

Broadside_The Backyard Naval Battle Game

This is very much a BEGINNING of a WORK IN PROGRESS. I haven't taken the time yet to actually BUILD one of the ships, so I'm not even sure it will work as I envision it. Comments welcome. If you can actually build (2) ships and play a game, definitely let me know how it goes and what changes you see needed! All dimensions can be considered preliminary until a few ships are built and actual games played.

Brent Clifton; <http://www.jbcmusic.com>; email comments, suggested rules changes, etc. to broadside@jbcmusic.com.

A. OBJECTIVE: TO DISABLE AND SINK YOUR OPPONENT'S SHIP(S).

B. EQUIPMENT:

(2) or more ships, constructed as described below. Ships are intended to model modern steel cruisers, destroyers, or perhaps battleships (not sailing ships). Later development of the game may allow for different ship classes with different sizes and weaponry.

"Ordnance": (softballs, football, tennis balls) as described below.

Playing Field: Any relatively level yard, field, or lot.

C. Ships: Rules of construction

1. Ship's overall dimensions are not to exceed 72" x 20". Minimum block dimensions below imply a minimum ship length of 36". Ship is to be constructed of normal construction grades of wood only, planed smooth on adjoining surfaces, with no treatment to increase weight or adhesion. Finishes and sealants must not increase the stickiness or adhesion of any surface, and no sand or other granular substance may be used in the finish to increase friction.
2. Ship is to be constructed on a carriage or skid capable of being wheeled or dragged to different locations. Wheels are to be located in conjunction with the steerage & movement rope (see #3 below), with the axles 12" to 15" in from the carriage ends. Carriages with skids or other than 4 wheels must have 4 faux wheel markers on the edges of the carriage corresponding to the angles described below. The top of the skid shall be a minimum of 3" and maximum of 6" above the bottom of the wheels or skids.
3. A rope or chain is to be connected to the carriage aft of the front axle, with a short stake or eyebolt on the opposite end. The attachment point must be located so that when the rope is stretched straight from that point and touching the front edge of the front wheels, the rope makes an angle of 50 degrees with the carriage centerline. The rear wheels are to be located so that when the rope is stretched straight from the attachment point and touching the rear edge of the rear wheels, the rope makes an angle of 15 degrees with the carriage centerline. A mark should also be made at the front of the skid at 15 degrees off centerline (suggestion: cut off the forward corner from this point to a point forward of the wheels, if the bow is narrow enough). The rope is to extend 10'0" from the point it touches the front of the wheels to the stake. A stake, flag, mark, or knot should also be placed 6'0" from the wheel point.
4. The hull is to be constructed of blocks and bulkheads stacked on the carriage in such a way to form 4 main hull sections divided by bulkheads, plus bow section, stern section

and superstructure. Joints between blocks are to consist only of a single groove machined to match a 3/4" half-round strip applied to the block above, except for permissible doweling described below.

- a. Hull blocks: Each side of each main hull section is to consist of (5) blocks stacked on top of each other, joined only by a half-round joint running the length of the block. Each block should be cut from a nominal 2x4 or 2x6 to conform to the following dimensions:

Thickness: min. 1-1/4", max. 1-5/8".

Width: min. 2-1/4", max. 3-5/8". Width of curved blocks shall be measured perpendicular to the curve of the outer surface.

Length: min. hull section is to be 6", measured center-to-center of bulkheads along a line parallel to the ship centerline.

Block lengths are to be maximum of 1/16" less than the distance between bulkheads.

Ends shall be cut perpendicular to the ship centerline, forming a vertical line between the hull section and bulkhead (no stagger or overlap). A single course of 3/4" thick material is allowed to be permanently attached to the carriage, to receive the half-round key for the lowest course of hull blocks. Blocks may be curved or beveled to form a curved hull shape, in which case the width is to be measured perpendicular to the arc of the outer surface, and each top or bottom face to comply to the limits above. A rectangle enclosing the overall dimensions of a curved block must lie completely within the dimensions of a nominal 2x6, or 5-5/8" max. width (Does not apply to bow & stern blocks).

- b. Bow and stern blocks: The bow section and the stern section are each to consist of 4 to 6 blocks extending the width of the ship, stacked on top of each other with a single half-round joint as described above. Considerable creativity is allowed in shaping these sections to form a "ship-like" shape, however, they must conform to the following guidelines:
 - i. Fore-and-aft length of bow and stern sections must be a minimum of 6" and maximum of 18".
 - ii. Bow and stern sections must start at or below the top of the first course of hull blocks, and not extend more than 6" above the highest hull block.
 - iii. The blocks of each section should be of roughly equal height, with the stacking surfaces between blocks flat and horizontal.
 - iv. Bow and stern blocks may be doweled horizontally into the adjoining bulkhead with not more than (3) dowels per block, extending not more than 1/2 the thickness of the bulkhead. Dowels must be aligned parallel to the centerline of the ship and horizontal. The mating holes in the bulkhead are to be drilled a minimum of 1/32" over the diameter of the dowels, and aligned with the centerline of the dowels so that the section slips easily into place (See "Right of Inspection" below).
 - v. Bow and stern sections may be propped by a single 3/4" thick board affixed on edge on the carriage, not counting as any part of the hull, and forming a friction joint only between the prop and the section.

- c. Bulkheads: Bulkheads between hull sections shall consist of (3) blocks conforming to the dimensions of the hull blocks, except that bulkhead blocks shall be placed on edge, with a single half-round joint running the length of the edge. Bulkheads will be placed vertical, across the full width of the ship, perpendicular to the ship centerline, at the adjoining ends of each hull block section. Ends of bulkhead blocks will be shaped to fit the outside of the hull blocks.
- d. Hull block keepers: See the sketches (when I get them done) for the hull block keepers to be attached to the ends of each bulkhead. Keepers are to be made of wire of similar gage and stiffness to common coat hanger wire. They may be installed to keep the hull blocks from falling outward only, while allowing the blocks to move inward without restriction. There may be one (1) keeper at each bulkhead for each layer of hull blocks. Keepers must be no longer than four inches (4") long and doubled back at the ends in a manner to keep any ordnance (below) from being punctured. Each will be fastened to the ends of the bulkhead with one or two staples and may be set into a groove in each hull block at least 1/4" in width and not more than 1/8" deep. The ends of the groove must be expanded to allow a loose fit of the doubled end loop.
- e. Superstructure blocks: Superstructures may be built with a maximum of (10) blocks, plus weapons blocks as described below. The superstructure blocks are primarily to support the weapons. Each block will conform to the dimensions given for hull blocks, except that no block will be allowed to overhang the top row of hull blocks, nor overhang or extend to more than (2) bulkheads; no minimum length applies, and double thickness (<3-1/4") is allowed. Supporting blocks may be keyed to either the top row of hull blocks or the top of the bulkheads. No superstructure block may have more than (1) 1/2-round keyed joint per side.
- f. Decks: Hull may not be decked over except as allowed above under "Superstructure blocks".
- g. Weapons blocks: Each ship shall be supplied with the following weapons blocks: (2) large guns, (2) small guns, and (1) missile launcher. The base of the weapons may be any shape conforming to the following overall dimensions:

Thickness(height) and width: Not more than 6".

Length: Not more than 8".

For easy identification, each "large" gun shall consist of a 1-1/2" dowel extending 3" to 8" from the gun base, and each "small" gun shall consist of (1) or (2) 3/4" dowels extending 2" to 6" from the gun base. The missile launcher may be any configuration identified to your opponent. Each weapon block must be joined to the top row of hull blocks, superstructure, other weapons, or top bow and stern blocks by not more than (1) half-round joint per side, plus not more than (4) dowels as described below. Weapons blocks may not be joined to the carriage or lower hull blocks.

[Note: To keep it simple at the beginning, I'll start with all ships having the same weapons. As the game develops, later versions may allow different classes of ships with different sizes and weaponry.]

- h. Machinery blocks: Each ship shall be supplied with (2) machinery blocks fitting the overall dimensions allowed for the weapons bases, except that both machinery blocks shall fit completely within one main hull section. Machinery blocks may

be doweled into the base of the carriage as described below.

- i. Permissible doweling: See section 4.b., Bow and Stern blocks, for doweling permitted at the bow and stern bulkheads. In addition, each weapons block and machinery block may be doweled to to the structure immediately below it with not more than (4) dowels as follows:

Dowels will be 1/2" diameter, extending vertically not more than 1/2" into the supporting structure.

Mating holes will be drilled in line with the centerline of each dowel, with a minimum 5/8" diameter.

No doweling is permitted to extend sideways or fore-and aft, except for bow and stern sections as described above.

D. ORDNANCE:

Ordnance delivery will consist of balls thrown or kicked at the opposing ship in an effort to dislodge blocks, resulting in disabling and eventually sinking your opponent. Ordnance may only be launched as long as at least one corresponding weapon remains in its original position on your ship. The suggested ordnance for each weapon is as follows:

- a. Large guns: Any softball or baseball agreed upon by the players.
- b. Small guns: Any tennis ball, squash ball, handball, etc. agreed upon by the players.
- c. Missiles: Any football, soccer ball, volleyball, etc. agreed upon by the players. Opponents should also agree before play whether missiles may be kicked or must be thrown.

E. METHOD OF PLAY:

1. A turn shall consist of ordnance from all available weapons launched at the opposing ship from an agreed-upon position, such as astern in line with the ship's centerline. Players should agree beforehand, depending on available ordnance, whether a full turn consists of firing all 4 guns and 1 missile, or 1 large gun, 1 small gun, and 1 missile, etc. The other player shall remain safely away from his ship until the opponent's turn is done. All damage will be assessed and available weapons determined at the start of each player's turn. If a player no longer has a weapon available, that ordnance will be returned to the other player without damage to the opposing ship.
2. Order of play will be determined as follows: Both players shall launch identical "ordnance" from a designated line. The shorter throw will determine the starting position of the ships; one at the throwing line, and one at the distance of the shorter throw, initially "broadside" to each other. The person making the shorter throw will have the choice of ends to set up on; the person making the longer throw will assume the element of "surprise" but will only have a partial first turn, consisting of one missile and one "large gun" shot.
3. Play will continue with each player taking his turn while the other steps safely back from his ship. At the start of each turn, each player may perform the following actions:
 - a. Damage control: At the start of each turn, a player may replace one block

dislodged by any of the opponent's previous shots. Note that this provision includes regaining weapons, movement, or steering capability for that turn, if possible. Each block may be replaced only in its original position, and only if the block immediately below and supporting it also remains in position.

- b. Movement: Subject to restrictions described below under "damage", a player has the option of moving his ship each turn a maximum of 10 feet, or the length of the rope attached to the carriage. To accomplish this, stretch the rope to length, insert the stake into the ground, and pull the leading edge of the wheels even with the stake. The rope must be stretched either between the two forward wheels or between the two aft wheels. The movement should end with the ship's axis aligned with the initial direction of the rope (Note: Alignment does not affect the ship's firing ability, just the target presented to the opponent). Any blocks which become dislodged as a result of the movement may be replaced before the player continues his turn.
4. Damage: Any block dislodged from its initial position by an opponent's ordnance represents damage to the ship which must be either repaired or taken account of in subsequent play. A block shall be considered "dislodged" when the 1/2-round joint is no longer mated to the block below it. Damage may have the following consequences for the ship:
- a. Weapons capability: Any weapon dislodged can no longer be fired, unless repaired as allowed under "damage control" above. Any ordnance corresponding to that weapon must be returned to the other player without damage to his ship.
 - b. Movement: If one machinery block is dislodged, movement henceforth is restricted to 60%, i.e., the 6' mark on the carriage rope. If both machinery blocks become dislodged, the ship is "dead in the water" and can no longer be moved. For this game, "flooding" of a machinery compartment does not cause loss of movement, however, a breach of (3) adjacent sections or any (4) sections does cause loss of movement.
 - c. Steerage: If the 2nd from bottom block of the stern section becomes dislodged, the carriage rope can only be stretched out either between the rear wheels or between the 15-degree bow marks for movement; i.e., steerage is limited to 15 degrees either forward or rearward.
 - d. Sinkage: If any blocks below the waterline become dislodged, that section of the hull is breached and "flooded". If (3) consecutive or (4) non-consecutive sections are breached, the ship is disabled and all movement stops, however, weapons can still be fired. If (4) consecutive or any (5) sections are breached, the ship is lost and the game over. The bow and stern are each considered one full section.

A strip of blue cloth or paper shall be placed between blocks at the waterline of each hull section. The waterline is determined as follows:

- i. The intact waterline is at the top of the second course of hull blocks, plus the top of the lowest block of the bow and stern sections.
- ii. The waterline is unchanged for a breach in any single section, or any two sections with more than one intervening section.
- iii. If any two adjacent sections are breached, or two sections with only one section in between, the waterline in the next adjacent sections moves up one block, i.e., to the top of the next course of hull blocks.

- iv. If any three hull sections are breached, the waterline in the next adjacent sections moves up two blocks, and up one block in any remaining sections.
 - v. A bulkhead block dislodged below the waterline of a breached section also breaches the adjacent section.
 - vi. There is no provision for heel or off-center damage; flooding is considered shell-to-shell.
5. Right of inspection: Each player shall have the right to inspect the opponent's ship before play, to ensure adherence to the rules of construction above. This may include but is not limited to:
- a. All wood construction.
 - b. Sizing of overall ship and individual blocks
 - c. Blocks are fitted with prescribed joints only, with no adhesive or sticky substances, and can be dislodged without excessive force.

Furthermore, inspection may occur during play (between turns) to confirm damage, establish waterlines, and validate damage control measures.

Copyright 1996, 2005, 2007, 2011 Brent Clifton; <http://www.jbcmusic.com>; email broadside@jbcmusic.com

Version: updated 12/4/2011/bc