

## Battle of Hampton Roads (1862)



**Historical Background:** On March 9, 1862 the USS Monitor battled the CSS Virginia in the first fight between ironclad warships. The battle was a turning point in naval warfare, ushering in the age of the armored battleship which would last until rise of the aircraft carrier. The battle was a draw, neither ship was able to significantly damage the other.

This simulation was designed for a group of 6 - 8 eighth grade students lasting about 20 minutes. The students should be divided into Union and Confederate, the Confederate side should have more students.

**Credits:** This simulation is based on the article "Monitor vs. Merrimack" by Marvin Scott, Lone Warrior #113. The fire resolution method, using a pointer, is based on an idea by Fred Jane (1898).

**Materials Needed:** A tape measure or ruler for movement. A bamboo skewer or similar pointer for shooting. Models of the ships. Print copies of the target pictures which can be found [here](#) under the Thing Files button.

**Models:** I made simple models of the ironclads using my Ironclad Construction Kit pieces. You can download the models (free) here: [3D Printable Models](#). You can also print paper models found here: [Union Ironclads](#), [Confederate Ironclads](#).



**Battlefield:** The game can be played on any flat surface - a table, the floor, etc.

**Set up:** Start the ironclads facing each other about 18 inches apart

**Turn Sequence:**

1. Union Move
2. Confederate Move
3. Both ships shoot
4. Resolve Damage
5. \*\* Reverse movement order each turn (Union moves first turn 1, Confederates move first turn 2, etc.)

**Movement:** The Monitor was faster and more nimble. The best way to measure movement is with a tape measure which you can bend in a curve when the ironclad is turning, but a ruler will also work. Ships must move a minimum of 2 inches each turn.

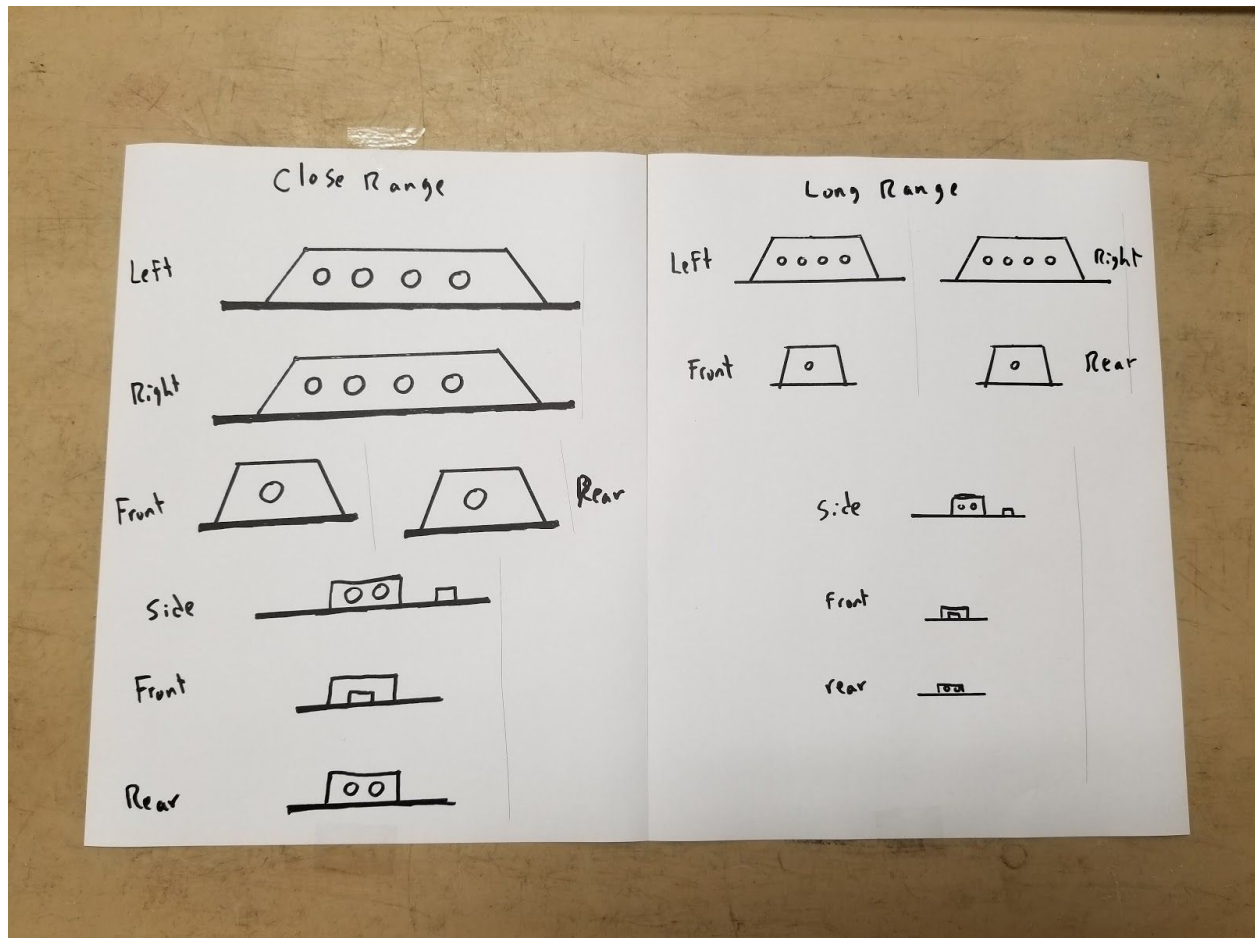
Ship	Maximum Movement	Maximum Turn Angle
Monitor	10 inches	180 degrees
Virginia	5 inches	90 degrees

**USS Monitor** - The Monitor has 2 guns in a rotating turret so it can fire 2 shots at the enemy every turn, unless one of the guns is hit and disabled. The small box structure near the front is the pilot house.. Vulnerable point - 2 hits to the pilot house will force the Monitor to retreat. If both guns are disabled the Monitor will retreat.

**CSS Virginia** - The Virginia was built on the burned out remains of the Merrimack, and is usually called the Merrimack, but it was renamed the CSS Virginia and that's the name used in this document. The Virginia can fire one gun from the front and rear. It can fire 4 guns broadside (right and left). The broadside guns do not have a wide angle of fire, so if the enemy is not directly broadside it will only be able to fire 2 - 3 guns, depending on the angle.

**Shooting** - Print copies of the ship diagrams and tape them onto a table or the floor. Shooting is done using a bamboo skewer. they can be purchased at the grocery store. For each shot a player grasps the skewer with thumb and index finger at the blunt end. Starting at least 6 inches above table they move the point of the skewer down in a steady motion to touch the correct target picture (based on range and facing). Where the point touches is where the shot hits, if it misses the picture it's a miss. Use a marker to mark where the ship was hit. Players should not rapidly stab at the target, and they are not allowed to slow down and place the point exactly where they want. A different player must take each shot during a turn.

Long Range	Over 12 inches
Close Range	12 inches or less



**Damage** - Both ships were armored so most shots will do no damage.

- Hitting a gunport (circles) - gun is disabled, roll 1D6 (one die) for casualties
- Two hits to the same location - armor penetrated, roll 1D6 for casualties
- Two hits to same location on waterline - ship will sink in 1D6 turns

**Victory Conditions** - The Monitor will retreat if it loses both guns, takes 2 hits to the pilot house, or suffers 15 casualties. The Virginia will retreat if it loses 4 guns or suffers 25 casualties. If neither ship retreats or sinks the battle is a draw.

**Playtest:** The simulation was run with 5 groups of 8th grade students in 20 minute battles. The results were one Union victory, one Confederate victory, and three draws.