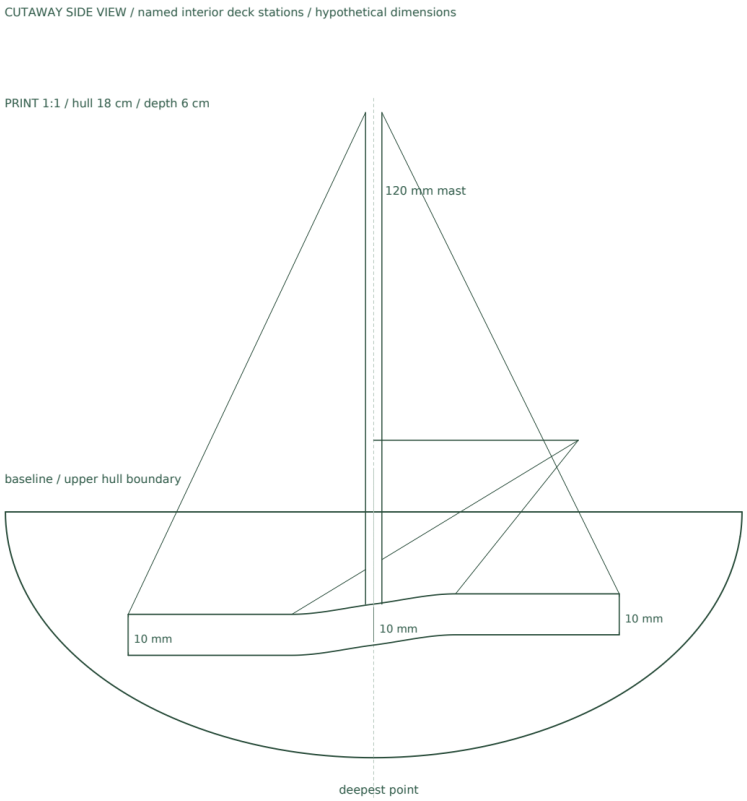
Draw a Generic Ship: Cutaway Hull, Deck, and Mast Construction

Ordinary topic reference / separately checked pixels



A closed selected hull is built from three joined arcs plus its top baseline. Bow/stern DECK stations are inset, not the zero-depth tips. All lower-deck sampled points lie inside the actual hull. Worked upper deck passes through all five frozen station/local anchors; the mast base is on that upper deck. Only the forward boom line is interrupted behind the 4 mm mast.

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Original worked example / unchanged complete key

Prompt: Construct a generic ship in a labeled cutaway side view with an 18 cm hull, 6 cm depth, and interior deck offsets of 2.5 cm at bow, 2.25 cm at midship, and 2 cm at stern. Add a second deck 1 cm lower and a mast 12 cm above its base. In local coordinates with mast base (0,0), x increasing toward the stern and y upward, use upper-deck points (-2,-0.25), (0,0), and (2,0.25). Draw a 5 cm boom from (0,4) to (5,4) and boom-end rigging to deck points (-2,-0.25) and (2,0.25). Check the line gap at x=3.5 and x=4 cm.

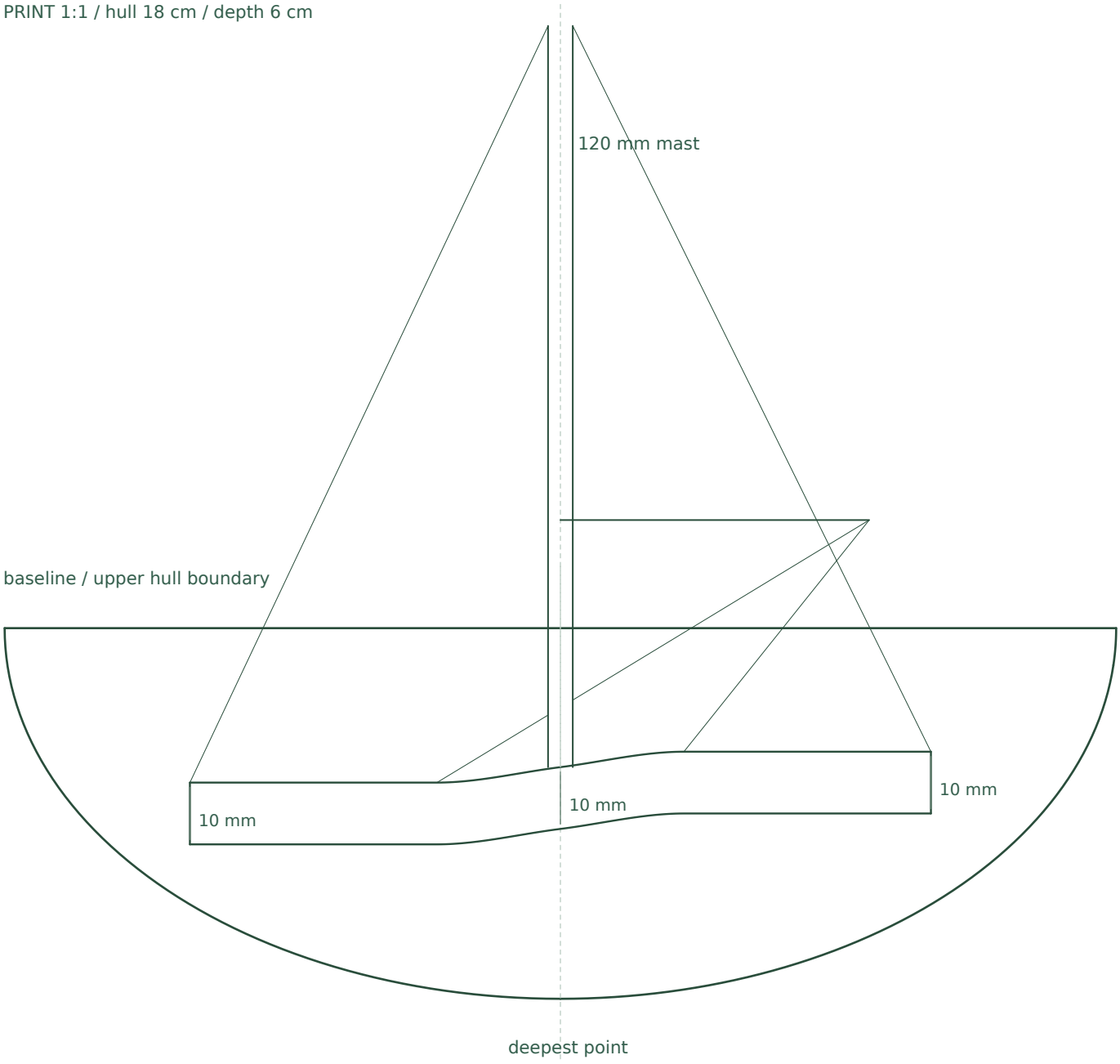
Answer: Label the view “cutaway side view.” Draw the baseline as the upper edge of the hull section, place the deepest point 6 cm below it on the midline, and draw the three hull arcs. Add the interior deck lines at the stated offsets at named inset bow and stern deck stations, then join those deck ends by short verticals. Do not extend the positive deck offsets to the zero-depth hull tips. For one selected 18 cm hull illustration, use a 3 cm inset at each end; keep the lower deck fully inside. The upper deck curve must pass through the given bow/midship/stern offsets AND the two given local forward/aft points, rather than inferring one straight line from only three stations. Use the local boom coordinates from the prompt: mast base (0,0), forward deck point (-2,-0.25), aft point (2,0.25), and boom end (5,4). The two boom-end lines are both present at x=3.5 and x=4. At x=3.5 their vertical gap is 27/28≈0.96 cm; at x=4 it is 9/14≈0.64 cm. The difference is 9/28≈0.32 cm, below 0.5 cm. Do not measure at x=0: the aft segment runs only from x=2 to x=5. Break only the forward line where it crosses behind the mast outline. Check mast verticality, then erase guides and use the rubric.

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Worked diagram / reference

CUTAWAY SIDE VIEW / named interior deck stations / hypothetical dimensions

PRINT 1:1 / hull 18 cm / depth 6 cm



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