radial and 4.7 sail number positions please see part 4 rule 29(e) and 30(e))

- (a) For boats up to sail number 148199, the sail number is a number moulded into the deck under the bow eye or into the transom, or displayed on a

plate attached to the rear of the cockpit.

For boats with sail numbers from 148200, the sail number is the number displayed on a unique World Sailing Building Plaque attached to the rear of the cockpit.

- (b) All numbers shall be in accordance with the Racing Rules of Sailing except as amended by these rules in respect of type, positioning and minimum dimensions:

Height 300 mm.

Width 200 mm (excluding digit 1).

Thickness 45 mm.

Space between adjoining numbers minimum 50 mm.

Sail numbers shall be regularly spaced.

Numbers on the starboard side shall be placed above those on the port side.

Each sail number digit shall be of one colour only.

The sail numbers shall be solid and easy to read.

After 1st March 1998 - sail numbers and national letters shall only be adhesive numbers. The use of permanent ink pens or similar to mark numbers and national letters on the sail is prohibited.

- (c) For sails with numbers above 153000 and sails purchased after 1st June 1993 the sail numbers shall be glued or sewn on each side of the sail, with the bottom of the numbers on the starboard side of the sail placed along a line parallel to and 400 mm (+ or - 12 mm) below the seam at the middle batten pocket. The bottom of the numbers on the port side of the sail shall be placed on a line 400 mm (+ or - 12 mm) below and parallel to the bottom of the numbers on the starboard side of the sail. The starboard sail numbers shall commence 100 mm (+ or - 12 mm) from the leech and the port side numbers shall end 100 mm (+ or - 12 mm) from the leech.

(For additional guidance, see the Instructions for Applying Sail Numbers on p. 45 along with accompanying diagrams on pp. 46 - 49).

- (d) Sail numbers from 131000, sails purchased after 1st June 1993 and new sails stamped "New Numbers" shall have numbers that are clearly visible with the last four digits of the number in one dark, distinctive colour or black and any preceding numbers in a different, contrasting, distinctive colour (red is recommended).

- (e) Exceptions to this Rule are permitted:

- i. when the hull and/or sail are provided by the organisers for an event and after approval of the International Laser Class Association, the numbers on the sail used for that event only may be single, double or triple digit numbers.
- ii. in the case of a boat borrowed or chartered for a specific event, and after written approval from the Race Committee, a competitor may use a sail with numbers that are different to the sail number allocated to the hull. The sail number used shall be the sail number allocated to the competitor's own boat. When the competitor does not own a boat, the number used on the sail shall be the number of the boat chartered.
- iii. when a sail is damaged during a series and Rule 7 (c) applies the sail number may contravene Rules 4 (a) and (e) ii only when written permission for a sail number change is given by the Race Committee.

- (f) **National Letters**, if required, shall conform to the same type, size, spacing and requirements as sail numbers (refer rule 4(b), (c), (d) and (e)) and shall be positioned as follows:

The letters on the starboard side of the *MK/I* sail shall

be placed along the top edge of the seam below the bottom batten pocket (+ or - 12mm), for the *MK/I* sail on a Base Line 400mm (+ or - 12mm) below the bottom batten pocket and on the port side of the sail along a line 400 mm (+ or - 12mm) below and parallel to the letters on the starboard side. The starboard letters shall commence 100 mm (+ or - 12 mm) from the leech and the port letters shall finish 100 mm (+ or - 12 mm) from the leech. The letters shall all be the same colour, which may be one of the colours of the digits of the sail number, or another distinctive colour [also see diagrams on pages 52-55].

National Letters shall be required at all World Championships, Regional Championships and events described as international events in the notice of race or sailing instructions. National Letters may be required at any other regatta by the notice of race or sailing instructions.

- (g) **RED RHOMBUS**

- i. Sails used in the following women's events shall carry a red rhombus above the top batten pocket on both sides;
- a. World or regional (continental) championships.
- b. Events described as "international events" by the Notice of Race or Sailing Instructions.
- c. Other events that prescribe in the Notice of Race or Sailing Instructions that women competitors should be identified.
- ii. The minimum size and approximate position shall comply with diagram on page 36.
- iii. The rhombus may be retained for racing in other events.

- (h) **NATIONAL FLAG**

If required by the Notice of Race and the Sailing Instructions, a national flag with a nominal size of 567 x 337 mm shall be applied to both sides of the mainsail. For the Standard and Radial sails, flags shall be positioned such that the aft edge of the flag is within 100 and 150 mm of the leech and between the sail numbers and the batten pocket below the sail numbers. The flag shall be approximately parallel with the sail numbers and letters and shall not touch the numbers. For the 4.7 sail, the flag shall be positioned within 100 and 150 mm of the leech but below and within 50 mm of the bottom batten pocket. The flag shall be printed on separate material applied to the sail. The use of permanent ink pens or similar to make a national flag is forbidden. The national flag shall correspond to the national letters.

5. **MAST**

No mast which has a permanent bend shall be used at any time.

6. **CLOTHING AND EQUIPMENT**

- (a) In alteration of RRS 43.1 (b) the maximum total weight of competitors' clothing and equipment shall be 9kg (for Radial and 4.7 rigs please see part 4).
- (b) Competitors shall not wear or carry non floating clothing or equipment which in total weight exceeds 500 grammes dead weight except protective sailing clothing.
- (c) For the purposes of weighing clothing and equipment as required by RRS Appendix H three coat hangers may be used instead of a rack.

7. **SAILING REQUIREMENTS**

- (a) The boat shall be raced with either one or two persons aboard.

When two persons race a boat they shall race together throughout the entire race or series of races without alternating at the helm.

- (b) No part of the helmsman or crew may be placed forward of the mast while racing.
- (c) Sails

In a series of races a sail shall not be changed for another unless written permission for an individual change is obtained from the race committee. Written permission shall only be given in the event of a sail damaged beyond repair or damaged to the extent that it cannot be repaired before the start of the next race in a series. In the event of a change the damaged sail shall not be used again in that series even if it is subsequently repaired.

For the purpose of this rule, a series is deemed to be two or more individual races which count towards an overall points total.

8. HULL COATINGS

The use of slowly soluble applications which might alter the boundary layer characteristics of the hull are prohibited.

9. CLASS ASSOCIATION MEMBERSHIP

No person is permitted to race in any Fleet, interFleet, District, or other sanctioned event unless at least one member of the crew is a current member of the International Laser Class Association (a member of a District Laser Association duly established in accordance with the Constitution is a member of the International Laser Class Association).

10. ADVERTISING

Advertising, including competitor advertising, is permitted in accordance with World Sailing Regulation 20 - Advertising code; except that the sail window shall be kept free of advertising or other graphic material.

[Note: For information about World Sailing Regulation 20, see: <http://www.sailing.org/documents/regulations/regulations.php>]

PART THREE

OPTIONS & EXCEPTIONS

TO PARTS ONE & TWO

11. HULL FINISH

- (a) Waxing, polishing and fine wet and dry sanding of the hull is permitted, provided the intention and effect is to polish the hull only. Polishing/sanding shall not be used to remove mould imperfections.
- (b) Sanding and refinishing of the hull with the intention or effect to lighten the hull or improve the performance, finish, materials or shape beyond the original is not permitted.

12. TRANSOM DRAIN BUNG

A retaining line may be attached to the transom drain bung and the gudgeon.

13. SELF BAILER

A self-bailing device as supplied only by the builder may be added. The bailer may be sealed with tape, filler or glue along its edge where it joins the hull and at the screw hole. Filling the screw hole level with the flat surface of the bailer is permitted. Fairing the flat surface of the bailer to the hull shape or changing the profile of the bailer is not permitted. The drain bung may be removed from the self-bailer, and the self bailer opening pin may be secured to the cockpit floor with self adhesive plastic tape. The builder-supplied o-rings may be substituted with non builder-supplied alternatives provided the basic function of the bailer is unchanged.

14. CENTREBOARD

- (a) A rope handle passing through not more than two holes of maximum diameter 12.5 mm above a line

drawn from the bottom of the centreboard stop, parallel to the top of the centreboard is permitted. A plastic/rubber tube and/or tape are permitted on the handle of the centreboard.

- (b) The trailing edge of the centreboard may be sharpened by sanding the blade between the trailing edge and a line 100 mm parallel to the trailing edge, provided the distance between the leading edge and the trailing edge of the blade is not reduced.
- (c) Surface refinishing of the centreboard is permitted provided the original shape, thickness and characteristics are not altered.
- (d) One layer of any material of maximum 2mm thickness and of a maximum size of 30mm x 30mm may be applied at the top front corner of the centreboard case. Vertical cuts are allowed in the material to allow the material to conform to the shape of the centreboard case.
- (e) A wood centreboard shall not be used on a hull that was originally supplied with a non wood centreboard.
- (f) A tie line or shock cord shall be attached to the small hole in the upper forward corner of the centreboard, and any of the bow eye, the cunningham fairlead, the "Builder Supplied" deck block fitting and the mast to prevent loss of the centreboard in event of a capsized. The tie line or shock cord may be looped around the bow, but shall not be attached to the gunwale. Attachment can be by knots or loops in the shock cord, and/or tie lines, shackles, clips, hooks or eyes. When the shock cord is attached to the bow eye it may also pass through an attachment to the "Builder Supplied" deck block fitting or the cunningham fairlead.
- (g) The components of the "Builder Supplied" centreboard stopper may be secured together by glue, screws, bolts, nuts and washers, provided the original shape and dimensions are not reduced.

15. RUDDER

- (a) The trailing edge of the rudder blade may be sharpened by sanding the blade between the trailing edge and a line 60 mm parallel to the trailing edge, provided the distance between the leading edge and the trailing edge of the blade is not reduced.
- (b) Surface refinishing of the rudder blade is permitted provided that the original shape, thickness and characteristics are not altered.
- (c) The rudder blade and/or rudder head holes may be enlarged up to a maximum diameter of 10mm. The rudder bolt and bush set may be replaced with a larger diameter bolt to fit this hole. The bolt head, nut and washers shall fall within a 20mm diameter circle.
- (d) To achieve the maximum 78 degree rudder angle relative to the bottom edge of the rudder head, the leading edge of the blade may be cut away where it touches the spacing pin.
- (e) To restrict the rudder angle to maximum 78 degrees relative to the bottom edge of the rudder head, the lower forward spacing pin may be wound with flexible adhesive tape.
- (f) The rudder pintles may be fitted with spacers to lift the rudder head to allow the tiller to clear the deck at the transom.
- (g) The rudder downhaul line may have multiple purchases.
- (h) A hole may be drilled in the top rudder pintle and a pin or clip inserted in the hole to prevent loss of the rudder.

- (i) A wood rudder shall not be used on a hull that was originally supplied with a non wood rudder.
 - (j) The rudder shall be maintained in the full down position except whilst racing in water less than 1.5m deep unless otherwise specified in the sailing instructions.
 - (k) Padding of uniform thickness may be used in the gap between the rudder blade and rudder head. This padding must cover completely the part of the rudder blade that comes in contact with the rudder head. The thickness of the rudder blade plus the padding must not exceed 20.3mm.
- 16. TILLER**
- (a) The tiller and tiller extension are not restricted in any way except that the tiller:
 - i. shall be capable of being removed from the rudder head.
 - ii. shall be fitted with a cleat, hook, pin or eye to secure the downhaul.
 - iii. shall, except for normal wear caused by the traveller rope, be straight along its topmost edge between a point 30 mm in front of the forward edge of the rudder head and the cockpit end of the tiller.
 - (b) The tiller may be fitted with an "anti wear" strip or tube of not more than 200 mm in length placed above the level of the straight edge required by 16 (a) iii and only where the traveller crosses the tiller.
 - (c) The use of a tiller retaining pin is optional.
- 17. HIKING STRAP**
- (a) The hiking strap may be substituted with any type of non-stretch material and it may be padded.
 - (b) The hiking strap may be fixed to the cockpit at the forward end by wrapping the strap around the mainsheet block plastic pressure plate or by using both the centreboard friction attachment plate and the mainsheet block plastic pressure plate.
 - (c) The hiking strap supporting line between the aft end of the hiking strap and the eye straps on the aft face of the cockpit may be rigged in any manner so that the hiking strap is fixed or adjustable and may include one cleat; one ring, thimble, or shackle; or both.
 - (d) A shock cord may be attached between the aft end of the hiking strap and to either the traveller cleat, or the hiking strap eye straps at the aft end of the cockpit.

18. BOOM

- (a) A metal sleeve supplied by the builder of maximum length 900 mm may be fixed inside the boom. The sleeve shall not extend aft of the point 1220 mm from the front end of the boom (including plug).
- (b) The stainless steel mainsheet eye strap between the two blocks on the boom may be replaced with a soft strap. The maximum width of the soft strap shall be 26mm. The soft strap shall only be fixed to the boom using the holes drilled by the builder as shown in the diagram below.
- (c) Traveller and Boom mounted mainsheet blocks may be replaced with the "Builder Supplied" blocks shown in the photo.

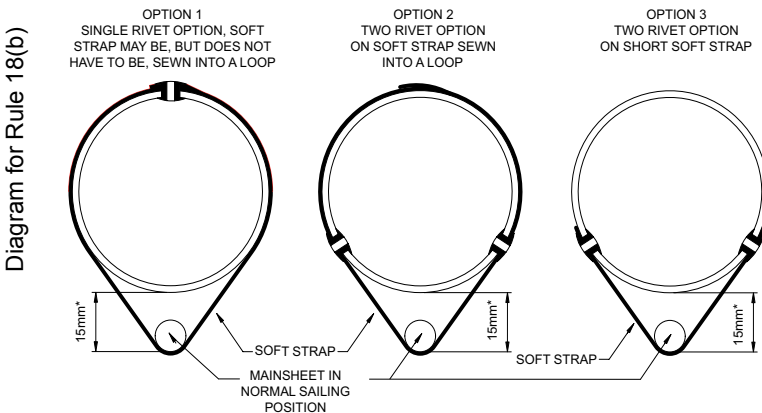


19. MAST

- (a) To prevent abrasion of the mast step, tubes or collars of uniform thickness not exceeding 1 mm in total may be placed around the entire circumference of the lower mast or the mast step cavity. A tube or collar shall not extend more than 10 mm above deck level. In addition, a disc of uniform thickness not exceeding 1mm in thickness may be placed in the bottom of the mast step.
- (b) The mast or mast cavity may be lubricated.
- (c) Tape or other bushing material may be applied to both the plastic end cap, the collar of the upper mast and the upper mast to ensure a snug fit. The tape or bushing material may only be used on that portion of the plastic parts that actually slide into the lower section and/or between the upper mast and the collar and it shall be a uniform thickness around the circumference. Taping or bushing material above the collar to fair the collar into the mast is prohibited.
- (d) Flexible adhesive tape may be applied to the outside of the joint of the upper and lower mast sections to a limit of 40mm above and below the joint to prevent rotation of the mast sections at the joint.



CROSS SECTIONS THROUGH BOOMS AND SOFT STRAPS SHOWING THE ONLY LEGAL FIXING OPTIONS



NOTES:
 1. 15mm DIMENSION MARKED * IS NOMINAL
 2. HOLES FOR OPTIONS 2 AND 3 ARE POSITIONED TO FIT THE ORIGINAL STAINLESS STEEL EYE STRAP
 3. NO BOOM SHALL BE DRILLED WITH THREE HOLES AT THE BOOM STRAP POSITION

20. INSPECTION PORTS

Inspection ports not exceeding 153 mm internal diameter may be installed on the deck or in the cockpit to provide access to the hull cavity, provided that any inspection port is fitted with watertight threaded covers (any bayonet mounted parts are deemed to be not threaded).

Storage receptacles are permitted underneath hatch covers.

21. CLIPS AND STORAGE BAGS

Clips, ties or bags to stow or secure safety or other equipment may be used on the deck, in the cockpit, around the mast or boom.

22. COMPASS, ELECTRONIC EQUIPMENT AND TIMING DEVICES

- (a) One compass mounted on any part of the deck or the cockpit is permitted if the hull cavity is not pierced by anything other than the fasteners. Compasses may not be fitted to inspection ports. An additional wrist mounted compass is permitted. Electronic, self-contained, digital compasses using only magnetic input are permitted.
- (b) Timing devices are permitted.
- (c) A timing device and electronic compass may be integrated in the same device.
- (d) A compass or timing device must not be capable of displaying, delivering, transmitting, receiving, calculating, correlating or storing information about wind speed, wind direction, boat speed or boat position.
- (e) Any use of electronic equipment not specifically allowed in the rules is prohibited unless the rules are modified by the sailing instructions.

23. WIND INDICATORS

- (a) Wind indicators may be attached as desired provided the sail is not cut and the buoyancy qualities of the hull and mast are not impaired.
- (b) Ribbons, wool or similar wind indicators may be attached to the sail.

24. TAPE AND LINE

The use of flexible adhesive tape or similar or line is permitted to secure shackle pins and clips, and to bind sheets, control lines and rigging, except that tape or line shall not be used to construct new fittings or modify the function of existing fittings.

25. SAFETY EQUIPMENT

Any additional equipment required by an international, national or other governing authority for safety purposes may be fitted or carried provided it is not used in contravention of the FUNDAMENTAL RULE.

26. REPAIRS AND MAINTENANCE

- (a) Repairs and preventative maintenance to the sail, hull, deck, centreboard, rudder, mast, boom or any fittings and fixings may be carried out without violation of these Rules provided such repairs are made in such a way that the essential shape, characteristics or function of the original are not affected.
- (b) In the event of the failure of any fittings, or the replacement of fittings as authorised by these Rules, the fitting or the replacement shall be the same type as the original and shall be placed in a position conforming to the Measurement Diagrams.
- (c) Preventative maintenance includes the replacement of fasteners (screws, bolts, nuts, washers and rivets) provided the replacement does not alter the function of the fitting. The tolerances of the Measurement Diagrams shall not be used to alter the position of fittings. In addition the reversing of spars is permitted

if the fittings are replaced in accordance with the Measurement Diagrams. Any holes in the top section of the mast shall be permanently sealed with a rivet or similar to maintain the buoyancy of the mast. .

- (d) Sail panels and luff sleeves shall not be replaced.
- (e) Any flotation equipment (flotation foam blocks or Cubitainer inserts) that is defective or has been removed shall be replaced by fully air filled, builder supplied, Cubitainer inserts which shall have an equal volume to the defective or removed flotation equipment.
- (f) The use of lubricants is unrestricted except that they shall not be used on the hull (below the gunwales).

27. REEFING

The sail may be reefed by rolling the sail around the mast 1 or 2 times.

28. BOAT OR BODY MOUNTED CAMERA

One camera may be attached to the sailor or may be mounted on the boat if the hull cavity is not pierced by anything other than the fasteners.

PART FOUR RADIAL RIG AND 4.7 RIG OPTIONS

Part 4 of these rules shall be read in conjunction with the remainder of the Class Rules.

When the Radial or the 4.7 rigs are used the Rules of Parts 1, 2, 3 and 5 of the Laser Class Rules apply except where specifically amended by Part Four.

29. RADIAL RIG

- (a) The Radial sail and bottom mast as supplied by an approved Builder shall conform to the measurement diagrams which form part of these Rules.
- (b) The Radial rig may be used in any class regatta subject to the conditions in 29 (c) and any restrictions in the Notice of Race and Sailing Instructions.
- (c) The Radial rig may only be used in District Championships and higher level regattas when prescribed in the Notice of Race and Sailing Instructions.
- (d) In a series of races a Radial rig shall not be changed for a Standard or 4.7 rig. A series is 2 or more races that count towards an overall points total.
- (e) SAIL REGISTRATION NUMBERS & NATIONAL LETTERS

Rules 4(c) and (f) shall be amended to read as follows:

- 4(c) For Radial sails with numbers above 153000 and sails purchased after 1st June 1993 the sail numbers shall be glued or sewn on each side of the sail, with the bottom of the numbers on the starboard side of the sail placed along a line parallel to and 400 mm (+ or - 12 mm) below the underside of the middle batten pocket. The bottom of the numbers on the port side of the sail shall be placed on a line 400 mm (+ or - 12 mm) below and parallel to the bottom of the numbers on the starboard side of the sail. The starboard sail numbers shall commence 100 mm (+ or - 12 mm) from the leech and the port side numbers shall finish 100 mm (+ or - 12 mm) from the leech.

(For additional guidance, see the Instructions for Applying Sail Numbers on p. 45 along with accompanying diagrams on pp. 46 - 49).

- 4(f) National Letters, if required, shall conform to the same type, size, spacing and requirements as sail numbers (refer rule 4(b), (c), (d) and (e)) and shall be positioned as follows (also see diagram):

The top of the letters on the starboard side of the sail shall be placed on the bottom edge of the bottom batten pocket and its extension (+ 12 mm). The starboard letters shall commence 100 mm (+ or - 12 mm) from the leech. The bottom of the letters on the port side shall be placed on a line 400 mm (+ or - 12 mm) below and parallel to the bottom of the letters on the starboard side of the sail. The port letters shall finish 100 mm (+ or - 12 mm) from the leech. The letters shall all be the same colour, which may be one of the colours of the digits of the sail number, or another distinctive colour.

National Letters shall be required at all World Championships, Regional Championships and events described as international events in the notice of race or sailing instructions. National Letters may be required at any other regatta by the notice of race or sailing instructions.

(f) CLOTHING AND EQUIPMENT

Rule 6(a) shall be amended to read as follows:

6(a) For the purposes of RRS 43.1 (b) the maximum total weight of competitors clothing and equipment shall be 9 kg.

30. 4.7 RIG

(a) The 4.7 sail and bottom mast as supplied by an approved Builder shall conform to the measurement diagrams which form part of these Rules.

(b) The 4.7 rig may be used in any class regatta subject to the conditions in 30 (c) and any restrictions in the Notice of Race and Sailing Instructions.

(c) The 4.7 rig may only be used in District Championships and higher level regattas when prescribed in the Notice of Race and Sailing Instructions.

(d) In a series of races a 4.7 rig shall not be changed for a Standard or Radial rig. A series is 2 or more races that count towards an overall points total.

(e) SAIL REGISTRATION NUMBERS

Rules 4(b), 4(c) and 4(f) shall be amended to read as follows:

4(b) On 4.7 sails all numbers shall be in accordance with the Racing Rules of Sailing and shall be of the following minimum dimensions:

Height 220 mm.

Width 150 mm excluding digit 1.

Thickness 30 mm.

Note: Optimist Class legal numbers conform to this rule.

The maximum height to conform is 240mm.

Space between adjoining numbers / letters and rows minimum 30 mm.

Sail numbers shall be regularly spaced.

Numbers on the starboard side shall be placed above those on the port side.

Each number digit shall be one colour only.

The numbers shall be solid and easy to read.

4(c) For 4.7 sails with numbers above 153000 and sails purchased after 1st June 1993 the sail numbers shall be glued or sewn on each side of the sail, with the bottom of the starboard numbers placed along the top edge of a line placed 270mm (0 to +12mm) below and parallel to the seam below the bottom edge of the middle batten pocket. The port side numbers shall be placed along a line 270mm below and parallel to the bottom of the starboard side numbers. The starboard side numbers shall commence 100 mm (+ or - 12 mm) from the leech

and the port side numbers shall end 100 mm (+ or - 12 mm) from the leech.

(For additional guidance, see the Instructions for Applying Sail Numbers on p. 45 along with accompanying diagrams on pp. 46 - 49).

4(f) National letters, if required, shall conform to the same type, size, spacing and requirements as 4.7 numbers (refer rule 29 (e) 4 (b)).

For all 4.7 sails with numbers from 190000, and for sails purchased from 1 April 2006 onwards, The bottom of the starboard side letters shall be placed along a line 270mm (+12mm) below and parallel to the bottom of the numbers on the port side and start 100mm (+ or -12mm) from the leech. The bottom of the letters on the port side shall be placed along a line 270mm (+12mm) below and parallel to the bottom of the letters on the starboard side and finish 100mm (+ or -12mm) from the leech.

For 4.7 sails with numbers under 190000 that were purchased before 1 April 2006, they may be placed as above or along the same line, 270mm below and parallel to the bottom of the numbers on the port side, on opposite sides of the sail. The letters on the port side shall be closer to the leech than those on the starboard side, with the port side letters finishing 100mm (+ or - 12mm) from the leech.

National Letters shall be required at all World Championships, Regional Championships and events described as international events in the notice of race or sailing instructions. National Letters may be required at any other regatta by the notice of race or sailing instructions.

The letters shall all be the same colour, which may be one of the colours of the digits of the sail number, or another distinctive colour.

(f) MAST

Rule 5 shall be amended to read as follows:

5 The 4.7 bottom mast is supplied with a pre-bend aft of approximately 5 degrees. The pre-bend shall not be increased or decreased. No top mast that has permanent bend in it shall be used at any time.

(g) CLOTHING AND EQUIPMENT

Rule 6(a) shall be amended to read as follows:

6(a) In alteration of RRS 43.1 (b) the maximum total weight of competitors clothing and equipment shall be 8 kg.

PART FIVE

31. AMENDMENTS

Amendments to these Rules shall be approved by each of:

- (a)** the World Council,
- (b)** the Advisory Council,
- (c)** at least two-thirds of the membership casting a vote in response to a ballot published by the International Office of the Class. Only those votes submitted within one month from the date of publication of the rule change ballot shall be valid, and
- (d)** World Sailing.

Class Rule Interpretations

1. Approved compasses that meet the requirements of Rule 22. Compass, Electronic Equipment and Timing Devices. A list of approved compasses can be found on the ILCA website - please go to the "Interpretations" tab under "Laser Class Rules".
2. Repairs and Maintenance: Sailors may apply anti-abrasion material at the traveller fairleads to prevent wear of the deck as a form of preventative maintenance under rule 26(a).
3. Hiking Strap: A sheaveless block, such as the "shock block" or equivalent, will be considered a ring for the purpose of rule 17(c).
4. Laser Radial Class composite lower mast spars may not be used in national or higher level (regional, world) competition until 01 September 2020.
5. Sails designated ILCA 4 with the required sail button are class legal for use in Laser 4.7 Class competition. Sails designated ILCA 6 with the required sail button are class legal for use in Laser Radial Class competition. Sails designated ILCA 7 with the required sail button are class legal for use in Laser Class (Standard rig) competition.



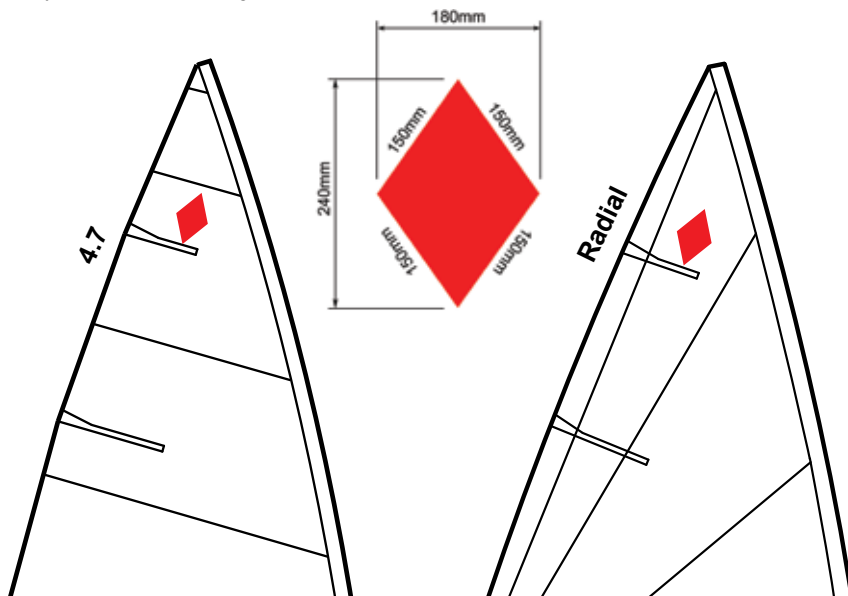
Instructions for Applying Red Rhombus For Women's Events

Sails used in the following women's events shall carry a red rhombus above the top batten pocket on both sides;

- a. World or regional (continental) championships.
- b. Events described as "international events" by the Notice of Race or Sailing Instructions.
- c. Other events that prescribe in the Notice of Race or Sailing Instructions that women competitors should be identified.

The minimum size and approximate position shall comply with diagrams below.

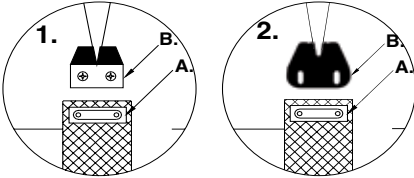
The rhombus may be retained for racing in other events.



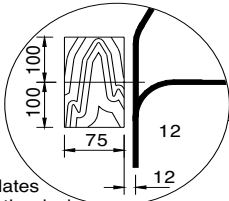
Measurement Diagrams (pages 37 to 43 part of class rules)

All dimensions shown in millimetres

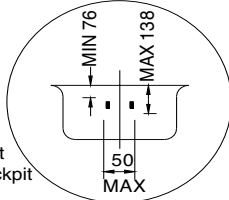
Measurements are shown only as a guide to replacement in the event of failure.



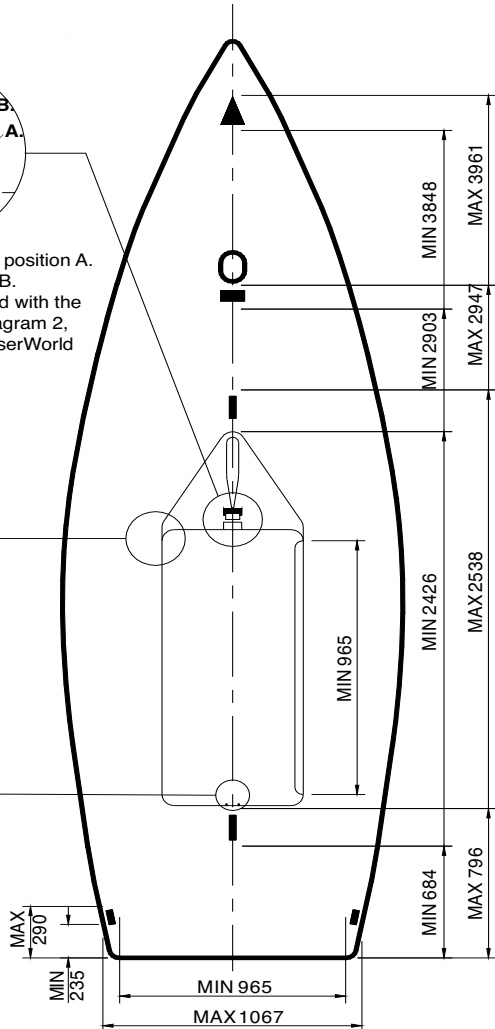
Mainsheet block shall be attached to eyestay in position A. Centreboard Brake shall be attached in position B. Centreboard Brake in diagram 1 may be replaced with the builder supplied Centreboard Brake shown in diagram 2, available mid/late 2009 (see December 2008 LaserWorld or www.laserinternational.org)



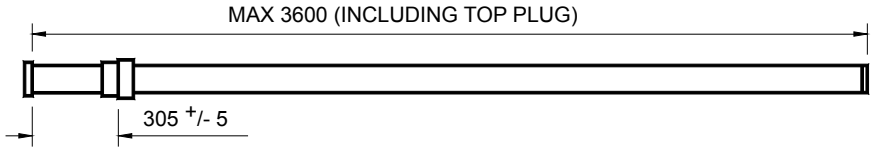
Wooden backing plates are under the deck for the fitting of cam or clam cleats



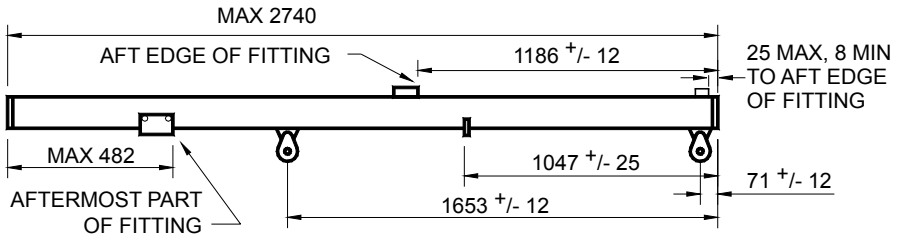
Eyes at aft end of cockpit



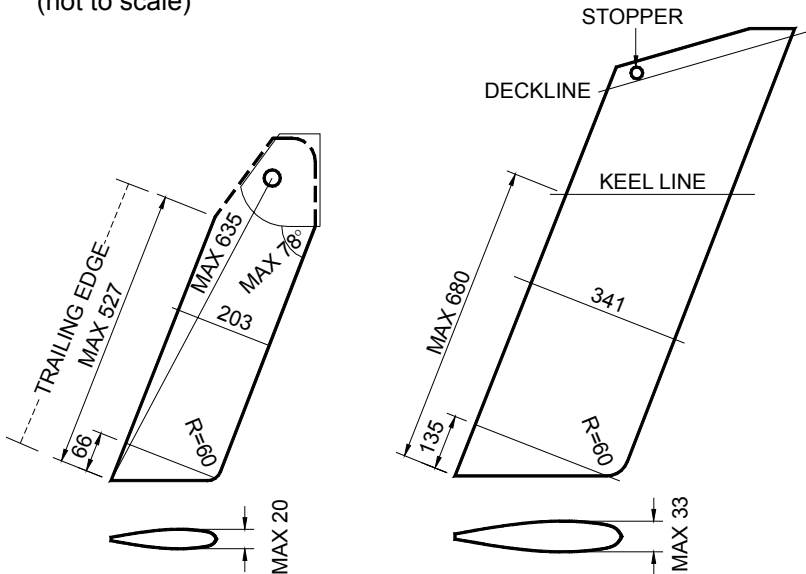
STANDARD, RADIAL & 4.7 MAST TOP SECTION



STANDARD, RADIAL & 4.7 BOOM

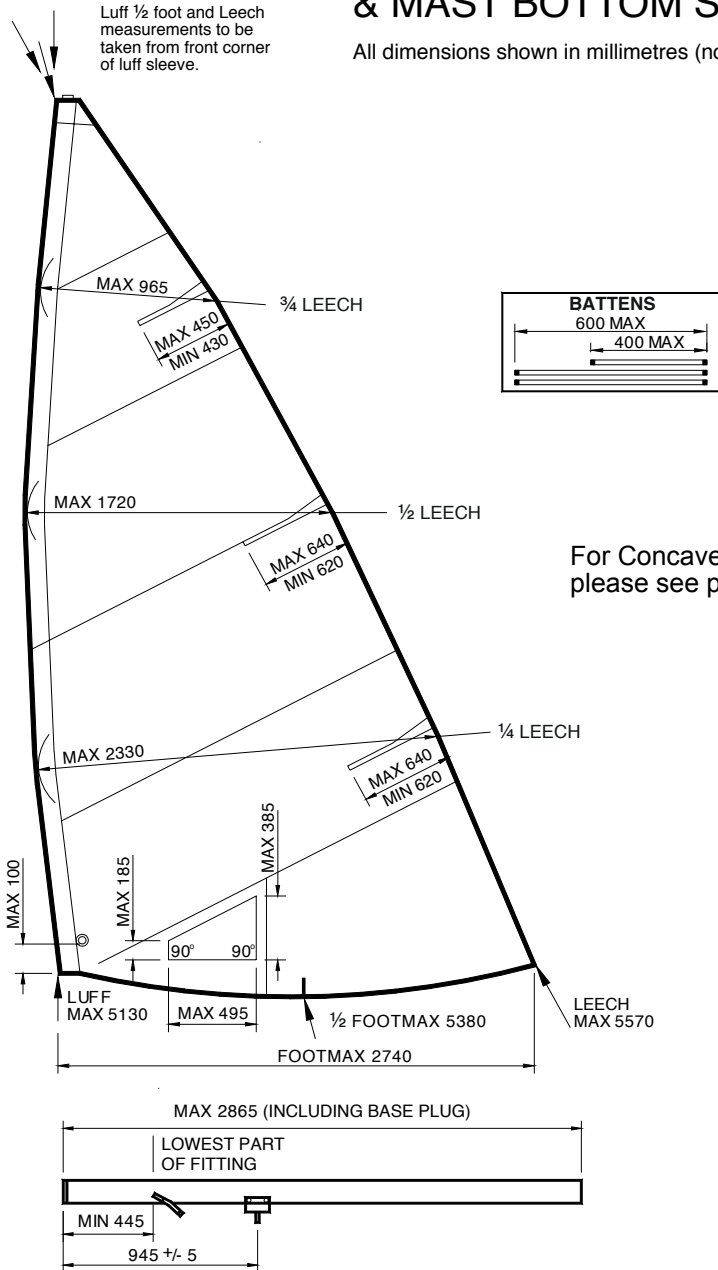


All dimensions shown
in millimetres
(not to scale)



LASER CLASS MKI SAIL & MAST BOTTOM SECTION

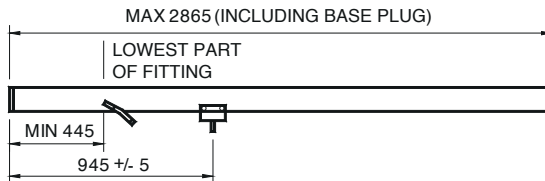
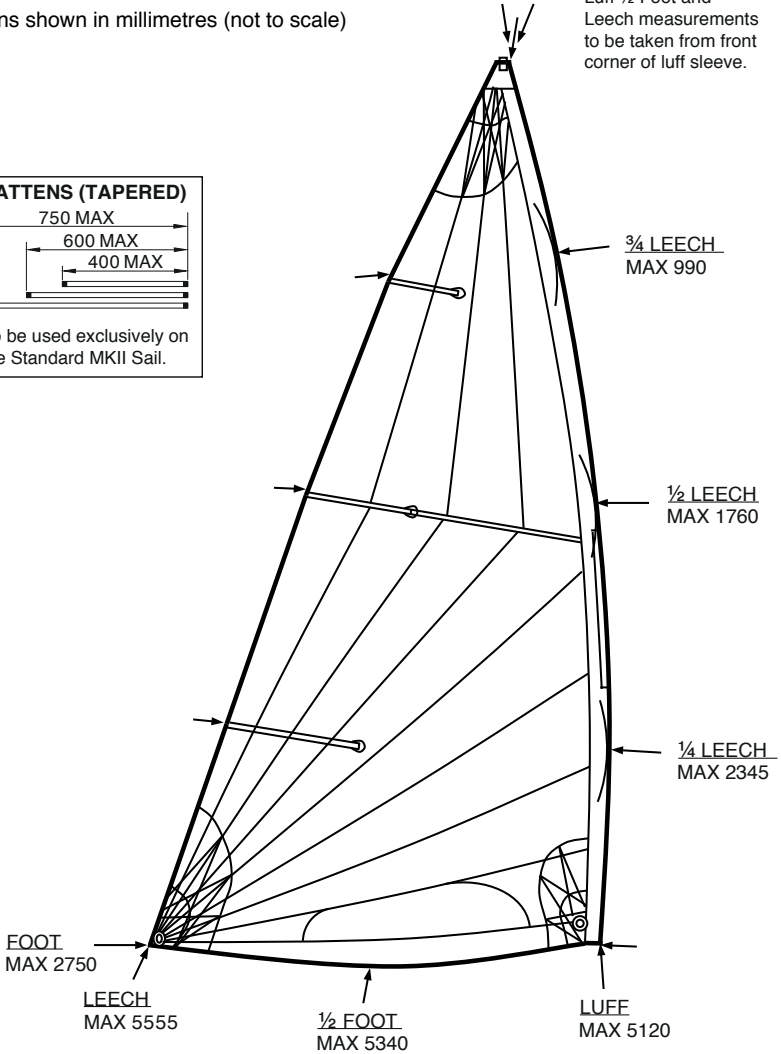
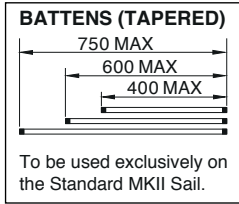
All dimensions shown in millimetres (not to scale)



LASER CLASS MKII SAIL & MAST BOTTOM SECTION

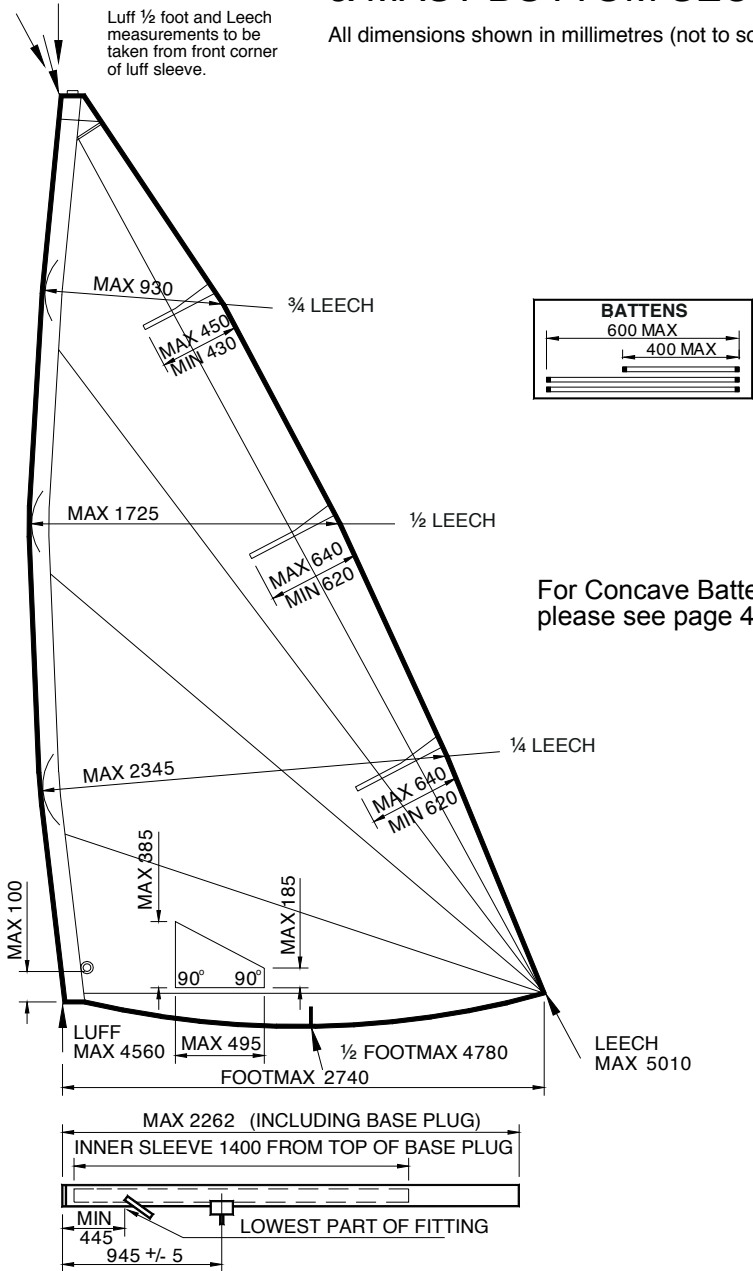
All dimensions shown in millimetres (not to scale)

Luff ½ Foot and
Leech measurements
to be taken from front
corner of luff sleeve.



LASER RADIAL CLASS SAIL & MAST BOTTOM SECTION

All dimensions shown in millimetres (not to scale)

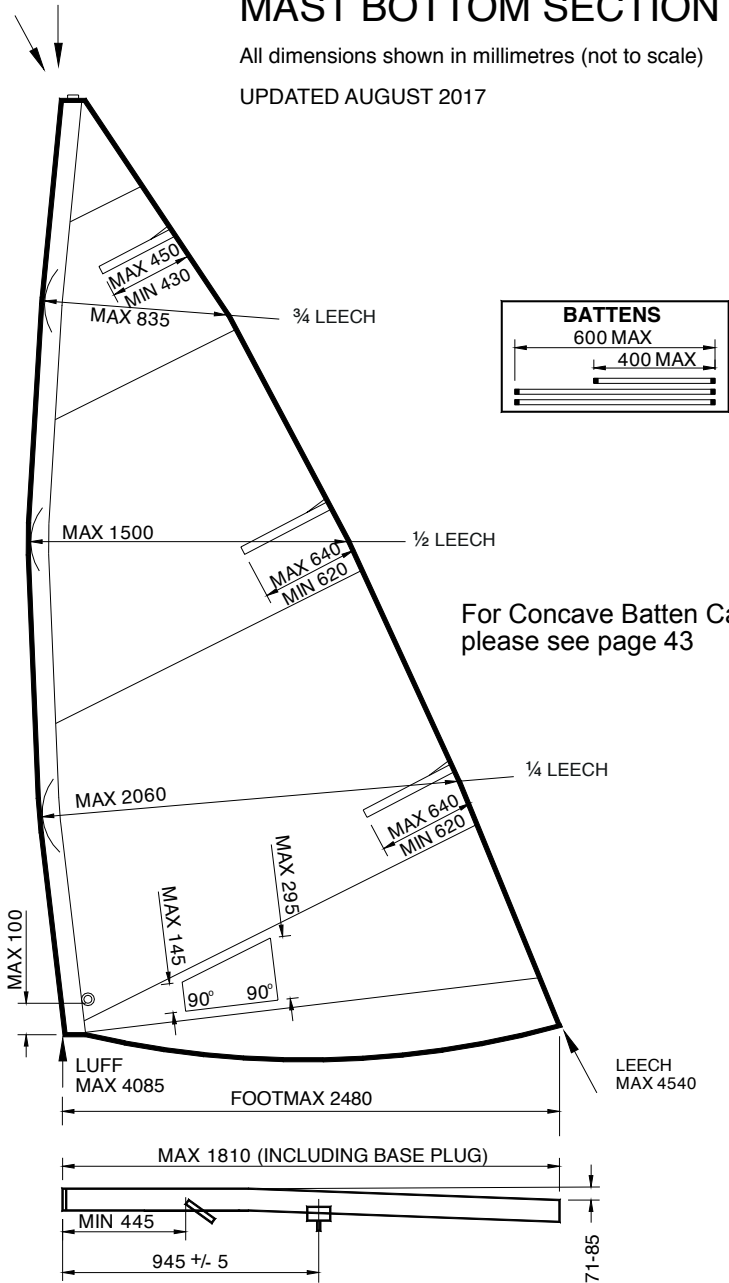


LASER 4.7 CLASS SAIL & MAST BOTTOM SECTION

All dimensions shown in millimetres (not to scale)

UPDATED AUGUST 2017

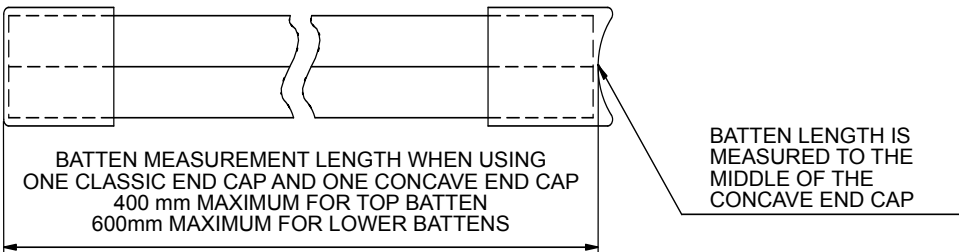
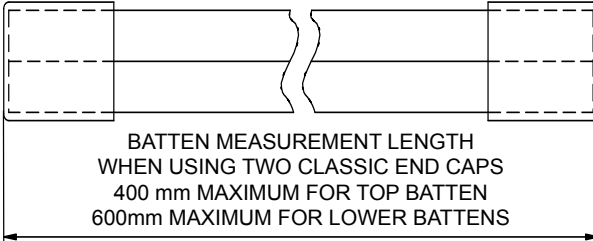
Luff and Leech measurements to be taken from front corner of luff sleeve.



Concave Batten Caps

**For 4.7, Radial and Standard MKI (Cross Cut) Sails
Not applicable for Standard MKII (Bi-Radial Cut) Sails**

The diagrams below illustrate the methods to be used for the measurement of battens using both classic and concave end caps. Please see pages 39-42 for full sail and bottom section diagrams.



ILCA By-Law 2: District General By-Law

1. NAME

The name of the District Association shall be the (Name or Geographic Designation) Laser Association and it shall have its offices at Address in the City of

2. OBJECTS

The objects of the District Association are

- (a) to provide a medium of exchange of information among Laser Sailors in the District;
- (b) to promote and develop Laser Class racing within this District;
- (c) to encourage and foster the enjoyment of the sporting and recreational aspects of sailing through the development of fleets within the District; and
- (d) to co-ordinate the activities of this District with other Districts within the Region.

3. FLEET CHARTERS

- (1) A fleet may be granted a Fleet Charter upon application to the District Association by six or more persons who are members of the International Laser Class Association and who are individual owners of Lasers within an area or club deemed appropriate having regard to locality where regular racing activity is easily accessible to members of that Fleet.
- (2) Notwithstanding Paragraph (1), a special Fleet may be chartered in any locality for the purposes of accommodating specific members of the armed forces, an educational institution, a junior programme or any other non-profit organisation.
- (3) A Fleet Captain, and such other officers if any as the Fleet may deem necessary, shall be elected annually from among the members of the Fleet in such manner as is prescribed by the Fleet, unless otherwise provided by a By-Law of the District Association, and shall be responsible to the District Association for the organisation of the Fleet and the due compliance by the members of the Fleet with the provisions of the Constitution and By-Laws of the Association.

4. ASSOCIATION OFFICERS

The District Association shall be comprised of a

- (a) District Chairman who shall be responsible for the co-ordination of all activities of the District Association within the District, shall represent the District at Annual Meetings of the Region in accordance with the Constitution of the International Laser Class Association, shall chair all Annual Meetings of the District Association, and shall otherwise perform the normal functions of the senior officer within the District;
- (b) District Vice Chairman who shall act in the place instead of the Chairman in the event of his inability or refusal to act and in addition he shall be the Sailing Secretary of the District and be responsible for the development of District racing programmes of all kinds, the supervision of sanctioned events, and co-ordination with other Sailing Secretaries of all inter-District racing;

- (c) District Secretary who shall be responsible for maintaining all membership and other records and correspondence of the District Association, the preparation of the District Newsletter, if any, and shall otherwise carry out such responsibilities as may be assigned to him by the District Chairman;
 - (d) District Treasurer who shall be responsible for determination of the entitlement of applicants to membership in accordance with Paragraph 10 of the Constitution, the collection of dues to be levied for membership in accordance with Section 11 of the said Constitution, the maintenance of all accounts to the District membership thereon and preparation of an annual financial statement for the membership; and
 - (e) District Measurer, if one is appointed by the Chief Measurer of the International Laser Class Association, who shall carry out the responsibilities set forth in subparagraph (6) of paragraph 8 of the Constitution.
5. The District Association may appoint such additional officers to perform such duties or to carry out such special projects as may from time to time be determined by the District Association and they shall hold office for such term as it may determine.
6. The District Association may appoint such committees, as may be deemed appropriate from time to time to carry out the functions and duties as are prescribed by the District Association; and the District Chairman shall be a member ex-officio of any committee so established.
- ## 7. ANNUAL MEETINGS AND ELECTION TO OFFICE
- (1) The District Association shall hold an Annual Meeting at such time as may be determined by resolution of the District Association, but not later than fifteen months from the date of the last Annual Meeting.
 - (2) Notice of the Annual Meeting shall be sent to all members of the District Association not less than fourteen days prior to the Meeting and such notice shall include:
 - (a) an agenda for the said Meeting,
 - (b) a notice of any special By-Law whether to amend the District General By-Law or to enact any other By-Laws,
 - (c) a summary of the annual reports of the District Chairman and the Treasurer, and
 - (d) a report of the nominating committee, if any, for the election of officers for the ensuing year.
 - (3) Any member of the District Association shall be entitled to attend the Annual General Meeting and to vote thereat.
 - (4) A majority of members voting in favour of a resolution at the Annual Meeting shall be sufficient, except for resolutions which report to amend the District General By-Law or to enact any other By-Law which shall require a two-thirds majority thereof to be effective.
 - (5) Officers of the Association elected at an Annual General Meeting of the Association shall hold office until their successors are elected.

8. FEES

The annual fees of the District Association shall be payable to the Association not later than the first day of March in any year or such other day as the District Association shall by By-Law determine, provided that no person may race a Laser in any event after the last date for payment shall fall due unless the said dues have been fully paid and he shall be a member of the International Laser Class Association as required by the Class Rules.

9. DISTRICT CHAMPIONSHIPS

- (1) The District Association shall annually sponsor a District Championship sailing event which shall be open to any member of the District Association to be held at such place within the District as the District Association shall determine.
- (2) The District Championship event shall be conducted in accordance with the provisions of the Racing By-Law passed by the World Council.

10. BY-LAWS

The District Association may make By-Laws for the purpose of carrying out the objects of these General By-Laws and, without restricting the generality of the foregoing, may make By-Laws

- (1) determining the fiscal year of the District Association;
- (2) determining the period within which the Annual General Meeting must be held;
- (3) establishing nominating committees and methods of formation thereof;
- (4) subject to any By-Law of the International Laser Class Association, respecting the conduct of any regatta within the District and the eligibility of members for major racing events;
- (5) respecting the acceptance of deeds of gift of trophies;
- (6) changing the Head Office of the District;
- (7) respecting the conduct of the business of the District;
- (8) giving effect to the provisions of any local or general public law having application in the District enacted by any governmental body having jurisdiction;
- (9) respecting the organisation, constitution, and operation of fleets within the District; and
- (10) respecting the constitution and eligibility for committees including nominating committees.

11. COMING INTO FORCE

- (1) This By-Law comes into force
- (a) in respect of any District established by the World Council prior to the first day of November 1973, on the said date; and
- (b) in respect of any District established on or after the first day of November 1973, on the date of the By-Law of the World Council establishing such District pursuant to provisions of Section 8 of the Constitution.
- (c) The World Council upon establishing a District shall designate the name of the District and the location of the offices thereof and may, in addition, approve any addition to the said District General

By-Law as may be required to meet the laws of such District or any special circumstances, provided such additions are not inconsistent with the provisions of the Constitution or this By-Law.

ILCA By-Law 3: Measurement

1. If a protest is lodged against a boat alleging that there has been an alteration or addition thereto not permitted by the Rules of the Class, and the Technical Committee, on investigation, is in doubt as to whether a violation of the Rules has occurred, it shall measure the part of the boat subject to protest in accordance with paragraph 2.

2. (a) Hull

The part of the hull of the boat subject to protest shall be measured in accordance with the measurement directions attached as Schedule A and the same part of not less than five (5) other boats, chosen by the Technical Committee as random samples, shall be measured in the same manner. The Technical Committee shall select, if possible, boats which show no evidence of having been repaired or altered and which do not have inspection ports.

The arithmetic mean of the measurements of the boats chosen as the sample shall be calculated, and the protested boat shall be disqualified if the difference between the mean value so determined and the measurement on the boat subject to protest shall exceed the following values for the measurements indicated:

any point along the keel line (rocker): 2 mm
any other area of the hull: 3 mm

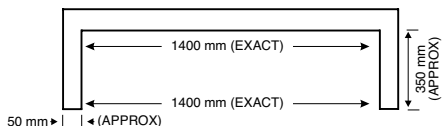
(b) Equipment

If any mast, boom, fitting, centreboard or rudder is the subject of a protest as to size, shape or location, measurement thereof shall be governed by the drawings and tolerances set forth in the Measurement Diagrams (Ref: By-Law 1 - Rules)

3. This By-Law shall be read and construed in conjunction with the Rules of the International Laser Class Association and the Interpretation of the Chief Measurer, and may be amended by the World Council with the approval of World Sailing.

Schedule A to By-Law 3

1. Measurement Template



2. Measurement of Hull

Turn boat upside down. Starting at the transom, measure out a distance along the keel line and establish point A, which will fall roughly athwartships of point X, the area under protest.

Lay a straight edge across the transom as shown in the sketch and measure out a distance along the vertical

surface of the gunwale and establish point B, which will fall approximately in line with the measured point on the keel line (A) and the area under protest (X). Distances shown are as an example only.

The centre line of the boat must then be established at point A. This will be easy in the front one third of the boat but, to find the centre line in the aft two thirds, stretch a string over the centre of the centreboard opening and the centre of the bailer depression and extend fore and aft, as necessary. Mark the centre line at point A. Now measure from point A to point X and retain this figure to establish an equal point of measurement on the five random sample boats.

Place the centre of the measurement template on point A (Diagram 2), line up the vertical arms with points B and equalise exactly the distance from the horizontal bar to the inside of the gunwale on each side of the boat.

Measure the shortest distance from point X up to the horizontal bar and record this measurement (96 mm in example).

This procedure should now be repeated using all the distances established above and a similar reading obtained for the distances from the hull to the horizontal cross bar on the other five sample boats.

Example: Measurements on 5 sample boats:

$93 + 94 + 94 + 97 + 96 = 474$
 Arithmetic mean = $474/5 = 94.8$
 Measurement on protested boat = 96
 Difference = 1.2

Diagram 1

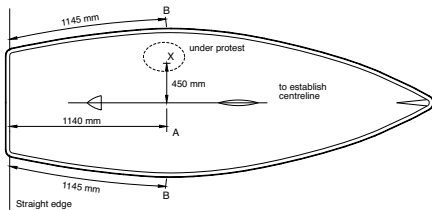
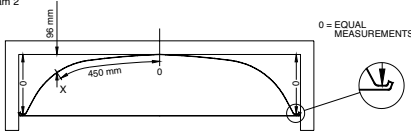


Diagram 2



This does not exceed mean value by more than 3 mm, therefore protest is disallowed.

Measurement of Rocker

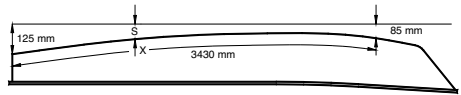
Turn boat upside down. Measure out a distance of 3430 mm along the keel line of the boat.

Set up a taut string over the centre line of the boat exactly 125 mm above the keel at the transom and 85 mm above the keel at 3430 mm from the transom.

Measure distance along keel to point under protest (point X) and retain this figure to establish an equal point of measurement on the five sample boats.

Measure the shortest point from point X to the string and then repeat procedure with five sample boats.

Calculate arithmetic mean of the measurements from the five sample boats. Point under protest should not



deviate by more than 2 mm.

ILCA By-Law 4: District Measurers

1. The responsibilities of the District Measurer and any assistant shall include:
 - (a) generally, ensuring that throughout the District, the principles of the Rules are understood and complied with;
 - (b) National and District championships and other events designated by the District Chairman as requiring the attendance of the District Measurer:
 - (i) perform a pre-race inspection following ILCA standard procedures of boats to be sailed in such event and report to each owner and to the Race Committee Chairman the owner and number of any boat which, if sailed in such event, would violate the Rules and be subject to protest and submit a written summary report of each event to the ILCA Chief Measurer within 2 weeks of the championship ending;
 - (ii) assist the Race Committee at such event, upon request, with any protests to which the Measurement By-Law applies;
 - (iii) issue interim rulings respecting the Rules, not previously the subject of an Interpretation of the Chief Measurer, provided that such interpretation shall be committed to writing following such event and submitted to the Chief Measurer for confirmation or variation as he shall see fit. Any such interim interpretation shall be binding and valid for the event for which it shall have been issued.
 - (c) carry out such additional responsibilities (as a member of the Executive of the District Association) as may be assigned to him.
 - (d) to make an annual report to the ILCA Chief Measurer on the measurement and inspection that has taken place in the year.
2. No person shall be nominated for the position of District Measurer unless he has displayed, to the satisfaction of the District Chairman and Sailing Secretary:
 - (a) a thorough appreciation of the Constitution of the Laser Class;
 - (b) an appreciation of the principles as set forth in Part 1 of the Rules;
 - (c) a thorough knowledge of the Rules, the Interpretations issued thereunder and the Measurement By-Law of the Class, including the ability to carry out measurements in accordance with the Measurement By-Law; and
 - (d) that he is a person who maintains his Laser in a condition which does not violate any of the Rules

of the Class and whose attitude towards the enforcement of the Rules has been and is likely to be, beyond reproach.

3. The position of District Measurer is limited to a two year period, after which the existing Measurer can be re-proposed or an alternative proposed by the District Chairman as set out in point 4 below.
4. The District Chairman, upon satisfying himself in respect of the items set forth in paragraph 2 above, shall submit the recommendation for the appointment of the District Measurer to the Executive Secretary of the World Council or the Regional Council.
5. The Executive Secretary shall forthwith communicate the recommendation to the Chief Measurer and shall confirm the appointment, following certification, if the same is approved.
6. District Measurers, with the approval of the District Chairman, may appoint assistant District Measurers from time to time, who meet the requirements of paragraph 2, for the purpose of attending a sanctioned or other event designated as requiring the presence of the District Measurer. Such appointment shall be for one specific event.

ILCA By-Law 5: Sanctioned Events and Honour Awards

SANCTIONED EVENTS

1. The following events shall be deemed to be Sanctioned Events for the purposes of the Constitution, the Rules and the By-Laws of the Association:
 - (a) World Championship events;
 - (b) Regional Championship events approved by the World Council, including the North American, European, Central & South American, Oceania and the Asian Championship, whether or not a Region has been established;
 - (c) Multi District events (other than district, regional or World Championship) including North American Midwinters, Canadian, US, Nordic, Australian and Middle East Championships;
 - (d) District Championship events, including District Womens' Championship, District Junior Championship;
 - (e) Such other events as may be designated by the World Council or a Regional Executive Committee, as the case may be.
2. Any Sanctioned Event shall be conducted in accordance with the provisions of the Racing By-Law.
3. Honour Awards and Trophies shall only be given if sufficient entries take part in each category in a regatta according to the following table:

5-9	Entries	1 award/cube
10-19	Entries	2 awards/cubes
20-29	Entries	3 awards/cubes
30-39	Entries	4 awards/cubes
40+	Entries	5 awards/cubes

HONOUR AWARDS

Sail Awards

4. Every member shall be entitled to apply to his sail the symbol earned by him racing in a Sanctioned Event, in accordance with the following schedule:

World Championships

Winner	3 Chevrons
Series 2nd & 3rd place finishers	2 Chevrons
Each daily 1st place finisher	1 Chevron
Series 4th & 5th place finishers	1 Chevron

Regional Championships

(which may be known as "Bar Events")

Winner	3 Bars
Series 2nd & 3rd place finishers	2 Bars
Each daily 1st place finisher	1 Bar
Series 4th & 5th place finishers	1 Bar

Multi District Events

(which may be known as "Medallion Events")

Winner	3 Medallions
Series 2nd & 3rd place finishers	2 Medallions
Each daily 1st place finisher	1 Medallion
Series 4th & 5th place finishers	1 Medallion

District Sanctioned Events

(which may be known as "Diamond Events")

Winner	3 Diamonds
Series 2nd & 3rd place finishers	2 Diamonds
Each daily 1st place finisher	1 Diamond
Series 4th & 5th place finishers	1 Diamond

5. A member may carry on his sail only one award, which shall be the highest award won at any time by such member; it being understood that the highest awards are Chevrons, Bars, Medallions and Diamonds in that order.
6. (a) The symbols representing the sail awards shall be glued on or sewn to each side of the sail in the third panel from the top of the sail, with the first award being placed in the uppermost position as specified in Schedule A.
- (b) The symbols shall be in red for events which are not restricted, green for events restricted to women, blue for events restricted to juniors, and light blue for events restricted to Masters (35 years and over). A Masters event may be split into 5 categories: 75 and Over (aged 75+), Great Grand Masters (aged 65-74), Grand Masters (aged 55-64), Masters (aged 45-54) and Apprentices (aged 35-44) in which case honour awards and cubes may be awarded for each category. The minimum number of entries in each age category (except Apprentices) at a Masters championship shall be 5. If there are fewer than the minimum number then those Masters shall be scored and eligible to win awards in the next lower age category. Determination of category for Masters shall be the age attained on the day before the first scheduled race of a regatta.

7. Sail awards shall be retroactive to all North American, European and District Championships organised at any time and publicised and known as such; and any dispute as to whether any event heretofore qualifies as a Regional or District event herein shall be settled by the World Council on application for interpretation made to the Executive Secretary.

Trophies

8. Every member shall be entitled to receive a Laser cube, in accordance with the following schedule:

World Championship

- Winner
Cube inscribed with 3 Chevrons
Series 2nd & 3rd place finishers
Cube inscribed with 2 Chevrons
Each daily 1st place finisher
Cube inscribed with 1 Chevron
Series 4th & 5th place finishers
Cube inscribed with 1 Chevron

Regional Events ("Bar Event")

- Winner
Cube inscribed with 3 Bars
Series 2nd & 3rd place finishers
Cube inscribed with 2 Bars
Series 4th & 5th place finishers
Cube inscribed with 1 Bar

Multi District Events ("Medallion Events")

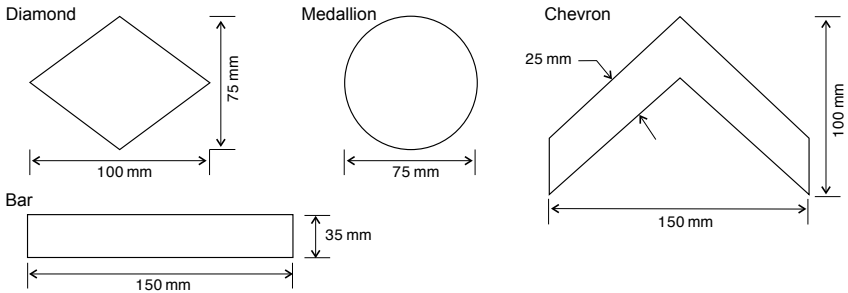
- Winner
Cube inscribed with 3 Medallions
Series 2nd & 3rd place finishers
Cube inscribed with 2 Medallions
Series 4th & 5th place finishers
Cube inscribed with 1 Medallion

District Events ("Diamond Events")

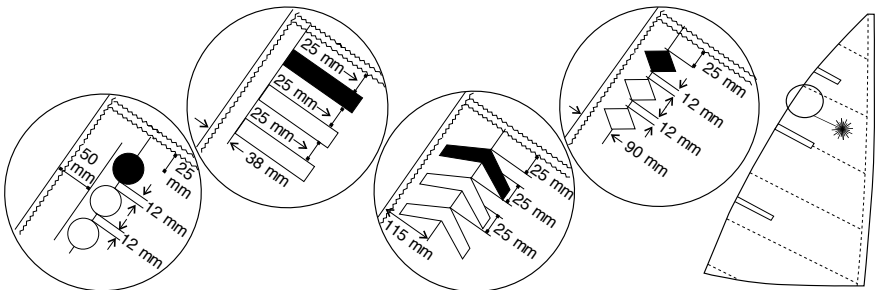
- Winner
Cube inscribed with 3 Diamonds
Series 2nd & 3rd place finishers
Cube inscribed with 2 Diamonds
Series 4th & 5th place finishers
Cube inscribed with 1 Diamond

9. Any member who has earned a Laser cube in any event to which paragraph 3 applies shall be entitled, if available, to order such cube upon application to the Executive Secretary with particulars of the event, time and location; provided that such application shall be certified by the District Sailing Secretary or the Race Committee Chairman of such event. The insurance of the retroactive trophies shall be at the expense of the person applying therefore; the cost of the cube shall be determined from time to time by the World Council.
10. In the event of the disposition of a sail, the person holding a sail award shall cause the same to be removed from the sail prior to such disposition.
11. The cubes referred to in paragraphs 7 and 8 may be changed in style and design from time to time by the World Council.

Size and Shape of Award Symbols



Schedule A: Position of Award Symbols



ILCA By-Law 6: Status and Dissolution

1. The Association is a non-profit organisation. All profit and surpluses shall be used to maintain or improve the Association's facilities and the objects of the Constitution.
2. No profit or surplus shall be distributed other than to another non-profit making body promoting international sailing on winding up or dissolution of the Association.
3. Dissolution shall be approved by each of:
 - (a) The World Council
 - (b) The Advisory Council
 - (c) At least two thirds of the membership replying in writing to the International Office of the class in response to a postal ballot published by the International Office. Only those postal votes returned to the International Office within 6 months of the date of publication of the proposal to dissolve the Association shall be valid.

ILCA By-Law 7: Postal Ballots

1. For the purposes of Constitution article 17 (c) and By-Law 1 (Rules) paragraph 31 (c) Postal Ballots may be published by any of:
 - (a) a printed document
 - (b) e-mail
 - (c) e-mail or a printed document and notice on the Association's website

2. Responses to a Postal Ballot shall be by returning the Postal Ballot Voting Form by letter, fax, e-mail or completing a designated web based Postal Ballot Voting Form.
3. When so designated by the World Council a Postal Ballot on a subject that relates only to members owning a specific rig shall be voted upon only by members owning the specified rig.

ILCA By-Law 8: Regional Championships

Organisation and Conduct of Regional (Continental) Championships

1. At least 18 months in advance of a Regional (Continental) Championship and before the dates, venue and notice of race of such a championship are published the venue and dates shall be submitted to the World Council for approval. Before giving such approval the World Council shall consider the requirements of this By-Law and any other aspect affecting the quality and fairness of the competition.
2. The sailing instructions shall be submitted to ILCA for approval 4 months before the date of the first race and shall follow the ILCA standard championship instructions.
3. A Laser District or International Measurer approved for the event by the ILCA Chief Measurer shall inspect boats at the championship prior to the start of racing using a check list and procedure prepared by the ILCA Chief Measurer.

Technical Tips

One of the great things about the Laser is it is instant sailing. It takes only a few minutes to rig and then you are out on the water. Here are some ideas to help make rigging and sailing even more simple.

How to change the hiking strap

The hiking strap connection to the front end of the cockpit is one of the most critical screwed joints in the boat. After all there is nothing worse than jumping out onto the new tack, in the heat of a race, and ending up head first in the drink!

So when changing a hiking strap here are some tips on how to avoid potential failures through stripped threads, broken screws or leaks:-

1. Do not use a power drill or power screwdriver – it is too easy to strip threads or misalign the screws.
2. Use a normal hand screwdriver.
3. When undoing the screws walk them out a turn or two at a time, first one, then the other.
4. When replacing the screws seal the threads with a silicone or polyurethane sealer and walk them in, a turn at a time, first one then the other.
5. When finally seating the screws be careful not to over torque. It is important to firmly torque with a hand screwdriver but that is sufficient.



When chartering a boat at a regatta please refer to the charter boat operator's policy on changing hiking straps.

Mast retention line (class rule 3(b) xi.)

The mast retention line is one of the most important lines on the boat. It must allow 180 degree rotation of the mast and at the same time keep the mast in the deck tube in the event of a capsize. It is important that the mast cannot move in and out of the tube by more than 50mm. A mast retention line with too much movement may result in the mast sliding most of the way out of the tube and then breaking through the side of the tube and the deck when the boat is righted after a capsize.

You will need 640mm of 5mm diameter line and a 15mm plastic stop ball. Core spectra line works well as it is low friction.

1. Tie a stop knot in one end of the line and thread the stop ball on to the line.
2. Pass the loop through the 2 eyes on the deck block plate (fig 1).
3. Tie a bowline in the other end of the line so that the overall length of the line from the end of the loop to ball is 570mm. The loop of the bowline should be just big enough to allow the stop ball to pass through the loop.
4. Take the loop end round the front of the mast and then behind the mast over the top of the mast boom vang attachment point and back to the front of the mast.
5. Take the ball end of the rope to the front of the mast and pass through the loop to secure (fig 2).



The retention line can be left on the boat through the deck block fitting so it does not get lost.

Reprinted from an article featured in LaserWorld January 2008.

Is Your Rudder Angle Correct?

At championships, measurers are often asked what angle the rudder should be set at, how this is measured and, if it is wrong, how it can be fixed. This article is intended to answer these questions.

Using a measuring gauge (fig 3), the angle is measured between the bottom edge of the rudder box and the front edge of the rudder blade.

So, if the front edge of the rudder exceeds 78 degrees, it is more vertical than it should be.

The sanctioned method (Rule 15(e) of the Laser Class Rules) to correct this is to wind plastic tape around the front lower rudder box spacer pin (fig 4).

Note: you are **not** allowed to add material to the front of the rudder to achieve the same effect.

If the rudder angle is significantly less than 78 degrees, you may cut away the rudder where it touches the spacing pin (see Rule 15(d)).

Be careful though, as just 1mm of cut away will result in about 1 degree of rudder movement.

You are always safer to make it slightly less than 78 degrees to allow for wear on the pivot bolt hole and the contact area to the spacing pin (fig 5).

With the recent availability of new fibreglass skinned rudders, both Performance Sailcraft Australia and Laser Performance inform us that the incidence of rudders being significantly below 78 degrees (in conjunction with a modern rudder head) is extremely low.

If required, the gel coat can be wet sanded to fine tune the angle.

However, sanding into the laminate will weaken the blade and is not advised.

Reprinted from an article by Technical Officer Clive Humphris, featured in LaserWorld March 2009.



Instructions for Applying Sail Numbers

PLEASE NOTE THE FOLLOWING DIAGRAMS ARE FOR INFORMATION AND ARE NOT PART OF THE CLASS RULES

Style and Colour

Only self-adhesive, stick on sail numbers and letters may be used. Each one shall be a single, solid colour, and easy to read. The last four numbers on both sides of the sail shall be the same dark colour, preferably black. The numbers in front of the last four shall all be another, obviously different colour, preferably red. National letters are only required at international events, and shall all be the same colour.

Preparation

If the sail is not new, it should be sponged clean with mild soapy water, rinsed and dried. Find a large, clean, flat, hard surface to work on, such as a table or clean wooden floor.

Template

Make a template that each number will just fit inside. See the **Positioning Diagrams** for the minimum sizes of numbers and letters, and template details. They are different for each of the Standard, Radial and 4.7 sails. The template is a rectangle for upright numbers, and a parallelogram for angled numbers.

Base Lines and Limit Lines

Use a pencil to lightly draw **Base Lines** and **Limit Lines** on the sail. The bottom of each number and letter must lie on a **Base Line**. The **Limit Line** is parallel to the leech of the sail, and 100mm from it. The closest letter or number to the leech is positioned to just touch the **Limit Line**. This is shown as the **Start Point** on the Positioning Diagrams. The number or letter should touch the **Limit Line** at the **Base Line** or at any other height, depending on its shape.

Starboard Side Numbers and National Letters

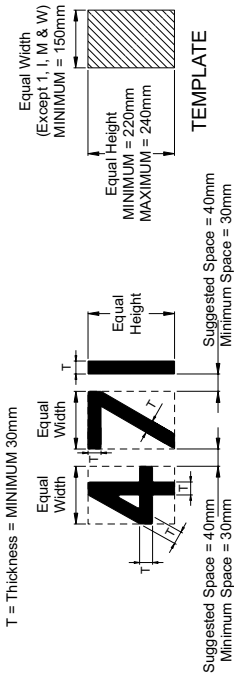
1. Spread the sail out flat on the working surface so that the starboard side of the sail is facing up. The leech (back edge of the sail) will be on the left hand side as shown in the positioning diagrams.
2. **Make sure you are using the correct diagram for the design of sail you are applying the numbers to.** Draw the **Base Line** and **Limit Line** for the starboard numbers (and letters) as shown on the positioning diagram.
3. Before peeling off the backing, place the bottom of the first number on the **Base Line**, with the Start Point touching the **Limit Line**. Use the template with its bottom edge on the **Base Line** to make sure the number is at the correct angle. Pencil around the outline of the number.
4. Peel and fold back about 10mm of the backing from the bottom of the number. Place the number within the pencil outline and press down to stick the peeled back area. Lift the remainder of the number and slowly peel off the backing as you smooth the number onto the sail, taking care to remove air bubbles and creases as you go.
5. If the first number you applied was a 1 (one), measure from the bottom right corner of it and mark a point the space width away along the **Base Line**. The space width is 60mm for Standard and Radial rig sails, and 40mm for 4.7 sails - see the appropriate Positioning Diagram. Place your template on the **Base Line** with its lower left corner on the new mark and pencil round the outline of it. Before peeling off the backing of the second number, place it within the pencil outline of the template. Pencil around the outline of the number, and apply it as in point 4, above.
6. If the first number you applied was not a 1 (one), place your template over it and make a pencil mark at the bottom right hand corner. Measure the space width from this mark along the Base Line and make a second pencil mark. Place the template, with its lower left hand corner on the second mark, pencil around the outline and then apply the next number as in point 4, above.
7. When a 1 (one) is to be applied after another number, make sure the appropriate space width between numbers along the **Base Line** is maintained, as shown in the positioning diagram. Use the bottom right hand corner of the template, placed over the preceding number to find the start of the space width on the **Base Line**.
8. Continue marking number positions using the template, the appropriate space widths between template corners, and applying numbers to complete the full sail number. Use the same method to apply national letters if they are required.

Port Side Numbers and National Letters

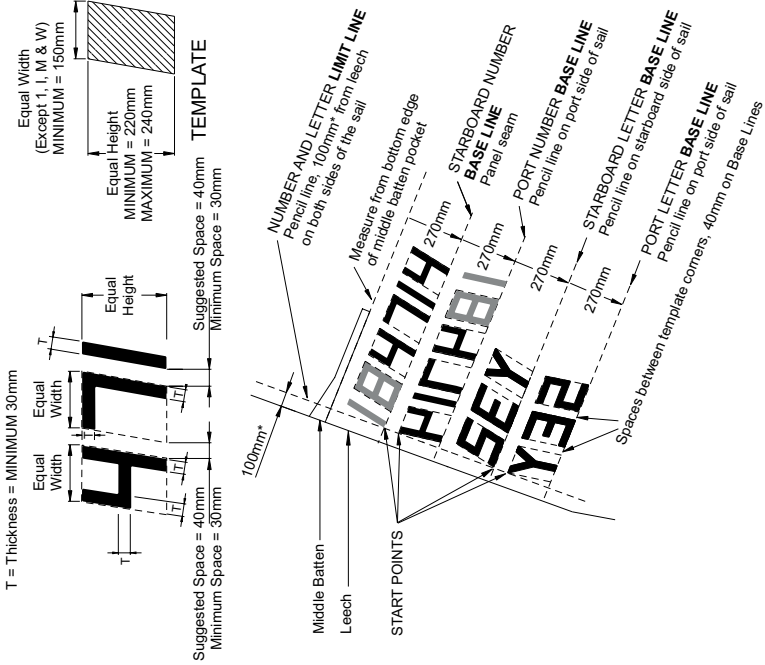
1. Spread the sail out flat on the working surface so that the port side of the sail is facing up. The leech (back edge of the sail) will be on the right hand side. Draw the **Base Line** for the port numbers (and letters).
2. Start with the letter or number closest to the leech making sure that no part of the number or letter crosses the 100mm **Limit Line** towards the leech. Follow the same method as for the starboard side of the sail, working along the **Base Line** away from the leech towards the luff.

4.7 SAIL NUMBER & LETTER SIZES AND POSITIONING

UPRIGHT NUMBERS AND LETTERS



ANGLED NUMBERS AND LETTERS



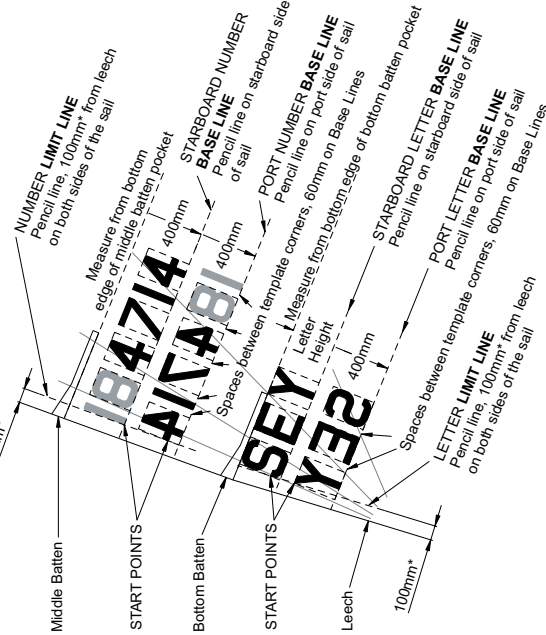
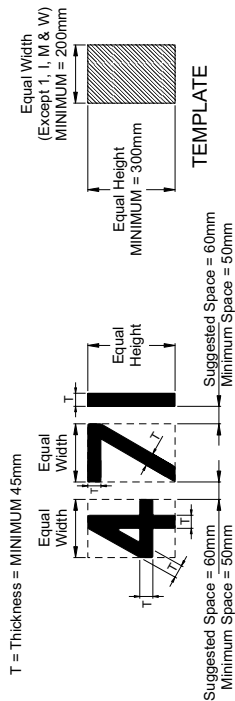
1. MINIMUM SPACE BETWEEN NUMBERS AND LETTERS IN THE CLASS RULES IS 30mm. SO USE 40mm TO ENSURE THAT ANY SMALL ERRORS IN POSITION ARE STILL LEGAL.
2. LAST FOUR DIGITS OF SAIL NUMBER TO BE ONE DARK, DISTINCTIVE COLOUR OR BLACK. PRECEDING DIGITS TO BE A DIFFERENT, CONTRASTING, DISTINCTIVE COLOUR, PREFERABLY RED. ALL NATIONAL LETTERS TO BE ONE COLOUR. THEY MAY BE ONE OF THE COLOURS OF THE SAIL NUMBER DIGITS OR ANOTHER DISTINCTIVE COLOUR.

* CLOSEST POINT OF LETTER OR NUMBER SHOULD BE 100mm FROM LEECH, WITH TOLERANCE +/- 12 mm.

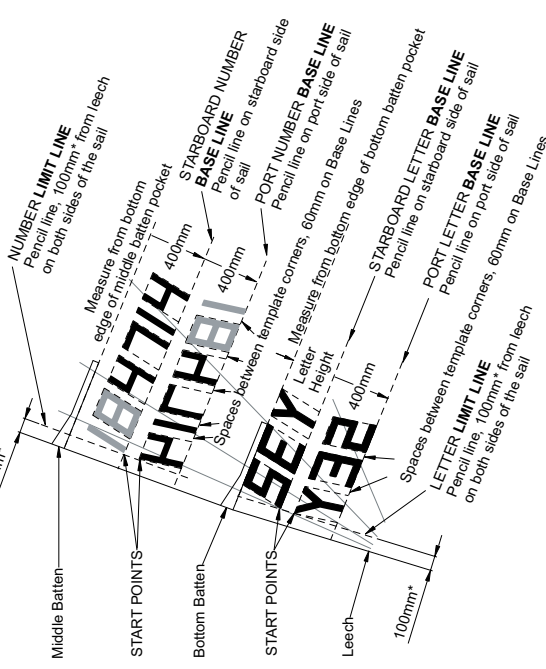
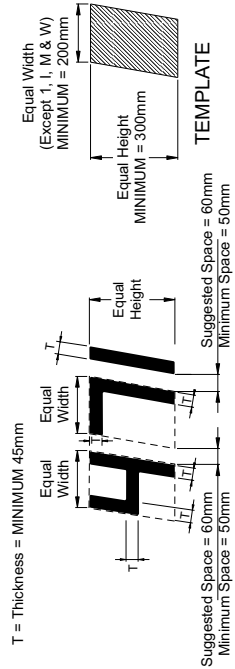
PLEASE NOTE DIAGRAMS ARE NOT PART OF THE CLASS RULES

RADIAL SAIL NUMBER & LETTER SIZES AND POSITIONING

UPRIGHT NUMBERS AND LETTERS



ANGLED NUMBERS AND LETTERS



1. MINIMUM SPACE BETWEEN NUMBERS AND LETTERS IN THE CLASS RULES IS 50mm, SO USE 60mm TO ENSURE THAT ANY SMALL ERRORS IN POSITION ARE STILL LEGAL.
2. LAST FOUR DIGITS OF SAIL NUMBER TO BE ONE DARK, DISTINCTIVE COLOUR OR BLACK, PRECEDING DIGITS TO BE A DIFFERENT, CONTRASTING, DISTINCTIVE COLOUR, PREFERABLY RED. ALL NATIONAL LETTERS TO BE ONE COLOUR. THEY MAY BE ONE OF THE COLOURS OF THE SAIL NUMBER DIGIT'S OR ANOTHER DISTINCTIVE COLOUR.

* CLOSEST POINT OF LETTER OR NUMBER SHOULD BE 100mm FROM LEECH, WITH TOLERANCE +/- 12 mm.

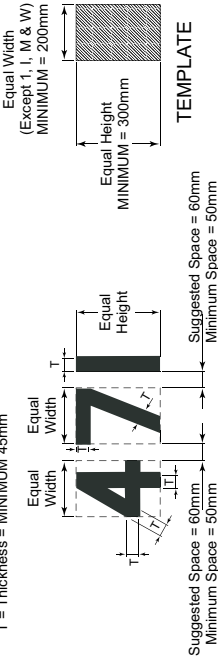
PLEASE NOTE DIAGRAMS ARE NOT PART OF THE CLASS RULES

STANDARD MKII (BI-RADIAL CUT) SAIL NUMBER & LETTER SIZES AND POSITIONING

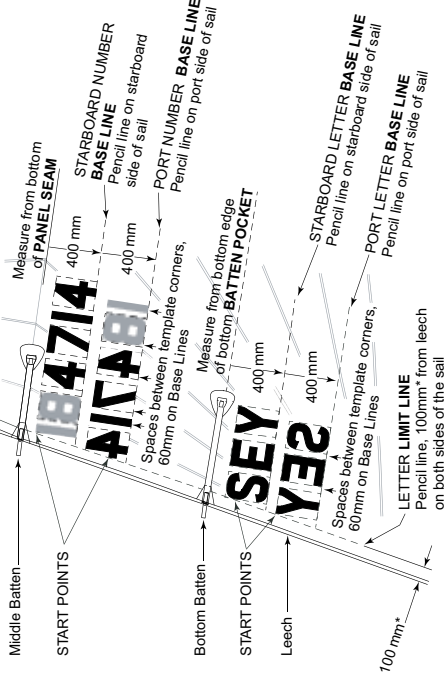
November 2017 Edition

UPRIGHT NUMBERS AND LETTERS

T = Thickness = MINIMUM 45mm

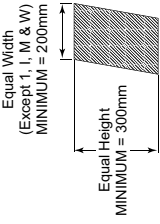


NUMBER LIMIT LINE
Pencil line, 100mm* from leech
on both sides of the sail



1. MINIMUM SPACE BETWEEN NUMBERS AND LETTERS IN THE CLASS RULES IS 60mm. SO USE 60mm TO ENSURE THAT ANY SMALL ERRORS IN POSITION ARE STILL LEGAL.
 2. LAST FOUR DIGITS OF SAIL NUMBER TO BE ONE DARK; DISTINCTIVE COLOUR OR BLACK; PRECEDING DIGITS TO BE A DIFFERENT, CONTRASTING, DISTINCTIVE COLOUR, PREFERABLY RED. ALL NATIONAL LETTERS TO BE ONE COLOUR. THEY MAY BE ONE OF THE COLOURS OF THE SAIL NUMBER DIGITS OR ANOTHER DISTINCTIVE COLOUR.
- * CLOSEST POINT OF LETTER OR NUMBER SHOULD BE 100mm FROM LEECH, WITH TOLERANCE +/- 12 mm.

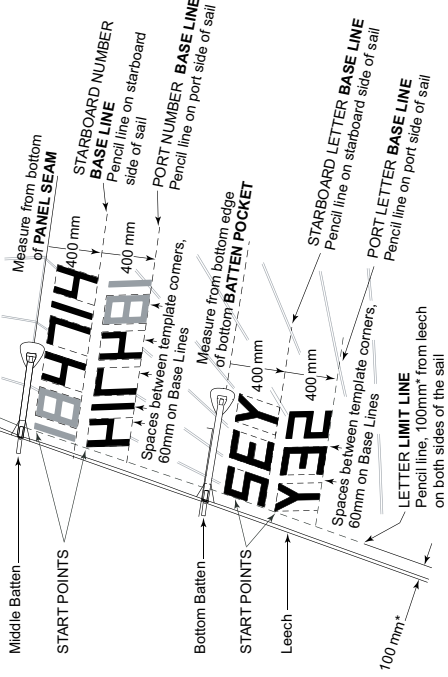
PLEASE NOTE DIAGRAMS ARE NOT PART OF THE CLASS RULES



TEMPLATE

Suggested Space = 60mm
Minimum Space = 50mm

NUMBER LIMIT LINE
Pencil line, 100mm* from leech
on both sides of the sail



November 2017 Edition

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STANDARD MKI (CROSS-CUT) NUMBER & LETTER SIZES AND POSITIONING

UPRIGHT NUMBERS AND LETTERS

T = Thickness = MINIMUM 45mm

ANGLED NUMBERS AND LETTERS

T = Thickness = MINIMUM 45mm

1. MINIMUM SPACE BETWEEN NUMBERS AND LETTERS IN THE CLASS RULES IS 50mm, SO USE 60mm TO ENSURE THAT ANY SMALL ERRORS IN POSITION ARE STILL LEGAL.
2. LAST FOUR DIGITS OF SAIL NUMBER TO BE ONE DARK, DISTINCTIVE COLOUR OR BLACK, PRECEDING DIGITS TO BE A DIFFERENT, CONTRASTING, DISTINCTIVE, COLOUR, PREFERABLY RED. ALL NATIONAL LETTERS TO BE ONE COLOUR. THEY MAY BE ONE OF THE COLOURS OF THE SAIL NUMBER DIGITS OR ANOTHER DISTINCTIVE COLOUR.

• CLOSEST POINT OF LETTER OR NUMBER SHOULD BE 100mm FROM LEECH, WITH TOLERANCE +/- 12 mm.

PLEASE NOTE DIAGRAMS ARE NOT PART OF THE CLASS RULES

55

World Championship Archives

Before 1997, ILCA did not hold separate Radial or Youth Worlds. Except in 1980, entry to the Senior Worlds (Standard Rig) was restricted.

OLYMPIC GAMES

2016 Rio, Brazil
Standard
Countries 46
 1st Tom Burton AUS
 2nd Tonci Stipanovic CRO
 3rd Sam Meech NZL
 4th Robert Scheidt BRA
 5th Jean Baptiste Bernaz FRA
Radial
Countries 37
 1st Marit Bouwmeester NED
 2nd Annaliese Murphy IRL
 3rd Anne-Marie Rindom DEN
 4th Evi Van Acker BEL
 5th Tuula Tenkanen FIN

2012 London, UK
Standard
Countries 49
 1st Tom Slingsby AUS
 2nd Pavlos Kontides CYP
 3rd Rasmus Mygren SWE
 4th Tonci Stipanovic CRO
 5th Andrew Murdoch NZL
Radial
Countries 41
 1st Lijia Xu CHN
 2nd Marit Bouwmeester NED
 3rd Evi Van Acker BEL
 4th Annaliese Murphy IRL
 5th Alison Young GBR

2008 Beijing, CHN
Standard
Countries 43
 1st Paul Goodison GBR
 2nd Vasilij Zbogor SLO
 3rd Diego Romero ITA
 4th Gustavo Lima POR
 5th Andrew Murdoch NZL
Radial
Countries 28
 1st Anna Tunnicliffe USA
 2nd Gintare Volungeviciute LTU
 3rd Lijia Xu CHN
 4th Sarah Blanck AUS
 5th Sarah Steyaert FRA

2004 Athens, GRE
Standard
Countries 42
 1st Robert Scheidt BRA
 2nd Andreas Geritzer AUT
 3rd Vasilij Zbogor SLO
 4th Paul Goodison GBR
 5th Gustavo Lima POR

2000 Sydney, AUS
Standard
Countries 43
 1st Ben Ainslie GBR
 2nd Robert Scheidt BRA
 3rd Michael Blackburn AUS
 4th Serge Kats NED
 5th Andreas Geritzer AUT

1996 Savannah, USA
Standard
Countries 56
 1st Robert Scheidt BRA
 2nd Ben Ainslie GBR
 3rd Peer Moberg NOR
 4th Michael Blackburn AUS
 5th Stefan Warkalla GER

WORLD CHAMPIONSHIPS

2019 Sakaiminato-City, JPN
Open: Standard
Entries 158 Countries 57
 1st Tom Burton AUS
 2nd Matthew Wearn AUS
 3rd George Gautrey NZL
 4th Sam Meech NZL
 5th Nick Thompson GBR
Women: Radial
Entries 111 Countries 49
 1st Lucia Falasca ARG
 2nd Elyse Ainsworth AUS
 3rd Anne Eastgate AUS
 4th Cassie Imeneo AUS
 5th Mara Stransky AUS

Men: Radial
Entries 32 Countries 5
 1st Mark Louis AUS
 2nd Zac West POL
 3rd Jan Heuinck NOR
 4th Simon de Gendt AUS
 5th Guilherme Perez POL

2019 Kingston, CAN
Youth Men: Radial
Entries 161 Countries 30
 1st Yigit Yalcin Citak TUR
 2nd Aimiianos Monos GRE
 3rd Michael Compton AUS
 4th Piotr Malinowski POL
 5th Tom Higgins IRL
Youth Women: Radial
Entries 48 Countries 13
 1st Matilda Nicholls GBR
 2nd Paige Caldecoat AUS
 3rd Eve McMahon IRL
 4th Sophia Montgomery THA
 5th Clare Gorman IRL

U18 Men: 4.7
Entries 121 Countries 33
 1st Toby Coote AUS
 2nd Oliver Gordon AUS
 3rd Ian Louis AUS
 4th Xavier McLachlan AUS
 5th Charles Smith AUS

U18 Women: 4.7
Entries 64 Countries 20
 1st Mia Lovelady AUS
 2nd Evie Saunders AUS
 3rd Bayley Taylor AUS
 4th Livi Allen CAN
 5th Annaliese Balasubramanian CAN

2019 Split, CRO
U21: Standard
Entries 146 Countries 42
 1st Juan Pablo Cardozo ARG
 2nd Clemente Seguel Lacámarach CHI
 3rd Vishnu Saravanan IND
 4th Yoshihiro Suzuki JPN
 5th Yigit Yalcin Citak TUR
U21: Radial Women
Entries 71 Countries 31
 1st Wiktorija Golebiewska POL
 2nd Valeria Lomatchenko RUS
 3rd Maria Kisilukhina RUS
 4th Chiara Benini Floriani ITA
 5th Mara Stransky AUS

2018 Aarhus, DEN
Open: Standard
Entries 165 Countries 66
 1st Pavlos Kontides CYP
 2nd Matthew Wearn AUS
 3rd Philipp Buhl GER
 4th Sam Meech NZL
 5th Elliot Hanson GBR
Women: Radial
Entries 119 Countries 53
 1st Emma Plasschaert BEL
 2nd Marit Bouwmeester NED
 3rd Anne-Marie Rindom DEN
 4th Monika Mikkola FIN
 5th Paige Railey USA

2018 Kiel, GER
Men: Radial
Entries 94 Countries 26
 1st Zac Littlewood AUS
 2nd Aleksandar Arián POL
 3rd Caelin Winchcombe AUS
 4th Uffe Tomasgaard NOR
 5th Marcin Rudawski POL
Youth Men: Radial
Entries 373 Countries 45
 1st Guido Gallinaro ITA
 2nd Josh Armit NZL
 3rd Francesco Viel ITA
 4th Uffe Tomasgaard NOR
 5th Rodolfo Silvestrini ITA

Youth Women: Radial
Entries 101 Countries 29
 1st Matilda Talluri ITA
 2nd Matilda Nicholls GBR
 3rd Ana Moncada Sanchez ESP
 4th Julia Büsselberg GER
 5th Lillian Myers USA
2018 Gdynia, POL
U21: Standard
Entries 140 Countries 41
 1st Philipp Loewe GER
 2nd Max Wilken GER
 3rd Liam Glynn IRL
 4th Jonatan Vadnai HUN
 5th Holey Marshall USA
U21: Women
Entries 73 Countries 30
 1st Anna Munch DEN
 2nd Carolina Albano ITA
 3rd Elyse Ainsworth AUS
 4th Dolores Moreira URU
 5th Zoe Thompson AUS

U18 Men: 4.7
Entries 280 Countries 42
 1st Daniel Hung SGP
 2nd Michael Compton AUS
 3rd Stefano Viale PER
 4th Wonn Key Lee SGP
 5th Theo Peyre FRA
U18 Women: 4.7
Entries 158 Countries 35
 1st Chiara Benini Floriani ITA
 2nd Simone Chen SGP
 3rd Gloria Cingolani ITA
 4th Ine Verstraelen BEL
 5th Marissa Ijben NED

2017 Split, CRO
Open: Standard
Entries 148 Countries 52
 1st Pavlos Kontides CYP
 2nd Tom Burton AUS
 3rd Matthew Wearn AUS
 4th Philipp Buhl GER
 5th Jesper Stalheim SWE
2017 Medemblik, NED
Women: Radial
Entries 99 Countries 40
 1st Marit Bouwmeester NED
 2nd Evi Van Acker BEL
 3rd Manami Doi JPN
 4th Mathilde De Kerangat FRA
 5th Brenda Bowskill CAN
Men: Radial
Entries 65 Countries 28
 1st Marcin Rudawski POL
 2nd Eliot Merceron SUI
 3rd Zac Littlewood AUS
 4th Maxime Mazarod FRA
 5th Daniil Krutskikh RUS

Youth Men: Radial
Entries 281 Countries 44
 1st Dimitris Papadimitriou GRE
 2nd Matias Dietrich ARG
 3rd Nicholas Bezy HKG
 4th Josh Armit NZL
 5th Alexandre Boile FRA
Youth Women: Radial
Entries 110 Countries 32
 1st Hannah Anderssohn GER
 2nd Dolores Moreira Frasinchi URU
 3rd Charlotte Rose USA
 4th Emma Savelson NED
 5th Laura Schewe GER

2017 Nieuwpoort, BEL
U21: Standard
Entries 125 Countries 41
 1st Joel Rodriguez Perez ESP
 2nd Jonatan Vadnai HUN
 3rd Daniel Whiteley GBR
 4th Jack Cookson GBR
 5th Sam Whaley GBR

U21: Radial Women
Entries 66 Countries 27
 1st Mária Erdi HUN
 2nd Hannah Anderssohn GER
 3rd Magdalena Kwaska POL
 4th Luisa Cervera FRA
 5th Dolores Moreira Frasinchi ITA

U18 Men: 4.7
Entries 235 Countries 43
 1st Yiikan Timursah TUR
 2nd Sofiane Karim FRA
 3rd Cesare Barabino ITA
 4th Pere Ponseti Mesquida ESP
 5th Finn O'Dea AUS
U18 Women: 4.7
Entries 115 Countries 30
 1st Federica Cattarozzi ITA
 2nd Giorgia Cingolani ITA
 3rd Ana Moncada Sanchez ESP
 4th Julia Büsselberg GER
 5th Shai Kakon ISR

2016 Nuevo Vallarta, MEX
Open: Standard
Entries 113 Countries 44
 1st Nick Thompson GBR
 2nd Jean-Baptiste Bernaz FRA
 3rd Rutger Van Schaardenburg NED
 4th Matthew Wearn AUS
 5th Marco Gallo ITA
Women: Radial
Entries 72 Countries 32
 1st Alison Young GBR
 2nd Paige Railey USA
 3rd Ann-Marie Rindom DEN
 4th Marit Bouwmeester NED
 5th Gintare Volungeviciute LTU

2016 Dun Laoghaire, IRL
Men: Radial
Entries 42 Countries 18
 1st Marcin Rudawski POL
 2nd Nik Pletikos SLO
 3rd Martin Manzoli Lowy BRA
 4th Darragh O'Sullivan IRL
 5th Jack Marshall USA
Youth Men: Radial
Entries 231 Countries 42
 1st Henry Marshall USA
 2nd Ewan McMahoon IRL
 3rd Bertan Chin SIN
 4th Daniel Whiteley GBR
 5th Finnian Alexander AUS
Youth Women: Radial
Entries 76 Countries 25
 1st Zoe Thomsson AUS
 2nd Caroline Rosmo NOR
 3rd Luisa Cervera FRA
 4th Sophia Reineke USA
 5th Carolina Albano ITA

2016 Kiel, GER
U21: Standard
Entries 147 Countries 38
 1st Jonatan Vadnai HUN
 2nd Joel Rodriguez ESP
 3rd Nik Aaron William GER
 4th Santiago Sampaio POR
 5th Nicolo' Villa ITA
U21: Radial Women
Entries 59 Countries 39
 1st Monika Mikkola FIN
 2nd Vasileia Karachaliou GRE
 3rd Maité Carlier BEL
 4th Valentina Balbi ITA
 5th Maud Jayet SUI

U18 Men: 4.7
Entries 262 Countries 38
 1st Dimitrios Papadimitriou GRE
 2nd Guido Gallinaro ITA
 3rd Pere Ponseti ESP

4th Uffe Tomasgaard..... NOR
 5th Andrey De Oliveira Godoy BRA
U18 Women: 4.7
 Entries 127 Countries 32
 1st Emma Savelon..... NED
 2nd Mariia Kisliukhina..... RUS
 3rd Elisa Navoni..... ITA
 4th Federica Cattarozzi..... ITA
 5th Juli Baruch..... ISR

2015 Kingston, CAN
Open: Standard
 Entries 158 Countries 62
 1st Nick Thompson..... GBR
 2nd Philipp Buhl..... GER
 3rd Tom Burton..... AUS
 4th Juan Ignacio Maegli..... GUA
 5th Matthew Wearn..... AUS

Youth Men: Radial
 Entries 142 Countries 34
 1st Conor Nicholas..... AUS
 2nd Gianmarco Planchestainer ITA
 3rd Nic Baird..... USA
 4th Paolo Giargia..... ITA
 5th Umberto Jose Varbaro ITA

Youth Women: Radial
 Entries 53 Countries 20
 1st Maria Erdi..... HUN
 2nd Dolores Moreira..... URU
 3rd Magdalena Kwaska..... POL
 4th Francesca Bergamo..... ITA
 5th Carolina Albano..... ITA

2015 Al Mussanah City, OMA
Women: Radial
 Entries 100 Countries 49
 1st Ann-Marie Rindom..... DEN
 2nd Marit Bouwmeester..... NED
 3rd Evi Van Acker..... BEL
 4th Tuula Tenkanen..... FIN
 5th Josefina Olsson..... SWE

2015 Aarhus, DEN
Men: Radial
 Entries 75 Countries 21
 1st Marcin Rudawski..... POL
 2nd Matthias Van De Look..... BEL
 3rd Zan Luka Zelko..... SLO
 4th Patrick Dopping..... DEN
 5th Mon Cañellas Salas..... ESP

2015 Medemblik, NED
U21: Standard
 Entries 155 Countries 42
 1st Joel Rodriguez..... ESP
 2nd Michael Beckett..... GBR
 3rd Benjamin Vadvnai..... HUN
 4th Finn Lynch..... IRL
 5th Jonatan Vadvnai..... HUN

U21: Radial Women
 Entries 74 Countries 33
 1st Maxime Jonker..... NED
 2nd Line Flem Host..... NOR
 3rd Monika Mikkola..... FIN
 4th Dewi Cokkova..... NED
 5th Martina Reino Cacho..... ESP

U18 Men: 4.7
 Entries 257 Countries 36
 1st A. Bethencourt Fuentes ESP
 2nd Rafael De La Hoz Tuells ESP
 3rd Guido Gallinaro..... ITA
 4th Toygar Elmzas..... TUR
 5th Alberto Tezza..... ITA

U18 Women: 4.7
 Entries 127 Countries 29
 1st Katerina Gumenko..... UKR
 2nd Julia Büßelberg..... GER
 3rd Isaura Maenhaut..... BEL
 4th Lin Pletikos..... SLO
 5th Federica Cattarozzi..... ITA

2014 Santander, ESP
Open: Standard
 Entries 147 Countries 69
 1st Nicholas Heiner..... NED
 2nd Tom Burton..... AUS
 3rd Nick Thompson..... GBR
 4th Philipp Buhl..... GER
 5th Robert Scheidt..... BRA

2014 Santander, ESP
Women: Radial
 Entries 120 Countries 55
 1st Marit Bouwmeester..... NED
 2nd Josefina Olsson..... SWE
 3rd Evi Van Acker..... BEL
 4th Tuula Tenkanen..... FIN
 5th Veronika K. Fenclova..... CZE

2014 Dziwnow, POL
Men: Radial
 Entries 76 Countries 22
 1st Stelmazyk Jonasz..... POL
 2nd Marcin Rudawski..... POL
 3rd William De smet..... BEL
 4th Tristan Brown..... AUS
 5th Martis Pjarskas..... LTU

Youth Men: Radial
 Entries 159 Countries 31
 1st Joel Rodriguez..... ESP
 2nd Nik Willim..... GER
 3rd Benjamin Wempe..... NED
 4th Nicol Villa..... ITA
 5th Jonatan Vadvnai..... HUN

Youth Women: Radial
 Entries 81 Countries 27
 1st Monika Mikkola..... FIN
 2nd Maria Erdi..... HUN
 3rd Maite Carlier..... BEL
 4th Magdalena Kwaska..... POL
 5th Maud Jayet..... SUI

2014 Douarnenez, FRA
U21: Standard
 Entries 105 Countries 33
 1st Lorenzo Chiavarini..... GBR
 2nd Hermann Tomasgaard..... NOR
 3rd Stefano Pescierha..... PER
 4th Finn Lynch..... IRL
 5th Joao Vinuto de Oliveira BRA

U21: Radial Women
 Entries 57 Countries 23
 1st Agata Barwinska..... POL
 2nd Daphne Van der Vaart..... NED
 3rd Martina Reino Cacho..... ESP
 4th Martha Faraguna..... ITA
 5th Joyce Florida..... ITA

2014 Karatsu, JPN
U18 Men: 4.7
 Entries 66 Countries 21
 1st Alexandre Boite..... FRA
 2nd Ismael Less..... ESP
 3rd Paolo Mavricic..... CRO
 4th Federico Fornasari..... ITA
 5th Kaito Iwaki..... JPN

U18 Women: 4.7
 Entries 37 Countries 15
 1st Asya Luvisetto..... SUI
 2nd Irene Miras Leung..... ESP
 3rd Francesca Bergamo..... ITA
 4th Maria Rochelli..... ITA
 5th Mariia Kisliukhina..... RUS

2013 Al Mussannah, OMA
Open: Standard
 Entries 112 Countries 38
 1st Robert Scheidt..... BRA
 2nd Pavlos Kontides..... CYP
 3rd Philipp Buhl..... GER
 4th Rutger Schaardenburg NED
 5th Jesper Stalheim..... SWE

2013 Rizhao City, CHN
Women: Radial
 Entries 76 Countries 31
 1st Tina Mihelic..... CRO
 2nd Tuula Tenkanen..... FIN
 3rd Paige Railey..... USA
 4th Dongshuang Zhang..... CHN
 5th Sarah Gunn..... DEN

2013 Dun Laoghaire, IRL
Men: Radial
 Entries 95 Countries 25
 1st Tristan Brown..... AUS
 2nd Marcin Rudawski..... POL
 3rd Finn Lynch..... IRL
 4th Juan Cabrera Gonzales ESP
 5th Sebastian Schneider..... ESP

2013 Al Musannah, OMA
Youth Men: Radial
 Entries 51 Countries 22
 1st Benjamin Vadvnai..... HUN
 2nd Gianmarco Planchestainer ITA
 3rd Sebastian Schneider..... SUI
 4th Ryan Lo..... SIN
 5th Jonatan Vadvnai..... HUN

Youth Women: Radial
 Entries 28 Countries 17
 1st Monika Mikkola..... FIN
 2nd Celine Therese Herud..... NOR
 3rd Line Flem Host..... NOR
 4th Jillian Lee..... SIN
 5th Agata Barwinska..... POL

2013 Balatonfured, HUN
U21: Standard
 Entries 138 Countries 34
 1st Mitchell Kennedy..... AUS
 2nd Hermann Tomasgaard..... NOR
 3rd Francesco Marrai..... ITA
 4th Lorenzo Chiavarini..... GBR
 5th Giovanni Coccoluto..... ITA

U21: Radial Women
 Entries 96 Countries 32
 1st Svenja Weger..... GER
 2nd Niki Blassar..... FIN
 3rd Claretta Tempesti..... ITA
 4th Manami Doi..... JPN
 5th Kim Pletikos..... SLO

U18 Men: 4.7
 Entries 239 Countries 46
 1st Anil Cetin..... TUR
 2nd Jonatan Vadvnai..... HUN
 3rd Conor Nicholas..... AUS
 4th Gianmarco Planchestainer ITA
 5th Sergio Silva..... PER

U18 Women: 4.7
 Entries 130 Countries 33
 1st Silvia Morales Gonzalez ESP
 2nd Magdalena Kwaska..... POL
 3rd Sofia Caparuccini..... ITA
 4th Alba Elejabaiter..... ESP
 5th Jose Maria Marichal..... ESP

2012 Boltenhagen, GER
Open: Standard
 Entries 169 Countries 62
 1st Tom Slingsby..... AUS
 2nd Tonci Stanovic..... CRO
 3rd Andrew Maloney..... NZL
 4th Juan Maegi..... GUA
 5th Tom Burton..... AUS

2012 Boltenhagen, GER
Women: Radial
 Entries 136 Countries 53
 1st Gintare Scheidt..... LTU
 2nd Lijia Xu..... CHN
 3rd Sari Muttala..... FIN
 4th Alison Young..... GBR
 5th Marit Bouwmeester..... NED

2012 Buenos Aires, ARG
U21: Standard
 Entries 29 Countries 19
 1st Giovanni Coccoluto..... ITA
 2nd Stig Steinfurth..... DEN
 3rd Aleksander Arian..... POL
 4th Juan Ignacio Biava..... ARG
 5th Ignasi Lopez Carcaré..... ESP

2012 Brisbane, AUS
Men: Radial
 Entries 54 Countries 9
 1st Tristan Brown..... AUS
 2nd Matthew Wearn..... AUS
 3rd Jeremy O'Connell..... NZL
 4th Mahia Pepper..... AUS
 5th Daniel Smith..... AUS

Youth Men: Radial
 Entries 71 Countries 11
 1st Hermann Tomasgaard..... NOR
 2nd Andrew McKenzie..... NZL
 3rd Mitchell Kiss..... USA
 4th Maxim Nikolave..... PUR
 5th Juan Carlos Perdomo..... RUS

Youth Women: Radial
 Entries 35 Countries 19
 1st Maxime Jonker..... NED
 2nd Madison Kennedy..... AUS
 3rd Georgina Povall..... GBR
 4th Milly Bennett..... AUS
 5th Anna Phillip..... AUS

2012 Buenos Aires, ARG
U18 Men: 4.7
 Entries 71 Countries 25
 1st Benjamin Vadvnai..... HUN
 2nd Nahuel Rodriguez Pérez ESP
 3rd Maximilian Kuester..... ITA
 4th Jacopo Fanti..... ITA
 5th Raul Sanchez Lago..... ESP

U16 Men: 4.7
 Entries 20 Countries 12
 1st Joel Rodriguez Pérez..... ESP
 2nd Malone Chao Jie Pun..... SIN
 3rd Luka Tosic..... SRB
 4th Liam McCarthy..... USA
 5th Francisco Guaragna..... ARG

U18 Women: 4.7
 Entries 46 Countries 17
 1st Celine Therese Herud..... NOR
 2nd Yolanda Luque Gonzalez ESP
 3rd Anja Hamerlitz..... CRO

4th Julia Silva..... BRA
 5th Martina Reino Cacho..... ESP
U16 Women: 4.7
 Entries 12 Countries 7
 1st Maria C. K. Boabaid..... BRA
 2nd Natalia A. S. Barriga..... ESP
 3rd Jacinta Ainsworth..... AUS
 4th Daniela Cardozo..... ARG
 5th Kana Hayashi..... JPN

2011 Perth, AUS
Open: Standard
 Entries 145 Countries 66
 1st Tom Slingsby..... AUS
 2nd Simon Groteluschen..... GER
 3rd Nick Thompson..... GBR
 4th Andreas Gertner..... AUT
 5th Paul Goodison..... GBR

Women: Radial
 Entries 102 Countries 51
 1st Marit Bouwmeester..... NED
 2nd Evi Van Acker..... BEL
 3rd Paige Railey..... USA
 4th Veronika Fenclova..... CZE
 5th Gintare Volungeviciute LTU

2011 La Rochelle, FRA
U21: Standard
 Entries 151 Countries 40
 1st Sam Meech..... NZL
 2nd Alex Mills-Barton..... GBR
 3rd Martin Evans..... GBR
 4th Ki-Raphael Sulkowski..... AUS
 5th Francesco Marrai..... ITA

2011 La Rochelle, FRA
Men: Radial
 Entries 135 Countries 35
 1st Marcin Rudawski..... POL
 2nd James Burman..... AUS
 3rd Yuri Hummel..... NED
 4th Tristan Brown..... AUS
 5th Juan Carlos Perdomo..... PUR

Youth Men: Radial
 Entries 277 Countries 42
 1st Giovanni Coccoluto..... ITA
 2nd Elliot Hanson..... GBR
 3rd Eliot Mercerot..... FRA
 4th Mitchell Kisk..... USA
 5th Tommaso Centonze..... ITA

Youth Women: Radial
 Entries 101 Countries 27
 1st Erika Reineke..... USA
 2nd Oren Jacob..... ISR
 3rd Sandy Fauthoux..... FRA
 4th Paulina Czubachowska POL
 5th Manami Doi..... JPN

2011 San Francisco, USA
U18 Men: 4.7
 Entries 112 Countries 28
 1st Francisco Gonzalez S. ESP
 2nd Carlos Rosello..... ESP
 3rd William de Smet..... BEL
 4th Keiju Okada..... JPN
 5th Mehmet Turkmen..... TUR

U16 Men: 4.7
 Entries 39 Countries 22
 1st Nils Theuninck..... SUI
 2nd Anthony Parke..... GBR
 3rd Martin Low..... BRA
 4th Nicholas Connor..... AUS
 5th Trent Rippey..... NZL

U18 Women: 4.7
 Entries 53 Countries 19
 1st Cecilia Zorzi..... ITA
 2nd Kim Pletikos..... SLO
 3rd Line Flem Host..... NOR
 4th Celine Therese Herud..... NOR
 5th Maud Jayet..... SUI

U16 Women: 4.7
 Entries 12 Countries 8
 1st Maud Jayet..... SUI
 2nd Athanasia Fakidi..... GRE
 3rd Vasileia Karachaliou..... GRE
 4th Savannah Siew K. Hui..... SIN
 5th Marine V.Campenhoudt SUI

2010 Hayling Island, GBR
Open: Standard
 Entries 160 Countries 53
 1st Tom Slingsby..... AUS
 2nd Nick Thompson..... GBR
 3rd Andrew Murdoch..... NZL
 4th Julio Alsogaray..... ARG
 5th Pavlos Kontides..... CYP

3rd Alex Mills-Barton GBR	4th Guillermo Arce PER	4th Anne Haeger USA	4th Antonios Tzortzis GRE
4th Kacper Ziemiński POL	5th Tono Alcazar ESP	5th Mathilde de Kerangat FRA	5th James Burman AUS
5th Filip Jurisic CRO			
2010 Larqs, GBR			
Women: Radial			
Entries 117 Countries 41			
1st Sari Multala FIN			
2nd Marit Bouwmeester NED			
3rd Paige Rayley USA			
4th Sarah Stroyz FRA			
5th Tatiana Drozdovskaya BLR			
Men: Radial			
Entries 103 Countries 31			
1st Marcin Rudawski POL			
2nd Wojciech Zemke POL			
3rd Mitchell Kiss USA			
4th Ben Koppelaar NED			
5th Insub Kim KOR			
Youth Men: Radial			
Entries 228 Countries 41			
1st Giovanni Coccolato ITA			
2nd Tadesuz Kubiak POL			
3rd Luca Antognoni ITA			
4th Stefano Mazzaferro BRA			
5th Mitchell Kiss USA			
Youth Women: Radial			
Entries 91 Countries 26			
1st Erika Reineke USA			
2nd Manami Doi JPN			
3rd Michelle Broekhuizen NED			
4th Chiara Steimmueller GER			
5th Arionella Julia Vallo ESP			
2010 Pattaya, THA			
U18 Men: 4.7			
Entries 45 Countries 22			
1st Etienne Le Pen FRA			
2nd Supakon Pongwichan THA			
3rd Jobert Van Dijk NED			
4th Luca Malusa ITA			
5th Juan Carlos Perdomo PUR			
U18 Women: 4.7			
Entries 40 Countries 20			
1st Caitilin Elks AUS			
2nd Nur Amirah Hamid MAS			
3rd Oren Jacob ISR			
4th Ashlie Lane AUS			
5th Ella Evans AUS			
U16 Mixed: 4.7			
Entries 31 Countries 14			
1st Ryan Amlehn NZL			
2nd Mark Spearman AUS			
3rd Filippos Florentin GRE			
4th Panagiotis Stathis GRE			
5th Benjamin Whiteside NZL			
2009 Halifax, CAN			
Open: Standard			
Entries 168 Countries 51			
1st Paul Goodson GBR			
2nd Michael Bullot NZL			
3rd Nick Thompson GBR			
4th Julio Alsogaray ARG			
5th Tonci Stipanovic CRO			
2009 Karatsu, JPN			
Women: Radial			
Entries 88 Countries 30			
1st Sari Multala FIN			
2nd Sophie de Turckheim FRA			
3rd Anna Tunnicliffe USA			
4th Marit Bouwmeester NED			
5th Lijia Xu CHN			
Men: Radial			
Entries 61 Countries 16			
1st Marcin Rudawski POL			
2nd Ben Koppelaar NED			
3rd Insub Kim KOR			
4th Hisaki Nagai JPN			
5th Mohd Romsli Muhamad MAS			
Youth Men: Radial			
Entries 100 Countries 25			
1st Keerati Bualong THA			
2nd Aleksander Arian POL			
3rd Filip Kobielski POL			
4th Toma Visic CRO			
5th Chris Barnard USA			
Youth Women: Radial			
Entries 39 Countries 16			
1st Mathilde de Kerangat FRA			
2nd Ashley Stoddart AUS			
3rd Michelle Broekhuizen NED			
4th Anna Agrafioti GRE			
5th Joanna Maksymjuk POL			
2009 Buzios, BRA			
Youth Men: 4.7			
Entries 109 Countries 24			
1st Jonathan Martinetti ECU			
2nd Hermann Tomsgaard NOR			
3rd Juraj Divjakinja CRO			
4th Yano Aizawa JPN			
5th Yuta Shimizu JPN			
6th Hiroyuki Nakajima JPN			
7th Yusaku Kimura JPN			
8th Yusaku Kimura JPN			
9th Yusaku Kimura JPN			
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93rd Yusaku Kimura JPN			
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95th Yusaku Kimura JPN			
96th Yusaku Kimura JPN			
97th Yusaku Kimura JPN			
98th Yusaku Kimura JPN			
99th Yusaku Kimura JPN			
100th Yusaku Kimura JPN			

1989 Aarhus, DEN

Entries 114 Countries 25

Apprentices

1st	Keith Wilkins	GBR
2nd	Phil Graves	CAN
3rd	Jeff Loosemore	AUS
4th	Had Brick	USA
5th	Peter Griffiths	NZL

Masters

1st	John Rigg	AUS
2nd	Curt Blidner	SWE
3rd	Christer Baath	SWE
4th	Denis O'Sullivan	IRL
5th	Peter Seidenberg	CAN

Grand Masters

1st	Friedhelm Lixenfeld	GER
2nd	Jack Swenson	USA
3rd	Heinz Gebauer	CAN
4th	Nick Paine	GBR
5th	Robert Saltmarsh	USA

1988 Falmouth, GBR

Entries 156 Countries 24

Apprentices

1st	Jeff Loosemore	AUS
2nd	Philip Graves	CAN
3rd	Had Brick	USA
4th	Keith Wilkins	GBR
5th	Peter Heywood	AUS

Masters

1st	Peter Seidenberg	CAN
2nd	Colin Lovelady	AUS
3rd	John Maynard	GBR
4th	John Rigg	AUS
5th	Nils Andersson	USA

Grand Masters

1st	Friedhelm Lixenfeld	GER
2nd	Geoffrey Myburgh	RSA
3rd	Heinz Gebauer	CAN
4th	Peter Milnes	USA
5th	Jan Nouwen	NED

1987 Melbourne, AUS

Entries 106 Countries 22

Apprentices

1st	Phil Peglar	AUS
2nd	Warwick Phillips	AUS
3rd	John Sprague	AUS
4th	Geoff Gale	AUS
5th	Willi Gerlinger	GER

Masters

1st	John Rigg	AUS
2nd	Michael Heath	AUS
3rd	Peter Seidenberg	CAN
4th	Colin Lovelady	AUS
5th	Greg Marshall	AUS

Grand Masters

1st	Alan Clark	AUS
2nd	Alec McClure	AUS
3rd	Graham Gilbert	AUS
4th	Doug Bates	NZL
5th	Bob White	AUS

1985 World Masters Games**Toronto, CAN**

Entries 101

Apprentices

1st	David Olsen	USA
2nd	Ben Lashaway	USA
3rd	Richard Gronblom	FIN

Masters

1st	Peter Seidenberg	CAN
2nd	Colin Lovelady	AUS
3rd	Peter Lundt	USA

Grand Masters

1st	Alec McClure	AUS
2nd	Alexander Nimick	USA
3rd	Alister Taig	USA

1984 Pattaya, THA

Entries 62 Countries 22

Apprentices

1st	Richard Verco	AUS
2nd	Paul Millsom	AUS
3rd	Kim Weber	FIN
4th	Roger Williams	UAE
5th	Ilkka Schroederus	FIN

Masters

1st	John Rigg	AUS
2nd	Peter Seidenberg	CAN
3rd	Colin Lovelady	AUS
4th	Michael Heath	AUS
5th	Denis O'Sullivan	IRL

Grand Masters

1st	Alex McClure	AUS
2nd	Doug Bates	NZL
3rd	Alan Clark	AUS
4th	Robert Saltmarsh	USA
5th	Alf Johnson	USA

1983 Gulfport, USA

Entries 70

Apprentices

1st	Tucker Bragdon	USA
2nd	Philip Peglar	AUS
3rd	Peter Branning	USA
4th	Carolle Spooner	CAN
5th	Roger Williams	QAT

Masters

1st	Norman Freeman	USA
2nd	Randall Swan	USA
3rd	Dick Rose	USA
4th	Heinz Gebauer	CAN
5th	Geoff Myburgh	RSA

Grand Masters

1st	Alan Clark	AUS
2nd	Alan Levinson	USA
3rd	Bob Saltmarsh	USA
4th	Peter Milnes	USA
5th	Alf Johnson	RSA

1982 Sardinia, ITA

Entries 82

Apprentices

1st	Paul Millsom	AUS
2nd	Jacky Nebrel	FRA
3rd	Michael Wallace	IRL
4th	Michael Heath	AUS
5th	Tony Manning	AUS

Masters

1st	Hans-Luther Striewe	GER
2nd	Geoff Myburgh	RSA
3rd	Nick Paine	GBR
4th	Jack Swenson	USA
5th	Hugo Kroth	GER

Grand Masters

1st	Alan Clark	AUS
2nd	Alex McClure	AUS
3rd	Cecil Walker	GBR
4th	Bob Saltmarsh	USA
5th	William ter Weld	NED

1981 Bender, FRA

Entries 52 Countries 11

Apprentices

1st	Jacky Nebrel	FRA
2nd	Michael Teiken	GER
3rd	Michael Nerbollier	SUI
4th	Werner Winter	GER
5th	Wolf Peter Niesen	GER

Masters

1st	Nick Paine	GBR
2nd	Maudez de Cozannet	FRA
3rd	Lucien Bouche	FRA
4th	Horst Kimm	GER
5th	Michael Tuson	QAT

Grand Masters

1st	Alan Clark	AUS
2nd	Cecil Walker	GBR
3rd	Piero Marchetti	ITA
4th	Vittorio Baldoni	ITA
5th	John Nouwen	NED

1980 Bender, FRA

Entries 67 Countries 15

Apprentices

1st	Svend Carlsen	DEN
2nd	Werner Winter	GER
3rd	Jacky Nebrel	FRA

Masters

1st	Nick Paine	GBR
2nd	Alf Johnson	RSA
3rd	Peter Fordham	GBR

Grand Masters

1st	Sam Small	USA
2nd	Cecil Walker	GBR
3rd	Vittorio Baldoni	ITA



Standard



Radial



4.7