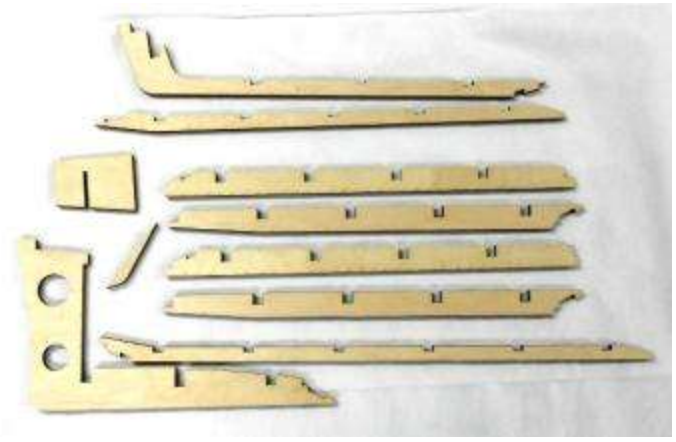
Baltimore Class Heavy Cruiser

Displacement: 14,472 tons standard, 17,031tons full load
Dimensions: 673ft 5in overall x 70ft 10in x 24ft @full load
Machinery: 4-shaft, GE turbines, 120,000shp = 33 knots
Armament 9 – 8 in/55 (3x3), 12 – 5in/38 (6x2), 48 – 40mm (11x4, 2x2), 24 20mm

CA68	Baltimore	CA123	Albany	CA131	Fall River
CA69	Boston	CA124	Rochester	CA132	Macon
CA70	Quincy	CA125	Northampton	CA133	Toledo
CA72	Pittsburgh	CA126	Cambridge*	CA135	Los Angeles
CA73	St Paul	CA127	Bridgeport*	CA136	Chicago
CA74	Columbus	CA128	Kansas City*	CA137	Norfolk*
CA75	Helena	CA129	Tulsa*	CA138	Scranton*
CA122	Oregon City	CA130	Bremerton	*canceled before completion	

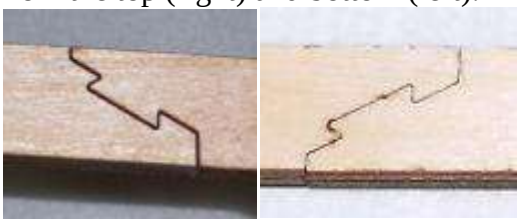
This hull kit will build a 1/96 scale Baltimore class or Oregon City class heavy cruiser hull, suitable for R/C naval combat under Battlestation's rules. The kit features laser cut parts for precise fits and accurate shapes. The kit includes 24 3/8" ribs, a 3/8" sub-deck, and 4 keels. The builder will need to supply 1/32" plywood sheeting for the bottom, a 1/8" plywood top deck, approximately 16' of 3/16"x3/8" basswood sticks, superstructure, and all controls and armament. The kit contains the following:

- 1 fore center keel (2 pieces)
- 1 aft center keel (2 pieces)
- 2 mid keels (2 pieces each)
- 24 ribs
- sub-deck (4 pieces)
- rudder
- sub-keel piece

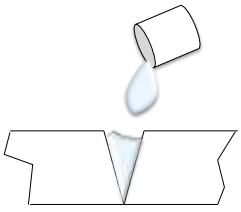


Start by examining the kit and making sure all the parts are there. A couple of notes on assembling laser cut wood parts:

- All the notches should fit together with a slight friction fit. However, the thickness of the plywood varies some, so if the fit on a part is too tight, sand the mating part slightly until it is thin enough to fit without forcing it.
- While the cut sides of the parts may look perfectly straight, there is actually a slight taper. The slot cut by the laser is slightly wider at the top where it burns the longest and narrowest at the bottom where it hits last. This is especially evident on the thicker 3/8" plywood. On dovetail joints make sure to assemble the parts so the tops are all facing the same direction. The joint will form a narrow "V", open at the top and very tight at the bottom giving the best part alignment. The pictures below illustrate the joint from the top (right) and bottom (left).

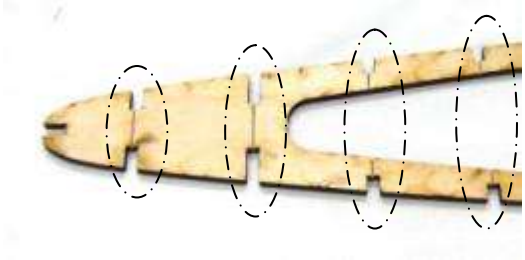


Glue the parts together with thin CA and then fill the "V" with thick CA or epoxy.



Assembling the hull

1. The sub-deck bends up at the bow, so several cuts need to be made to make this bending easier. Using a saw, cut



about 3/4 of the way through the sub-deck where the first 6 ribs fit. Gently flex the sub-deck to make sure it is flexible, taking care not to break the top layer of the plywood.

2. To make it easier to sand the sub-deck to shape at the bow, some trimming before assembly is recommended. Start by marking the bottom of the sub-deck where it intersects the edge of the ribs.

3. Using a scroll saw, plane, or similar tool, trim the sub-deck between the line and the top edge of the deck.

4. After the cuts are made, join the sub-deck and the keels together at the dovetail joints.

5. Now is a good time to plan your deck and hatches. Lay the completed sub-

deck on a piece of paper and trace around the outside and inside. Using this plan, decide where you want the hatches and draw these on your plan. The outlines can also be traced directly onto the 1/8 ply deck material.

6. Add the ribs to the sub-deck. The saw cuts on the sub-deck should be facing up so that the cuts will be on the bottom side of the sub-deck.

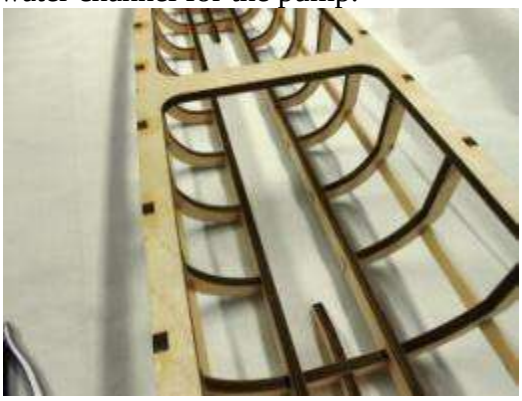
7. Once all the ribs are fitted in the sub-deck, add the fore and aft center keels. The bow keel will not seat all the way right now because the sub-deck is flat. Do not glue the keels in place at this time.

8. Now carefully roll the assembly over. Finish seating the bow keel into the ribs. The sub-deck should now curve up at the bow and the keels should be flat on the table.
9. Add the two center keels to the ribs. The tapered ends of the center keels face the bow of the ship.

10. Add some weight to hold the bottom of the hull firmly to the table. Check to make sure that the sub-deck is level and has no twist. When you are satisfied that everything is aligned, glue it together with thin CA. Reinforce the glue joints with thick CA or epoxy.
11. Add the 3/16”x3/8” stringers to sides of the hull. Start at the stern where the most curvature is and move towards the bow. Where there is a lot of curvature, sand the slot sides to angle them and make it easier to fit the stringer. Cut the stringers so that all the joints are at a rib. Make sure that the bottom of the keel remains flat with the stringers fitted. Once satisfied with the fit, glue the stringers.

12. Cut out the centers of the ribs between the double keels. This will form the

water channel for the pump.



13. Using a plane and/or sanding block, blend the sub-deck with the ribs.

14. Now is the best time to waterproof the hull. Using the sealer of your choice (spar varnish or laminating/finishing epoxy are good choices) coat the entire hull assembly. If the wood soaked up all the sealant and looks dry, put on a second coat.
15. Sheet the bottom of the hull with 1/32 plywood. In the center section, the hull has simple enough curves that one piece can cover several ribs. In the bow and stern, use a separate sheet for every one to two ribs. Trim the sheeting even with top of the stringer.

16. Fill in between the first 2 bow ribs and after the last stern rib with wood blocks.
17. Sand the wood blocks to the shape of the ribs and blend with the sheeting.
18. Add spackling or other filling to the hull if necessary to smooth out the bottom of the hull. Make sure to fill all gaps, so that when the hull is glassed the epoxy will not drip through.
19. This completes the basic hull. Once the deck has been added, the bottom of the hull should be covered with 2-4 oz fiberglass cloth and laminating resin to improved durability and ensure the bottom is water tight.
20. A basic superstructure drawing is available, email mail@jenkse.us for a copy.