

HASSE MALMSTEN REPORT

INTRODUCTION

The 2.4 mR Class is a development class.

The rating is calculated according to the formula

$R = (L + 2d - F + \sqrt{S}) / 2.37$ see Part III Section H

The purpose of these rules is to give a designer the possibilities to develop and produce a fast boat within the limitations of these rules. Because of that these rules are open class rules.

The above copied introduction from the 2.4mR class rules is an invitation to a common quest for the benefit of all sailors to improve the boats sailed under the class rules.

The first and foremost factor that makes a racing class attractive is how well it is functioning socially. This requires good will and transparency.

Letting special interest take charge of the leadership since mid-nineties is in my view the main reason for the present status of the class. I would take it as far as to say that the class lives on in spite of its officials and organization. Since Pål Kragset and Steve Bullmore stepped in, a change in direction has been seeded so there is hope. The good thing about it is that it proves the strength of the concept that the 2,4mR class/yachts represents.

Within the class there are outspoken special interests that seemingly share interest in the realization of a Norlin Mk III OD class making other boats obsolete, but not as common as they may seem and more harmful for the class as a whole than you would think.

I would say that the issues mentioned below by far outclasses the dreaded design breakthrough in graduating what keeps the class from realizing it's full potential.

The original builder of the production Norlin Mk III together with Peter Norlin naturally has had an interest to keep other builders/boats away from the class for economic reasons. Their interest was monopoly and Peter Norlins outspoken aim was to build a Norlin OD class with one builder per continent.

The Stockholm based SWE N/A was also loyal to Peter Norlin as his career as designer faded out. In the last 20 years there was not many other Norlin boats in production than the 2,4. Many of these people were Peter's friends and/or fans. One must understand that Peter is an icon among many sailors. The method to keep control of the class was simply to make it hard for other prospect designers/builders/sailors to enter the class and leave the class to the Norlins. Every designer/builder that has entered the class after Vene-Bjorndahl started to build the production Norlin Mk III has in different ways been asked to leave the class. In the end the class would be a de facto Norlin Mk III OD which one must say has been almost accomplished.

The fraud with certificates that went on from 1995-2004 was pretty unveiling of how far they were willing to go. As you might have heard the Norlins built by Vene-Bjorndahl and later Charger were not

measured correctly and were delivered with a copied measurement protocol with the "right numbers" in which then were transferred to the certificates without control.

From 1996 till we finally got the Swedish Sailing Federation (SSF) to act not one WC title during these years was won with a boat conforming to the class rule and none of them carried a legal certificate while other designs were scrutinized in detail.

In 2004 the SSF canceled all Swedish 2.4mR certificates and demanded all boats having their displacement checked in a sweet water pool before having a new certificate, a procedure now incorporated in the class rules. Me and my mates on the west coast had then every year since 1996 asked the Swedish N/A to act upon the obvious cheating with the figure for the displacement for the Norlins totally unheard.

The designers/builders/sailors that had the guts to enter the class with other boats than standard Norlins was harassed and left the class.

From around 1998 the Swedish NA was controlled by a small group of sailors led by Stellan Berlin. The outspoken aim with the Norlin OD from this party was first of all to preserve the value of their own boats. At the SWE AGM in 2000 when these people by cheating with votes managed to get an article into the SWE constitution saying that the aim of the SWE NA was to transform it into an OD Norlin class. We took Stellan Berlin aside at the meeting to nail his motives for the agenda, as we found it hard to understand/cope with the aggressiveness at hand. He finally admitted that his main motive was to preserve the value of his own boat. A boat that we all know is not a standard Norlin as it is built to much higher specifications, where every detail was designed/described/executed to the specifications from the customer who first ordered the boat. I know because I was a part of the build process. That the motive at the core of the drive for OD is preservation of value for the present fleet of Norlins has been spelled out officially by the SWE N/A as well.

The disabled sailors need for Paralympic equipment. As the concept represented by the 2,4mR boats was found very suitable for disabled sailors the boat was chosen as equipment for single handed Paralympic class with the limitation that only the Norlin Mk III design was allowed if compatible with the appendix K addition to the 2,4mR class rule/later the Norlin OD rule.

This party though seemingly having much in common with the other interests, they have completely different needs and preferences.

Professional sailors/racing puts organization and rules under a completely different pressure than amateur sailing. The demand for fair and equal rules governing the racing/equipment is essential and understood in the often relatively small group of sailors involved at this often professional and high level. The goal is to win the gold medal and you seek to optimize any factor involved that you can affect for your own advantage. Failing to meet this pressure leads to unfair sailing, bad reputation and in the end the class will be exchanged for some other class that meets the demands better. The open 2,4mR class rule is in its present form may not be suited for racing at this level as you risk it to be an arms race at any cost though it should not be exaggerated as the room for improvement is very small.

There is most definitely a conflict between professional Paralympic sailing and disabled integration into the 2,4mR class which is a beautiful aspect of the 2,4mR class that we are all proud of.

The present Norlin OD rule is of course better than the open class for those with Paralympic ambitions but in its present form it is not good enough to withstand the pressure from professional sailing. First and foremost the OD rule is in lack of sufficient definition of the construction i.e. laminate specifications and definition of structural members making sure similar rigidity in the boats built.

I believe the disabled sailors as a group has failed to recognize that there is a division of interest at hand and that it should be discussed among those concerned. From the point of view of the disabled I can't see the meaning in restricting your choice of design/build to the Norlin Mk III unless you have Paralympic ambitions. Access to older low budget boats is an important asset when introducing the class to new sailors and why should disabled sailors exclude themselves from taking part in the quest to develop a 2,4mR yacht? It is equally valid to win races on the merit of the entire project as well as just the sailing skill and in any case all classes have room for improvement. It's just to a different degree.

There is more room in the 2.4 than in the Starboat and less in the Laser but still the pro's in the Laser gets to pick their equipment before the amateurs. I can't see that it would be impossible for a disabled person to be a part of a group developing a new boat.

The problem for those who advocate the OD path is that if you make a true and well designed OD class rule based on the Norlin Mk III the boats in the present fleet would not fit in. Secondly a new class rule and building plugs and molds strict enough is costly so not only would you need to start from zero, the boats would also need to carry the initial investments in order to match the criteria.

So then why not take the shortcut and have a rule that fits the bulk of Norlins?

The simple fact is that the bulk of Norlins are very different in build specifications and many has also been upgraded in different ways most certainly improving the speed potential.

It's like the saga of the king's new clothes, he's nude but no one dares to say it loud as you then threaten "the value of my boat".

In order for the ICA to handle these issues expert knowledge in yacht design as well as boat building is of indispensable value.

In other similar classes it is custom practice to have designers/builders involved in the class, constituting the technical committee in order to guarantee the expert knowledge required and also in order to make sure different interests are balanced.

The ICA has in the past not only omitted to invite the many professional designers/builders who has entered the class (more than 40 different designs has been built to the class rules since the eighties) but even shown very antipathetic attitudes towards other designers/builders wishing to enter the class.

The influence of this lack of professional knowledge can not be underestimated as it is at the base of the miseducation of the membership of the class and the misconception of the risk of designs for the class becoming obsolete. In a well matured open class as in the case of the Metre classes and in our case the 2.4mR class the possibility to generate a new hull geometry being superior to all others is non-existent. The only actual step in improvement of the hull geometry under the Metre Rule since it was conceived in 1907 is the shift from full keel to fin keel and separate rudder and that happened 50 years ago. The introduction of wing and bulb keels was prohibited early on for the 2.4mR class.

The reality is that small steps in development is taken gradually over time.

The more you work yourself into the Metre formula/class rule the more you realize its genality in its simplicity. The yacht designers who designed the rule were professionals and experienced yachtsmen who had deep knowledge in what factors determine the speed potential of a yacht and they also had a specific type of yacht in mind when setting up the constraints limiting the possible shapes available. Just about the only boat for the Metre Rule not conforming to the norm and being successful is the 6mR Woodo that won the 6mR WC in 1991 but did so without winning a single race so thought radical in shape it was not radically fast. Just an example of a well executed project by a team of designers/builders/sailors.

All other boats designed to the formula fit within a very tight box with small variations in displacement and width. The main driver for evolution of the hull geometry in open classes like the Metre Rule is engineering. The stiffer and lighter the structure, the deeper the CG (center of gravity), the more narrow you can design the boat without compromising RM (righting moment) and subsequently potentially the faster the boat will be. This was clearly demonstrated in the IACC class that started out as pretty wide boats and ended up super narrow as the engineers and boat builders had more room for improvement than in the Metre classes. In the Metre classes the weight distribution is controlled by the build scantlings. For the 2.4mR the minimum skin weight 3.6kg/m² and no carbonfibre. The design of the internal structure is free.

A well executed 2.4mR can be less than 50 kg ex rig and lead. Most production boats are well over that which opens up a small room for improvement for the one off builder on top of the satisfaction to create something special.

Lack of competition among builders is another consequence of the above mentioned malfeasance which in the end is counterproductive for the sailors.

Hopefully this has added some to your understanding of the present situation.

Regards,
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