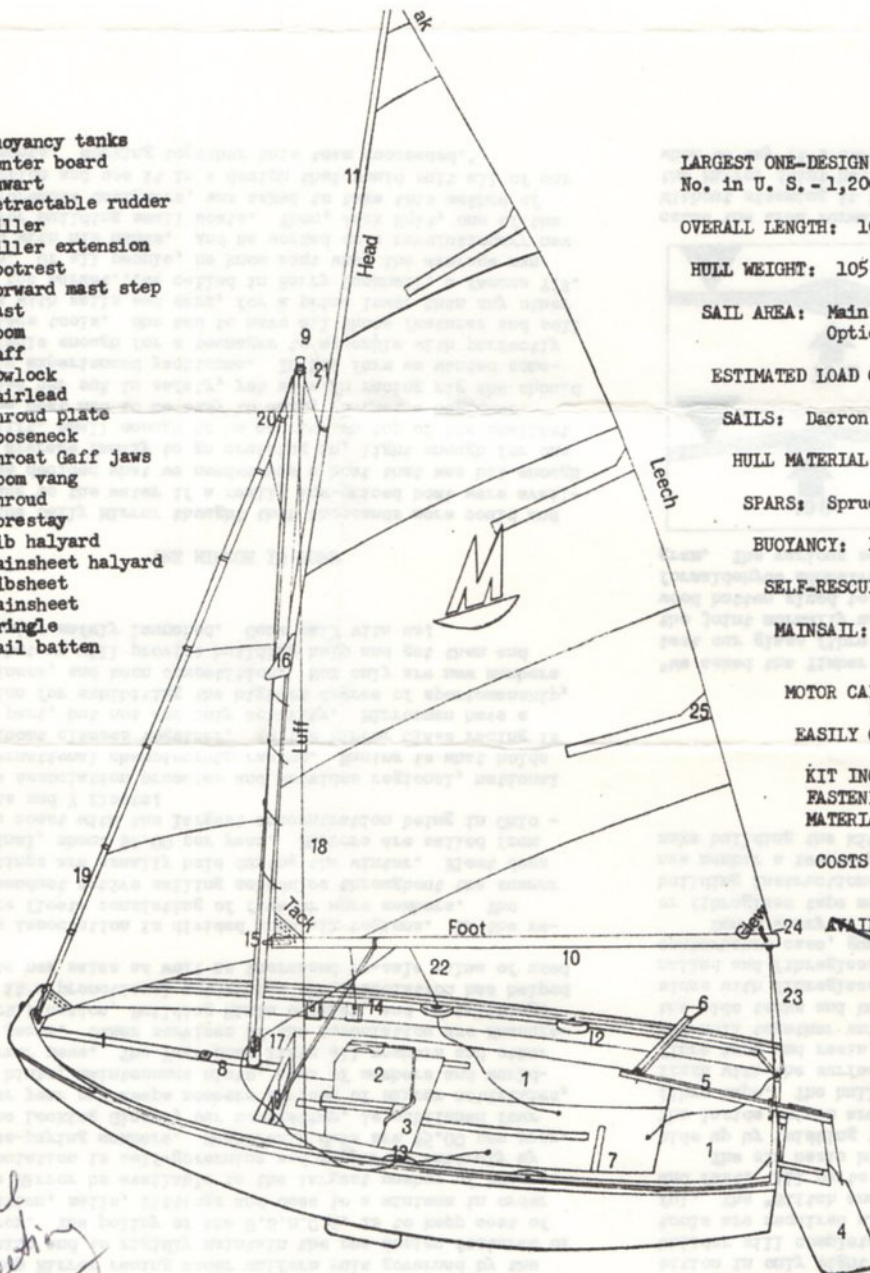




- 1 Buoyancy tanks
- 2 Center board
- 3 Thwart
- 4 Retractable rudder
- 5 Tiller
- 6 Tiller extension
- 7 Footrest
- 8 Forward mast step
- 9 Mast
- 10 Boom
- 11 Gaff
- 12 Rowlock
- 13 Fairlead
- 14 Shroud plate
- 15 Gooseneck
- 16 Throat Gaff jaws
- 17 Boom vang
- 18 Shroud
- 19 Forestay
- 20 Jib halyard
- 21 Mainsheet halyard
- 22 Jibsheet
- 23 Mainsheet
- 24 Cringle
- 25 Sail batten



MIRROR DINGHY FACTS

LARGEST ONE-DESIGN SLOOP CLASS IN THE WORLD
No. in U. S. - 1,200 No. world-wide - 40,000

OVERALL LENGTH: 10 ft. 10 in. BEAM: 4 ft. 7 in.

HULL WEIGHT: 105 lbs. RIGGED WEIGHT: 135 lbs.

SAIL AREA: Main - 49 sq. ft. Jib - 20 sq. ft.
Optional Spinnaker - 65 sq. ft.

ESTIMATED LOAD CAPACITY: 600 lbs.

SAILS: Dacron type, Viking Red, Black markings

HULL MATERIAL: Marine mahogany plywood

SPARS: Spruce FITTINGS: All marine quality

BUOYANCY: Four built-in air tanks

SELF-RESCUING: Can be sailed full of water

MAINSAIL: Luff runs in sail-track on gaff
laced on mast and loose foot.

MOTOR CAPACITY: 3 h.p., 1½ h.p. preferred

EASILY CARRIED ON TOP OF CAR

KIT INCLUDES ALL ITEMS AS SHOWN IN DIAGRAM
FASTENINGS, ALL HARDWARE, CONSTRUCTION
MATERIAL

COSTS: New Kit - \$300 and up
Used completed boat, about \$500

AVAILABLE FROM:
~~Marvin G. Wallis Company~~
~~5014 Mendell St.~~
~~Fairfax, Virginia 22030~~
~~(Licensed Manufacturer)~~

Cleveland Amateur Boatbuilding and
Boating Society Supply Co.
19250 Telbir Avenue
Rocky River, Ohio 44116
(Importer of kits for members)

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12/72

inside
&
outside
sheeting

The objectives of the U.S.M.C.A. are to promote the Mirror and to develop Mirror racing under uniform rule governed by the Association and to rigidly maintain the one design features of the Mirror. The policy of the U.S.M.C.A. is to keep cost of construction, sails, fittings and dues to a minimum in order that the Mirror be available to the largest number of owners. The Association is self-governing and supported entirely by its dues-paying members. Membership dues are \$5.00 per year.

"The Looking Glass", our newsletter, is published four times per year and keeps members advised of Mirror activities, sailing hints, maintenance hints, news of members and worldwide Mirror news. The Year Book lists all members and other helpful facts. Other services of the Association are Measurement Certification, Building Hints booklet, and advertising. Through its promotional activities the Association has helped stimulate new sales as well as increased re-sale value of used boats.

The Association is divided into six regions. In the regions are fleets consisting of five or more members. The fleets conduct active sailing schedules throughout the summer and meetings are usually held during the winter. Fleet dues are nominal, about \$2.00 per year. Mirrors are sailed from coast to coast with the largest concentration being in Ohio - 700 boats and 7 fleets!

The Association promotes and provides regional, national and international championship racing. Racing is what holds all sailboat classes together. In the Mirror Class racing is a large part, but not our only activity. Mirrormen have a reputation for exhibiting the highest degree of sportsmanship, friendliness, and keen competition. Not only are new members welcome, but we will provide building help and get them and their family safely launched. Come sail with us!

THE MIRROR IS BORN

"We at the Daily Mirror thought that thousands more could and would take to the water if a really low-priced boat were available...We decided what we needed was a boat that was bit enough for the average family to go cruising in, light enough for one man to lift, small enough to be carried on top of the smallest car. The boat had to be easy to sail, so that a beginner could take her out in safety, yet when in racing rig she should entertain experienced yachtsman. In kit form we wanted something simple enough for a teenager to assemble with perfectly commonplace tools. She had to have all those features and sell complete with sails and oars, for a price lower than any other boat on the market...We called in Barry Bucknell, a famous T.V. handyman. Of all people, he knew best what the average man could do with his hands. And he worked on a revolutionary new method for building small boats. Then, Jack Holt, one of the worlds foremost designers, was asked to take this method of construction and use it in a design that would suit all of our requirements. Working together this team succeeded."

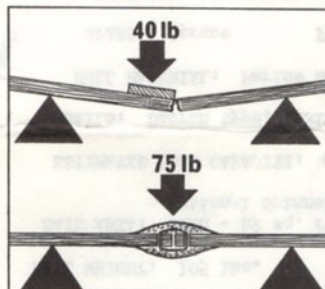
A group of nine school girls completed the hull at an exhibition in only eight hours! The average inexperienced builder will complete his boat in 100 hours. No special tools are required although an electric drill would be helpful. The "Stitch and Glue" method is what makes it so easy and fast. All parts are pre-formed and require only fitting.

The six basic hull sections are stitched together right side up by twisting together short pieces of copper wire. The inside joints are sealed with fibreglass resin and glass fibre tape. The hull is next turned over. The wire is cut flush with the surface and the joints sealed with glass fibre tape and resin. The copper wires only purpose is to hold the hull together until it can be fibreglass taped. Next, the side tanks and bulkheads are added and sealed on both sides with fibreglass tape. The decks are set in place, nailed and fibreglass taped. The boat is completed by adding centerboard case, gunnels, and hull stiffeners.

Don't worry if you don't understand the "Stitch and Glue" or fibreglass tape method. The kit comes with step-by-step building instructions. The U.S.M.C.A. gives free to each new member a twelve page building hints brochure that will make building the kit even easier.

HOW STRONG IS THE HULL

"We asked the Timber Research and Development Association to test our glass fibre and resin joint. They compared it with the joint normally used in dinghy construction, i.e., a softwood batten glued to the inboard side of the ply with a urea formaldehyde adhesive. Tests proved what we show in our diagram. The various samples of the wood-batten joint had, on



the average, just about half the failing strength of the Mirror joint, 41.45 lbs. per 1 3/4" width compared with 75.23 lbs. per 1 3/4" width for the Mirror joint. And that's not all. Further samples of both joints were steamed for six hours at 15 lbs. per square inch pressure. The tensile strength of the Mirror after this was 478 lbs. per inch width. The wood-batten joint fell apart because the urea formaldehyde adhesive had lost all its strength. Without steaming it had a tensile strength of 350 lbs., while the Mirror joint held under 900 lbs.!! So you can see - - when we say it's strong and will last - - we mean it."



U.S. MIRROR CLASS ASSOCIATION

15645 Normandy Ave.
Cleveland, Ohio 44111

Mirror Class Dinghy Building Instructions



FIRST CLASS MAIL