

Årsmøte NKK – 22.03.2022

VEDLEGG A

REGELENDRINGER

Proposed changes to the Knarr International Class Rules by Norway and Denmark
with comments by IKA Technical Committee in blue 05 MAR 2022
NKK-TC comments in red 07-MAR-2022

a) Use of jib winches (from Norway)

The proposal is regarding the missing rule related to position and use of jib winches, and it has been agreed twice by the Norwegian Knarr Association as required according to the Norwegian bylaws.

Reference is also made to the discussion at the 2019 Admirals Meeting – see minutes on <https://www.knarronlinedesign.com/meeting-minutes> (under the heading ‘Other Rules Initiating Discussion / Cabin top sheeting is not in rules’).

C 9.8 (a) (2). “The jib shall be hauled with the help of winches placed outside the cockpit coaming and crank handles under the deck”

Reason for the proposal:

It is agreed internationally that the Knarr shall be supplied with and have jib-winches on the deck outside the cockpit coaming with crank handles under deck. As before, this should be stated in the Knarr International Class Rules.

The fact that this rule has to be included is also important for maintaining the intentions of the new rules: “Keep the Knarr as a one-design-class”. The already included rule C 9. 8 (2) The sheeting of the jib is free, is according to the earlier “Blue book 1989” rule 15.3.1 «The sheeting of the jib is free. However, the meaning of this is that the position of the sheeting point on the deck is free, not how the jib is hauled, it is hauled by the jib winch, as stated in 15.3.2

In Denmark, some have used the halyard winches on the cabin top, as jib winches. However, this is only applicable if one has jib sheeting blocks on the cabin roof. This is not applicable in San Francisco as no one has or wants this because of heavy wind. In Norway, no one has both jib sheeting blocks on the cabin roof and halyard winches. It is considered to be an unfair advantage that the jib trimmer can sit on the rail to windward adjusting the jib instead of going down to leeward. The Knarr is a one-design- class and also the handling of the boats shall be as similar as possible within the regulations.

In addition, using halyard winches on the cabin top may not be recommended for wooden boats as the roof is not intended nor designed for such a load.

If Denmark wants, they may have the opportunity to apply to the IKA for a national rule/prescription.

The case has been discussed with the Norwegian Sailing Federation Technical Committee, which recommends that the rule simply be included in the Knarr International Class Rules for 2022, as it is a clear error and happened thought an oversight.

Note from Per Fl.:

For your information a proposal at the Danish AGM in November 2021 for use of halyardwinches for halyards only (and thus not for jib sheeting) was not passed.

IKA T.C. comment:

All Knarrs must be equipped with winches outside the cockpit coaming, even though they are not shown for the wooden Knarr on Plans A, B and C.

We propose the following alternative with new text to this section in *italic*:

D.10.1 FITTINGS / (a) MANDATORY

(7) Jib sheet winches *placed outside the cockpit coaming with crank handles placed under the deck. Length of handles must be min. 200 mm. The position of the winches is free, however, normal practical handling of the sheeting shall be possible.*

NKK TC Comments:

In addition to the above arguments: The Knarr rules allows a crew of 2-4 during racing. Jib sheeting by halyard winches cannot be handled safely by the helmsman with the crew on the foredeck. The International Knarr Class Rules shall not have rules that open for sheeting of the jib in a way that is impossible to handle with 2 crewmembers and favor 3-4 crewmembers.

NKK uphold the original rule, approved twice by the NKK-GM. However, DK is free to propose for a national prescription if they in addition wants to use halyard winches as jib winches.

- b) New rules governing interpretation of and approval of amendments to the class rules (from Denmark)

A.7 CLASS RULES INTERPRETATION

A.7.1 Interpretation of class rules shall be made by the ICA.

A.7.2 Interpretation of national prescriptions shall be made by the relevant NCA.

The addition of A.7.1 will mean that it is established that interpretations of the class rules take place under the auspices of IKA and not - as it may be now - with each of the national authorities under World Sailing. This will ensure uniformity in all countries.

Interpretation of national prescriptions (A.7.2) must naturally take place nationally, i.e. under the auspices of the respective Knarr clubs.

A.8 CLASS RULES AMENDMENTS

A.8.1 Amendments to these class rules are subject to the approval of the ICA.

This addition to the class rules themselves is necessary to stipulate, that changes to the class rules must be made under the auspices of IKA.

In general, it may be noticed, that SFBKA is not affiliated with the US National Authority (US Sailing), that the Danish National Authority (Dansk Sejlunion) has advised that they are not interested in approving nor interpreting Knarr class rules, and that the Norwegian National Authority (Norges Seilforbund) just needs to be kept informed of any changes to the class rules.

IKA T.C.: No comment.

- c) Rule amendment regarding position of the mast (from Denmark)

C.9.4 MAST

(b) Use

(2) Measured from the intersection between the deck and the outside surface of the transom along the centerline of the hull, the front edge of the mast spar shall intersect the deck at maximum 6160 mm, and the aft edge of the mast spar shall intersect the deck at minimum 5810 mm.

The purpose of this proposal is to lock the position of the mast in the longitudinal direction. In the current class rules the position is free. This is motivated by a desire to avoid an "arms race" with extremely costly modifications to the boats (relocation of mast step and all chain plates, alteration of mast hole in deck etc.).

The Danish Technical Committee has performed extensive measurements, during which it turned out that the above method of measuring was preferable rather than utilizing the hull datum point as defined in D.3.4 (a).

The area between 6160 mm and 5810 mm as per the proposed rule will absorb all current Danish Knarrs without any need for modifications, both wooden- and GRP-built, including a 10 mm tolerance. The same is believed to apply to both US and Norwegian Knarrs.

For illustration of the measurement point, please see the photos below.



Intersection between the deck and the transom seen from above



Intersection between the deck and the transom seen athwartships

IKA T.C. comment:

The SFBKA T.C. and NKK will during the 2022-season measure a number of Knarrs with a view to determine the inclusion under this new rule. Our comment will follow thereafter.

NKK TC Comments

- The measurement to be changed to be taken from the bow, top of the footrail, as reference point. (ref. LOA definition)
- The Knarr LOA is: 9280 +0-40mm. If measure mast position from the transom a "short" Knarr may have the mast up to 40mm more forward than a "long" Knarr, not being the intention.
- The balance of the boat and the optimal position of the mast is related to the COG of the lateral plane including possible variations in the position of the keel. If limitations on the position of the mast shall be introduced: All Knarrs must be checked for variations in the position of the keel to prevent that limitation in the position of the mast may, for some boats, introduce unfair limitations to obtain optimal position of the mast and optimal balance.
- The aft limitation of the position of the mast is unnecessary and should be taken out.

DK TC Comment:

- Limitations on the position of the mast: The situation is that we agreed that both SF and Norway would look into the actual positions of the masts in the respective countries. Therefore this proposal will have to await the result of these measurements, at which point in time we shall resume our discussions. In the meantime no doubt we in Denmark will be looking into the method of measurement.

As a consequence, naturally this proposal cannot be dealt with at the forthcoming general meetings in SF and Norway.

d) New rule defining the height of the cockpit sole (from Denmark)

C.8.6 Cockpit sole

(1) FOR USE:

Floorboards must be fitted in the cockpit.

(a) MANDATORY:

(1) Floorboards must be made of plywood or solid wood.

(2) For the GRP-Knarr the top of the floorboards must be flush with the cockpit sole.

(b) OPTIONAL:

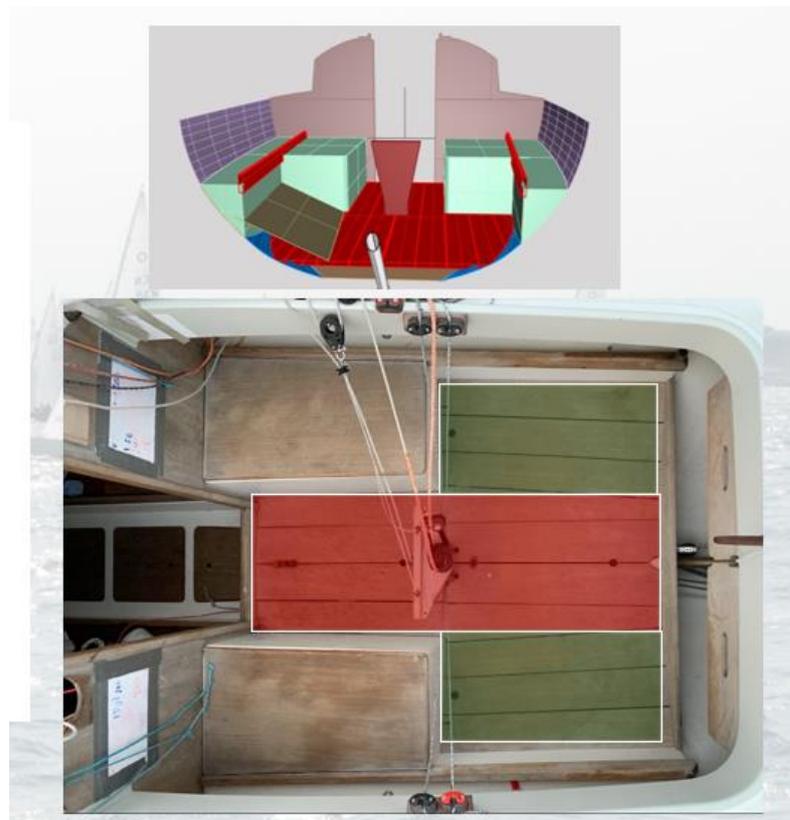
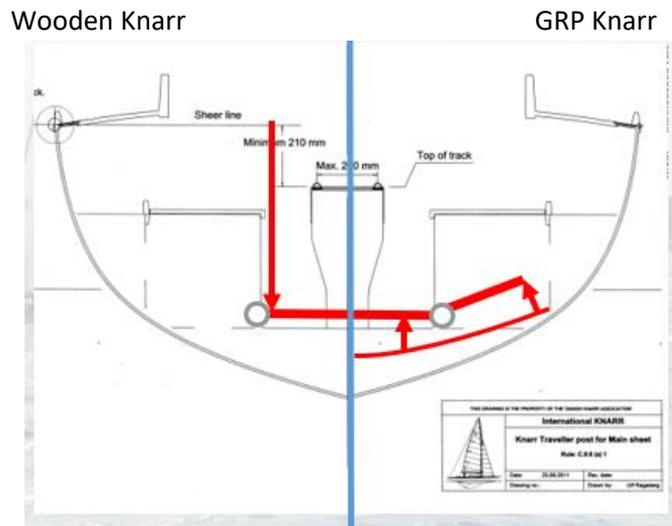
Raised cockpit sole is permitted.

1) For the wooden-Knarr the top of the cockpit sole must be minimum 610 mm below the sheerline measured at the position of the barney post. The cockpit sole must be parallel with the waterline.

2) For the GRP-Knarr the top of the raised cockpit sole must be maximum 80 mm above the GRP-cockpit sole.

In the current class rules, there is no definition of the cockpit sole or floorboards. For the GRP-Knarr the cockpit sole is defined by the moulded inner section, but there is no mention of floorboards. In several GRP-Knarrs an extra teak sole of different heights has been fitted on top of the GRP-sole. The purpose of this proposal is to set a limit on the height of the floor in the cockpit. This prevents "high-floor" solutions as in Soling, Yngling & Starboats.

The original intention of the cockpit of the Knarr, both in terms of design and function, will be maintained.



The Danish Technical Committee has performed extensive measurements, and the proposed rule will absorb all current Danish Knarrs without any need for modification, both wooden- and GRP-built. The same is believed to apply to both US and Norwegian Knarrs.

IKA T.C.: No comment.

e) Amendment of the rule regarding hiking (from Denmark - 2019)

The purpose of this proposal is for better and easier policing the rule regarding hiking, which is performed in various ways, by amending the term "...further out over the sheer line than the middle of the thigh" to:

C.2 CREW

(....)

C.2.3 PLACEMENT

(b) The center of body gravity must always be inside the toe rail (sheer line) or the vertical line up from the sheer line when heeled.

IKA T.C.: No comment.

f) Addition of text regarding US and Danish national prescription for shortened benches (from Denmark)

It has previously been agreed at an IKA General Meeting (Admirals Meeting) that all national prescriptions must be written into the class rules at the relevant sections. The national prescription regarding shortened benches is missing in the rules text and is therefore proposed to be added:

D.8 THWARTS AND BENCH

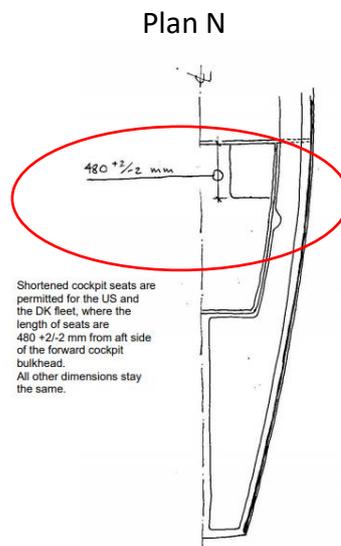
(.....)

US and Danish National prescription:

Cockpit seats may be as shown on Plan N.

Following measurements performed by the Danish Technical Committee it has transpired, that shortened benches in some Knarrs do not correspond to the measurements on Plan N. To avoid costly rebuilding, the Danish fleet has therefore approved the following measurements as a new Danish national prescription to be written on to Plan N:

515 mm + 35 mm and -4 mm



IKA T.C.: No comment.

g) The rudder – new drawing and minor amendments to the rule text (from IKA T.C.)

There have been some discussions in San Francisco in the past, and latest in Denmark also, about the shape of the rudder blade. These discussions were mainly about the sharpness of the trailing edge, as the GRP-rudders built in the original moulds have a rather rounded edge, whereas the edge on the current drawings (Plan G & V) appear less blunt. On early Knarrs equipped with a rudder made of solid wood, the trailing edges are rather sharp. The discussions were sparked by a need for building replacement rudders due to failure, mainly seen on GRP rudders. With technical assistance from Ulf Røgeberg a few replacements have been built to SF-Knarrs by a Canadian specialist manufacturer licensed by SFBKA. In the manufacturing process a CNC-milling cutter was utilized. The trailing edge of these new rudders are rather sharp and based on his work with SF a new drawing, Plan AA attached hereto, has subsequently been developed by Ulf.

It has been determined that the new US-rudders do not improve the boat speed.

The difference between the current drawings (Plan G & V) and the new drawing is the appearance of the trailing edge and minor differences of the profile (thickness). Tolerances have also been introduced. In addition to the new drawing a minor amendment in rule C.8.5 (a) is needed, also to correct a couple of typos. At the same time a new sub-clause E.4.5 (b) is proposed:

C.8.5 RUDDER

(a) DIMENSIONS

	Minimum	Maximum
Length parallel to rudderstock centreline	1545 mm	1555 mm
Width Thickness of rudder blade perpendicular to rudderstock centreline	440 43 mm	450 mm

E.4.2 DEFINITIONS

(a) The rudder shall be in accordance with plan ~~V~~ AA.

E.4.3 MANUFACTURERS

(a) Manufacturers of ~~GRP~~ rudders shall be licensed by the holder of the rights or the NCA.

(...)

E.4.5 CONSTRUCTION

(a) The rudder blade may be manufactured in a mould approved by the holder of the rights or the NCA.

(b) All curves shall be fair curves without any concavity.

IKA T.C. comment:

Having consulted an official measurer approved by the Danish Sailing Association, we have revised our above proposal. The reason is that the measurer almost urged us to have a measurement diagram for reasonable and easy measuring the rudder. This appears under a new rule E.4.9. At the same time, we propose the US National Prescription under C.8.1 to be applicable in all countries.

The revised proposal is below.

C.8 HULL APPENDAGES

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR OF THE KEEL AND RUDDER

- (a) Only routine maintenance and repair such as light sanding, painting and polishing is allowed.
- (b) Re-fairing to remove hollows and bumps from the building process, or to remove accumulation of bottom paint is permitted.
- (c) Addition of material beyond what is reasonably necessary for fairing, removing original construction material, or re-shaping beyond symmetry is prohibited.
- (d) Major repairs or overhaul requires a re-measurement defined as the approval of the Measurer.

(...)

C.8.5 RUDDER

(a) DIMENSIONS

	Minimum	Maximum
Length parallel to rudderstock centreline	1545 mm	1555 mm
Thickness of rudder blade measured perpendicular to rudderstock centreline	43 mm	45 mm

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

E.4.1 RULES

- (a) The **rudder** blade shall comply with the **class rules** in force at the time of **certification**.

E.4.2 DEFINITIONS

- (a) The Rudder shall be in accordance with plan **AA**.

E.4.3 MANUFACTURERS

- (a) Manufacturers of **rudders** shall be licensed by the holder of the rights or the NCA.

(...)

E.4.5 CONSTRUCTION

- (a) The **rudder** blade may be manufactured in a mould approved by the holder of the rights or the NCA.
- (b) All curves shall be fair curves without any concavity.

(...)

E.4.9 MEASURING

For measurement of the **rudder** the following shall be applied:

- (a)

Measuring stations from the lower edge of the rudder blade measured perpendicular to the rudder stock centreline. Numbers below are in mm.	Distance from the rudderstock centreline to the trailing edge. Tolerance +/- 5 mm Numbers below are in mm.
0	31
250	208
500	314
750	374
1000	390
1250	371
1415	326

- (b) Measured along the trailing edge from the lowest point and 222 mm +/- 5 mm up, the thickness 10 mm from the trailing edge must not be less than 8 mm.

- (c) At the measuring points below the thickness must not exceed 40 mm.

Measuring stations from the lower edge of the rudder blade measured perpendicular to the rudder stock centreline. Numbers below are in mm.	Distance from the trailing edge. Tolerance +/-5 mm. Numbers below are in mm.
500	190 191
1000	240

Årsmøte NKK – 22.03.2022

VEDLEGG B

TEGNING ROR

Årsmøte NKK – 22.03.2022

VEDLEGG C

UTKAST BREV IKA



KNARR

**International Knarr Association
Technical Committee**

The Chairman
International Knarr Association

xth March 2022

Dear Per Flemming

With reference to our letter 12th February, we have now concluded our discussions regarding proposal (g), the rudder, and we have agreed to a revised proposal.

For easy reference we have included the above in the document with our comments to the remainder of the proposals as forwarded with our above letter.

We trust that all proposals incl. our comments will be included on the agendas for the forthcoming meetings in Norway, Denmark and San Francisco.

Kind regards,

Morten H. Haugerud

Lars Jårvik

Mike Ratiani

Morten Reinhold

Jes Thomsen