

# LIGHTNING SPECIFICATIONS

*With amendments and revisions as of January 17, 1941.  
All changes indicated in italic type.*

## NOTICE TO BUILDERS AND SAILMAKERS

The association will refuse to issue a number or grant a measurement certificate to any yacht on which the royalty has not been paid or which was not built by a recorded owner of official Lightning Class plans.

**PLANS**—Plans are not transferable. They are sold subject to the terms and conditions of the notice thereon. Plans and specifications are subject to annual revision, only as provided in Constitution and By-Laws. The responsibility of keeping advised as to these annual revisions rests with the purchaser of plans and specifications. Never copy another Lightning.

**ROYALTIES**—A royalty, or number tax, must be paid by the builder to the association on each Lightning built. A royalty must also be paid by the sailmaker on each suit of sails made, amounting to 40 cents on jibs, 60 cents on mainsails and 60 cents on spinnakers.

**PROTECTION OF NAME AND EMBLEM**—No boat may properly be sold, or entered in any race, as a "Lightning", or at any time display the Lightning emblem upon its sails or otherwise, unless the number tax or royalty on such boat has been paid to the association by the builder or owner thereof. For the benefit of owners, and prospective owners, the association proposes to take whatever steps may be necessary to protect both the Lightning name and emblem from any unauthorized use.

## ARTICLE I — EXPLANATIONS

**IMPORTANT**—Specifications, however complete, cannot anticipate every possible situation that may arise. If a point is not herein covered, or governed by the dictates of common sense, a ruling must be obtained from the Measurement Committee. In interpreting any point not covered, or wording of obscure meaning, the Measurement Committee shall consider the intended meaning rather than any technical misconstruction that might be derived from the wording, and shall bear in



*Lightning No. 2  
Built and Owned  
by Nelson Bearse,  
Centerville, Mass.*

Dear Mr. Larsen:

I enclose a small photo of my Lightning Class boat #2 showing you a fair picture of your sail you made for me.

I think that it is a fine setting sail and sets better now than when I had the picture taken. I thought perhaps you would be interested to have a photo.

Thanking you again for a fine piece of work, I am,

Very truly yours,

NELSON BEARSE

**LOUIS J. LARSEN**

50 WARREN STREET, NEW YORK



SAIL LOFT A CITY BLOCK LONG  
ONE OF THE FINEST IN AMERICA



mind at all times, the basic principle of the specifications, which is to maintain the Lightning as a standard one-design class.

MEASUREMENTS AND WEIGHTS in the specifications are in feet, inches, and pounds, in accordance with the standards of the United States Bureau of Weights and Measures.

REQUIREMENTS—In addition to payment of a royalty or number tax as above specified, a yacht, its spars, rigging, and sails, must conform strictly throughout with respect to design, dimensions, construction and material to the official plans and specifications of the Lightning Class Association, to be considered a Lightning and be eligible to the Lightning Class. *The Association's measurement certificate is the only recognized proof of eligibility to the Lightning Class.*

YACHT'S NUMBER—Must be permanently burned or cut into the centerboard case in 2" figures for future identification before a certificate can be issued.

OPTIONS—Nothing is optional in these specifications unless the word "optional" appears in the article and then only within the limitations described.

MEASUREMENTS—All heights shall be measured from the base line plane which shall be established as 8½" from the bottom at station No. 3 and 7⅜" from the bottom at station No. 8 and shall be equi-distant from the chines on both sides of the boat. (See note on keel heights. Art. 4, Paragraph 1.)

Half breadths shall be measured from the center line plane.

Fore and aft measurements shall be measured from a plane AA at right angles to the base line and tangent to the forward edge of the centerboard pin. All deck measurements are taken exclusive of mouldings. Yachts must be built to exact dimensions given, as the allowance which will be made for expansion, unavoidable fractional inexactness, etc., is not sufficient to permit of any intentional deviation.

## ARTICLE II — HULL DIMENSIONS

1. Length over all, 19'0".
2. Greatest beam at deck, 6'6⅛".
3. Greatest beam at chine, 5'6¼".
4. Water line length, 15'3" approximately.
5. Greatest draft, 4'11½" approximately.

For further dimensions see plans.

# *Skaneateles* LIGHTNINGS

Have the Exclusive Features of  
the Class' NUMBER ONE Builder

Check the many exclusive features of the Skaneateles Lightning and the detailed specifications in our complete, illustrated literature . . . and remember that long established master builders who specialize in this type of craft and who pioneered the construction of the Lightning are making extra quality possible at no extra cost. . . . If you want the thrill of winning important class events, take note that Skaneateles has long been known as a builder of class racing champions. Every boat has measurer's certificate. Skaneateles dealers can give you prompt deliveries, trade in quotations and unexcelled service. Ask for name of nearest dealer.

## SKANEATELES BOATS, INC.

*Fine Boats Since 1893*

Skaneateles, N. Y.



*Write for  
Free Literature*

### ARTICLE III — GENERAL

The hull is to be entirely of wood. When kinds of wood are indicated as optional, they must be of the varieties normally accepted in yacht practice for the purpose. Their weight must be between 22 and 38 pounds per cubic foot when commercially air dried. Waterproof plywood may be used but its thickness must be that specified for lumber unless definitely stated otherwise.

The construction shall follow the plans and any departure will be at the builder's risk.

Chines and keel may be rounded to a radius not greater than  $\frac{1}{2}$ ". (See note on keel heights. Art. 4 Paragraph 1.)

Minimum weight of hull with all rigging, mast and boom, rudder, tiller and centerboard to be not less than 700 pounds. (If this is less than 700 pounds the difference shall be made up by the addition of any material attached to the under side of the deck.) This shall be securely fastened and may be removed in the amount that soakage increases the weight of the hull.

All materials to be of specified or indicated dimensions except where so stated.

### ARTICLE IV

#### KEEL, TRANSOM, PLANKING AND CHINE TIMBERS

1. Keel of mahogany or oak moulded  $1\frac{1}{8}$ " as shown, or on double planked boats if the inner planking crosses the keel its thickness shall be considered as part of the  $1\frac{1}{8}$ " moulding; sided not less than 6" at its greatest point or less than 4" where it intersects chine timber or less than  $4\frac{1}{2}$ " at the transom. The keel is to stand not less than  $\frac{7}{8}$ " proud of the bottom planking and the amount must be allowed on all keel heights as shown on the lines drawing and in measuring the after end of the skeg.

2. Bottom planking—May be of double or single planked construction or seam battens may be used; cedar and of not less than  $\frac{5}{8}$ " total thickness.

3. Transom—Of mahogany not less than  $\frac{3}{4}$ " thick.

4. Top Sides—Cedar not less than  $\frac{5}{8}$ " thick. May be ship lapped or seam battens may be used.

5. Chines—Oak or mahogany  $\frac{7}{8}$ " x  $1\frac{1}{2}$ ".

Options—Number of planks, kind of wood.

*Give your boat  
the advantage of*  
**JOYS  
CHAMPIONSHIP  
SAILS**



WRITE FOR DETAILS OF  
COMPLETE MARINE EQUIPMENT



**JOYS BROS. CO.**  
129 NORTH WATER STREET, MILWAUKEE, WIS.

#### ARTICLE V — STEM

1. Stem—Of oak sided and moulded as shown.

Option—Kind of wood.

#### ARTICLE VI — FRAMES

Frames—Of oak or mahogany sided and moulded as shown.

Options—Kind of wood. Additional frames may be added, but specified frames must be centered as shown. May be larger but not less than dimensions given. Gussets are not permitted.

#### ARTICLE VII — DECK BEAMS

Deck Beams—Oak or mahogany moulded and sided as shown.

Options—Kind of materials. Beams may be larger but not smaller than shown.

#### ARTICLE VIII — DECK

Deck—Of white pine  $\frac{3}{8}$ " thick or waterproof plywood  $\frac{5}{8}$ " thick, thoroughly painted and covered with 8 oz. canvas carried down over sides of top strake and covered with gunwale or moulding. Covering boards are not permitted.

Option—Kind of wood.

Doubling blocks, etc., shall be of material not less than  $\frac{7}{8}$ " thick.

#### ARTICLE IX — COCKPIT

Cockpit—Of size and shape as shown, it shall start at frame No. 4 and run to frame No. 8½. It shall be 4'8" wide at station No. 5 and 3'5" wide at station No. 8½. The deck surrounding the cockpit shall not be less than 10" wide at any point. Coamings shall be of mahogany as shown, and the height can be as low as ½". Floor boards and seats are to be of the outline shown on drawings. They may be solid or of slats of material not less than  $\frac{5}{8}$ " thick. If of slats the space between slats cannot exceed 25% of the width of the slats. Their height may vary plus or minus 2" from that shown on drawings.

Options—Kind of wood. Lockers, shelves.

Cockpit braces shall be of material not less than  $\frac{7}{8}$ " thick.



C. P. McCLELLAN

*for*

LIGHTNING CLASS  
RACING SAILS



YACHT SAILMAKERS

*for the last fifty years*



Manufacturers of Quequechan  
Special Egyptian Yacht Fabrics  
of the Highest Quality

Direct From Our Looms to Your Boat



MILL and SAILLOFT

32 Boomer St.. Fall River, Mass.



## ARTICLE X — HATCHES

Hatches—One small hatch on after deck for attaching outboard motor may be used.

## ARTICLE XI — FASTENINGS

Fastenings can be of iron, steel, bronze, brass, copper or nickel, or any alloy made basically of combinations thereof, but not of aluminum or other light weight metals. Other materials not permitted. They may be galvanized or plated.

## ARTICLE XII — MAST STEP

Oak as per plans.

Option—Kind of wood.

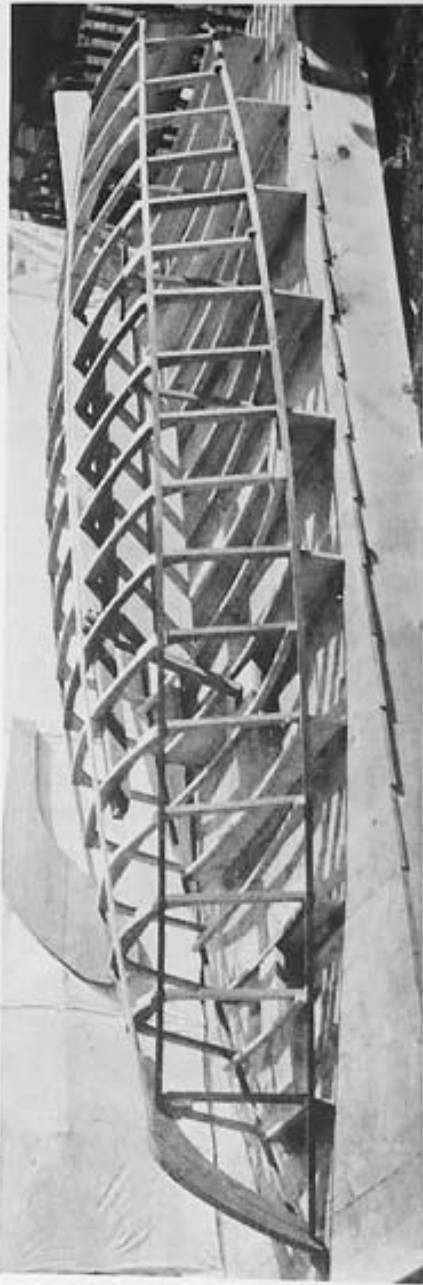
## ARTICLE XIII — SPARS

1. Mast—To be hollow and rectangular in section. Made of spruce or Douglas fir with walls not less than  $\frac{1}{2}$ " in thickness at any point. Minimum dimensions as per spar drawing. Length of mast from top of deck to top of sheave shall be 25'8". *A distinguishing color band  $\frac{1}{2}$ " wide shall be painted around the mast, the top edge of which shall be 24'0" below the top of main balyard sheave. A stopper shall be permanently fixed in the gooseneck slide track to prevent the line of the top of the boom, when extended, from coming below the top of this colored band.* Mast must not be grooved to take bolt rope of sail. Sails must be attached to the mast with  $\frac{5}{8}$ " track and slides. Halyards may not run inside the mast and weight of the sails must be carried on the halyards while the sails are set.

The bolster at the mast head must be the same outline as in the detailed drawing. AA to forward side of mast must measure 1'9". Rotating masts prohibited. No change in position of mast at any point will be allowed during any race. With boat in sailing trim aft side of mast must be a straight line.

2. Boom—Must be solid T section as per plans, made of spruce or Douglas fir. Foot of sail must fasten in a straight line in both plan and profile. No arched or curved tracks are allowed and no transverse movement is permissible in the foot of the sail. The sail must be attached to boom with track the same as on mast. Length of boom from aft side of mast to extreme end shall not be greater than 10'0".

3. Spinnaker pole—Shall not be greater than 6'9" overall including fittings when measured square off. Size and shape as



## LIGHTNING FRAME SET CONSTRUCTED ENTIRELY OF PHILIPPINE MAHOAGANY BRASS AND COPPER FASTENINGS

Consisting of one piece stem, 3" wide, cut and sanded to the true contour, rabbet sawn to depth of planking. Must be tapered after planking is on. Dark mahogany is used for the stem because some may want to finish it in natural wood.

All seventeen frames completely assembled with floors attached, copper riveted and burred, sanded and beveled to fit planking. Nine frames having the deck carlins attached. Exactly to specifications. All other deck carlins furnished. Deck cleat block, mast deck block, mast step, all cockpit stanchions. The trunk completely assembled with trunk logs attached, painted in well, copper riveted and brass screws throughout. Drilled for bolting to keel. Transom, Transom cheeks, Transom knee, Skeg, Trunk Brace, and rudder cut to size. Instruction sheet and thirteen templates that will enable anyone to true up the frame without shoring.

Priced at \$41.00 F.O.B.

\$5.00 deposit with order. Balance on delivery.

Shipping weight, 295 lbs.

**DELTA MANUFACTURING CO., 105-43 DITMARS AVE., CORONA, N. Y.**

### OTHER FRAME SETS

4' x 9' PRAM.....	\$19.90
15'6" x 5' SNIPE.....	31.00
16' x 5' COMET.....	35.00
17' x 5'8" NAT. O.D.	37.00
18' x 7' SEAGULL..	41.00
22'7 1/2" x 5'8" STAR	41.00

**Straight grained Sitka Spruce  
Masts and Booms for these and  
other boats. The Lightning hull  
is as easy to plank as any  
frame set we make.**

per plans. Made of spruce or Douglas fir. Pivot point on forward side of mast not to project forward more than  $1\frac{1}{2}$ ".

#### ARTICLE XIV — RIGGING

Rigging—As shown on plans as to position and number and length of stays. To be of wire rope of diameter and strength not less than shown on plans. Spreaders and struts to be as shown as to position, length, diameter and wall thickness. They can be of iron, steel, bronze, brass, copper or nickel, or any alloy made basically of combinations thereof, but not of aluminum or other light weight metals. Other materials not permitted. They may be galvanized or plated.

Method of attaching to spars optional. Any change in the set of standing rigging except as occasioned by accident or by means other than conventional turnbuckles during a race shall be prohibited. *Changes in running rigging, not expressly barred in the plans or specifications, may be made at owner's option.*

#### ARTICLE XV

##### CENTERBOARD, CENTERBOARD PIN AND CENTERBOARD TRUNK

Centerboard Pin—Must be  $\frac{5}{8}$ " in diameter.

Centerboard—To be  $\frac{5}{8}$ " thick and not to vary more than  $\frac{1}{2}$ " in any dimensions from official pattern except in an area bounded by a triangle formed by the top and forward edges at their intersection and having legs 22" and 8" long respectively, to allow for pennant fittings. Provided, however, that for use in local races only, including elimination races to determine fleet representatives in the National Championship or other sanctioned events, the centerboard may be shortened by removal of a portion of the after end thereof when such shortening has been approved by the local fleet. To be of iron or steel. Other materials not permitted. May be plated to eliminate corrosion but must be painted and may not be of polished metal. May be streamlined but chamfer not to extend in more than 1" from any edge.

Centerboard Trunk—May not be enclosed. Centerboard trunk may be notched out along its upper edge to permit boards with their forward upper corner cut off to be lowered to the designed position without the hoisting tackle entering the trunk. Boats with double planked bottom may use a trunk with sides  $\frac{1}{8}$ " thick throughout. *The use of a gasket of any kind, either in or at the bottom of the centerboard well, is not permitted.*

**WILLIAM H. GRIFFIN**

**Yacht Sailmaker**

Established 1863

Tel. ESplanade 2-7392



**MARINE BASIN**

Foot of 26th Avenue

**BROOKLYN**

**NEW YORK**