

## PORTABLE NAVAL WARGAME – 1860 to 1870

### Ship Flotation Values (FV)

Ship Type	Ship's Flotation Points	Critical Point	Rules
Turreted Monitor	10 points	4 points	a) All hits are cumulative.
Casemate Ironclad	12 points	4 points	b) When a ship's Flotation Points (FP) are reduced to the Critical Point, the ship must break off from battle.
Steam Frigate	6 points	2 points	c) When a ship's Flotation Points reaches 0, it sinks.
Steam Gunboat	4 points	2 points	

### Turn Sequence

- Both sides fire their guns.  
(N.B. Firing guns is deemed to be simultaneous, and a ship that has been hit and sunk may fire its guns that turn – as it sinks – if a suitable target is in range.)
- Both sides throw a D6 die. The side with the lowest score moves its ships first that turn.
- Once the first side has moved its ships, the other side moves theirs.
- If a ship rams another (i.e. either accidentally or deliberately enters the same hex as another ship), the results of the ramming are adjudicated.
- Once both sides have had the opportunity to fire and move, the turn is complete and the next turn can commence.

### Firing Guns

Ship Type	Gun Range	Number of D6 dice thrown	Rules
Turreted Monitor	6 hexes	6	a) No ship may fire its guns at more than one target each turn.
Casemate Ironclad	4 hexes	4	b) No ship may fire its guns at a target that is not in direct line-of-sight.
Steam Frigate	4 hexes	4	c) Turreted Monitors have a 360° arc of fire. The number of D6 dice thrown is reduced by 1 for every hex the target ship is distant from the firing ship.
Steam Gunboat	3 hexes	3	d) Other ships have restricted arcs of fire. If the target ship is not ahead or astern of the firing ship (i.e. it is in a hex that is <u>not</u> wholly within a 60° arc either side of the hex ahead or astern of the firing ship), the firing ship may 'fire' with full effect. The number of D6 dice thrown is reduced by 1 for every hex the target ship is distant from the firing ship. If the target ship is ahead or astern of the firing ship (i.e. it is in a hex that is wholly in a hex that is within a 60° arc either side of the hex ahead or astern of the firing ship), the firing ship may 'fire' with half effect (i.e. it only throws half the number of dice it may normally throw). The number of D6 dice thrown is reduced by 1 for every 2 hexes the target ship is distant from the firing ship.

e) Results –  
 Dice score = 6 :Major 'hit': target ship loses 2 FP  
 Dice score = 4 or 5: Minor 'hit': target ship loses 1 FP  
 Dice score = 1, 2, or 3: Gunfire has been ineffective.

### Movement

Ship Type	Movement	Rules
Turreted Monitor	1 hex	a) Movement is measured in hexes.
Casemate Ironclad	1 hex	b) Ships may turn 60° – the turn 'costing' one hex of movement – or move forward one hex for each hex of movement they are allotted.
Steam Frigate	2 hexes	
Steam Gunboat	3 hexes	

### Ramming

#### Rules

- Ramming occurs when a ship either accidentally or deliberately enters the same hex as another ship.
- If the ship that is ramming the other is equipped with a ram, the number of D6 dice thrown is 4.
- If the ship that is ramming the other is equipped not with a ram, the number of D6 dice thrown is 2.
- Results –  
 Dice score = 6 :Ramming has caused major 'damage': rammed ship loses 2 FP  
 Dice score = 4 or 5: Ramming has caused minor 'damage': rammed ship loses 1 FP  
 Dice score = 1, 2, or 3: Ramming has been ineffective.

Arcs of Fire

