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SPECIFICATIONS NO. 131

45' 11" WATERLINE AUXILIARY SCHOONER YACHT

IN GENERAL:

In carrying out these specifications, it is understood that all workmanship shall be first class, that the materials used shall be of good quality, and that the stock shall be reasonably clear and free from all defects.

The specifications and drawings are intended to cooperate, so that any works exhibited in the drawings and not mentioned in these specifications, or vice versa, are to be executed the same as if they were mentioned in the specifications and set forth in the drawings, without any extra charge whatever.

No changes are to be made in either the plans or specifications without the written consent of the Architect.

<u>DIMENSIONS:</u>	Length Overall	53' 3"
	Length Waterline	45' 11"
	Beam	14' 11"
	Draft	6' 0"

KEEL: (wooden) Of clear, sound oak, moulded 7 1/2" and sided as per rabbet line. Mortised to receive heels of all frames with the exception of station frames. All through fastenings to be a tight driving fit through keel to prevent leaks. As an additional precaution, place a ring of cotton caulking or oakum, soaked in red lead, around bolt on top of keel before setting up nuts.

FORWARD OVERHANG TIMBER: Of oak, in two pieces as shown, sided as per rabbet line and moulded as shown. Fastened as indicated on Construction Plan.

AFTER OVERHANG TIMBER: Of oak, sided as per rabbet line and moulded as shown. Fastened as indicated on Construction Plan.

KEEL: (lead) To weigh approximately 14,000 pounds, plus or minus not more than 3%. To be shaped exactly to designed lines. Center of gravity to fall 11 1/4" aft of Station No. 9. Lead to be balanced to check center of gravity before fastening in place. To be bolted as shown on Construction Plan.

STEM: Of oak, sided 5 1/2", moulded as shown, and fastened as indicated.

STEM KNEE: Of oak, moulded as shown. Hook or lock scarphed to forward overhang timber.

DEADWOOD: Of oak or hard pine.

STOPWATERS: The entire foundation to be carefully stopwatered.

STERN: Of oak, constructed on radius as shown on Line Plan. Planks to be 1 1/4" thick and not over 5" wide, properly cleated and dowelled together. Fashion pieces of 2 1/2" oak. Kneed to tail feather with 3" oak knee.

FRAMES: Of clear, straight-grained oak, spaced 12" on centers, and to have a finished dimension of 2 3/4" x 2 3/4". Frames on mould stations 3 to 9 inclusive to be on forward side of station, and frames from No. 10 and mould stations aft to be on after side of station. To be steamed and bent oversize and then beveled outside and inside to conform to final dimension of 2 3/4" x 2 3/4". To be very carefully stayed and braced so that frame will absolutely hold the shape of the moulded station.

Floor timber to be bolted to frame with at least three 5/16" dia. galvanized iron screw bolts in the heel of each frame.

After these frames have been made to conform to the moulded sections of the boat they are to be set up as forms and ribbands screwed to them.

All intermediate frames to be steamed and bent oversize, beveled inside and out, and fitted to the inside of the ribbands with heels mortised into and securely fastened to keel.

Frames from about No. 3 mould station forward to be moulded cants.

There will be 11 auxiliary frames, 2 3/4" x 2 3/4", steamed and bent from bilge stringer to bilge stringer, bolted to floor timbers with 5/16" dia. galv. screw bolts, and planking fastened to them the same as to the main frame. Care must be taken in spacing plank butts to prevent them coming in same bay with auxiliary frames.

Absolutely no broken or cracked frames to be used.

FLOOR TIMBERS: Of oak, carefully shaped so that planking lays snugly to them. Of heights and thicknesses as shown. Fastened to keel with bolts of sizes as shown. Heels of timbers to be bolted to floor timbers with at least three 5/16" dia. galv. screw bolts in the heel of each timber. Planking to be securely fastened to floor timbers the same as to the main frame.

LIMBERS: Ample limbers at every frame. Bottom of boat to be run with wax up to the height of all limbers.

CLAMPS: Of long leaf yellow pine, 2" x 6", to be as shown on Construction Plan. Clamp which carries the forward deck frame to run way through to the stern; this clamp to be tapered at the ends to 2" x 5". Lower edge fastened at every frame with 5/16" galv. iron bolt, and upper edge to be through fastened through outside guard (see Section Drawing #12) with 3/8" galv. iron bolt at every frame.

Scarphs to be at least 3'6" long and to come preferably aft and well clear of the main rigging.

The clamp or shelf which carries the raised deck frame to be 2" x 6" long leaf yellow pine, fastened at every frame with 3/8" dia. galv. iron bolt.

There will be a short upper clamp, as shown, lapped on to the after end of shelf, of 2" x 6" long leaf yellow pine, fastened alternately top and bottom at every frame with 3/8" dia. galv. iron bolt.

BILGE STRINGERS: Of long leaf yellow pine, 1 1/2" x 6", tapered at ends to 4 1/2". To be carefully located as shown. Fastened alternately top and bottom at every frame with 3/8" dia. galv. iron bolt.

PLANKING: Of Oregon pine, to finish 1 3/8" thick. Wale strakes to be of rift stock and not over 5" wide. Planks hollowed to fit frames. Butts made on 1 3/4" thick oak butt blocks between frames, to completely fill the bay and be 1/2" wider ~~thick~~ than plank strake. Butts well distributed. Butts in the same bay to have at least three strakes between them. Butts in adjacent strakes to have at least three bays between them. Planking to show a tight seam inside and caulking seam of not more than 1/16" outside to receive cotton caulking and white lead putty.

Plank fastenings to be 1/4" dia. x 3" long galvanized hatch (or hinge) nails, bunged.

After each plank has been fastened off and allowed to set for a while, the Builder shall then give the plank and each fastening a final blow to ensure its hugging the frame snugly.

All butts and hood ends to be screw fastened with 2 1/2" #16 galvanized screws.

DECK: To be laid double, of 3/8" thick three-ply Oregon pine plus 1" thick teak. Seams of plywood to come on deck beams and to have, if possible, but one fore and aft seam in the center. The 1" teak to be laid fore and aft, in strips 3" wide, care being taken to have all seams perfectly straight. Caulking seams to be a strong 1/8" width, or as small a seam as Jeffery's marine glue can be satisfactorily run into. (Care must be taken to have caulking seams of uniform width).

Deck to be well painted between skins with a mixture of thick lead and varnish.

Main raised deck to be laid similar to forward deck with the exception that the covering board will be 1 3/8" thick teak, of same width as the rail cap so as to carry this finish all around the boat.

Covering board on deck forward of the break to be 1 3/8" Teak 8" wide, rabbetted so as to show 7" wide when deck is laid.

The after main deck to be laid similar to the forward main deck, but the rail cap will run on to this deck, forming a wide chock rail at its side and around the stern. To make this clearer, the rail cap forward of the break runs on to the raised deck as the plank sheer or covering board, and runs off the raised deck aft, forming rail cap at the side of the cockpit, and continuing aft running on top of the after deck, forming a wide chock rail at its side and around the stern.

Deck fastenings to be galvanized iron hinge nails 3/16" diameter x 2 1/2" long, bunged.

Deck seams to be caulked with cotton and run with Jeffery's Black Marine Glue.

Skylights, deckhouse and hatches to set down on to the three-ply and the teak laid up to them, thus producing a caulking seam all around.

