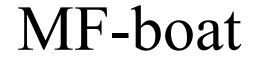
# 2011

# **Class rules for**



english



#### Authority

Swedish MF-boat Association, c/o Nicanders Båtvarv AB, Grötö, 45350 Lysekil tel. 0523-16010 MF-boat designed 2009-2010 by Sture Sundén, Blanchegatan 18, 11533 Stockholm 08-6650872

# Part A – General rules

#### A.1 ABBREVATIONS AND DEFINITIONS

A.1.1

NKF	MF –class association
RSR	Rules of device
KSR	ISAF rules

A.1.2 The word "shall" is imperative and the word "may" is allowing

#### A.2 AUTHORITY AND RESPONSIBILITY

- A.2.1 The national authority of the class is NKF regarding all questions about these class rules.
- A.2.1 Neither NKF nor a Measurer should have any legal responsibility based on these **class rules**.

#### A.3 ISAF:S RULES

- A.3.1 These **class rules** should be read together with RSR and all measurements taken in accordance with RSR if not otherwise is specified.
- A.3.2 When a term is used in its defining meaning in RSR it is written in **bold** characters.
- A.3.3 When a term is used in its defining meaning in KSR it is written in *italic* characters.

#### A.4 AMENDMENTS IN THE CLASS RULES

- A.4.1 Amendments in these class rules should be initiated and approved by NKF.
- A.4.2 Class rules may be altered by *racing rules*, but only when approved by NKF.

#### A.5 INTERPRETATION OF THE CLASS RULES

- A.5.1 Interpretations of these **class rules** should be made by NKF.
- A.5.2 A member of NKF may appeal to the National Sailing Association.
- A.5.3 An interpretation is only valid during the present year and should be followed by a corresponding change in the **class rules.**

#### A.6 SAIL NUMBER

A.6.1 *The sail number* should be the same as the production number of a boat, and in an unbroken series starting on 1 and should be issued by the manufacturer. The national letters may be shown together with the *sail number*.

## PART B – Approval of a boat

#### **B.1 MEASUREMENT CERTIFICATE**

B.1.1 **Measurement certificate** is not issued.

#### **B.2** MEASUREMENT AND SURVEY

- B.2.1 All measurements should be taken in accordance with RSR.
- B.2.2 **Survey** in relation to a race should be performed according to RSR or as "COMPARATIVE CONTROL MEASUREMENT" according to B.2.3.

#### B.2.3 COMPARATIVE CONTROL MEASUREMENT

The following procedure may be used if these **class rules** does not mention anything else for the part to be controlled:

- a) At least 1 reference boat should be identified by drawing lots.
- b) The part should be **measured** both on the boat subject to measurement and on the reference boat using idetical methods.

c) If a dimension on the measured part is outside of the interval on the reference boat, the matter should be handed over to NKF to decide the case.

## **PART C – Conditions when racing**

# In this part: Rules for the **boat** not subject to **certification**. Rules for the boat, where certification control or survey demands access to several parts of the boat simultaneously.

#### C.1 BOAT

#### C.1.1 DIMENSIONS

a) Draught ...... 1000mm
b) The min. weight of the boat in dry condition including sails and mandatory equipment.... 1125 kg

#### C.1.2 CORRECTION WEIGHTS

Eventual **correction weights** should be permanently secured to the underside of the deck. 50% of the total weight should be aft of section 5 and the remaining part forward of section 7. Section 5 is located 90 mm aft of the rear egde of the cabin top, section 7 is located 1000 mm forward of section 5.

# C.1.3 USAGE

a) Round the bouys racing

#### C.2 HULL AND HULL APPENDAGES

#### C.2.1 DIMENSIONS

		maximuim	minimum
a)	Hull length excluding rudder	6835 mm	6820 mm
b)	Hull maximum beam, including gunwhale etc	2100 mm	
c)			

#### C.2.2 MAINTENANCE AND REPAIR

- a) Normal maintenance such as painting, sanding and polishing is allowed.
- b) Repair for restoration purpose is allowed.
- c) Epoxi may be used for repair or finishing purpose.
- d) Any type of filler putty may be used for fairing.

#### C.3 RIG

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#### C.3.2 USAGE

- a) Running backstays are not allowed.
- b) Rigging screw on forestay is not allowed.
- c) Spinnaker- or gennaker halyard may be fitted. The top of the sheave should not be installed higher

than 8500 mm over the lower point and not lower than 6000 mm over the lower point.

d) Lift and downhaul for spinnaker pole may be fitted.

#### C.4 SAILS

#### C.4.1 DEMANDS AND LIMITATIONS

a) Not more than 1 mainsail, 1 jib and 1 spinnaker should be onboard while racing.

#### C.4.2 IDENTIFICATION MARKS

- a) *Sail number* och *nationality letters* should correspond to KSR.
- b) Class insignia should ne in accordance with drawing H.1.1.

#### C.4.3 MAINTENANCE AND REPAIR

- a) Repair for restoration purpose is allowed.
- b) Change of *sail number* is not allowed.
- c) Sail number should be the same as the boat's production number.

#### C.4.4 USAGE

- a) The foot of the mainsail should stay in the groove of the bom except at the **clew**.
- b) The mainsail may be loose-footed for a distance of 500 mm from the **clew**.

#### C.5 STORM SAILS

#### EXPIRE

#### C.6 EQUIPMENT

- C.6.1 MANDATORY
  - a) Anchor, weight min. 5 kg, except for eventual chain.
  - b) Anchor line, min. lenght 30 m, diameter min 8 mm, including eventual chain.
  - c) 1 hand operated bilge pump. May be operated with control line through block in the center console.
  - d) 1 bucket
  - e) 2 towing lines, 10m each, diameter min. 8mm.
  - f) Life jackets for every crew member.
  - g) 1 paddle

#### C.7 MEMBERSHIP

C.7.1 When class-racing, the owner or the **skipper** should be a member of NKF.

#### C.8 ADVERTISING

C.8.1 Advertising is allowed

# Part D – Hull

- D.1 GENERAL
- D.1.1 INCLUDED PARTS
  - a) Hull shell
  - b) Deck / cabin
  - c) Innerliner with reinforcements

- d) Fittings
- e) Rudder

#### D.2 HULL SHELL

D.2.1 CONSTRUCTION

- a) The hull shell should be of homogeneous laminate.
- b) The hull shell should be made in a mould approved by NKF.

#### D.2.2 MATERIAL

- a) The laminate should be fiberglass reinforced polyester resin.
- b) The transom may have a sandwich core laminate.

#### D.3 DECK / CABIN

#### D.3 CONSTRUCTION

- a) Deck and cabin may have a sandwich laminate.
- b) Deck and cabin should be made in a mould approved by NKF.

c) A deck beam made of sandwich laminate should be installed immediately aft of the mast, stretching across the whole underside of the deck.

#### D.3.1 MATERIAL

a) The laminate should be fiberglass reinforced polyester resin.

b) The sandwich core material should be expanded thermoplastic with closed cells.

#### D.4 INNERLINER

#### D.4.1 CONSTRUCTION

- a) The innerliner is made in one piece and bonded to the hull and to the deck.
- b) The innerliner should be according to approved mould.
- c) The innerliner includes a centre console from which mainsheet, backstay and bilge pump is operated.
  - d) The innerliner should be made in a mould approved by NKF.

#### D.4.2 MATERIAL

- a) The laminate should be fiberglass reinforced polyester resin.
- b) The sandwich core material should be expanded thermoplastic with closed cells.

#### D.5 FITTINGS

#### D.5.1 MANDATORY

- (a) Forestay fitting with reinforcement below deck.
- (b) Teak gunwhale, dimensions according to the rules for CE-marking
- (c) Stemhead fitting and stem rail
- (d) Chain plates for shrouds.
- (e) Tracks for foresail with adjustable traveler that includes a spring-loaded position lock, mounted on elevation on deck SB&BB. Shall not be complemented with barberhaul or outhaul arrangements.
- (f) Mainsheet track and traveler with athwardship control gear 1:2, mounted on center console.
- (g) Swivelling ratchet block for mainsheet control mounted on center console
- (h) Swivelling cleat for backstay control mounted on center console.

- (i) Mainsheet gear ratio max.1:4
- (j) Mast step with hinge.
- (k) Mooring cleats, 1 at bow, 2 aft.
- (1) 2 ratchet lead blocks for jibsheets. Positioning of these are free.
- (m) 2 cam cleats for jibsheet. Positioning of these are free.
- (n) Kicking strap with gear ratio 1:8 and cam cleat on cabin top.
- (o) 2 cam cleats for main halyard and foresail halyard respectively.
- (p) Through-deck sheave for backstay adjustment mounted in after deck.
- (q) Crowfoot with gear ratio 1:2 over deck and tackle for backstay max 1:4 below deck.
- (r) Rescue ladder in cartridge installed on starboard side of transom.
- (s) Safety hooking points in cockpit should be fitted as follows: Two hooking points starboard & port side, aft of the cabin bulkhead. Two hooking points starboard & port side of the center console, one or two hooking point on the cockpit floor. aft of the center console.
- (t) The hooking points may be use to attach hiking straps.

#### D.5.2 OPTIONAL

- a) Bracket for outboard auxiliary engine.
- b) Flexible kicker rod to lift the main boom.
- c) Spinnakersheets, tweakers, spinnakerboom downhaul, spinnakerboom lift and spinnakerhalyard may be fitted using optional fittings and fasteners. Positioning of these are free.
- d) Optional number of hiking straps may be fitted inside the cockpit. Any hiking strap should be of such length that it will prevent a crewmember to position his hock at the gunwhale or further outboard.
- e) Helmsman's seat

#### D.6 INTERIOR

- D.6.1 MANDATORY
  - (a) Standard interior integrated in the innerliner.
  - (b) The interior may be extended freely.

#### D.7 INBOARD AUXILIARY ENGINE

D.7.1 GENERAL

Only electric inboard auxiliary engine is allowed.

# **Part E – Hull appendages**

#### E.1 GENERAL

- E.1.2 INCLUDED PARTS
  - a) Keel
  - b) Rudder

#### E.2 KEEL

- E.2.1 CONSTRUCTION
  - a) The **keel** fin is an integrated part of the **hull.**

#### E.2.1 MATERIAL

- (a) The laminate should be fiberglass reinforced polyester resin.
- (b) The ballast keel should be iron, bonded into the forward part of the keel fin.

#### E.2.2 DIMENSIONER

#### E.3 RUDDER AND TILLER

#### E.3.1 CONSTRUCTION

The **rudder** should be manufactured the following way:

a) In a mould approved by NKF

#### E.3.2 MATERIAL

- (a) The **rudder** laminate should be fiberglass reinforced polyester resin.
- (b) The sandwich core material should be expanded thermoplastic with closed cells.
- (c) The tiller should be homogeneous or laminated wood.

## Part F – Rig

#### F.1 GENERAL

- F.1.1 INCLUDED PARTS
  - a) Mast
  - b) Boom
  - c) Spinnaker boom
  - d) Standing **rigging**
  - e) Running rigging

#### F.2 MAST

#### F.2.1 CONSTRUCTION

- a) The luff groove should be integrated in the mast section.
- b) The upper part of the **mast** may be tapered over the fastening point of the upper shrouds.

#### F.2.2 MATERIAL

a) The **spars** should be of aluminium alloy and may be anodized.

#### F.2.3 FITTINGS

a) Mandatory

- i. Jumper struts should be installed on the mast.
- ii. Eye for spinnaker pole should be installed on forward side of the mast.
- iii. Mast step with hinge should be installed on deck.
- iv. Fastenings for main and jib halyard gear should be installed on mast.

#### F.2.4 DIMENSIONS

2.1	DIMEROIONS	
		minimum maximum
a)	Distance between mast root and 0-point	0 mm
b)	Mast section alongships at the upper shrouds	
c)	Mast section athwardships at the upper shrouds	
d)	Mast section alongships at the upper point	
e)	Mast section athwardships at the upper point	
f)		mm5820 mm
g)	Heigth, lower shrouds	mm mm
h)	Heigth, upper shrouds	mm 5200 mm
i)		mm
j)		
k)	Heigth of jumper struts	mm6000 mm
1)		
m)	Width of black bands	
n)	Distance between <b>upper point and lower point</b>	mm7800 mm
0)	Weigth of mast section including fittings	20 kg

#### F.3 BOOM

#### F.3.1 CONSTRUCTION

- a) The **boom** should have the same section across its length, excluding forward and aft part where it may be taperad for a length of max. 300 mm.
- b) The luff groove should be integrated in the boom section.
- c) The boom may have equipment for reefing the mainsail.

#### F.3.2 MATERIAL

a) The **spars** should be of aluminium alloy and may be anodized.

#### F.3.3 FITTINGS

#### a) Mandatory

- i. Fastenings for kicking strap and 2 mainsheet blocks.
- ii. Outhaul for the mainsail foot should be fitted, with cam cleat either on the lower side of the boom or operated from the cabin top.

#### F.3.4 DIMENSIONS

DIN			
		minimum	maximum
a)	Width of black bands	20 mm	
b)	Boom section vertically		mm
c)	Boom section horizontally	60 mm	mm
d)	Distance from aft side of mast to forward side of black band		mm 3200
mm			
e)	Weight of boom	6 kg	

#### F.4 JIB POLE / SPINNAKER POLE

- F.4.1 MATERIAL
  - a) The **spars** should be of aluminium alloy and may be anodized.

#### F.4.2 DIMENSIONS

DIM		minimum	maximum
a)	Length of jib pole/spinnaker pole	mm	2500 mm
b)	Spar diameter		mm

#### F.5 BOWSPRIT

F.5.1 GENERAL

Bowsprit is not allowed

#### F.6 STANDING RIGGING

#### F.6.1 MANDATORY

- a) forestay
- b) upper shrouds
- c) backstay with flexible batten at masthead
- d) jumper stays

#### F.6.2 OPTIONAL

i. Lower shrouds may be installed at any heigth over the root point of the mast.

- ii. Jib furling gear is allowed
- iii. The forestay may be extended with shackle or toggle.

#### F.6.3 MATERIAL

a) Mandatory standing rigging should be stainless strand wire, dimension min. 5 mm for forestay and shrouds, min. 3 mm for jumper stays. The backstay may be wire or cordage. If lower shrouds are fitted, they should be stainless steel strand wire, dimension min. 4 mm.

#### F.7 RUNNING RIGGING

#### F.7.1 MANDATORY

- a) Mainsheet
- b) Foresail sheets
- c) Mainsail and foresail halyards
- d) Kicking strap

#### F.7.2 OPTIONAL

- a) Gennaker/ spinnaker halyard
- b) Lift for spinnaker pole
- c) Downhaul for spinnaker pole

#### F.7.3 MATERIAL

- a) Mandatory running rigging should be wire or cordage.
- b) For optional running rigging the material is optional.

# Part G – Sails

#### **G.1 GENERAL**

Only 1 mainsail, 1 jib and 1 spinnaker should be allowed onboard when class racing.

#### G.1.1 **INCLUDED PARTS**

- Mainsail a)
- b) Jib
- Spinnaker c)

#### **G.2** MAINSAIL

#### G.2.1 **IDENTIFICATION**

- a) Sail numbers and national letters should correspond to KSR.
- Class insignia should be according to drawing H.1.1"Class logotype MF" b)

#### G.2.2 CONSTRUCTION

- (a) Construction should be: soft sail, single ply sail.
- (b) The main part of the sail should be woven cloth, minimum weight 6,0 oz.
- (c) **Cloth** fibers should be polyester.
- (d) Windows and telltale windows made of transparent material may be fitted. Size, number and positioning of these windows are optional.
- (e) The sail may have max 4 batten pockets in the leech. The upper batten may be the full width of the sail.
- (f) The foot of the sail should be designed to run in the boom groove. The foot may be outside of the groove for a distance of 500 mm from the clew.
- (g) The following is allowed: seams, stichings, glue, tape, luff rope, everings, headboard, cunningham eye/gear, reefing eyes, battenpocket reinforcements, elastic tape for battens, end fittings for battens, mast and boom travelers, leech line with adjustment gear, windows, contrast tape, sailmakers label, tell tales.

#### G.2.3 DIMENSIONS

		minimum m	aximum
a)	Quarter girth		mm
b)	Half girth		150 mm
c)	Three quarter girth		400 mm
d)	Head width		150 mm
e)	Headboard width		140 mm
f)	Leech length		200 mm
g)	Batten lenghts, maximum	L1=free; L2= 1000; L3= 1000; L4	= 750mm

#### **G.4** JIB

- G.4.1 CONSTRUCTION
  - (a) Construction should be: soft sail, single ply sail.
  - (b) **The main part** of the **sail** should be woven cloth, minimum weight 6,0 oz.
  - (c) **Cloth** fibers should be polyester.
  - (d) Windows and telltale windows made of transparent material may be fitted. Size, number and positioning of these windows are optional.
  - (e) The sail may have max 2 batten pockets in the leech. Batten lengths are optional.

(f) The following is allowed: seams, stichings, glue, tape, luff rope, eyerings, headboard, cunningham eye/gear, reefing eyes, battenpocket reinforcements, elastic tape for battens, end fittings for battens, mast and boom travelers, leech line with adjustment gear, windows, contrast tape, sailmakers label, tell tales.

#### G.4.2 DIMENSIONER

						minimum		maximum
a)	Luff length	 		 		.5600 mm-		. 5700 mm
b)	Luff perpendicular	 		 				mm
c)	Foot length	 		 				2300 mm
d)	Half girth	 		 				1250 mm
e)	Three quarter girth	 		 				700 mm
f)	Head width	 		 				mm
g)	Leech length	 		 		4900 mm		.5050 mm
h)	Batten pockets	 minii	mum	 •••••	L1=	= 350 mm	L	2=400 mm

#### G.4 SPINNAKER

#### G.4.1 CONSTRUCTION

- (a) Construction should be: soft sail, single ply sail.
- (b) The main part of the sail should be woven cloth, minimum weight 0,75 oz.
- (c) **Cloth** fibers should be nylon or polyester.
- (d) The following is allowed: seams, stichings, glue, tape, luff rope, eyerings, headboard, cunningham eye/gear, reefing eyes, battenpocket reinforcements, elastic tape for battens, end fittings for battens, mast and boom travelers, leech line with adjustment gear, windows, contrast tape, sailmakers label, tell tales.

#### G.4.2 DIMENSIONER

DI	ILIGIOIULIC	Mininum	Maximum
i)	Luff length	 6000 mm	8600 mm
j)	Foot length	 3900 mm	4800mm
k)	Half girth	 4200 mm	5400 mm

## Part H – Drawings

#### H.1 ENCLOSED DRAWINGS

#### H.1.1 Class insignia

Min. diameter on circle = 400 mm; Font: Modern nr 20, bold.



