

*Regulations of the
Scandinavia650/Skippi650
Class*

REGULATIONS OF THE SCANDINAVIA650/SKIPPI 650 CLASS.

Present regulations have been formed to bring into being a class of not large, permanent, safe and easily transported yachts to the shipping on inland and coastal water.

The Scandinavia650/Skippi 650 class is the class of monotype, permissive on the rivalry in real-time without time counting on the same yachts according to below mentioned regulations.

REGULATIONS OF THE SCANDINAVIA650/SKIPPI650 CLASS

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I. General decisions.

1. The definition of the yacht of the Scandinavia650/Skippi650 class.

The Scandinavia650/Skippi650 yacht we call a yacht fulfilling Regulations of the Scandinavia650/Skippi650 Class which possesses the Classificatory (Survey) Certificate and marking of a class. The yacht of the Scandinavia650/Skippi650 Class is the yacht whose hull, with the insertion of the hull, the centerboard box, centerboard, pilars, and the construction of futtock shrouds, the building of the interior (fences under cockpit, cupboards and galleries) must be performed exactly with the documentation, worked out on the basis of the PhD Jerzy Pieśniewski project exclusively by the owner of copyrights.

2. The aim of the Scandinavia650/Skippi 650 Class.

The basic aim of the Scandinavia650/Skippi650 Class is qualitative and quantitative development of yachts of this class fulfilling survey regulations directed to the equation of regatta chances.

3. Authorities.

Authorities of the Association of the Skippi 650 Class are:

- The General Meeting of the Members of the Scandinavia/Skippi Association.
- The Board of the Scandinavia/Skippi Association.
- The Board of Control of the Scandinavia/Skippi Association.

4. Auxiliary authorities.

These authorities are appointed by the Board of the Scandinavia/Skippi Association for a period of time and in order to perform certain assignments.

- 4.1 The Technical Committee of the Association consists of three members of the Scandinavia/Skippi Association. Its Chairman is a surveyor. Its task is solving problems connected with interpretation of regulations of the Scandinavia650/Skippi650 Class. The Committee and the surveyor are appointed by the Board of the Association.
- 4.2 The surveyor of the Scandinavia650/Skippi650 Class makes control measures of yachts. They give a Bill of Tonnage, run the control over the class Scandinavia650/Skippi650 Class yachts for every class yacht.

5. Marking of yachts of the Skippi 650 Class.

5.1 Class Marks.

- 5.1.1 The shape of the class mark must be identical with one of the example given in fig.

SCANDINAVIA 650
SKIPPI 650

- 5.1.2 Navy blue color of class mark is obligatory for all yachts starting in regatta of yachts of the Scandinavia650/Skippi6500 Class.
- 5.1.3 The class marks with measurements L=1500mm and H=220mm must be situated permanently on both sides of greatest main sail at its top so that they are not covered.
- 5.1.4 The class marks with minimal measurements L=220mm and H=30mm must be situated permanently astern of the yacht on left side.

5.2 General Marks.

- 5.2.1 Registration numbers and signs of the national status must comply with general regulations concerning them.

6. Bill of Tonnage.

- 6.1 Bill of Tonnage is an identity certificate of the yacht of the Scandinavia650/Skippi650 Class, must contain the size and data according to the below mentioned example.
- 6.2 The Number of the Bill of Tonnage is ascribed to a given yacht, cannot be transferred on other yacht.
- 6.3 The exchange of the Bill of Tonnage can happen only in case of change of name of a yacht, change of a registration number or an owner.
- 6.4 The yacht can be deprived of the Bill of Tonnage, when it stops fulfilling the regulations of the Scandinavia650/Skippi650 Class. Such decision is taken by the Board of the Scandinavia/Skippi Association on application of every member of the Technical Committee or as a result of technical protest during regatta.
- 6.5 Bill of Tonnage free of charge is obtained by a yacht fulfilling all regulations of the Scandinavia650/Skippi650 Class whose owner is a member of the Scandinavia/Skippi Association.
- 6.6 Bill of Tonnage payable is obtained by a yacht fulfilling all regulations of the Scandinavia650/Skippi650 Class whose owner is not a member of the Scandinavia/Skippi Association and in the case of the renewal of the Bill of Tonnage resulting from the situation mentioned in point 6.4. The amount of this payment fixes the Board of the Scandinavia/Skippi Association for every regatta season.
- 6.7 Every yacht except the Bill of Tonnage must possess the Survey Form written and kept by the Surveyor of the Class.

7. Regatta crew.

- 7.1 During regatta the crew consists of one skipper leading the yacht and to a maximum three crew members.
- 7.2 The skipper leading yacht is responsible for the technical condition of the yacht, its safety and safety of the crew as well as for the compatibility of its measuring parameters with the regulations of the Scandinavia650/Skippi650 Class.
- 7.3 The skipper must make the yacht available to supervisory measurement on every demand of the Surveyor of the Class or a member of the Technical Committee with the omission of the duration of the race.

8. Regatta.

- 8.1 The time of regatta begins at the moment of entering the regatta by the skipper, and finishes at the time of the announcement about the end.
- 8.2 The regatta crew will be disqualified in the series of done races in case of stating the offence of Class or Survey Regulations of the Scandinavia650/Skippi650 Class.

II. Definitions.

1. Measuring trim to exam the stability and mass of a yacht.

A yacht in measuring trim to stability and mass examination is a yacht prepared as follows:

1.1 Sails

- The greatest mainmast rolled up to the boom with the encastré waist and kicking strap, yard arm of the boom leaning on the bottom of the cockpit possibly in the plane of symmetry of the yacht.
- The greatest foresail rolled up on the stay with attached and chosen sheets.
- Greatest genaker on the shunter position with attached braces, the line of the tack and with the halyard, on the port side in compliance with with assumptions of the constructor of the yacht.

1.2 The ballast fin (the centerboard with the midriff) and steering one are blocked in the maximum low position, tiller with the lengthener immobilized in the plane of symmetry of the yacht.

1.3 The internal ballast fixed permanently.

1.4 Removed obligatory equipment, additional and all other moveable elements.

At examination of the mass of a yacht the distribution of above mentioned elements does not have to be in the above mentioned position.

2. The mass of a yacht - M.

The mass of a yacht in measuring trim must be minimum 700kg.

3. The length of a centerboard - W.

The length of the centerboard can not exceed 1330mm of its maximum bottom position. It is measured from the contour of the hull to its farthest advanced bottom edge.

4. The mass of a centerboard Mw.

The mass of the centerboard fin cannot exceed 150kg.

5. The surface of main sails- S.

The surface of main sails (the foresail and the mainmast) cannot exceed 27m².

6. The surface of genaker - Sg.

The surface genaker cannot exceed 35m².

7. The length of genakerboom - LG.

The length of genakerboom in the use position cannot exceed 1700mm.

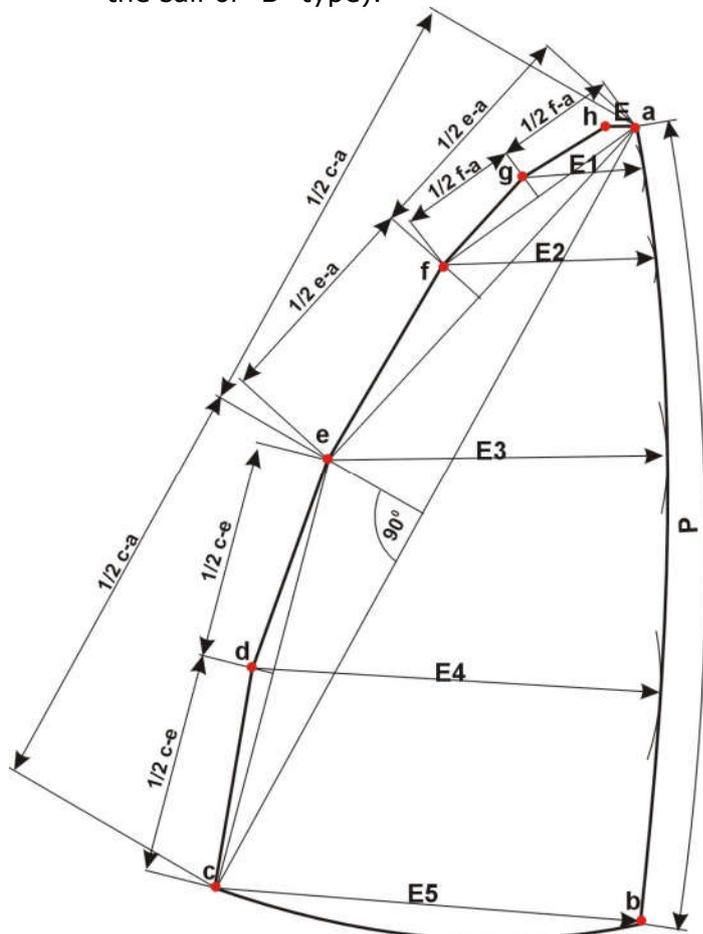
8. The stability of a yacht.

The stability of a yacht is accomplished at minimum 12kg upraised by the yacht.

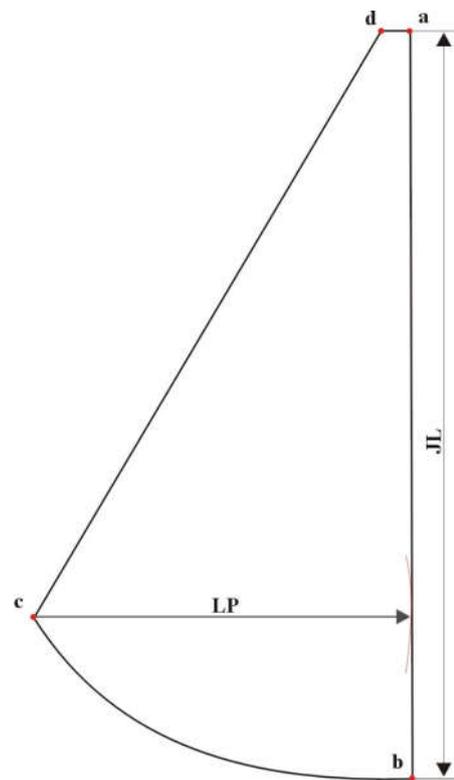
III. Survey regulations.

1. Sails.

1.1. The measurement of the main sails (the mainmast - the sail of "A" type, the foresail - the sail of "B" type).



The sail of "A" type



The sail of "B" type

1.1.1 The measuring surface of the sail of "A" type must be calculated according to the following formula:

$$FA = P \times \frac{E + 2E1 + 3E2 + 4E3 + 4E4 + 2E5}{16}$$

1.1.2 The measuring surface of the sail of "B" type must be calculated according to the following formula:

$$FB = 0,5 \times JL \times LP$$

1.1.3 All measurement of parameters of sails one ought to make to the external edge of the contour elements of the sail (strengthenings, stiffenings, luff, mast hoop) measuring along the tangent to its surface. A measuring point of the corner of the sail crossing of prolongations of the contour of its edges.

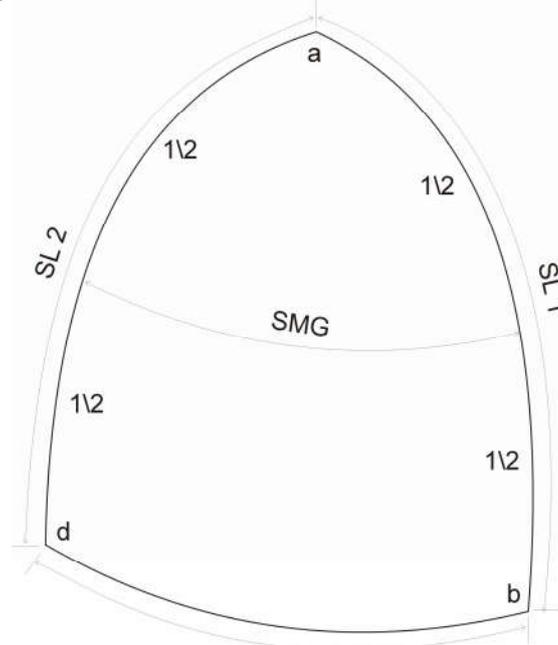
1.1.4 Marking the parameters c-d, d-e, e-f, f-g, g-a should be done along the edge of the contour of the sail. The measurement of the parameter LP, E1, E2, E3, E4 should be done along the straight line with shortest length and

along the of tangent to the surface of the sail. The length of the edge a-d 50mm and the edge c-d will not go beyond the line connecting angles c-d.

- 1.1.5 The measurement of the parameter P is made among internal edges of contrasting measuring-bands being 20mm wide, permanently fixed on the mast. The upper edge of the bottom band on the mast creates a straight with the upper edge of the boom installed perpendicularly to the mast.
- 1.1.6 The measurement of the parameter E5 is made between the back edge of the mast and the internal edge of the measuring-band being 20mm wide, permanently fixed on the boom.
- 1.1.7 For the mainsail is permitted to use up to 5 strips in the leech, of which more than half could be full (across the entire width of the sail)
- 1.1.8 For the foresail is allowed to use a maximum of 3 strips in the leech . The length of each of the slats must not exceed 50 cm

1.2. Measurement of additional sails (genaker - the sail of „D” type).

- 1.2.1. An additional sail is the sail fastened to the stable fragments of flag-staffs with the angle a and b.
- 1.2.2. Measuring of the additional sail must be performed according to the figure.



SF
The sail of "D" type

1.2.3. The measuring surface of the sail of "D" type must be calculated according to the following formula:

$$FD = 0,75 \times \frac{SL1 + SL2}{2} \times \frac{SMG + SF}{2}$$

1.2.4. All measurement of parameters of sails one ought to make to the external edge of the contour elements of the sail (strengthenings, stiffenings, luff, hanks) measuring after the tangent to its surface. A measuring point of the corner of the sail crossing of prolongations of the contour of its edges.

1.2.5. Measurement of the parameters SL, SL1, SL2, SF should be made along the edge of the contour of the sail. The measurement of the parameter SMG one ought to do along the straight with the shortest length and along the tangent to the surface of the sail.

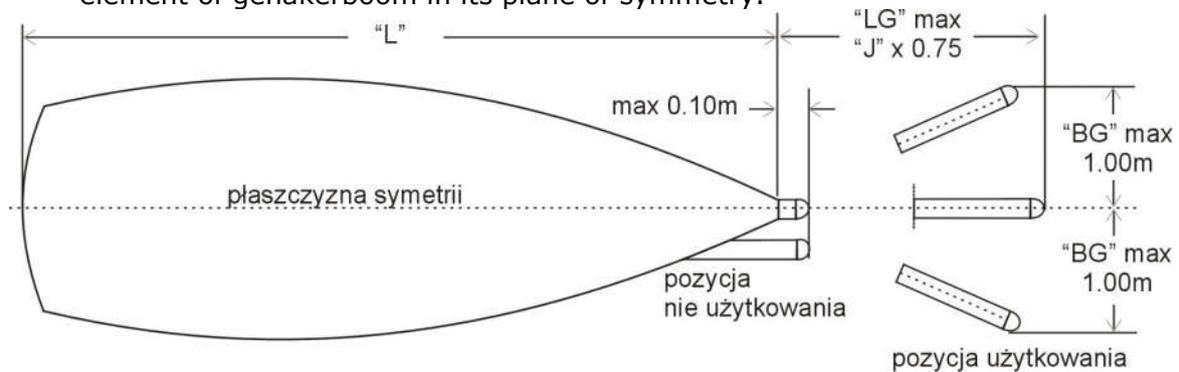
2. Genakerboom.

2.1 It is allowed to use one genakerboom with one end fastened to the hull of the yacht as far as its active length LG in the use position will not be greater than 1700mm and will not be greater than 100mm in the non use position.

2.1.1. Measurement LG should be made horizontally in the plane of symmetry of the yacht among the plumb-line situated outside the farthest advanced elements of the yacht (the plumb-line appointed at the L measurement) and the plumb-line situated outside the farthest advanced element of genakerboom.

2.1.2. The deviation of the end of genakerboom being not fastened is allowed as far as the deviation BG is not greater than 1000mm from the plane of symmetry of the yacht.

2.1.3. Measurement BG one ought to perform horizontally between the plane of symmetry of the yacht and the plumb-line situated outside the farthest advanced element of genakerboom in its plane of symmetry.



3. Rudder blade

3.1. The length of the rudder blade shall not exceed 1100 mm in its maximum lower position . It is measured from the lower edge of the transom stern to the furthest protruding bottom edge.

3.2. The width of the rudder blade shall not exceed 295 mm at its widest point

3.3. . The mass of the rudder blade shall not be less than 6,0 kg

4. Survey of stability.

The condition of unsinkability (stability) of the yacht will be completed when the yacht canted to the left and right side up to the horizontal position of the mast, raises every time the weight of minimum 12kg, situated on the bottom edge of the upper measuring-band of the mainmast situated on the mast. The measurement takes place when the yacht is in measuring trim.

IV. Detailed regulations.

1. The qualification of the drive of the yacht.

- 1.1 It is allowed to have only sail drive of the yacht, based on the mast, boom and genakerboom. A main sail is the sail fastened with at least two corners to stable fragments of the yacht. Sails made from woven monostratal materials are allowed. The minimum weight (the basic weight of the fabric) of main sails is $170\text{g}/\text{m}^2$.
- 1.2 An additional sail is the sail fastened to stable fragments of flag-staffs with angle a and b. The minimum weight (the basic weight of the fabric) of the additional sail is $35\text{g}/\text{m}^2$.

2. The qualification of dimensions and construction of the yacht.

- 2.1 The length of the yacht L.
 - 2.1.1 L cannot be greater than 6500mm.
 - 2.1.2 Measurement L should be made horizontally between the plumb-lines situated outside the farthest advanced elements of the yacht parallel to its plane of symmetry.
 - 2.1.3 Measurement L is made with the omission of elements which do not serve to hold the mast or manoeuvrings with sails. Out of this rule are genakerboom and shields of the rudder and the pantograph.
- 2.2 The width of the yacht B.
 - 2.2.1 B cannot be greater than 2500mm.
 - 2.2.2 Measurement B should be made horizontally between the plumb-lines situated outside the farthest advanced elements of the yacht perpendicularly to its plane of symmetry.
 - 2.2.3 The length L and the width B as well as other measurements of laminate coats qualified is univocally by the shape of the yacht performed in negative forms and one may not change them.
- 2.3 Constructional parameters.
 - 2.3.1 To the construction of the yacht the use of following materials is allowed: (the laminate polyester-glass, wood, plywood, polyurethane foam, PCV foams, the aluminium and its alloys, lead, cast iron, steel).
 - 2.3.2 To the construction of the accessories to manoeuvre with the drive of the yacht, composites the high endurance (carbon filaments) are not allowed.
 - 2.3.2 Ballasts can be made from materials which thickness is equal or less than the thickness of lead.
- 2.4 Qualification of the interior of a yacht.
 - 2.4.1 The interior with the internal insertion, the centerboard box, centerboard, pilerssem and with the construction of stay futtock shrouds, the building of the interior (fences under cockpit, cupboards and galleries) must be performed exactly with the documentation, exclusively by the owner of copyrights, Skipper Yachts shipyard or its licensor.

3. The qualification of the mast, boom and genakerboom.

- 3.1 Only yachts with masts made from the single section of the profile from alloys of aluminium fastened with their own base on board are allowed. Masts arisen with a calx on the bottom of the yacht crossing the mast ring in the deck and rotary masts are forbidden.

- 3.2 The length of the mast measured from the deck at the place of its uprising up to the highest advanced stable element of the mast cannot exceed 9100mm. Places of fastening of the fixed and moveable rigging on the mast must be in accordance with the technical documentation of the yacht (the enclosure no1).
- 3.3 The mast and the boom with longitudinal profile max 102mm and min 90mm as well as transverse one max 75mm and min 64mm are allowed.
- 3.4 The minimum diameter of shrouds and stenshrouds is 4mm.
- 3.5 If the surface of the projection of the mast on the plane of symmetry of the yacht is greater than 1m², then we include it into main sails.
- 3.6 If the surface of the projection of the boom on the plane of symmetry of the yacht is greater than 0,4m², then we include it into main sails.

4. Safety conditions.

- 4.1 The mass of the yacht cannot be less than 700kg. This measurement is taken when the yacht is in measuring trim.
- 4.2 Ballasts permanently situated inside the yacht.
- 4.3 The centerboard (ballast) fin.
No liftings of the centerboard (ballast) fin during the regatta. The centerboard during the race is possible only in the damage situation eg. running against under-water the hindrance where the situation can threaten the safety of the crew and sailing. When the danger is over, the centerboard must be lowered at once. The yacht informs the Regatta Committee about the happening. In the situation when the proper course goes through generally well known shallows or hindrances, it is forbidden to choose consciously this course and sailing with upraised fins.
- 4.4 Unsinkability of the yacht.
The yacht should possess draught material in the quantity delivered by the producer of the yacht. No disposal of draught materials.
- 4.5 Accomplishment of the criterion of the tightness demands: the tightness going through the cabin of the centerboard box on all its height within cabins and on the crossing point with the deck, tightness of holds and bull's-eyes.
- 4.6 The condition of unsinkability (stability) of the yacht must be completed.

5. The obligatory equipment.

- 5.1 An anchor of the any type weighing min 4kg with the line 15m long and the diameter of min 8mm.
- 5.2 Two mooring-ropes of min 5m and the diameter of min 8mm.
- 5.3 One paddle min 1,5m long.
- 5.4 One bucket of min 5l capacity.
- 5.5 Life jacket of a recognized type for every crew member.
- 5.6 On the board during the race must be the obligatory equipment of the yacht and the equipment being obligatory on a given maritime reservoir.

6. Other.

- 6.1 It is allowed to use only ballast belts permanently fastened in the cockpit, to excluding all other devices as trapeziums, ballast boards etc. protruding outside the contour of the hull. Ballasting with legs outside the contour of the yacht is forbidden.
- 6.2 No usages of the continuous regulation of the rigging except the tension of the stay and achtersztg.
- 6.3 No usages of sails with double luff, flag-staffs bent in continuous way or by means of mechanical devices or any other artificial manner. The normal regulation of the sails during the race is not treated as mechanical bending of the mast.

- 6.4 Mainmasts can be reefed only after the bottom luff. Refbanta must be placed at the min high of 1000mm.
- 6.5 No usage of fairings of the foresail.
- 6.6 No changes of trim of the yacht through permanent stay of the crew outside places appointed for them on board the yacht.
- 6.7 The use of navigational aids for the introduction of waypoints , counting out the optimum course and transmit weather data