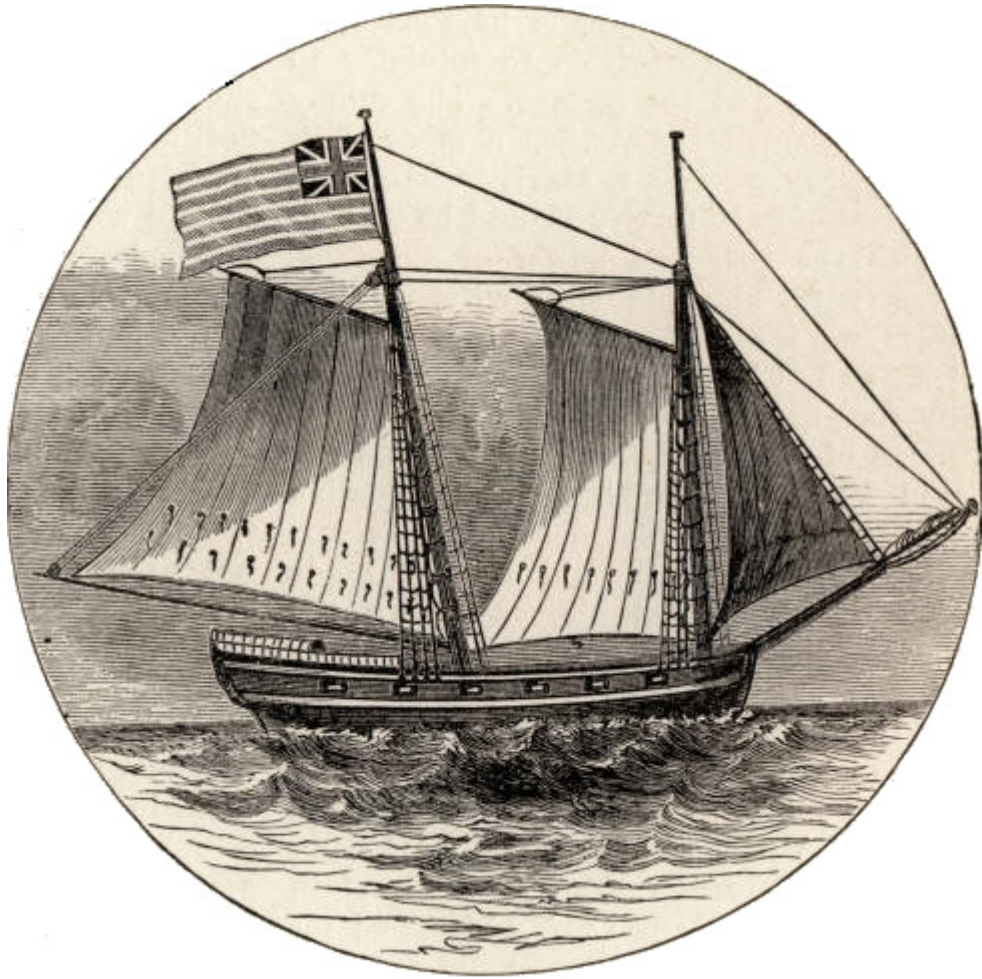# Away, Boarders!

Rules for 18th and early 19th Century Naval Wargaming
On the Great Lakes

Designed by Jeffrey Knudsen

Away Boarders, version 1.03
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1.0 GENERAL

"Away, Boarders!" is an historical wargame designed to recreate the battles between the small warships of various nations that fought on the Great Lakes during the 18th and early 19th centuries.

Each player takes the role of the commander of a ship, and makes decisions about how his ship will maneuver and what tasks his crew will perform, with the object of defeating his opponents (or, perhaps, just surviving the ordeal of combat to fight again another day).

The game is played in a repeating sequence of actions, performed in a specific order each turn by the players. The sequence, which represents the events that would take place in about the amount of time it would take a typical gun crew in the 18th century to load and fire a large cannon, is repeated until the victory conditions of one side have been achieved, or all the ships of one side have been lost or have fled.

Several components are needed to play the game, all of which are included in the archive; these rules, files for the various counters and markers, game charts and ship display sheets. See the appendices for suggestions on printing and constructing the components.

1.1 The Ships

The ships can be represented by counters, flats or miniature ship models, preferably ones which resemble the actual historical vessels which they are supposed to represent. The miniatures can be any scale, since the field of play can be designed to accommodate any size of model.   1:300 scale models are ideal for this, since they allow a reasonable amount of detail to be displayed on the miniature, while not overcrowding the field of play.

1.2 The Field of Play

Naval wargames require much less preparation than land wargames, because the terrain required is much simpler. In many scenarios, a simple open expanse of water is sufficient. Occasionally an island or coastline must be represented, but these can be as simple or as elaborate as the players desire.

The playing area is laid out by placing "points" on the surface at regular intervals. These points are occupied by the ships in the scenario, and are used to regulate movement and determine ranges and arcs of fire. The points may be marked on the playing surface by any means convenient for the players; marks on a large sheet of paper or tag board, or pieces of tape or small adhesive labels on a tabletop or cloth, for example.

A triangular template is included (see the Appendices) for placing the points. Print the template and glue it to a cardboard backing, and cut it along the appropriate outline to create an equilateral triangle with sides about as long as the largest ship model you will be using.

Use the template to locate each of the points (see illustrations below). Begin by placing the template on the playing surface, and mark one point at each vertex (illustration 1). The location of a new point is determined by flipping the template so that two of its vertices remain on two existing points (illustration 2). Repeating this procedure over the entire playing surface will yield a grid of points (illustration 3) which works much like the traditional hex grid in some other wargames.

| 1. | 2. | 3. |
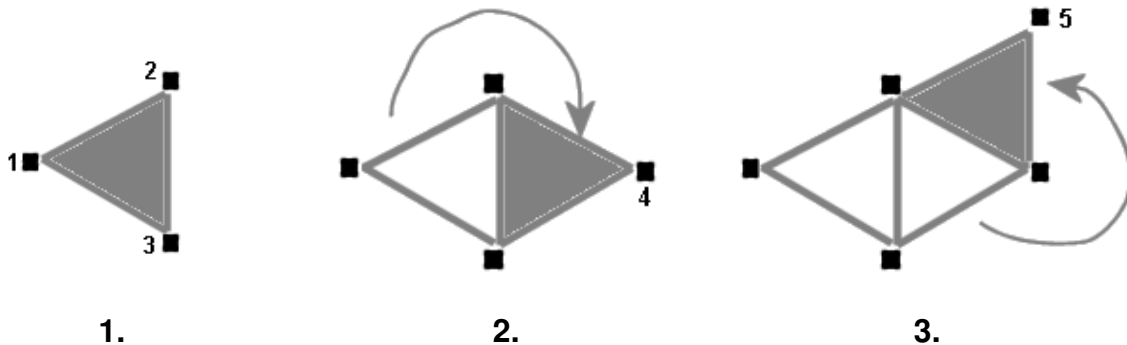
1.3 Other Equipment

Each player will require a writing utensil of some kind to mark damage on his Ship Display. Pencils are best, since on occasion it will be convenient to erase marks which have been made previously. A number of six-sided dice will be necessary (all die rolls in "Away, Boarders" utilize these ubiquitous items). If you can manage to scrounge up enough of them for a half-dozen to be conveniently near each player, that would work well; very rarely will more be necessary. A number of very small dice are very useful for keeping track of ongoing repairs, as well as the current speed of the vessel.

1.4 The Components

<u>The Ship Display</u> This array contains all of the information about the status of the ship and its crew. Markers are placed at various locations on the display to keep track of this information. See the illustration below.

1. The ship silhouette indicates the general type of vessel, and the text below gives the ship's name. The boxes on the silhouette show the damage status of the vessel's sails and yards. These are marked off as the ship receives sail hits (see section 4.3)

2. The hull boxes show the damage status of the ship's hull. These are marked off as the ship receives hull hits (see section 4.3)

3. The crew Task boxes (there are six of them) hold the crew markers that are assigned to the various tasks on board (see section 2.3).

4.   The Sail box holds a marker indicating how much sail is set. There are two 2-sided markers for the sail setting, with each of the four sides printed with one of the possible settings.

5. The Gun boxes represent the artillery aboard the vessel. Each box holds a gun marker, which can be front up (with the gun graphic showing) to indicate that the gun is loaded and ready to fire, or backside up (with just the gun weight showing) to indicate that it needs to be reloaded. Most guns are broadside guns (like the ones in the example below), but some ships have bow guns which will be shown on the Display facing the top of the page. Some ships have guns on swivel mounts, which will be shown as a pair of boxes facing the sides of the display, but indented from both edges; this pair of boxes is used to hold a single gun marker which will face either port or starboard.

6. The Load boxes (one for each broadside) hold markers indicating what type of ammunition is loaded in the guns for that broadside (see section 4.1). There are two 2-sided markers for the ammunition types, with each of the four sides printed with one of the possible types.

ROYAL SAVAGE

(Diagram labels: MANNING THE YARDS/SWEEPS, REPAIRING RIGGING, LOAD, LOAD, MANNING THE GUNS, SAIL, REPAIRING GUNS, BOARDING PARTY, REPAIRING THE HULL; gun markers labeled 4#, 4#, 6#, 6#, 6#, 6# on left and 4#, 4#, 6#, 6#, 6#, 6# on right; callout numbers 1, 2, 3, 4, 5, 6)
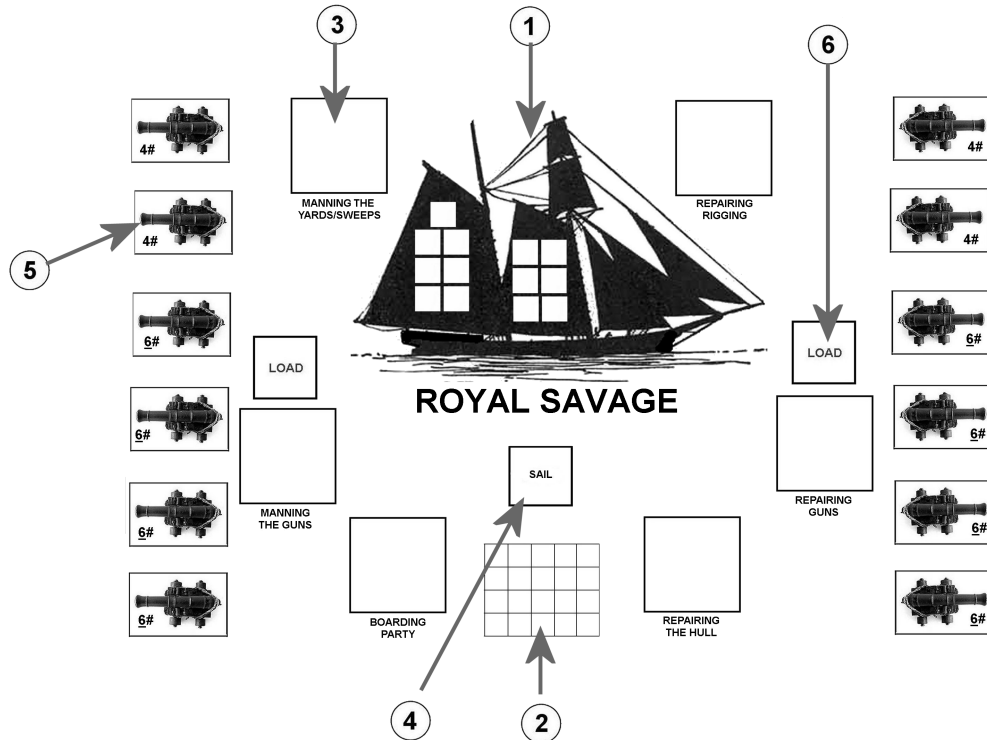
<u>The Commanding Officer Marker</u> This represents the officer in command of the ship and his corps of subordinate officers.

<u>The Crew Markers</u> These represent the crew available to work the ship and the guns, a motley assortment of sailors, soldiers and landsmen. They are placed in the task boxes on the Ship Display to indicate how many crew are assigned to each task. A special marker is included to represent the ship's commander and other officers. This may be placed anywhere on the Display to indicate that the ship is under command.

<u>The Gun Markers</u> Each gun marker represents one of the naval artillery pieces mounted on board the ship. One gun marker of the appropriate size is placed on each box containing a gun graphic on the Ship Display at the beginning of the game. The back (unloaded side) is plain, except for the size of the gun, so the players can easily see which guns have been fired.

<u>Load Markers</u> These are placed in the Load boxes on the Ship Display, one on each side of the ship. There are four types of rounds which can be loaded, so each broadside requires two 2-sided markers, each side printed with one of the possible types.

<u>The Tables</u> These are all of the tables and charts needed to play the game, on a half of a letter-sized sheet. The Turn Record chart is also a half page, and fits neatly on the back, for convenience.

1.5 SETTING UP THE GAME

Each player should have a copy of the game tables, and the ship display for his vessel. Place a gun marker that matches the type on each of the guns on the ship display, and place a Load Marker in each load box, indicating the rounds with which the guns are loaded at the beginning of the game. Put a Sail marker in the Sail box, to show how the sails are set. Place the number of crew markers indicated by the small number under the ship's name nearby, ready to be assigned in the first segment of the first turn. Place the Commander's marker anywhere on the ship display, face up.

2.0 SEQUENCE OF PLAY

1. Crew Assignment Segment
2. Action Segment
   A. First Action Phase
   B. Second Action Phase
   C. Third Action Phase
3. Crew Task Segment

Crew Assignments: In this segment of the turn sequence, each player assigns his crew to the tasks he wishes them to perform during the turn. The crew markers can be placed in any of the six Crew Task boxes on the Ship Display.

Actions: In this segment of the turn sequence, the ships execute the movement and gunfire of which each is capable. The action segment is divided into three phases. In each phase, the ships move one at a time, in order from fastest to slowest. When all the ships eligible to move in each phase have finished moving, any ship with a target in its arc of fire (assuming the guns are loaded and crew is assigned to fire them) may attempt to damage its target.

Crew Tasks: In this segment of the turn sequence, the crew assigned to the Task boxes on the Ship Display execute the tasks to which they have been assigned.

2.1 Crew Assignments

If the commanding officer was a casualty in the previous turn's Action Segment, the only crew assignment possible in the current turn is turning over the Commanding Officer marker to indicate that the next-in-command has taken over (see the last paragraph of section 4.3).

If the commanding officer of the ship has not become a casualty, then the player may assign crew to the various tasks aboard ship by placing the crew markers in

any of the six task boxes on the Ship Display. Any number of crew may be placed (or left in place, if they were already there from the previous turn) in each box. Keep in mind that for some tasks, a certain minimum number of crew is necessary to complete the task (see the Crew Tasks section for details). Also keep in mind that, during the Action Segment, crew markers may be lost, so it may be necessary to assign extra crew to the most urgent tasks to ensure that they are completed.

As an alternative to reassigning crew, the commanding officer may "rally" crew; he may not do both in the same Crew Assignment segment. Not all crew removed as casualties are "dead"; some are not even seriously wounded. Some are caring for the wounded, or carrying them below decks to be cared for; some are stunned or confused and some are skulking. Sometimes a sharp order or encouraging word from the commanding officer is enough to bring these men back under discipline, and back into action.

To rally crew, the player selects a crew marker from the casualty pile and rolls a die; if the roll is even, the marker is placed in the Crew Task box of the player's choice; if it is odd, the marker is removed permanently from the game (not put back in the casualty pile).

2.2 Actions

In the three phases of this segment, each ship moves and fire its guns in the order prescribed by the Movement Phases Chart:

MOVEMENT PHASES

FIRST	SECOND	THIRD
5(2)	5(2)	4
4	4(2)	5
3	3(2)	
2	2	
	1	

In each phase, the ships moving at the fastest speeds move first, followed by those moving at slower speeds, in the order listed. Those with a (2) after their listed speed move twice in that phase. If two or more ships are moving at the same speed, the ship farthest upwind has the option of moving first, or deferring to the others. When all ships which are moving at the same speed have moved, the move passes to the next slowest speed listed for that phase.

After all ships eligible to move in a given phase have done so, any ship with loaded guns and an eligible target may fire. All damage from gunfire is applied to the targets immediately and simultaneously at the end of the phase (note that

damage aloft may affect the target ship's movement in later phases of the same turn).

2.3 Crew Tasks

Any crew in Crew Task boxes in this phase will execute the tasks assigned to them.

- Make/Reef Sail: One crew marker is required for each fore-and-aft rigged mast to perform this task; two are required for each square-rigged mast. If the required crew are present, the sail setting for the ship can be adjusted up or down, as the player desires. If the sail setting is "oars", then the crew in this box are manning the sweeps, and the ship will use the rules for movement under oars.

- Load Guns: One gun may be flipped from its "Unloaded" side to the "Loaded" side for each crew marker assigned to the "Manning the Guns" box. If the ship is armed with a cannon on a swivel mount, one Crew Marker may move the gun from one broadside to the other, instead of loading it.

- Repair Damage: The player may tally one "repair point" for each crew marker that is in a repair Task box. These can be tallied by making marks on the Ship Display, by placing small markers in the box, or by denoting the total on a small six-sided die placed next to the applicable Task box. When the total reaches 6, the player may erase the damage from one box on the Ship Display, of the type indicated by the Task box. When the damage is removed, subtract the 6 repair points from the total for that Task box.

- Grapple/Ungrapple/Unfoul: When two opposing ships occupy the same point, one crew marker in the Boarding Party may attempt to Grapple the other ship, or to Ungrapple the two if the ships were grappled on a previous turn, or to Unfoul two ships which have become fouled. A Crew Marker used to attempt to Ungrapple or Unfoul may not also be used to Board or Repel Boarders. An even result on a die roll indicates a successful attempt. (see section 5.0).

- Board/Repel Boarders: If two ships on the same point are Grappled or Fouled, and at least one ship has one or more Crew Markers in the Boarding Party box, they may board the opposing vessel and engage the opposing crew in close combat.
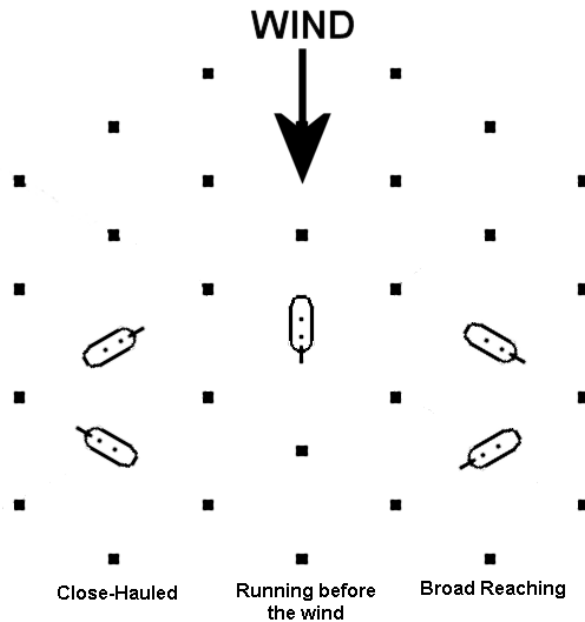
3.0 MOVEMENT

Ships in the field of play are located on the points; each ships is positioned facing an adjacent point. Its facing indicates its attitude to the wind, and

determines the points on which its guns will bear (see the illustrations below). In each action phase, ships in motion move from point to point across the field of play, according to their speed and the sequence outlined in the Movement Phase Chart. When ships turn, they are rotated to face an adjacent point to the left or right of the one which they previously faced.

3.1 Movement Under Sail

A ship's base speed is 1, unless a different speed is noted next to the Sail box on the Ship Display. At the beginning of each Action Segment, the ship's total speed is calculated by adding its base speed to the following:

Square rigged ship is close-hauled (the wind is crossing the ship from either the port bow or the starboard bow) +0
Fore-and-Aft rigged ship is close-hauled +1
Ship is running before the wind (the wind is crossing the ship from directly astern) +1
Ship is broad reaching (the wind is crossing the ship from either the port quarter or starboard quarter) +2
Sail is set to "Reef" -1
Sail is set to "Battle" +0
Sail is set to "Full" +1

WIND

Close-Hauled   Running before   Broad Reaching
                      the wind

In each Movement Phase, the ships whose speed is at the top of the list (see chart in section 2.2) move first, followed in turn by the ships at the next speed in the list, etc., until all the ships whose speed are listed for that phase have made

their move. (If a speed is notated with a "(2)" after it, then the ships moving at that speed will make two moves in that movement phase).

A "move" consists of
a) advancing one point
b) advancing one point and turning downwind, or
c) turning upwind
d) backing sail (not moving or turning)

Ships running before the wind or on a broad reach may back sail for one move each turn. Ships which are close hauled may back sail indefinitely.

A ship which has turned directly into the wind may not move forward; it may only turn downwind on its next move. Ships which do not move, because . . .

•   "sail" is set to "oars" but no men are manning the sweeps, or
•   no masts remain standing, or
•   ship is facing into the wind but no men are manning the yards, or
•   the commander has backed sail for two or more consecutive turns, or
•   two or more ships are grappled or fouled)

. . . will drift, moving downwind one point in each even numbered turn. These turns are shaded on the Turn Record.

A ship must have at least one Crew Marker per mast assigned to Man the Yards in order to maneuver the ship; otherwise it will simply continue whatever move it made in the previous Action Phase.

3.2 Movement Under Oars

In order to move when there was no wind, or when the wind was contrary to the direction the commander wished to take, most small vessels were equipped with sweeps. To move by means of these, the sail setting must be "Oars", and Crew Markers must be assigned to Man the Sweeps (the same Task box as Man the Yards).

In order to move efficiently under oars, there must be one Crew Marker manning the sweeps for every 3 guns (or fraction thereof) on board the ship. If insufficient crew are manning the sweeps, the vessel will drift. A vessel under oars will move at a speed of 1, except when it moving directly downwind, when it will move 2, or directly upwind, when it will move 1, but only in the even numbered turns (these turns are shaded on the Turn Record).

3.3 Incidents During Movement

On occasion, it will happen that a ship will move onto a point which is already occupied by another vessel, sometimes friendly, sometimes not. When this happens, the ships may slide by each other in a near miss, or they may collide. (Note - in any case, both ships remain on the same point until one or the other moves off.) The player whose ship entered the point last rolls a die; an odd result means a collision has occurred; an even result means they simply pass close to each other, and the moving player may decide to which side of the other ship he will pass.

If they collide, they may just brush past each other, both losing way, or they may foul their upper works and remain stuck together. The player rolls again; an odd result means that the ships have fouled. Commanders of ships which have fouled each roll two dice, the difference between the dice being the number of rigging hits the player must mark on his masts (distribute the damage as in section 4.3). Fouled ships will remain in their relative position (the bow of the moving vessel pointing at the ship that arrived on the point first) and will drift until a crew task unfouls them. If the result is even, both ships will subtract 1 from their speed for this turn, and the moving ship will turn one point to port or starboard, parallel to the ship already on the point (note that if this turns the ship into the wind, its speed becomes 0).

4.0 GUNNERY

The naval artillery in use on the Great Lakes was virtually all smoothbore cannon of various weights, firing a variety of rounds but mostly iron round shot. A few special types of rounds were available, whose characteristics are detailed below, and on the Game Tables.

4.1 Loading the Guns

All guns begin the game loaded. The initial loads in the guns can be whatever type of ammunition the commander orders; these rounds are chosen and loaded with care, without the distraction of battle smoke and confusion, so the initial shot from each cannon is given a bonus (see the Hit Table Modifiers). Eventually, though, these rounds are fired away and then the gun is useless until it is reloaded. To indicate a gun which has fired, turn the gun marker over so that the image of a gun is facing down, and just the number indicating the size of the gun is facing up.

In the Crew Task Segment of turn, each Crew Marker which is manning the guns may load one of the ship's guns with whatever ammunition type the commander wishes. Turn the guns which have been reloaded face up, and place an

ammunition marker in the "load" box to show what type of ammunition has been loaded in them. Each broadside has its own "load" box, and each may be loaded with a different type of round, but all the guns on a given broadside are considered to be loaded with the same type.

On a vessel which is armed with a gun on a swivel mount, a Crew Marker may be used to switch the gun from one broadside to the other, in lieu of loading it.

4.2 Firing the Guns

While loading the guns requires a number of crewmen performing different functions, firing the guns only requires that one man be ready to apply a match or pull a lanyard. At the end of each phase in the Action Segment, if there are any crew manning the guns at all, any or all of the guns may be fired.

The ability of broadside guns to aim at a target was limited by the tackle holding them to the side of the ship, and the narrowness of the port through which the muzzle projected. In order to be an eligible target, an opposing ship must be within a 30 degree angle of a line athwart the firing ship. The illustration below shows what points an opposing ship must occupy in order to be an eligible target.
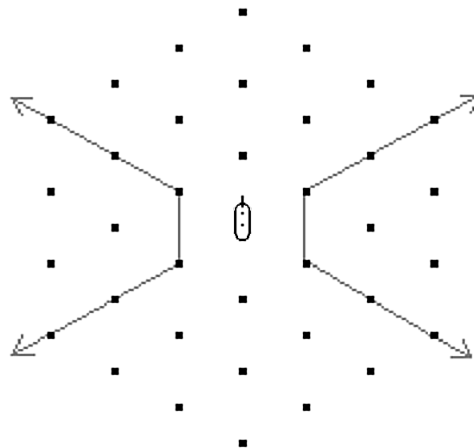
Bow guns were more limited in their arc, and may only fire at targets directly ahead.

The target must also be in range of the guns to be eligible. The bottom portion of the Hit Table lists the types of guns that the ships may be carrying, and the arrows extending to the right indicate the maximum range for each gun type.

Finally, the firing ship must have a clear line of sight to the target. If there is a friendly ship directly in line between them then no fire is allowed. If there is an enemy ship in between, then the closer one is the eligible target.

Once the player has announced that the guns are firing, he may not change his mind even if the result is no effect (zero hit dice or less). The ammunition loaded in the firing guns is lost, and they must be reloaded.

4.3 Doing Damage

Once it has been determined that the firing ship has loaded and manned guns, and an eligible target, the next step is to determine the number of Damage Dice the attacker gets to roll. The damage done by all of the guns of identical caliber is resolved in a single roll. On the Hit Table, find the number of guns firing along the left hand side, and go across to the column for the range to the target. (Find the range simply by counting the number of points between the firing ship and the target). The number found at that location is the base quantity of Damage Dice.

To the base number, add the following cumulative modifiers:

Shot Weight: The list of Hit Table Modifiers on the Table sheet shows modifiers for various calibers of guns. Add the modifier for the caliber of gun being fired to the base number from the Hit Table.

Initial Fire: If the gun(s) firing are doing so for the first time in the game, add 2 to the number of Damage Dice.

Rake: If the guns are firing from a position directly ahead of or behind the target, add 2 to the number of Damage Dice.

Low Stern Rake: If the target is being raked from astern, and the gunners are firing low, add an additional 1 Damage Die.

(Note, however, that each of the above modifiers is limited to the number of guns firing (for example, a pair of 18 pounders firing together would receive a modifier of +2, not +4. A single gun on a bow rake would receive a modifier of +1, not +2.)

Random Modifier: Roll a single die. If the result is 5 or 6, add it to the Damage Dice already accumulated. If the result is 3 or 4, do not add it to the Damage Dice. If the result is 1 or 2, do not add it, and remove one of the Damage Dice already accumulated.

When the total number of Damage Dice to be rolled has been determined, the player chooses whether he wishes his gunners to fire low at the target (firing low is more likely to damage the hull) or fire high (which will do more damage to the masts and sails). After this choice has been announced, the Damage Dice are rolled and the results are compared with the Damage Table.

An "H" result indicates hull damage; mark a slash in one of the hull boxes on the Ship Display. A second slash in a box (making an "x") destroys that hull section, and further hits are marked in other boxes. When all the hull boxes on the Ship Display have been destroyed (marked with an "x"), the ship will sink.

An "R" result indicates rigging damage; mark one of the rigging boxes on the Ship Display, in the same manner as the hull boxes are marked. If the ship has more than one mast, the dice that resulted in "R" damage are re-rolled to determine where the damage is to be marked (except when the target is being raked, in which case all of the "R" damage goes on the mast closest to the firing vessel), thus:

Two masts: 1,2,3 main   4,5,6 fore
Three masts: 1,2, mizzen   3,4, main   5,6 fore

When all of the boxes on a mast have been destroyed, the mast has fallen. For each mast that a ship has lost, its base speed is reduced by 1.

A "G" result indicates that a gun has been put out of action; remove a gun marker from the Ship Display. If the damage came from a rake, the gun hits should be distributed evenly between the sides of the damaged ship (odd hits going on the port side on a 1,2,3, on the starboard side on a 4,5,6). Otherwise, the damaged guns will be on the same side from which the fire came, unless all the guns on that side are already damaged. If there is more than one caliber of gun present, use the small numbers in parentheses near the guns on the Ship Display to distribute the hits. Once all the guns are damaged, further "G" hits are considered misses. Since all gunnery for a given action segment is considered to occur simultaneously, guns which are hit but have not fired in the current segment may do so.

A "C" result indicates that a crew casualty has occurred. If the attacking ship was firing high, the casualties must come from the Rigging Task boxes first, if there are any crew there; if low, then they must come from the lower four Task boxes first. Place the casualties in a pile near the Ship Display, where they will remain until the commander attempts to "rally" the crew (see Section 2.1).
For each crew casualty that is taken, a roll of 2 dice should be made; on a roll of 2 ("snake eyes"), the commanding officer of the vessel has become a casualty, and his marker should be turned face down. No crew reassignments or rallying can take place until his second-in-command takes over.

4.4 Special Rounds

There are three types of ammunition available, other than the common iron round shot, each of which has different effects on the performance and capabilities of the gun that fires them.

Grape Shot: A cluster of small shot, usually bound together by rope, in a canvas bag, on a wooden sabot; used primarily as an anti-personnel round. The maximum range of any gun firing grape shot is 2. Each "C" result on the Damage Dice causes 2 casualties, but any "H" result is treated as no effect.

Double Shot: Simply, two round shot loaded in the same gun. To load, simply reload an already round-shotted gun; flip the round shot ammunition marker to its reverse side, which shows two round shot. The maximum range of a gun firing double shot is halved (round fractions up), but every Damage Die does two hits instead of one.

Chain Shot: . . . and its close cousin, Bar Shot, sometimes collectively called "disabling" shot. Intended to do extra damage to sails and rigging, it consists of two round shot, or a single, split shot connected by a chain or bar. The maximum range of guns firing this type of ammunition is halved. Any "R" results cause two hits, but any "H" results are halved (round fractions down).

5.0 BOARDING ACTIONS

If two ships are located on the same point, and are fouled or grappled together, then a boarding action may take place. A player must have crew assigned to the Board/Repel Boarders Task box in order to participate in a boarding action. The commanding officer's marker may be included in the Boarding Action, at the players' option; he counts as an extra crew marker, but may become a casualty.

If one ship has no crew in Board/Repel Boarders Task box, then the crew boarding gets a free attack; the crew of the target vessel loses one crew marker, by preference from the crews manning or repairing the guns.

If both ships have crew assigned to Board, then both players add the number of crew markers to a die roll, and the highest total wins the round. The losing crew will remove a crew casualty, rolling 2 dice for the commander if he was included in the Boarding Action. If the result is 2 (snake eyes), then the commander's marker is returned to the Ship Display, face down; otherwise, a regular crew marker becomes the casualty.

If two or more ships are involved in a boarding action with a single enemy ship, the single ship must divide its boarding party Crew Markers between the two

opposing boarding parties; each is resolved separately.

At the end of any turn, if the Boarding Party outnumbers the remaining crew on the opposing ship by a ratio of 2:1, the ship surrenders. If a ship's commander is currently a casualty, then a ratio of 3:2 in favor of the boarders will cause the ship to surrender.

6.0 APPENDICES

There are a number of files included in the zipped archive which contains these rules. They are jpgs of the markers and displays needed to play the game.

The Ship Displays (***display.jpg) are for the individual ships that fought in the battles on the Great Lakes. They are grouped into folders that cover particular campaigns. Most of them can be printed out on half a page; two to a sheet is very economical, and a light cardstock (65#) works well.

The Crew Markers are one-sided. Print them out on a decent weight paper or cardstock, and glue them down (spray adhesive or rubber cement is best, but ordinary white glue will work if used sparingly) to a piece of illustration board or other heavy cardboard, then cut them out with a hobby knife or box cutter and a metal straightedge.

The Gun, Load, and Sail markers are a little more complicated, since they are two-sided. Print them out and glue the fronts to illustration board or heavy cardboard (the thicker, the better, since the players will have to flip them during play), and trim away the margins outside the outer border at two opposite corners. Trim the back at the corners in the same way, and use the trimmed corners to align the back while gluing it into place. When it's completely dry, cut out the counters the same way you did the Crew Markers. The front and back should line up well enough.

The Game Tables fit on half of a letter-size sheet, so you can fit two of them on a piece of cardstock and cut it in half. For convenience, the Turn Record Chart fits on the back; just print it on the reverse side, and turn it over during the game to mark off the phases of each turn.

"AWAY, BOARDERS!" GAME TABLES

HIT TABLE							
Guns Firing	**RANGE**						
	0-1	2	3	4	5-6	7-8	9-10
1	0	-1	-2	-2	-3	-3	-4
2	1	0	-1	-2	-2	-3	-4
3	1	0	0	-1	-2	-2	-3
4	2	1	0	-1	-1	-2	-3
5	2	1	1	0	-1	-1	-3
6	3	2	1	0	0	-1	-2
7	3	2	2	1	0	0	-1
8	4	3	2	1	1	0	-1
9	4	3	3	2	1	1	0
10	5	4	3	2	2	1	0
11	5	4	4	3	2	2	1
12	6	5	4	3	3	2	1
13	6	5	4	3	3	2	1

3, 4# ————→

6# ————————→

8, 9# —————————————→

12# ——————————————————→

18# + —————————————————————→

12#C, H ————→

18-24#C ————————→

32#C ——————————→

HIT TABLE MODIFIERS:

6#	+1
8 OR 9#	+2
12#	+3
18#	+4
24#	+5
32#	+6
INITIAL FIRE	+2
RAKE	+2
LOW STERN RAKE	+1

D6
```
1,2 ...... -1
3,4 ...... 0
5,6 ...... +1
```

DAMAGE TABLE

Die	1	2	3	4	5	6
HIGH	H	G	C	R	R	R
LOW	H	H	H	G	C	R

SEQUENCE OF PLAY
1. Crew Assignments
2. Actions (Movement and Fire)
3. Crew Tasks

GRAPE SHOT: MAXIMUM RANGE = 2, CREW HITS X2, HULL HITS NE

DOUBLE SHOT: MAXIMUM RANGE X 1/2, ALL HITS DOUBLED, (LOAD ROUND SHOT TWICE)

CHAIN SHOT: MAXIMUM RANGE X 1/2, RIGGING HITS DOUBLED, HULL HITS X 1/2 (ROUND DOWN)

MOVEMENT PHASES

FIRST	SECOND	THIRD
5(2)	5(2)	4
4	4(2)	5
3	3(2)	
2	2	
	1	

CREW TASKS:
Make/Reef Sail
Load Guns
Repair Damage
Grapple/Ungrapple/Unfoul
Board/Repel Boarders