

International 2.4mR Class Association, Technical Committee

$R = (L + 2d - F + \sqrt{S}) / 2.37 = 2.4$



2.4mR TC MEETING 14 December 2022 (notes in blue)

Present

Peter Russell (AUS)
Bruce Millar (CAN)
Rikard Bjurstrom (FIN)
Thomas Jatch (GER)

Apologies

Stellan Berlin (SWE)
Keith Gordon (GBR)

General Business

1. 2.4mR eAGM

14.12.2022 2.4 NOD 2022 Class Rules and Construction Manual approved by World Council.
G.3.4 Dimensions Mainsail leech length minimum amended to 4850mm.

14.12.2022 2.4mR ICA Constitution eAGM mid 2023 to ratify revised Constitution approved by World Council. TC to review proposed Constitution

2. Foot Median Sail Measurement

14.12.2022 2.4mR World Championship USA 2022 Dee Smith sailed well to win. 2.4mR sailors have experimented with foot extensions to mainsails and headsails in the past but Dee Smith looks to have designed an all-conquering sail extension. Dee Smith on Bar karate, The Sailing Podcast, 02/12/2022 – the 2.4mR is “really good it’s nice to sail”. “my boat had more sail area I read the rule different than everyone else ... huge speed advantage”.

HEADSAIL

- ❖ Headsail foot median for standard headsails varies from 3760mm to 3785mm.
- ❖ Headsail foot median for Quantum medium headsail is 4125mm with 230mm luff extension.
- ❖ Headsail foot median for Quantum heavy headsail is 3910mm.

MAINSAIL

- ❖ Mainsail luff extension for Quantum mainsail is 190mm.

CLASS RULES

2.4mR class rules do not include foot median controls, sail area is based on maintriangle and foretriangle dimensions only with foot extensions not considered in the rules.

2.4 NOD class rule G.3.4 includes mainsail foot median of 4900mm, there is no headsail foot median.

KEEPING EXISTING SAILS COMPETITIVE

Do we need to introduce foot median controls as follows to keep existing sails competitive? One set of sails should be available for all events.

FOOT MEDIAN	2.4mR	2.4 NOD
Headsail	I x 1.02 (proposed)	3825mm (proposed)
Mainsail	P x 1.054 (proposed)	4900mm (existing)

14.12.2022 Peter Russell to follow-up with World Sailing regarding 2.4mR interpretation options – (1) introduce foot median controls OR (2) introduce tack limit controls? TC to check proposed 2.4 NOD headsail foot median class rule.

3. Hollows

17.11.2022 Keith Gordon raised question of hollows in bow section of boats – hollows to be checked on 2.4 NOD scan boat. 2.4mR D.8.2 follows.

D.8.2 HOLLOWWS

(a) There shall be no hollows in the surface of the hull between the LWL plane and the sheerline except an area at the stern between the buttock lines 100mm from the yacht centreline and below L1. For the purpose of rating, any hollows in the entry of the boat below the LWL plane shall be bridged by a straight line from points on the entry at a vertical distance of 30mm above and below the LWL plane.

4. Size of hatches

17.11.2022 Keith Gordon raised question on size of hatches – 2.4mR D.4.2 (c) limits deck openings to no more than 0.7m², 2.4mR D.5.1(c) requires inspection hatches of minimum 100mm dia to watertight compartments., 2.4 NOD D.2.3 (h) permits hatches to be of any plastic material provided no lighter than deck. 2.4 NOD D.2.4 (f) permits one forward and one aft hatch in addition to the rudder hatch.

5. Station 0

17.12.2022 Bruce Millar noted some boats 3mm to narrow at station 0 – definition to be checked.

6. 2023 Work Program

14.12.2022 Draft 2023 2.4mR TC Work Program reviewed, TC to advise additional items for consideration.

7. Buoyancy Checks

18.12.2022 Request for Henk van Heuveln Buoyancy Check Certification approved by TC. Draft Buoyancy Check Certificate form approved by TC.

Next Meeting

Canada	noon Wednesday 18 January 2023
UK	8.00pm Wednesday 18 January 2023
Sweden	9.00pm Wednesday 18 January 2023
Germany	9.00pm Wednesday 18 January 2023
Finland	10.00pm Wednesday 18 January 2023
Australia	6.00am Thursday 19 January 2023

2023 2.4mR TC Work Program

A EC Meetings

Bruce Millar to act as TC representative for EC meetings. TC meeting minutes to be issued to EC and website for information. EC/TC to review Mid-year Measurement Forum 2023.

B ICA Constitution

TC to review proposed ICA Constitution including TC responsibilities for official measurers, buoyancy check persons, 2.4 NOD builders and EC coordination.

C 2.4mR and 2.4 NOD classes

TC to review 2.4mR and 2.4 NOD class descriptions for website.

14.12.2022 Peter Russell working to improve 2.4mR and 2.4 NOD description. Copy to be forwarded to Loic Eonnet (FRA) to develop description. Draft wording attached for review:

The International 2.4mR Class Association is the world organization that governs the International 2.4mR Class and the 2.4 Norlin One Design Class.

All 2.4mR boats comply with the 2.4mR Rating Rule.

INTERNATIONAL 2.4mR CLASS

*The International 2.4mR Class is a development class with boats complying with the 2.4mR **Open Class Rules**. 2.4mR boats are administered by Member National Authorities under delegation by World Sailing.*

The 2.4mR class rule provides a development option for sailors looking at innovation within the meter rule which has produced beautiful boats for over a century.

Current production 2.4mR boats include the Super 3 and Stradivari. Home built 2.4mR boats can also be built under this rule.

The 2.4mR World Championship includes all 2.4mR boats with the first boat awarded the World Cup Trophy and the first 2.4 NOD boat awarded the 2.4 NOD Trophy.

2.4 NORLIN ONE DESIGN CLASS

*The 2.4 Norlin One Design (NOD) is a restricted class with boats complying with the 2.4 NOD **Closed Class Rules**. 2.4 NOD boats are a class of 2.4mR boat, based on the Norlin Mk III design and administered by the 2.4mR ICA.*

The 2.4 NOD class rule provides a one-design option for sailors with racing in boats of equal performance where results are determined by the skill of the sailor. The 2.4 NOD has been selected by World Sailing as the single person technical equipment for Para Sailing.

2.4 NOD boats are manufacturer controlled with the ICA looking at accreditation of new builders. 2.4 NOD builders know that they are building a standard product that will not be outdated and is subject to quality control.

D 2.4mR Class Rules

TC to obtain WS approval of seat and headsail boom amendments. TC to review headsail and mainsail foot median class rule requirement.

E 2.4 NOD Class Rules

TC to publish 2.4 NOD Class Rules and Construction Manual as approved 2022 eAGM. TC to review headsail foot median class rule requirement.

14.12.2022 2.4 NOD Class Rules 2022 and 2.4 NOD Construction Manual 2022 to be issued to ICA for website.

F 2.4 NOD Boat Scan

TC to manage NOD digital file production by VmaxYachting as approved by EC 2 December 2022.

14.12.2022 Bruce Millar working with Heiko Kroger and Thomas Jatsch to complete 2.4 NOD boat scan, scan media including backup to be finalise.

G 2.4mR Measurement Forms

TC to review 2.4mR measurement forms including certification section for WS approval.

14.12.2022 Rikard Bjurstom to forward eform used for 6m & 8m boats for reference.

H 2.4mR Rating Certificates

TC to review standard 2.4mR Rating Certificates for NCAs responsible for class administration.

14.12.2022 Bruce Millar to forward current Canada Rating Certificate for reference, valid Rating Certificate to include Measurement Form and Buoyancy Certificate.

I NOD certification

How to get all NOD boats certified? How to inform owners that they are responsible for obtaining NOD certificates and require them to compete at para events? NOD certification explanatory video by Bruce Millar. 2.4 NOD boat event NORs to include requirement for owners to issue certificates to organising authorities.

J Official Measurer training

TC to review measurer training and certification process opportunities?

14.12.2022 Timeline for WS process to IM qualification to be scheduled, 2 events and IM seminar required.

K Buoyancy Checks

TC to establish 'competent persons' register for buoyancy checks. Note; Both 2.4mR and 2.4 NOD buoyancy checks can be performed by a competent individual assigned by the TC.

14.12.2022 Buoyancy Check certificates register to be established, TC to consider addition to website for event organiser information?

L 2.4mR boat builders

2.4mR builders are as follows:

- ❖ SUPER 3 (UNITED KINGDOM)*
- ❖ MALMSTEN BOATS (SWEDEN)*

M 2.4 NOD boat builders

2.4 NOD interested builders are as follows:

- ❖ United Kingdom (Brian Harding) – waiting for 2.4 NOD Agreement*
- ❖ USA (Rudy Trejo) – ongoing discussion*
- ❖ Australia (Michael Bunyard) – waiting for scan and 2.4 NOD Agreement*
- ❖ Germany (Thomas Bergner) – construction mid-2023*
- ❖ Finland (Evert Aartsen) – 10 boats to be manufactured 2023, monitoring program to ensure complete boats and payment schedule by FIN.*

TC contact person to be defined for potential builders.

- ❖ United Kingdom – TC contact tbc*
- ❖ USA – TC contact Bruce Millar*
- ❖ Australia TC contact Peter Russell*
- ❖ Germany – TC contact Thomas Jatsch*
- ❖ Finland - TC contact Rikard Bjurstrom*

14.12.2022 Brian Harding to be advised that 2.4 NOD Accredited Builder Agreement is under preparation, Bruce Millar is happy to be the GBR TC contact person.

14.12.2022 Evert Aartson to be advised that 2.4 NOD Accredited Builder Agreement is under preparation, Rikard Bjurstrom is happy to be the FIN TC contact person.

Accredited builder submissions shall include the following details prior 2.4 NOD boat certification:

- ❖ Prototype measurement – refer WS regulation 10.5 (f) (vi)*
- ❖ Lay-up design*
- ❖ Hull/keel stiffness*
- ❖ Chain plate deflection*

- ❖ 2.4mR WS plaque
- ❖ 2.4 NOD plaque
- ❖ 2.4 NOD Class Rules Compliance Declaration

2.4 NOD accredited builder pathway available for issue to potential builders following receipt of applications.

EC to prepare 2.4 NOD accredited builder agreement.

14.12.2022 Bruce Millar preparing draft 2.4 NOD Accredited Builder Agreement for review.

TC to prepare 2.4 NOD inspection plan based on builder compliance declaration.

14.12.2022 Peter Russell preparing draft 2.4 NOD Accredited Builder Inspection Plan for review, prototype and boat 2 + 3 measurement and compliance declaration, other boats compliance declaration, checklist required.

N 2.4mR Finland World Championship 2023

TC to review 2.4mR Finland WC 2023 documents.

O WC NOR Template

WC NOR template to be deleted from reference documents and the website – not in accordance with current World Sailing (WS) Racing Rules of Sailing.

P World Championship inspection plan and forms

TC to review World Championship inspection plans and forms including - Event Form, Inspection Plan, Haul-out Form and Substitution Form.

Q 2.4mR World and Continental Championship Management Manual update

TC to update 2.4mR World and Continental Championship Management Manual to clarify division scoring requirement.

14.12.2022 2.4mR World and Continental Championship Management Manual v.8 update including division scoring instructions to be issued to ICA for website.

R Measurement Manual update

TC to revise 2.4mR and 2.4 NOD measurement manuals to new 2022 2.4mR and 2.4 NOD class rules.

S Class Rules education

TC to develop a program of class rules education.

The 2.4mR Class is a development class granted international status in 1993. The 2.4mR Class is administered by Member National Authorities (MNAs) under delegation by World Sailing (WS). Where there is no MNA the International Class Association (ICA) may carry out administrative functions.

The 2.4 NOD Class is a restricted class based on the Norlin Mark III introduced in 2011. The 2.4 NOD Class hulls and rudders are manufacturer controlled with rigs and sails measurement controlled. The 2.4 NOD Class is administered by the ICA.

Class Rules are prepared from the World Sailing 'Standard Class Rules template' in accordance with World Sailing recommendations.

«As part of the World Sailing initiative to improve and standardise class rules and certification for the sailor, the Standard Class Rule template and Equipment Rules of Sailing has been developed. Through a common format, individuals can find relevant sections of each class rules easily and effectively. The World Sailing can consult and advise to aid a class in encompassing this rules system within their class. Class Rules are based on the ERS.»

Class Rules are rules that specify the boat, the crew, the personnel and portable equipment, and any other equipment limited by the Class and their certifications and administrations.

The Class Rules are read in conjunction with the Equipment Rules of Sailing (ERS) which provide more general governance of the equipment used in the sport.

It is the owners responsibility to ensure that their boat complies with the Class Rules and has a valid certificate.

T Measurer Recognition

TC to develop Measurer jacket/hat for events.

14.12.2022 Thomas Jatsch suggested Measurer jacket/hat be considered for measurere recognition and events.