

Mackerel, a 16 Foot Family Type Outboard Runabout

L.o.a. 15'-8", Beam 4'-3", Depth 1'-11"

THIS is a design of a popular type of small family runabout, using any one of the small outboard motors from about 6 hp. up to 10 hp. This little craft will carry as many as eight passengers, and if not overloaded will attain speeds up to 15 m.p.h., depending on the power used.

By making slight alterations to the hull structure a small air-cooled inboard motor can be used.

CONSTRUCTION

Waterproof plywood is used throughout where possible and feasible. Panels can be obtained in 16' lengths without a splice or butt, and this is recommended. However, if these 16' panels are not readily available in your locality, do not hesitate to use shorter lengths and make a butt.

Stem: Oak or mahogany conical in form, rabbeted for planking. Knee Hackmatack 2¼" thick.

Planking: On the bottom and sides is ¾", 3-ply resin bonded plywood.

Deck, Bulkheads, Seats and their supports are all ¼", 3-ply resin bonded plywood.

Transom is ¾", 3-ply, the same as the planking.

Inner Keel: Fir or sitka spruce, 1" x 3" wide.

Outer Keel: Oak, 1" x 1¼".

Chine Stringers: Fir or sitka spruce, 7/8" x 3" and the corner piece should be oak, 1" x ¾" fitted between the edges of the bottom and side planks.

Deck Edge Stringers: White oak, 1¼" x 1½"; rabbeted for deck planking.

Beams: May be spruce or fir.

Floors: Between bulkheads—sitka spruce or fir, 1" thick.

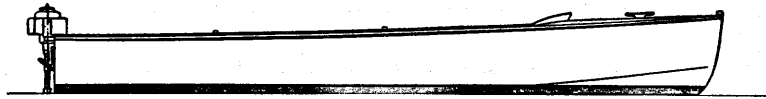
Frames: Sitka spruce or fir, 1" thick.

Seat and Bulkhead Cleats: Fir 1¼" x ¾"

Transom Beam and Fashion Pieces: Oak or mahogany.
 Coaming and Bulkhead Caps: May be oak or mahogany,
 slotted and glued over edges of the plywood.
 Fastenings: Be sure to use flathead wood screws for fastenings
 throughout and glue all contact surfaces.

Do not countersink the plywood planking for the screws. Just
 give the screw an extra one or two turns and this will compress
 the wood around the hole.

Glue should be applied on the bare wood only. Do not use
 shellac, oil or preservative under the glue.

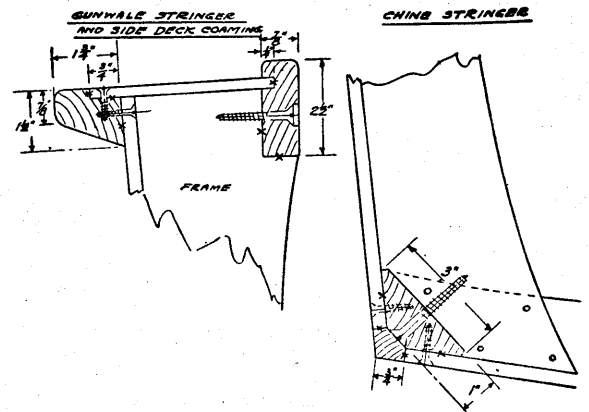
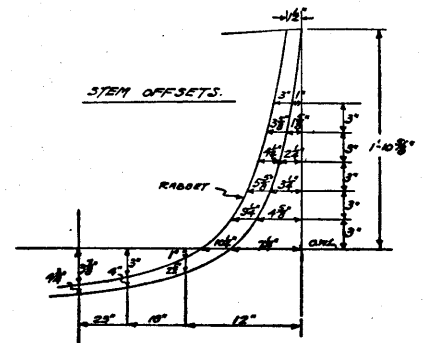
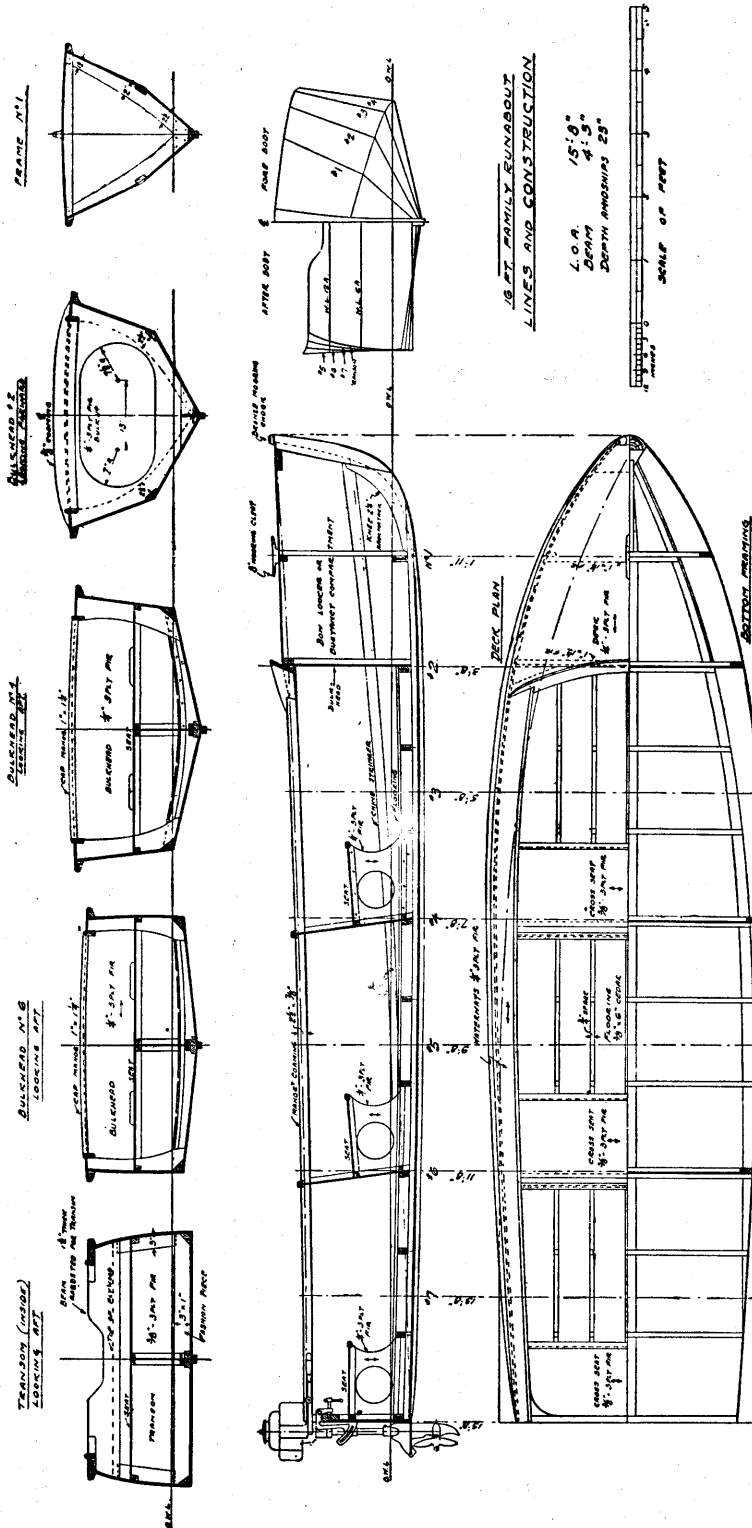


OFFSETS
STATIONS.

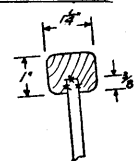
	STEM	1	2	3	4	5	6	7	T
STEM	1.105	1.87	1.76	1.65	1.56	1.51	1.44	1.41	1.40
CHINE	0.81	0.55	0.34	0.13	0.02	0.13	0.23	0.30	0.35
DECK	0.37	0.51	0.54	0.54	0.52	0.47	0.43	0.37	
WEEEL	1.40	1.00	2.04	2.14	2.11	2.01	1.85	1.51	
WEEEL	0.31	1.40	1.87	1.11	2.01	2.03	2.03	2.03	
WEEEL	0.05	FULL LENGTH OF KEEL							
WEEEL						2.05	2.04	2.03	2.00
WEEEL							2.07	2.03	1.85
WEEEL									1.86

USE O.W.L AS BASE LINE

Heights are taken above and below
 waterline which is used as baseline. Di-
 mensions in feet, inches and eighths of
 an inch to outside of planking

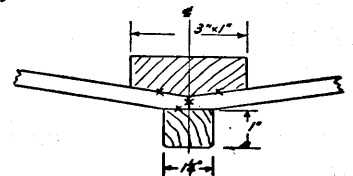


BULKHEAD CAP



INNER & OUTER KEEL

X THESE SURFACES
 TO BE GLUED.



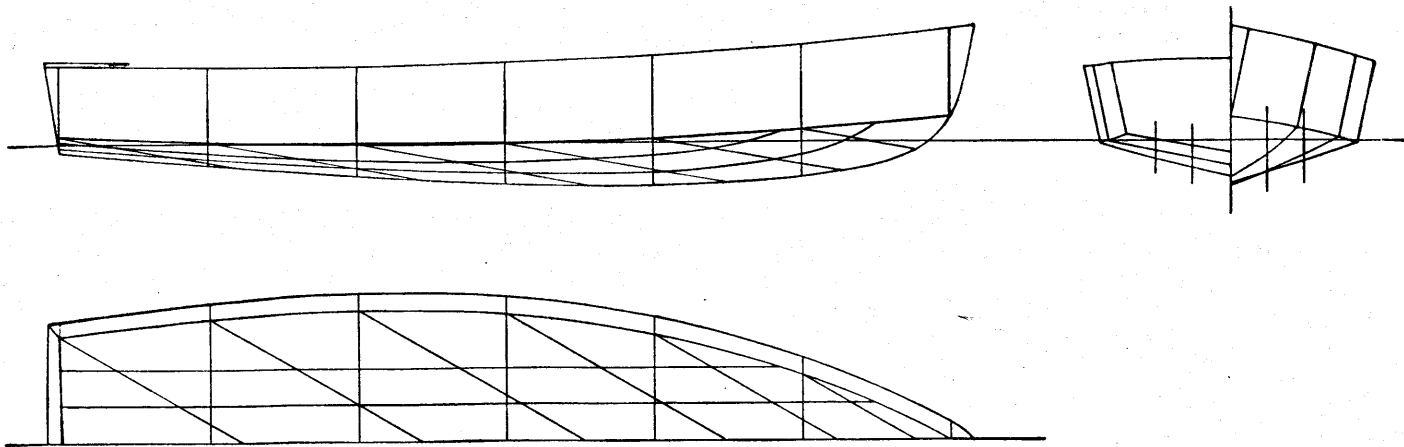


Fig. 1—Layout of a design with a "cylindrical" bottom surface, showing the parallel positions of the generatrix