

WOODEN SHIPS & IRON MEN

WOODEN SHIPS & IRON MEN IS THE AVALON HILL GAME COMPANY'S
TRADEMARK FOR ITS COMPUTER GAME ABOUT FIGHTING SAIL.



microcomputer games division
The Avalon Hill Game Company

C64/128
version

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Loading Instructions

Disable all cartridges. If using a C128, put it in 64 mode. Type **LOAD"*",8,1 <return>** with the game disk in the drive. If a **FILE NOT FOUND** error appears, move the cursor back up to that line and press the **<return>** key again. If you're still having trouble, try **LOAD"BOOT",8,1 <return>** instead. Your joystick should be in port 2.

On the back side of the disk are more files. A format program is also there that can format a disk to save games and create map, fleet and game files. That program is loaded apart from **WS&IM** by typing **LOAD"FORMAT",8 <return>**.

No other files can be loaded.

INITIAL BROADSIDE

A Painless Tutorial For Newly-Promoted Captains

Welcome to the world of **WOODEN SHIPS & IRON MEN**, the computer version of the popular board game. The computer game incorporates virtually all of the features found in the advanced version of the board game. If this is your first historical simulation, then welcome to an exciting new realm. This game is designed to give the player all the intricacies of a strategy game without the complexity of remembering and handling complex rules. We designed **WS&IM** to handle the bookkeeping jobs needed to keep track of the bulk of the information, and frees you to concentrate on more important things, like sailing, fighting and winning.

The best way to get the feel for game play is to plunge right in, so we'll load up a small scenario with two ships and learn the ins and outs of sailing them. We won't explain everything here; that can be found in the Fighting Instructions portion of the manual. We can tell you enough to learn how to get through a turn.

Load the game. After the title screen is a menu. Select #3 (Play Wooden Ships & Iron Men), then #5 (Play Previously Saved Scenario). Take the game disk out, turn it over, and put it back in the drive. The 25 scenarios are on this side. Press a key, then type **SC17 (Return)**. All 25 scenarios are "previously saved scenarios" and can be loaded in the same format, (a minor exception is scenario 15, see page 34). For example, to load scenario 2, type **SC2**.

The next thing to appear is a field of blue covered with hexagons. On the screen are two ships. All ships take up two hexes, the forwardmost called the bow (or front end) and the rear-most the stern (or the rear end). At the bottom of the screen is a black box with the words "Quit", "Save", and "Continue". We call this the "window" and it displays the prompts (messages from the computer) and menu bars (options available to the players) needed to understand and play the game.

Each turn follows a Sequence of Play. The Sequence of Play is a list of actions that are followed in order. While the game regulates this sequence exactly, some phases won't appear on the screen unless certain conditions are met. For example, the Wind Phase only shows up when there is a change in the wind.

All that you have to remember is what the phases are for, the game decides where and when they come into play.

One turn consists of the following phases:

1. Wind Phase. There is a chance each turn that the wind shifts to a new direction. This phase appears only when there is a change in direction.

2. Unfouling Phase. Fouled ships may attempt to unfoul themselves. This appears only if two or more vessels are fouled.

3. Movement Phase. This is subdivided into player 1's phase and player 2's phase. Since movement orders are executed simultaneously, the second player should not look at the screen while the first player is entering movement orders.

4. Anchoring Phase. Ships may drop, raise or cut their anchors.

5. Movement Execution and Drifting Phase. All ships are moved one movement point at a time. Drifting occurs only if a ship has remained motionless for a certain number of turns.

6. Grappling Phase. Ships can attempt to grapple or ungrapple adjacent ships. This phase only appears if two ships are in adjacent hexes.

7. Boarding Preparation Phase. Ships may form boarding parties to attack a grappled or fouled ship, or defend against an enemy boarding party. This phase only appears if ships are grappled or fouled.

8. Combat Phase. Ships fire their broadsides at other ships if they are within range and field of fire.

9. Melee and Crew Transfer Phase. This phase appears if boarding parties are on enemy ships or a crew transferred from one ship to another.

10. Load Phase. Ships may reload their guns.

11. Sail Phase. Ships may change their sails from battle to full and vice-versa. Also, eligible ships may institute repairs.

At the end of each turn, the game can be saved to a formatted disk. Right now the computer is offering that choice. Just press the fire button to go on.

Player 1 vs. Player 2. Here the game is asking if you want the computer to control the second player's ships. Toggle the joystick so that "Player 2" is replaced with "Computer", then press the fire button. Later, we'll ask you to change it back.

It's time for player 1 to enter movement orders. Press the fire button to continue to the next window. The window is now a command bar with four possible orders. A small arrow is over the "Scroll Map" order. This is called the windicator. Toggling the joystick right or left moves the windicator from order to order. The windicator serves two major functions: to show you the current wind direction, and to select options and ships. Wind direction is important in that it determines the speed of all ships. Ships sail slower moving against the wind than with it.

So, with the windicator over the Scroll Map order, press the fire button. Toggling the joystick now scrolls the map in that direction until the edge is reached. Move the map so that both ships are on the screen then press the fire button to exit the scroll map option.

Let's take a look at the ships. Select the Get Status command. Like all commands that deal directly with the ships, you must use the windicator to select the ship that order applies to although the <f7> key will scroll through the status reports of every ship on your side. So when the Get Status command has been selected, move the windicator to the leftmost ship and press the fire button. The ship will turn yellow and on the bottom of the screen the window will change. Remember that the windicator must be positioned carefully over the white ship in order for the command to work.

The bottom of the screen contains information about that ship. It tells you that this ship is the frigate USS CONSTITUTION. She carries an elite crew, which is the best possible. The words full and battle refer to her sails. A ship can either be in one or the other, and the current selection is highlighted in red. Battle sails cause the ship to move slower, but with less chance of rigging damage because a number of sails are furled. The CONSTITUTION is using full sails. With those sails, she can move a maximum of six hexes at her current heading and can turn at least three times.

Pressing the button again displays a second screen of information. The hull number tells you how many hull points of damage it can sustain before becoming unseaworthy. Next to it is the status of the guns. The abbreviations below this say if the right and left gun sections are loaded and with what kind of shot. At this time both sides are loaded with round shot (R). When a side's guns are fired, they can be reloaded with other types of ammunition.

The crew number shows how many men are in each watch. There are six crew points in

each watch. A watch is a part of a ship's company required to be on duty during a particular period of time. Simply put, a ship must have at least one watch available to execute an order. For instance, if one watch is sailing the ship, one reloading the guns, and one repelling boarders, then there are no watches available to handle the anchor. The computer will automatically place the crews where you request them on a first-come, first-served basis.

Guns are the long rows of cannon found on a fighting ship. carronades ("CAR") are larger guns of short range. The numbers indicate how many gun and carronade points remain undamaged on the right and the left sides of the ship. The final figures are for the rigging. Each section of the rigging is assigned a number representing the number of points of damage it can sustain. Each time an entire section is lost, ship movement is reduced.

One brief note on direction. All references to right and left during the game are determined as if you are standing on the stern of the vessel, facing the bow. For those who don't understand the terms port and starboard, port means left and starboard means right.

Return to the command bar by pressing the fire button. Select the Give Orders command. As with the Status command, move the windicator to the CONSTITUTION and press the fire button. A yellow arrow appears representing the ship. Since one of the objects of this tutorial is to engage the enemy in battle, you should move it closer. Notice the window. A 5 has appeared next to the 6. As the ship moves, that number will go down. Factors like relative wind direction and accumulated damage will also affect how many movement points are available. Turn her towards the enemy vessel. By pressing the joystick to the right, the arrow pivots clockwise. Look at the window again. It now displays how many moves forward you have remaining and how many times you can turn.

Also, remember that movement in this game is simultaneous. That means that both sides enter their movement orders. Then, the game moves all ships one movement point at a time.

There are some limitations on movement. Each turn costs one movement point and no ship can turn two times in a row. That is, after turning, a ship must move at least one hex forward before it can turn again. Finally, when a ship turns, note that the rear of the ship swing out, not the bow. This is the way sailing ships move.

So in order to turn again you must move forward. Push the joystick forward. The arrow moved one hex forward. Try to stay to the windward side of the enemy to maintain a sailing advantage. So turn the ship clockwise one more time. Then, move the ship forward two more hexes.

When you have spent your last movement point, the game goes back to the command bar automatically. If you wanted to stop before expending all your points, press the fire button or pull the joystick back. This is called backsailing. Did you make an error entering orders? Enter it again; the game remembers only the last orders entered for each ship.

Once you have entered the correct orders, advance to the next menu. This is done using the End Turn command. The next prompt will be the movement phase for player two. For the purpose of this tutorial, the computer will move the ship for you.

The next phase is anchoring. Unlike the movement phases, this menu bar applies to both players. In fact, all of the menu bars except for the previous two are used by both players. Players should still look away when their opponents are making their choices.

At this time nobody wishes to drop anchor, so continue to the next phase. The prompt says that it's the execution phase. There is nothing else to do at this time, so when you are ready, press the button. You will now see the simultaneous execution of both ship's movement orders. When the word Drifting appears, the computer is checking to see if any ships are doing just that.

The next prompt is Combat Phase. You're not close enough to shoot, so tell the computer No and it'll take you to the Load phase. All guns are loaded, so again tell the computer No.

The next phase is the Full Sail Phase. With full sails, the ship can move at the maximum possible movement rate. Although the CONSTITUTION does not need it, enter the Full Sail Phase by entering Yes as your response. Take the Change Sail command and choose the CONSTITUTION. The screen will now prompt "What type of sails? Full". Toggle the joystick to where the prompt reads "What type of sails? Battle", and enter the change. On the next turn, the CONSTITUTION will have less speed and maneuverability, but for now, repeat the procedure so that the ship will still have full sails.

After entering the End Turn command, the screen returns to the save game prompt. You have completed the first turn. However, as you know, you have not seen everything. So far

you have seen the Save phase, the Movement phases, the Anchoring phase, the Combat phase, the Reloading phase, and the Full Sail phase. There are others, but they only occur when needed. Much like an iceberg, the hidden part appears only when we come upon it. But for now we will discuss how to take direct action against another ship.

During the next movement phase, move the CONSTITUTION forward its full movement allowance and try to get close enough for long-range cannon fire. After movement has been executed, and we return to the Combat Phase, respond Yes this time. The Combat command bar has the command Fire Broadside. Now with the extreme range here, the chance of damaging the other vessel is slim, but since this is a tutorial, we'll try. Gunpowder is cheap anyway.

Using the Fire Broadside command consists of selecting the firing ship then the target ship. Place the windicator on the CONSTITUTION. When this is entered, the windicator returns to the center of the screen. Place it on the target vessel, GUERRIERE. Press the fire button. When this is entered you will hear the sound of gunfire, and the result of the devastating barrage is displayed in the window. GUERRIERE may return fire in the same way.

Like last turn, the next phase is the Load Phase, and since the CONSTITUTION's gun section has fired, it must reload. Go into the Load Phase and select the Reload Broadside command. Place the windicator on CONSTITUTION and get the prompt "Which Side Do You Want To Reload?". Toggle the joystick to the appropriate side and press the button. It will then ask you "What Kind Of Shot?". You can select Round, Double, Chain or Grape shot. Round shot is the traditional cannonball and the most commonly used. Double Shot is two Roundshot loads. This makes tremendous damage but can only be useful at a one-hex range and takes two turns to load. Chain shot is also limited in range but can do ferocious damage to the rigging. No British ships may use chain shot. Grape shot is canisters full of small balls or flechhetes which scatter through the exposed crewmen. Virtually useless against the ship itself, it can be put to good use softening up an enemy before boarding.

Now, let's attempt a boarding action. To do this, you may have to take control of the GUERRIERE so that the two ships can be sent on a collision course. At the end of the movement phase, if the two ships are in adjacent hexes, a new phase will appear! This is the Grappling phase, where your crew attempts to tie the two vessels together. Grappling is performed like firing a broadside. Select the grapple ship order and place the windicator on the ship doing the grappling, then place the windicator on the target ship. The word Succeeds or Fails will appear in the window. Try grappling from either ship until it succeeds. Each ship may attempt one grapple per turn.

The next thing you see is the game moving the grappled vessels to the center of the screen one at a time and asking if you would like to attempt ungrappling. But remain grappled to see the Boarding Phase. Boarding is done in the same manner as grappling. There are two types of boarding party; offensive and defensive. If an offensive boarding party attacks your vessel, and you do not greet them with an offensive or defensive party, your vessel surrenders without a fight.

There are a number of factors to consider when choosing between sending an offensive or defensive party, so for now we'll choose to set up a defensive party. That is select the Send Boarding Party command, and use the windicator to send men from your vessel to your vessel (in other words, choose your vessel twice). The screen says that a Defensive Boarding Party has been set up. If you select the ship status function now, you will find that a watch will have a D next to it. This reflects its new role (that of standing at the side with knives, axes, guns and other fun objects). They are waiting for the melee phase. Be sure to have the other ship send an offensive boarding party.

Move through the combat phase and the Melee phase will now appear. This is because you have crewmen in conflict or transferring from one vessel to another. The melee phase is broken into three rounds, the outcome of each appearing in the window. You move from one to the next, as usual, by pressing the fire button. After three rounds, the ship may be captured or remain locked in battle.

There are other phases that appear from time to time. The Wind phase appears at the beginning of a turn when the wind has shifted to a new direction. Obviously, it doesn't appear every turn, just when it's needed.

Another is the Unfouling phase. This is the second way two ships become entangled. Grappling is a deliberate action, while fouling means that both ships collided and their rigging is entangled.

Like the grappling phase, fouled ships can send across boarding parties. You can also attempt to unfoul them during the unfouling phase. The game identifies the fouled vessels and inquires if you would like to unfoul.

Another phase can come into play. If a ship has not fired, reloaded, handled the anchor, changed sails, executed any turns and has at least two crew watches available, it may effect repairs. When such repairs are possible, the computer will inform you and allow you to select where the repairs are performed.

This concludes the tutorial. It describes just enough to get you playing. There is quite a lot more to know, such as how often drifting takes place and how to repair your ship, and they can be found in the Fighting Instructions. In short, everything that you need to know about WS&IM can be found in either this section or in the Fighting Instructions. How much you want to learn in order to play the game is up to you.

Carry on, Captain!



THE DOCKYARD

The Building, Care and Feeding of your WS&IM game

Now that you are familiar with the general game play, it is time to discuss the special features of WS&IM. While it is possible to play the game by reading only the tutorial and playing the scenarios, there comes a time when most gamers want to create scenarios of their own. To design their personal flagship and take arms against a sea of hosts, as Shakespeare once wrote about an unrelated matter.

When you get the urge, the Dockyard is there to scratch it.

For purposes of this tutorial, a fleet is defined as a body of ships — from one to nineteen — that a player will command in battle. Even in a battle consisting of one ship on each side, they are referred to as two fleets.

A WS&IM scenario is created using a map file and two fleet files. Don't be worried by the term file: no programming is required to use or build them. All you have to do is follow the instructions below, as well as the menus in the Dockyard program. They're so simple, we created the scenarios that came with the game using the Dockyard program.

Since we're creating a scenario, have a formatted disk handy with at least 50 blocks available (if you already have files on it). Any format program can be used to create this disk.

Building An Ocean

If your scenario takes place on the high seas, there is no need to build a map file. One is already on the scenario side of the disk under the name SEA. If you want the computer to captain a fleet, only an all-sea map file may be used.

If you want to build islands, swamps and rivers, the possibilities are limited only by your imagination. Building a map begins with a map that is either all-sea, all-shoal, or all-land, then picking and choosing which hexes become what terrain. There is no restriction, and once that map file is saved it can be used for any number of scenarios.

Here's how you do it:

From the first menu, press 1 to go to the mapmaker. You will be asked what kind of map you would like to start with. Whichever you select will give you a complete mapboard in that color, so choose the terrain that makes up most of the map.

Existing maps may be changed and saved under a new name. On the menu you will find four maps, as well as the option of loading a previously saved map.

For our purposes, let's assume that you are creating a totally new map. The scenario will take place on mostly open ocean with a coastline on the western edge. Select option #6.

You will be prompted to make sure that your game disk is in the drive, and then press a key. After the map is loaded, the screen shows the northwest corner of an all-sea map. Move the windicator to the green rectangle (called Land) in the command bar. Press the fire button and notice that an asterisk appears over the land rectangle. That terrain is now "on your brush," ready to be placed on the map. Move the windicator to one of the blue hexes on the western (i.e. leftmost) edge of the board. When the fire button is pressed, the blue hex will turn green. Move on to the next hex and turn that one green also.

Any number of hexes may be colored green, and you can switch back and forth between the menu bar and the screen. A hex may also be colored over and over again.

If you now select the light blue rectangle (called Shoal), you may change the hexes to represent shallow water. And, of course, the Sea rectangle can change those hexes back. That is the entire mapmaker program. Play with it awhile and get the feel for how easy it is to create totally new maps.

Here is what the three terrain types do:

Land hexes block movement and fire. Ships cannot move into land hexes, nor can they fire guns through it.

Shoal hexes can block movement. At the beginning of each scenario, the player sets the shoal level by assigning a number between 1 and 99. If a ship with more hull points than that number attempts to enter a shoal hex, it stops before entering that hex.

Sea hexes have no effect on play.

When you have finished making a map, choose the quit box. The menu bar appears up with the prompts Continue, Save and Menu.

Continue returns to the map just as you left it. Menu takes you back to the opening menu, and eliminates the map that you worked on, so use it only when you have saved the map, or don't want it. Save asks for a file name, asks if the proper disk is in the drive, then saves the map. The map can now be used in any number of scenarios.

Remember that before you can save either a map, a fleet or a game, you must initialize a save disk.

Building Your Fleet

Now that you have a map, you need some ships. Call the Create Fleet/Alter Fleet function from the first menu. From this the computer asks if you wish to alter an existing fleet or create a totally new fleet.

Select the create option. Now you are presented with a screen with 19 empty slots and five options. Remember that when putting together a scenario you cannot have more than twenty ships in play. Press A for the add ship function. You now have a number of options which include the ability to load in lists of ships. We have more than 250 ships from the Revolutionary and Napoleonic period. These are on special fleet files. While they cannot be used directly in scenarios, you can draft ships from them to create your fleet.

At this point, the first British fleet is loaded into the machine automatically. Lets see what it contains. Press 3 to browse through these 99 ships.

You may start with any of the ships from 01 to 99. Press the Return key to start at the top of the list. Using the + and - keys moves through the list one ship at a time. Striking the x key returns to the last menu.

Again, for the sake of argument let's assume that you're building a small task force to blockade a port. Scan through the list until the Frigate SERAPIS appears (it's number 37). Its statistics are displayed for your viewing pleasure. These are the same ones you find with the Get Status command during the game.

To place SERAPIS on the fleet list, press X to return to the last menu. Now press A to Add Ship From List. Again you will be asked for a ship number. Type 37 and press the Return key. SERAPIS has been added to the roster.

It may be advantageous to add a couple of smaller vessels such as sloops or brigs. Returning to the list of ships, you will find the Sloop of War INFLEXIBLE (vessel number 1) a quick little ship. Add her to the list. Then add the Schooner MARIA (vessel number 4).

You now have your fleet. To use it in a scenario, it has to be saved to disk. From the fleet

page, select S to Save Fleet. Place the save disk in the drive and press a key. Then name the fleet. Pick any name you like from 1 to 16 letters.

You now need an opposing fleet. Go back to the main menu, and then select option 2 again (Create Fleet/Alter Fleet). This time when you use the Add ship option, enter option #8 (Load in Ship List-American). Follow the prompt by putting the game disk in the drive and pressing a key.

After this is loaded in, use the browse function to examine the American vessels. From the list select a number of American ships to pit against the British blockading fleet. When you are finished with this, save this fleet like the first.

Once you have saved a map and two fleets, it's time to construct your first scenario. Return to the Dockyard menu, select option 3 (Play WS&IM) and the option 6 (Create a New Scenario). As before, the computer will ask to place your own disk in the drive and enter the name of the map. When you see Fleet 1 on the screen, type in the name of that fleet. Do the same for the Fleet 2 prompt.

The next two prompts are Wind Direction and Wind Change. The Wind Direction is set by pressing the cursor keys, then pressing the return key. The Wind Change number is set by typing that number and pressing the Return key.

In all scenarios, you see the wind direction represented by a number from 1 to 6. On the screen, a wind direction of 1 means that the arrow must point up (to north, if you like). Each hexside running clockwise adds one to the direction number, so a wind direction of four is down (south), while a six is northwest.

The wind change number is the frequency in which the wind will change direction. You may enter a number from one to six. The wind change is checked every three turns. A number from one to six is "rolled" and, if it is higher than the wind change number, there is about a 66% chance the wind will change direction (that procedure is explained in the Fighting Instructions). Therefore, entering one causes frequent wind shifts, while a six causes fewer shifts.

The final number sets the depth of the shoal hexes. This appears even if the map doesn't have any. Type a number from 1 to 99 and press the return key. A ship with this many hull points or more cannot enter a shoal hex.

If this information is entered correctly, the map will appear. Using the windicator, place the bow and stern of each ship. You only get one chance, so be very careful about it. If you are not happy with the set up, the fleet files are still on disk, but you would have to reboot the game to try again. The window will tell you which ship is ready to be added to the screen, as well as if you are currently laying down her bow or stern section.

When all the ships have been placed, the computer will prompt for the game disk to be placed in the drive. When this is done, strike any key, and the game will load.

Nationalities & Ship Types

When creating or altering your own ship, the following table defines which keys will call up which nationality and ship type.

Key Nationality

A	American
B	British
C	Canadian
D	Dutch
F	French
J	Japanese
M	Malay Pirate
P	Portuguese
R	Russian
S	Spanish
T	Tripolitan
V	Venetian
1	Pirate
2	Privateer
3	Barbary Pirate

4	Black Birder
5	Papal States
6	Chinese

Key Ship Type

1	Frigate
2	Corvette
3	Brig
4	Sloop
5	Schooner
6	Gondola
7	Galley
8	Radeau

(continued on page 9, 2nd column)

Key Crew Quality

G	Green (Untrained)
P	Poor (Trained but incompetent)
A	Average (Competent but not exceptional)
C	Crack (well trained and high morale)
E	Elite (the best of the best)

9	Gunboat
O	Ship-of-the-line
J	Junk
M	Merchant
P	Pirate

FIGHTING INSTRUCTIONS

Rules For Experienced Captains

After playing a couple of games, you may have discovered that there is a lot of information hidden within the **WOODEN SHIPS & IRON MEN** game. This section represents the next step in the evolution of your skills as a captain since it means that you are ready to understand more about how your ship moves and fights.

This section covers all aspects of **WS&IM**, except for the Dockyard program. It explains everything by following the Sequence of Play just as if you are playing a turn.

Owners of the boardgame should know that this section is a rewrite of the Basic and Advanced game rules. **WS&IM** uses the same combat and movement system. The only omission is the Wind Effect Table and the Critical Hit Table. Some of the optional rules from the boardgame appear here but they are not programmed into the game. Players wishing to use them must devise their own "house rules" using their ingenuity and dice.

Section One gives the complete Sequence of Play from the Wind Phase to the Save Game Phase.

PROLOGUE: THE GET STATUS COMMAND

As you know, **WS&IM** keeps track of every ship as they move and take damage and displays their current condition when you select the **GET STATUS** command. The command is on every menu bar so the information is always available, and a complete description of it is presented here.

When **Get Status** is selected, move the arrow over a ship and press the fire button. It must be a friendly ship during your movement phase, or any ship during any other phase.

When the fire button is pressed, the ship's

status will appear at the bottom. Pressing the <f7> key repeatedly will cycle through the two status reports for each ship on that side. A ship on-screen will turn yellow when its status report appears. The <f7> key can be pressed any number of times.

The fire button will either display the second half of a ship's status report, or (if that is already on-screen) return to the command bar.

Let's assume that you are checking the status of the **CONSTITUTION**. This is what you'll see:

CONSTITUTION
AMERICAN
ELITE FRIGATE

BATTLE 4
FULL 6
TURNS 3

Key:

CONSTITUTION: The ship's name, appearing in the same color as the ship on the screen.

AMERICAN: The ship's nationality.

ELITE: The crew's quality, ranging from poor to elite.

FRIGATE: The ship's class.

BATTLE 4/FULL 6: The number of movement points available if the ship is using battle sails or full sails. The ship's current sail type is in red. This number changes as the ship moves and turns. Note that this number also changes depending upon the ship's position relative to

the wind.

TURNS 3: The number of turns a ship can make in a single movement phase. A turn consists of one hexside. After a turn a ship must move forward at least one hex before it can turn again.

When the fire button is pressed the following screen appears:

HULL	LOAD		CREW			GUNS		CAR		RIGGING			
	L	R	1	2	3	L	R	L	R	1	2	3	4
21	R	R	6	6	6	8	8	6	6	6	6	6	6

Key:

HULL: The number of hull points the CONSTITUTION can take before sinking. Considering that the average number of hull hits a ship can inflict is about 2 or 3, the ship can take a lot of damage.

LOAD: The content of the port and starboard guns. There are four different types of ammunition available: round shot (R), double round shot (DS), chain shot (CS) and grape shot (GS). If the CONSTITUTION fires a starboard broadside, the "R" abbreviation disappears under the R column and the player must reload that side before it could fire from that side again.

CREW: The number of crew points in each of three "watches." This division becomes important when allocating boarding parties.

GUNS: The number of gun points on the port and starboard side.

CAR: The number of carronades points on each side. A carronade is a short gun that's powerful at a two-hex range.

RIGGING: The number of rigging points in each section. One section equals one point of battle sail speed (three or four depending upon the ship). The number beneath each section is the number of rigging points that section has.

PROLOGUE: SAVING GAMES AND FILES

A blank, formatted disk must be on hand before you boot up the game to save games as well as map, fleet and scenarios files.

Commodore 64 owners: a program is on the Scenario side of the game disk that will format disks for you. The file, but not the

game, may be copied and used.

Place the scenario side of the disk into the drive and type **LOAD"FORMAT",8** (Return). Follow the instructions on your screen.

PROLOGUE: I/O Error

When loading and saving files, there may be a chance that you will get an "I/O Error." Don't panic; pressing Return will take you back to try again. The problem is to determine why the error occurred.

"I/O" stands for Input/Output. That means that in the process of reading information from a disk, or while writing information, something was found that would interfere with completion of the task.

The following checklist is not complete, but after creating over sixty fleet files, ten map files and fifty scenarios with the Dockyard program (O, the mistakes we made!), we found that the following things cause an "I/O Error":

- Major Error Department: writing to an already existing file (that means that when altering an existing file, you must save it under a different name.)

- A write-protect tab is on the disk.
- Attempting to write a file onto the game disk (no, it won't destroy the game if you did try it).
- Attempting to read information off the game side of the disk instead of the scenario side.
- Trying to read a map or game file while in the "Create Fleet/Revise Fleet" part of the Dockyard. This applies to reading game and fleet files while trying to make a map, and map and game files while creating a fleet.
- Writing to a blank disk that was not formatted for the Commodore 64.
- Forgetting to put the proper disk in the drive when asked.
- Reading or writing to an empty disk drive.

PROLOGUE: USING THE KEYBOARD AND JOYSTICK

Four keys and the Space Bar can substitute for the joystick. The Space Bar acts as the fire button, while the four buttons on the upper left hand corner of the keyboard move the cursor:

CTRL: moves windicator to the left
Left Arrow key: moves windicator down
"1": moves windicator up
"2": moves windicator right

I. SEQUENCE OF PLAY

WS&IM is played by moving from one phase to the next. These phases are defined by the Sequence of Play, and must be followed in order. Moving through all of the eligible phases represents one turn. When the Save Game prompt appears, one turn has passed.

There are 12 phases in all, not counting the save game feature. Some phases, like the Grappling and Ungrappling Phase, appear only when certain conditions are met.

The complete Sequence of Play is:

A. Wind Phase

Appears only when there is a change in the wind direction. When there is a change, it is announced to the players and the windicator shows the new direction.

B. Unfouling Phase

Appears only when two or more ships begin the turn fouled. The players decide for each ship whether to attempt unfouling.

C. Player One Movement Phase

The first player enters his movement orders.

D. Player Two Movement Phase

The second player enters his movement orders.

E. Anchoring Phase

Both players decide to drop, pull up or cut their anchors.

F. Movement Execution Phase

The movement orders for all ships are resolved one movement point at a time. Drifting movement for all eligible ships is resolved.

G. Grappling Phase

Appears only when at least two ships are in adjacent hexes. Attempts to grapple and ungrapple ships are made.

H. Boarding Preparation Phase

Appears only when at least two ships are fouled or grappled. The players assign crews on those ships to offensive, defensive or transfer boarding parties. These orders are resolved during the Melee Phase below.

I. Combat Phase

Each player decides which ships will fire broadsides. Combat results take effect at the beginning of the next phase.

J. Melee Phase

Appears only when at least one offensive boarding party is formed. Three rounds of melee combat occur.

K. Load Phase

Eligible ships may reload broadsides and effect repairs.

L. Sail Phase

Ships may change between battle and full sails.

M. Save Game

The game may be halted and saved to a formatted disk.

II. WIND PHASE

Each scenario has a wind direction number indicating how the wind is blowing; from one indicating to the north (the top of the screen), two to the northeast, four to the south and so on. Every three turns, the game rolls a die. If it equals or exceeds the wind change number, another die is rolled and checked against the Wind Change Table to determine the result. If the result is "no change," this phase will not appear. Otherwise, players are informed automatically of the new wind direction.

Wind Change Table

Die	Result
1	Wind shifts back to original direction
2	No change
3	Wind shifts 60 degrees clockwise
4	Wind shifts 60 degrees counterclockwise
5	Wind shifts 120 degrees clockwise
6	Wind shifts 120 degrees counterclockwise

III. UNFOULING PHASE

A ship which has enfouled its rigging with another ship may attempt to unfoul. A die is rolled for each ship and checked against the Unfouling Table. If successful, both ships are no longer fouled and may move.

Unfouling Table

Die	Result
1-2	Ships are unfouled
3-6	Ships remain fouled

IV. MOVEMENT PHASE

All ships are moved simultaneously after both players enter movement orders for all ships. These orders should be entered secretly.

The movement allowance of each ship is determined by its full sail speed, its sails, its attitude to the wind and rigging damage. It costs a ship one movement point to enter a hex or turn a hexside. When a ship turns one hexside, it must move forward at least one hex before it can turn again. (Exception: a ship ending its movement with a turn may turn again at the beginning of the next movement phase.)

Gunboats are exempt from this rule.

A. Full Sail Speed

Each ship has a full sail speed of 5, 6 or 7, representing the number of movement points a ship will have when it has full sails and is taking full advantage of the wind. This number is modified by factors listed below.

B. Sails

Ships sail under full or battle sail. Full sail means that the captain has ordered the proper amount of sail for the current tactical situa-

tion. WS&IM does not deal with the precise niceties of sailing a ship. Instead, it assumes that the captain of each ship knows best how much canvas to use.

Battle sail is the condition where the crew "takes in" enough canvas to keep the ship moving but offers a smaller target for rigging shots than under full sail. A ship fired upon while moving under full sail suffers double rigging damage (i.e., two rigging hits is doubled to four rigging hits).

A ship's battle sail speed is dependent upon its full sail speed. A ship with a full sail speed of 6 or 7 has a battle sail speed of 4; a ship with a full sail speed of 5 has a battle sail speed of 3.

C. Attitude To The Wind

A ship's position in relation to the wind determines its speed. A ship heading directly into the wind cannot move at all (it is "taken aback") while a ship moving with the wind moves much faster.

A ship moves in one of four attitudes. From slowest to fastest, they are: taken aback, beating, running and broad reaching. When taken aback, the wind is moving from bow to stern, preventing the ship from moving ahead. When beating, the wind is still pushing from the bow, but 45 degrees to the left or right. It is still slow, but the ship can make some headway.

When the ship is running, the wind is pushing in a straight line from stern to bow. It is a less efficient use of the wind than broad reaching because only the rearmost mast is catching all of the wind and blocking it from reaching the other sails. Broad reaching is when the wind is moving from stern to bow, but 45 degrees to the left or right. It is the fastest position to be in because the wind is pushing directly onto all of the masts.

So if a ship with a full sail speed of six is running with the wind with its battle sails up, it has a movement allowance of three. If the ship is under full sail, it has a movement allowance of five.

The movement allowance for each attitude to the wind is also the maximum number of hexes a ship may move in that particular direction. For example, a ship broad reaching with a full sail speed of six has a movement allowance of six. If it beats — turns one hexside towards the direction the wind is coming from — it may only move two hexes in that direction as its maximum movement allowance in that attitude is two. It may broad reach again

Depending upon the wind and sails, the following movement allowances are possible:

Under Battle Sails/Under Full Sails

Full Sail	Taken Aback	Beating	Running	Broad Reaching
5	0/0	1/2	2/4	3/5
6	0/0	1/2	3/5	4/6
7	0/0	1/2	3/6	4/7

Wind is coming
from this direction



Taken Aback



Beating



Running



Broad Reaching

after moving one hex forward and use up its remaining movement allowance.

But the opposite is not true. A ship beginning the turn with three movement points cannot increase it that turn by turning towards a more favorable wind position.

D. Battle Damage

Each ship's rigging is divided into three or four sections, one for each point of battle sail speed. When an entire section is destroyed in combat, the ship's movement allowance drops by one automatically and the ship cannot use full sails. When all rigging sections are gone, the ship cannot move but may drift.

Example: a ship has a battle sail speed of three. It has three rigging sections. If the first section is destroyed, the ship cannot move under full sails and its speed is reduced by one. At its most favorable sailing position (broad reaching), it has a speed of two. If it is beating, it cannot move at all, because the one movement point it had in that position is reduced to zero because of the rigging damage.

If all crew watches have been eliminated through combat and/or are assigned to boarding parties, the ship cannot move.

E. Backing Sails

Ships that wish to stay in place for part of the movement execution phase may use back-

ing sails. Backing sails may be used in any combination of movement and turns. By pulling back once on the joystick, the ship spends one movement point to remain in place. If the fire button is pressed, all of the remaining movement points is spent on backing sails.

F. The Edge Of The World

Due to the manner in which WS&IM was programmed, it is not possible to "sail off the edge of the world." Players must keep this in mind when setting up and moving their ships.

V. ANCHORING PHASE

Anchoring prevents the ship from drifting and improves its firing accuracy as a result of the steadier fire maintained from a more stable position. There are three commands:

Anchor ship: the ship will fulfill its movement orders this turn and then drop the anchor. While anchored, the ship cannot be given movement orders and cannot turn.

Pull up anchor: the ship may begin moving during the second Movement Execution Phase following this order. During the turn that the ship is up-anchoring, she cannot load or fire her guns, make repairs or engage in melees.

Cut anchor: the ship may begin moving during the next Movement Execution Phase following this order (i.e., next turn). The ship cannot drop anchor again.

VI. MOVEMENT EXECUTION PHASE

All ships move one hex at a time and turn by swinging the stern (rear) of the ship so that the bow faces the new direction. Ships which attempt to occupy the same hex collide and may become fouled.

Fouling: if two ships try to occupy the same hex, one ship is selected at random to enter. Both ships cannot move thereafter and a die is rolled and checked against the Fouling Table.

Fouling Table	
Die	Result
1-3	Ships are fouled
4-6	Ships are not fouled

Fouled ships cannot move until they become unfouled during the Unfouling Phase. Fouled ships may send boarding parties and grapple.

Drifting: if the bow hex of a ship does not change for two consecutive movement execution phases, the ship will drift one hex in the direction the wind is blowing. Drifting begins at the end of the second movement execution phase and continues every turn thereafter (if the ship is not a ship-of-the-line), or every other turn (if it is).

Ships that are fouled or grappled cannot move or turn but can drift.

VII. GRAPPLING PHASE

This phase appears only when two ships are in adjacent hexes. Friendly or enemy, fouled or unfouled, the captain of one ship may attempt to grapple or ungrapple another ship. Grappling between two friendly ships always succeed while all other attempts must be resolved on the Grapple Table. If one ship was motionless during the movement phase, one is subtracted from the die roll. If both ships were motionless during the phase, two is subtracted.

Grapple Table

Die	Result
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1-2	Succeeds
3-6	Fails

VIII. BOARDING PREPARATION PHASE

Fouled and/or grappled ships may form boarding parties to take over an enemy ship, defend against a melee or transfer to a friendly ship.

Players may not look at each other's selection of boarding parties.

There are three types of boarding parties: offensive, defensive and transfer. An entire watch is used to form one boarding party and any number of parties may be formed limited only by the total number of watches. If all watches have been assigned to boarding parties, the ship cannot fire or move until a watch becomes available. Once committed, a watch remains in the melee until one side wins or the ships are ungrappled or unfouled.

Offensive boarding parties are formed by selecting the ship the party is coming from followed by the enemy ship the party will attack. Each time, an entire watch is assigned to that task, beginning with the first watch. Any number of watches may be assigned to an offensive boarding party.

A watch assigned to an offensive boarding party will have an "O" next to its number when the status of that ship is checked.

Defensive boarding parties are formed by selecting the ship the party is coming from twice (to the game, you're assigning the boarding party to "attack" its own ship).

A watch assigned to a defensive boarding party will have a "D" next to its number when the status of that ship is checked.

Transfer boarding parties are used to move a watch from one friendly ship to another. It can reinforce a ship that lost most of its men to combat or take command of a prize ship captured in battle.

A watch assigned to a transfer boarding party will have a "T" next to its number when the status of that ship is checked.

Assigning boarding parties is limited only by the number of watches available. Any combination of assignments may be made: such as sending a watch to attack one grappled ship,

one to board a friendly ship and one to defend against boarding parties.

IX. COMBAT PHASE

The game checks a number of factors before permitting one ship to fire on another. It checks:

- if the defending ship is within the line of fire of the attacking ship,
- if the attacking ship has guns or carronades available on the side facing the enemy, and
- if the guns on that ship's side are loaded with ammunition of the proper type for that range. See the ammunition description in the reloading phase for further discussion on that point.

Then the Hit Determination Table is used. It takes a number of factors to determine which Hit Table is used. This is a small chart upon which are listed six possible combat results for a rigging or a hull shot. Most of the time, the player selects whether a ship will fire on the rigging or the hull. There are two exceptions to this:

- When firing at a range of six hexes or greater, all shots are at the rigging.
- When grappled and firing into that ship, all shots are at the hull.

There are 11 Hit Tables, from #0 with its ineffectual combat results to #10 which has the most damaging effects. When the Hit Table is chosen, the game rolls a die on that table to find the damage result.

A. Field of Fire

Each ship has a right and left broadside. It can fire one or both in a turn (but reload only one side per turn). A broadside is effective only from its side, and so long as the target ship is within the firing ship's field of fire. A diagram showing a ship's field of fire can be found on the inside back cover of this rulebook.

A gunboat has only bow guns that can fire straight ahead down the hexrow.

B. Line of Sight

A ship may fire one broadside at a single enemy ship subject to two conditions:

1. The target ship must be the closest one in the field of fire.
2. If a land hex, friendly ship, surrendered

or captured ship is the closest object in the field of fire the ship may not fire that broadside.

3. If more than one ship qualifies as the "closest ship," the attacker may choose which is closest and fire at it.

C. The Hit Determination Table

The journey through the HDT consists of eight steps:

1. Cross-reference the number of guns firing against the range in hexes from the firing ship to the target ship. The game does not count the hex the firing ship is in but does count the target ship. The number of guns firing is found under "GUNS" in the Ship Status section. Use the number from the side of the ship that is firing.

When the range is two hexes or less, add in the number of carronade guns.

If the defending ship is being raked, the number within parentheses is used.

2. The resulting number is the initial Hit Table number. Add to or subtract from that number according to the following conditions.

Example: if the initial Hit Table is 3 and the attack is a stern rake (+1) then the broadside is resolved on Hit Table 4.

If the shot qualifies as a stern rake, a bonus of one is added to the Hit Table number. When a ship fires into the stern of another ship and the shot can travel down the length of the ship, that is a stern rake.

3. Check the quality of the crew. Elite and crack crews increase the Hit Table number while green and poor crews decrease it. Average crews have no effect.

4. For each crew watch wiped out or used for boarding, the Hit Table is decreased. Ignore this if the ship firing is a captured ship.

5. The first broadside on either side of a ship is the most carefully loaded and aimed. So each ship has two initial broadsides — one for each side — and the first time it is used, the Hit Table is increased.

6. When using the guns of a captured ship the Hit Table is decreased.

7. The ammunition fired is checked. Round shot has no effect, while chain and double shot increases the Hit Table. Grape shot decreases the Hit Table.

8. If the firing ship is at anchor the Hit Table is increased.

After going through all eight steps, the final Hit Table number is found. A die is rolled, checked on that table, and the result is the number of hits inflicted on the hull, crew, gun

and/or rigging. If the Hit Table is zero or below, the guns are fired but no damage is scored.

Hit Determination Table

1. Guns Firing

	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25 +
Range									
1	1(2)	1(2)	2(3)	2(4)	3(5)	3(6)	4(7)	4(8)	5(9)
2	0(1)	1(2)	1(2)	2(3)	2(4)	3(5)	3(6)	4(7)	4(8)
3	-1(0)	0(1)	0(1)	1(2)	1(3)	2(4)	2(5)	3(6)	3(7)
4	-2(-1)	-1(0)	-1(0)	0(1)	0(2)	1(3)	1(4)	2(5)	2(6)
5-6	-3(-2)	-2(-1)	-2(-1)	-1(0)	-1(1)	0(2)	0(3)	1(4)	1(5)
7-10	-4(-3)	-3(-2)	-3(-2)	-2(-1)	-2(0)	-1(1)	-1(2)	0(3)	0(4)

(Use number in parentheses when defending ship is being raked)

2. Bonus For A Stern Rake

	+1	+1	+1	+1	+1	+1	+1	+1	+1
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3. Crew Quality

Elite	+1	+1	+2	+2	+2	+2	+2	+2	+3
Crack	+1	+1	+1	+1	+2	+2	+2	+2	+2
Average	0	0	0	0	0	0	0	0	0
Green	0	0	0	0	0	-1	-1	-1	-1
Poor	-1	-1	-1	-1	-1	-1	-2	-2	-2

4. Per Watch Eliminated Or In Boarding Party

	-1	-1	-1	-1	-1	-1	-2	-2	-2
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5. Initial Broadside

	+1	+1	+1	+1	+2	+2	+2	+2	+2
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6. Captured Ship

	-1	-1	-2	-2	-2	-2	-2	-2	-2
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7. Ammunition

Grape	-1	-1	-2	-2	-3	-3	-4	-4	-4
Chain	+1	+1	+1	+1	+2	+2	+2	+2	+2
Double	+1	+1	+1	+1	+2	+2	+2	+2	+3
Round	0	0	0	0	0	0	0	0	0

8. At Anchor

	+1	+1	+1	+1	+1	+1	+2	+2	+2
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HIT TABLES

Number 0

	Hull	Rigging
1	0	0
2	0	0
3	0	0
4	C	0
5	H	R
6	G	C

Number 1

	Hull	Rigging
1	0	0
2	0	0
3	G	R
4	H-G	C
5	H-C	R-H
6	H-R-C	R-C-G

Number 2

	Hull	Rigging
1	G	0
2	H	R
3	H-G	R-C
4	H-C	R-G
5	H-R-C	R-G
6	2H-G	2R-H-C

Number 3

	Hull	Rigging
1	G-C	0
2	H	R-C
3	H-G-C	R-G
4	2H-R	2R
5	2H-C	2R-G
6	2H-2G	2R-H-C

Number 4

	Hull	Rigging
1	G-C	R-G
2	H-R	R-H
3	2H-G-R	2R-C-G
4	2H-2G-C	2R-G
5	3H-C	3R-C
6	3H-G	4R-H-C

Number 5

	Hull	Rigging
1	H-G-C	R-C
2	2H-2C-R	2R-G
3	2H-G-C	3R-H
4	2H-2G	3R-G-C
5	3H-G-R	4R-H
6	3H-G-C	4R-H-G-C

Number 6

	Hull	Rigging
1	H-2G-2C	2R-C
2	2H-2C-R	2R-G-C
3	2H-G-R	3R-H-G
4	2H-2G	4R-G
5	3H-G-C	4R-H
6	4H-2G-C	5R-H-C

Number 7

	Hull	Rigging
1	2H-G-C	2R-C
2	2H-C-R	3R-G
3	3H-2G-2C	3R-H-G
4	3H-2G	4R-H-2C
5	4H-2G-C	5R-2G-C
6	4H-2G-C-R	5R-2H-G

Number 8

	Hull	Rigging
1	2H-G-2C	3R-2G-C
2	3H-G-C-R	3R-H
3	3H-2G-2C	4R-2H-G
4	4H-2G-C	4R-G-C
5	4H-G-2R	5R-G
6	4H-2G-2C	6R-H-2C

Number 9

	Hull	Rigging
1	2H-3G-C	4R-H-G
2	3H-2G-2C	4R-H-C
3	3H-2G-2C-R	5R-2H
4	4H-2G-2C	5R-2G-C
5	4H-G-3R	6R-G-2C
6	5H-G-2C	7R-2G

Number 10

	Hull	Rigging
1	2H-2G-4C	5R-H-C
2	3H-3G-C-R	6R-2G
3	4H-2G-C-R	6R-H-2G
4	5H-2R-G	6R-H-G-C
5	5H-2C-G-R	5R-2H-2C
6	6H-2G-2C	7R-H-2C-G

Key:

Damage is expressed in the number of points taken off that section of the ship: hull (H), rigging (R), crew (C) and guns (G). If the defending ship is a gunboat, rigging damage affects the ship's oar points.

Example: one ship attacks another. The HDT says that the result should come from Hit Table five. The commander decides to aim for the rigging. A four is rolled, and the result is cross-referenced to reveal "3R-G-C". The ship loses three rigging points, one gun point, and one crew point.

Example: later in the battle, both sides suffer severe gun losses. This time, one ship attacks another and the result must come from hit table one. Aiming for the hull, a two is rolled and the result is "0". That means that the guns fired but no damage was done.

Dismasted ships: ships which have lost all their rigging points are dismasted. They cannot move forward until at least one complete section has been repaired. While they cannot move forward they can turn. Dismasted ships with a 1 turning ability must wait three consecutive turns before turning one hexside.

Those with a 2 turning ability must wait two turns while ships with a 3 turning ability must wait one turn. So, if a dismasted ship with a turning ability of 3 turns a hexside on turn five, it cannot turn again until turn seven.

X. MELEE PHASE

If at least one watch was assigned to an offensive or transfer boarding party, this phase appears to resolve those orders. Transfers between friendly ships are automatically accepted while combat between boarding parties are resolved simultaneously with three rounds of combat.

Transfer procedure: the transfer boarding party is moved onto the new ship and is distributed, first, to replace crew losses; then, second, equally among all watches. The transfer boarding party assumes the quality of the

original crew. An Elite crew joining a Poor crew becomes Poor itself. Transfer crews participate immediately in running the ship.

Melee procedure: only an offensive boarding party may initiate a melee. So if two adjacent ships each form a defensive boarding party there is no melee. If they both send an offensive boarding party they will fight each other.

If one ship did not form a party while the other sends an offensive party, the ship surrenders and the crew is taken prisoner.

One turn's melee consists of three rounds in which the parties attack each other. The number of crew points in a party is multiplied by a number from the Crew Melee Strength Table. The result is the Total Melee Strength which is cross-referenced by a die roll on the Melee Resolution Table. The result is the number of crew hits the enemy party receives.

Each melee round is conducted simultaneously, with casualties taken immediately and

When a ship's hull is reduced to zero, it will either strike, sink or explode. There is a 64% chance of striking, a 16% chance that it will sink on a later turn and a 16% chance that it will explode on a later turn. Every turn thereafter, exploding and sinking ships have a one-sixth chance of doing just that. Striking ships have black bases, sinking ships light blue bases, and exploding ships grey bases. They cannot be repaired, fire guns, be fired upon or move. They can drift and block line of sight.

Prize money is not awarded for forcing a ship to strike until a prize crew is put on it.

Once aboard, a prize crew cannot be transferred off and automatically forms itself into a defensive boarding party. A prize cannot be fired upon and can only be retaken by boarding.

A sinking or exploding ship cannot be captured and exists only as an obstacle to movement and combat until the moment a six is rolled and its fate is fulfilled. When a ship explodes every adjacent ship, friendly and enemy, is affected with a rigging attack on Hit Table 10.

Melee Resolution Table

(Use column closest but not higher than Total Melee Strength)

Die	1	8	16	24	32	40	48	56	64	72	80
1	0	0	0	0	0	0	1	1	1	1	2
2	0	0	0	1	1	1	1	2	2	2	2
3	1	1	1	1	2	2	2	2	3	3	3
4	1	2	2	2	2	3	3	3	3	4	4
5	2	2	3	3	3	3	4	4	4	4	5
6	3	3	3	4	4	4	4	5	5	5	5

The table is based on this formula in which TMS is Total Melee Strength and 1d6 a die roll:

$$((TMS/8) + (1d6 \times 3) - 5) / 4$$

Crew Melee Strength Table

Each Elite Point = 5
 Each Crack Point = 4
 Each Average Point = 3
 Each Green Point = 2
 Each Poor Point = 1

Example: a boarding party of 5 elite crew points attack an enemy boarding party. The Crew Melee Strength Table shows that each elite point is worth 5 strength points, so the Total Melee Strength is 25. A die is rolled and cross-referenced with the "24" column (it's the closest to 25 without going over). If the computer's die roll is a four, then the boarding party inflicted 2 crew hits.

the Crew Melee Strength refigured. The melee lasts until three rounds have passed or until one boarding party is completely eliminated. If that happens, the surviving crew are prisoners (their number appears next to the word Crew on the status command) and the defeated ship is captured.

One crew point is required to keep six points prisoners. If this ratio rises, the prisoners can take the ship back.

XI. LOAD PHASE

When a ship fires a broadside, that side's guns must be reloaded before it may fire again. During the Load Phase, you must select a ship, the side to reload and the ammunition type to use. Ammunition cannot be changed without firing the guns. Carronades always carry the type of shot as the broadside even if the broadside has changed the type shot before the carronades have fired.

British ships may not use chain shot.

There are four different ammunition types, with the maximum range they can be used in parenthesis. Ships that attempt to fire beyond the range of the ammunition do no damage.

Round shot (10-hex range): this is standard ammunition for sailing ships. That is why there is no modifier to the Hit Table for using this, while modifiers exist for all other types.

Double shot (1-hex range): this consists of a double load of round shot and is highly effective when fired at close range. The disadvantage to this ammunition is that it takes two turns instead of one to load.

Chainshot (3-hex range): this is used to destroy rigging. It uses the same combat procedure as other shot, but ignores hull and gun hits.

Grapeshot (1-hex range): this is used exclusively against the enemy crew. Grape was composed of canister or langridge and while ineffective against the ship it was devastating against exposed crewmen. The Hit Tables are not used with grapeshot. Instead, the modified Hit Table number represents the number of crew points destroyed.

Repairs: ships which do not load or fire guns, engage in melee, become involved in a collision, up-anchor, change sails or expend any part of its movement allowance in a turn may make repairs provided there are two crew watches available. A ship is eligible for repairs after three turns of inactivity. When a ship can

make repairs, two points are restored to the hull, gun and/or rigging sections.

Ships that begin a scenario damaged may make repairs.

XII. SAIL PHASE

During this phase, a player decides for each ship whether full sails should be raised or dropped. This takes effect immediately.

XIII. VICTORY CONDITIONS

Historically, sailing battles were won whenever one side was completely destroyed, or when both sides could no longer carry on the fight. Who won depended upon how you looked at the battle: tactically, as an isolated contest between two sides, or strategically as to its effect on a more far-reaching campaign. The history of the sailing ship era has shown us all possibilities: an overwhelming tactical victory can be an equally strategic disaster (see Valcour Island, scenario 1).

Since WS&IM puts the player at the helm of each ship, only the tactical outcome of the battle will be used to judge victory. There are exceptions in some scenarios, but for the most part, your major task will be to capture and destroy the enemy's ships.

The navies of the time relied a lot on prize money to keep the system going. Bad rations, tyrannical officers and the prospects of being killed or maimed were relieved by the possibility of earning enough money to set yourself up for life. Generally, when a ship was captured, it was sold for salvage, and the money split up among the officers and crew involved. The admiral in charge of the station where the action took place also took his cut. Prize money was determined by the type and condition of the captured ship. A ship with a large number of guns was worth more than one with fewer guns. A heavily damaged ship did not produce much prize money. Crews that sunk a ship were usually paid "blood money" representing a fraction of the ship's value. This system encouraged the capture of ships over their total destruction.

Each turn, you have the option to end the game. Also, when one side no longer has a ship on the map, the game automatically ends.

In both cases, the victory screen will load and show the final status of all the ships, and how much prize money both sides earned. When that happens, the side with the most money is declared the winner.

When that screen appears, pressing the <f7> key repeatedly will scroll through the final status of all ships and return to the victory screen. Pressing the R key when the victory screen appears will reload the game.

Prize money is calculated in one of two

ways, depending upon how each ship met its fate:

If a ship was captured, the number of guns and carronades left on the ship is multiplied by 3000.

If a ship was sunk, the blood money is calculated by multiplying the number of guns and carronades a ship started with by 3000, then taking 10% of that.

Prize money is expressed in pounds sterling.

DESIGN YOUR OWN SCENARIOS

One of the more popular aspects of WS&IM is the ability of players to create their own scenarios. History has limited most sail engagements to either small ship duels or large fleet battles. Intermediate actions between several ships-of-the-line were very rarely fought. Yet within the game's format, these actions are the most enjoyable to portray. They allow for hard-fought battles without overburdening the player's ability to handle large numbers of ships.

This section allows players to design their own scenarios using a simple and balanced buying system.

In this system, players are allocated a certain number of points with which to purchase ships. Given below are two tables that classify the standard ships of the Revolutionary and Napoleonic periods, in which is placed the ship's point value in relation to the quality of the crew manning it.

Players mutually decide how many points they have available to purchase ships. We recommend 150 points in the beginning. They may then purchase any number of ships of any class or crew quality, and cannot spend more than has been allotted. Although this system creates balanced scenarios, limitations as to the number of large ships and crew quality which may be bought should be set.

If the scenario is an open-sea encounter, players set their ships in line entering from opposite corners of the same board edge and directed towards the center. The wind should be blowing in the same attitude to both fleets. So, if one fleet is coming in from the northwest, and the other from the northeast, the wind should be blowing to the south.

An alternate method can be used when players wish to use the Create Map function. One player may create the map in any way he sees fit, while the other player sets up first.

The charts below can be used to create balanced scenarios. Turn is turnability. FSS is full sail speed. Hull is hull points. Guns is the number of guns on each side. Carronade is the number of carronades on each side. Crew is the total number of crew points, found by dividing the number by three, then evenly distributing the remainder among the three sections evenly (example: 34 crew points splits down to 11-11-11, with the remaining point added to the first section to make 12-11-11). Rigging is evenly divided among the number of masts shown (example: 3/27 means three masts of 9 points each; 4/20 means four masts of 5 points each). The last five columns contains the number of points to acquire a ship with that type of crew: EL (elite), CR (crack), AV (average), GR (green), or PR (poor).

NAVAL REGISTRY REVOLUTIONARY PERIOD (1776-1784)

United States

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
74	SOL	2	5	20	24	—	26	3/21	25 22 19 17 15
36	F	3	6	9	4	—	12	4/20	14 12 11 10 9
32	F	3	6	8	4	—	10	4/20	13 11 10 9 8

Britain

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
100	SOL	1	5	24	22	*	34	3/27	35 32 26 24 22
98	SOL	1	5	23	18	*	30	3/24	31 28 23 22 19
90	SOL	1	5	21	16	*	30	3/24	30 27 22 21 18
80	SOL	1	5	23	20	*	26	3/21	31 28 23 22 19
80	SOL	2	5	18	16	*	26	3/21	28 26 20 18 16
74	SOL	2	5	21	18	*	26	3/21	29 27 22 20 18
74	SOL	2	5	20	16	*	24	3/21	28 26 21 19 17
70	SOL	2	5	18	16	*	22	3/21	27 25 20 18 16
64	SOL	2	5	17	12	*	20	3/21	22 20 17 15 13
60	SOL	2	5	15	10	*	18	3/18	21 18 15 12 10
50	SOL	2	5	12	8	*	14	3/18	20 17 13 11 9
44	SOL	2	5	11	6	*	12	3/15	14 12 10 9 8
38	F	3	6	11	6	*	12	4/20	16 14 12 11 10
36	F	3	6	9	4	*	10	4/20	13 11 10 9 8
32	F	3	6	8	4	*	8	4/20	12 10 9 8 7

*—1781 and after, add 2 carronade guns per side.

France

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
104	SOL	1	5	27	24	—	40	3/27	38 35 30 27 24
80	SOL	1	5	23	22	—	34	3/21	36 33 27 25 23
74	SOL	2	5	21	20	—	28	3/21	32 29 24 22 20
64	SOL	2	5	18	12	—	22	3/21	23 20 18 16 14
50	SOL	2	5	14	8	—	16	3/18	21 18 14 12 10
40	F	3	6	14	6	—	14	4/20	20 17 13 11 9
36	F	3	6	11	4	—	12	4/20	14 12 11 10 9
32	F	3	6	9	4	—	10	4/20	13 11 10 9 8

Spain

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
100	SOL	1	5	26	22	—	36	3/27	38 35 28 26 23
80	SOL	1	5	23	20	—	28	3/21	33 31 24 22 20
70	SOL	2	5	20	16	—	26	3/21	29 26 20 18 16
64	SOL	2	5	18	12	—	24	3/21	23 20 18 16 14
60	SOL	2	5	17	12	—	22	3/18	22 20 17 15 13
50	SOL	2	5	14	8	—	18	3/18	21 18 14 12 10
36	F	3	6	11	4	—	12	4/20	14 12 11 10 9
32	F	3	6	9	4	—	10	4/20	13 11 10 9 8



NAVAL REGISTRY

NAPOLEONIC PERIOD (1793-1815)

United States

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
44	F	3	7	18	8	8	20	4/24	24 21 17 15 13
38	F	3	7	14	6	6	16	4/20	18 16 14 13 11
36	F	3	7	12	8	4	16	4/20	17 15 13 12 10
32	F	3	7	11	2	9	14	4/20	15 13 12 11 9

Britian

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
120	SOL	1	5	27	28	4	36	3/27	43 40 32 30 27
110	SOL	1	5	27	24	2	34	3/27	38 35 28 26 23
100	SOL	1	5	26	22	2	34	3/24	35 32 26 24 22
98	SOL	1	5	24	20	2	30	3/24	33 30 24 23 20
90	SOL	2	5	21	16	2	30	3/24	31 28 22 21 18
80	SOL	2	5	24	20	2	28	3/24	34 31 24 23 21
74	SOL	2	5	21	18	4	26	3/21	30 29 23 21 19
74	SOL	2	5	21	16	4	24	3/21	29 27 22 20 18
64	SOL	2	5	17	12	2	20	3/21	22 20 17 15 13
50	SOL	2	5	20	10	9	16	3/21	22 20 18 16 14
50	SOL	2	5	12	8	2	14	3/18	20 17 13 11 9
50	F	3	6	18	8	8	14	4/24	22 20 18 16 14
44	F	3	6	11	4	2	12	4/20	14 12 10 9 8
44	F	3	6	17	10	2	14	4/24	20 18 15 12 10
40	F	3	6	15	8	6	14	4/20	19 17 15 14 12
38	F	3	6	14	6	6	14	4/20	17 15 13 12 11
36	F	3	6	12	6	2	12	4/20	16 14 12 11 10
36	F	3	6	11	4	2	10	4/20	13 11 10 9 8
32	F	3	6	9	6	2	10	4/20	14 12 11 10 9
32	F	3	6	8	4	2	8	4/20	12 10 9 8 7

France

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
120	SOL	1	5	27	28	2	44	3/27	43 40 33 30 27
110	SOL	1	5	27	26	2	42	3/27	39 36 31 27 25
80	SOL	2	5	24	22	2	34	3/21	36 33 27 25 23
74	SOL	2	5	21	20	2	28	3/21	32 29 24 22 20
44	F	3	6	17	20	2	26	4/24	22 20 17 15 13
40	F	3	6	15	16	2	16	4/20	19 17 15 12 11
38	F	3	6	14	16	2	16	4/20	19 17 14 12 10
36	F	3	6	12	8	2	14	4/20	17 15 13 12 10
32	F	3	6	11	4	—	12	4/20	13 11 10 9 8

Spain

Guns	Class	Turn	FSS	Hull	Guns	Car	Crew	Rigging	EL/CR/AV/GR/PR
130	SOL	1	5	30	26	—	44	3/27	41 37 31 29 26
112	SOL	1	5	27	24	—	36	3/27	38 35 29 27 25
100	SOL	1	5	24	20	—	34	3/24	28 26 22 20 18
80	SOL	2	5	23	20	—	28	3/21	34 31 24 23 21
74	SOL	2	5	21	16	4	26	3/21	33 30 22 20 18
74	SOL	2	5	20	16	—	24	3/21	29 26 20 18 16
40	F	3	6	14	6	4	16	4/20	19 17 15 14 12
34	F	3	6	9	4	—	12	4/20	14 12 11 10 9

THE BATTLES

The scenarios presented in this section represent naval battles fought during the period 1776-1814. Each scenario contains all the information necessary to set up and play a historical battle. Many of the scenarios omit ships which actually participated in the battles. This was done because they had no effect on the outcome of the battle or their inclusion cluttered play without any beneficial result.

All of the 25 scenarios have been set up and can be loaded. To load a scenario, type "SC" followed by the number of the scenario. Example: load Scenario 2 by typing "SC2", or Scenario 10 by typing "SC10".

Ship key: Guns is the ship rating. The letter under Crew is its quality (see IX.C.3). PV is its point value if used in a design-your-own scenario. No. refers to its location in the Dockyard ship list. British ships in scenario 11 and beyond are found in the "British 21" ship list unless marked with a 1 (example: 18¹).

SCENARIO 1

Valcour Island

October 11, 1776

I. Introduction

The battle for Valcour Island, though minor in scale, was important in its strategic effect upon the Continental cause in the American Revolution. Fought on October 11, 1776 between the British and American lake fleets under command of Sir Guy Carleton and Benedict Arnold respectively, it was an American victory even though the colonial fleet was destroyed in the battle. Seemingly a paradox, it is just one of many that occurred during the war.

Through the summer and fall of 1776, Carleton, the British governor of Canada, prepared a major invasion of New York, which, coming upon the heels of the American defeats around New York City, would be lightly opposed. The greatest impediment to the invasion was the difficulty in transporting troops and supplies through the upper New York wilderness. There was but one avenue of approach into the heart of New York and that was across Lake Champlain. Along this route Carleton could easily transport both troops and supplies. To travel by any other route would incur weeks of delay.

To oppose this invasion by water, Benedict Arnold hastily began building and arming a fleet. The British, aware of the danger to their supply lines poised by an armed fleet, began building a fleet of their own. The result of this ship-building race was several months delay to the invasion. When troop movement did commence in October, it was too late in the year to accomplish what had been planned and even though Carleton started down the lake, met the American fleet and destroyed it, he had to return to Canada as his troops were unable to campaign in winter.

Thus by threatening the invasion by the timely construction of a fleet, the Americans were able to delay the advance from Canada for one year. When the British returned the following year the Continentals, recovering from the losses incurred in 1776, were able to capture the entire enemy force at Saratoga.

II. Prevailing Weather Conditions

Wind direction: 4

Wind change: none

III. Special Rules

A. All vessels may anchor.

B. Any American ship which moves its bow into a hex closer to the northern board edge than its starting bow hex is considered to be retreating. Move the ship out of the battle, anchor it, and consider it removed from the scenario.

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Royal Savage	12	Sc	6	8a	2	0	4/12	5	1
Revenge	8	Sc	5	6a	2	0	4/12	3	2
Enterprise	12	S	5	8a	2	0	4/12	4	3
Washington	11	Gy	6	8a	4	0	3/6	5	4
Trumbell	10	Gy	6	8a	4	0	3/6	5	5
Congress	10	Gy	6	8a	4	0	3/6	5	6
Lee	6	C	5	6a	2	0	4/8	3	7
Gunboat No. 1	9	G	9	12a	2	0	3/4	6	8
Gunboat No. 2	9	G	9	12a	2	0	3/4	6	9
Gunboat No. 3	6	G	6	8a	2	0	3/3	4	10

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Inflexible	18	S	8	12c	6	0	4/16	9	1
Thunderer	12	R	6	8c	6	0	2/6	7	2
Loyal Convert	7	Go	6	6c	8	0	2/6	6	3
Maria	14	Sc	6	10c	8	0	4/12	7	4
Carleton	12	Sc	6	8c	8	0	4/12	7	5
Gunboat No. 1	5	G	15	16c	2	0	3/5	15	—
Gunboat No. 2	5	G	15	16c	2	0	3/4	15	—
Gunboat No. 3	5	G	15	16c	2	0	3/5	15	—
Gunboat No. 4	5	G	15	16c	2	0	3/5	15	—

SCENARIO 2

Ranger vs. Drake May 2, 1778

I. Introduction

The Spring of 1778 found John Paul Jones, Captain of the sloop **RANGER**, cruising British waters for opportunities to disrupt enemy commerce. Upon learning that a British sloop, **DRAKE**, was anchored in Carrickfergus harbor in North Ireland, Jones attempted to capture her by a ruse that only failed due to his crew's ineptitude. A month later in early May, he returned to Carrickfergus for another try at the **DRAKE**. This time he met her coming out of the harbor.

The battle itself was no contest. A combination of Jones' masterful ship-handling ability and the **DRAKE**'s unpreparedness forced it to surrender in less than an hour's time. This battle marked John Paul Jones' first success in defeating an enemy warship.

II. Prevailing Weather Conditions

Wind direction: 4

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Ranger	18	S	5	6c	1	0	4/12	8	11
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Drake	20	S	6	6g	1	0	4/12	5	6

SCENARIO 3

Battle of Ushant July 27, 1778

I. Introduction

The first fleet action between England and France after the latter's declaration of war, the Battle of Ushant was a portent of the inconclusiveness of British naval operations during the

War of Independence. Hampered by the "fighting instructions," and by political interference, not until the Battle of the Saintes did the British navy gain a decisive victory for which she was given the deserved reputation of Queen of the Seas.

The Battle of Ushant was like most other engagements of this period. The British line met the French line, fired broadsides for several hours and quit the battle with little to show for the resulting loss of life.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 4

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Monarch	74	SOL	20	24c	16	0	3/21	26	7
Hector	74	SOL	20	24c	16	0	3/21	26	8
Centaur	74	SOL	20	24c	16	0	3/21	26	9
Exeter	64	SOL	17	20c	12	0	3/21	20	10
Duke	90	SOL	21	30c	16	0	3/24	27	11
Queen	90	SOL	21	30c	16	0	3/21	27	12
Shrewsbury	74	SOL	20	24c	16	0	3/21	26	13
France	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Couronne	80	SOL	23	34a	22	0	3/21	27	1
Duc deBourgogne	80	SOL	23	34a	22	0	3/21	27	2
Glorieux	74	SOL	21	28a	20	0	3/21	24	3
Palmier	74	SOL	21	28a	20	0	3/21	24	4
Bien-Aime	74	SOL	21	28a	20	0	3/21	24	5
Dauphin Royal	70	SOL	20	26a	16	0	3/21	19	6
Vengeur	64	SOL	18	22a	12	0	3/21	18	7

SCENARIO 4

Battle of Flamborough Head September 23, 1779

I. Introduction

The most famous naval engagement of the American Revolution, the battle of Flamborough Head pitted American Captain John Paul Jones commanding the converted merchantman BONHOMME RICHARD against Richard Pearson, Captain of the British frigate SERAPIS. Accompanying Jones was the frigate ALLIANCE, which did not take part in the fighting but whose presence influenced the actions of both ships.

In a comparison of the two vessels, the SERAPIS clearly had the advantage. Not only was she speedier and more maneuverable than the American ship, she was better armed. The BONHOMME RICHARD on the other hand, not built as a warship, was bulky and slow and had been armed with an assortment of cannon of questionable quality.

During the first minutes of battle, the BONHOMME RICHARD began to receive much more damage than she was inflicting. Jones realized that the only way to nullify the British advantages was to close in and board. What occurred in the next few minutes is still under controversy. Somehow the BONHOMME RICHARD was able to foul SERAPIS' rigging and grapple with her broadside to broadside. By this time she was completely destroyed underneath her weatherdeck, with but

two guns firing from the quarterdeck and in serious danger of sinking. In spite of this, through the courage of Jones and the excellent aim of his marines, the Americans were able to clear the upper deck of the *SERAPIS*. One marine shinned along a yardarm and dropped a grenade down a hatch of the *SERAPIS* causing a minor explosion.

The final half-hour was a contest of nerves. Pearson, perhaps aware that the *ALLIANCE* was still at hand, was first to give in and strike the colors, thus marking the climax to the career of America's first hero of the sea.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 6

III. Special Rules

A. No anchoring allowed.

IV. Special Victory Conditions

A. Because the *SERAPIS* was protecting a merchant fleet, she wins by preventing the *BONHOMME RICHARD* from exiting the northern edge for the first twenty turns, and then exiting herself anytime after that on the same side. (If your version of WS&IM does not permit a ship to exit the board, it merely has to touch the edge of the board.)

B. The *BONHOMME RICHARD* wins if able to leave the northern board edge anytime during the first twenty turns. Keep track of the turns on a separate piece of paper.

C. Either side also wins by sinking or capturing the opposing vessel.

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Serapis	44	F	5	6g	1	0	4/12	12	37
United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Bonhomme Richard	42	M	11	12c	4	0	3/15	11	12

SCENARIO 5

Arbuthnot and Des Touches

March 16, 1781

I. Introduction

One of the preliminary events leading to the surrender of Cornwallis was the meeting of two squadrons under the British Admiral Arbuthnot and his French counterpart Admiral Des Touches just outside the Chesapeake Bay.

The action was precipitated by the need of America and France to threaten British activity in Virginia by both land and sea. In itself inconclusive, the battle is one of many examples of the weakness of the "fighting instructions" used during this period.

As the set of rules for governing naval tactics known as the "fighting instructions" was in common use throughout Europe during the Eighteenth Century, some words of explanation as to their significance are in order. Formulated at the turn of the century in Britain due to her loss to the French in the battle of Beachy Head, it was supposed to prevent a repetition of the mistakes that caused the defeat. What it actually accomplished was a formalization of defensive tactics that prevented a fleet from ever exploiting the enemy's positional weakness which could lead to a decisive victory. For the next hundred years until the time of Nelson, most naval battles resulted in large losses of life without greatly damaging the enemy's fleet.

The major drawback to the "fighting instructions" was its insistence that ships of a fleet must fight in a line of battle (i.e., bow to stern) and in no other formation. This was supposed to prevent any part of the fleet from ever being isolated and defeated before it could be reinforced as had occurred at Beachy Head, and in this respect it was successful. Yet a ship in line was never allowed to break line for any reason and could take no initiative for fear of splitting from

the rest of the fleet. Fleets would form lines of battle and pound away at one another until one began getting the worst of the damage whereupon it would break off action leaving no gain to either side to show for the loss of life.

The only way for one side to win under this system was to damage the opposing line to the extent that it could not be maintained, in which case the order for "General Chase" was given and each ship could close in and engage on their own.

However, this rarely occurred. Not until the time of Horatio Nelson were the "fighting instructions" discarded and navies able to adapt to particular opportunities of a battle.

II. Prevailing Weather Conditions

Wind direction: 5

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
America	64	SOL	17	20c	12	0	3/21	20	33
Bedford	64	SOL	20	24c	16	2	3/21	26	38
Adamant	50	SOL	12	14c	8	2	3/18	17	39
London	98	SOL	23	30c	18	2	3/24	28	40
Royal Oak	74	SOL	20	24c	16	2	3/21	26	41
Prudent	64	SOL	17	20c	12	2	3/21	20	42
Europe	64	SOL	17	20c	12	2	3/21	20	43
Robust	74	SOL	20	24c	16	0	3/21	26	30
France	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Neptune	74	SOL	21	28a	20	0	3/21	24	33
Duc deBourgogne	80	SOL	23	34c	22	0	3/21	27	2
Conquerant	74	SOL	21	28a	20	0	3/21	24	24
Provence	64	SOL	18	22a	12	0	3/21	18	34
Ardent	64	SOL	18	22a	12	0	3/21	18	35
Jason	64	SOL	18	22a	12	0	3/21	18	36
Romulus	44	SOL	11	12a	6	2	3/15	10	37

SCENARIO 6

The Battle of the Chesapeake September 5, 1781

I. Introduction

As the fifth year of the War of Independence began, the British army was split into two major groups; one situated in New York under General Clinton, the other based in Yorktown under General Cornwallis. Both forces were completely dependent on the British navy to maintain their positions as occupying armies in a distant land. George Washington, commander of the Continental Army, discussed with the French allies the possibilities of isolating one of these two armies and forcing it to surrender before assistance from the other could arrive. Essential in these plans was the fact that the British navy must be at least temporarily nullified. When Admiral De Grasse with the French fleet was reported heading from the Caribbean to the Atlantic coast in late summer Washington set his plan into motion. His choice for investment was Cornwallis at Yorktown and he depended heavily on the ability of DeGrasse to prevent the British navy from aiding the beleaguered army.

The British, suddenly aware of the danger that Cornwallis was in, sent their fleet to reach Yorktown before the French could arrive, but they had started too late and found DeGrasse already within the Chesapeake Bay blockading Yorktown. As they arrived at the capes of the bay, Sir Thomas Graves, Admiral of the British fleet, realized that the only way to save Cornwallis and his army was to either destroy the French fleet or dislodge it from the bay. Thus the stage was set for the most significant naval battle of the Revolution.

As the British armada moved in line of battle toward the bay, DeGrasse moved out to intercept it. For all that was at stake, the actual fighting was desultory and inconclusive. Both lines met at an angle and remained in that position throughout the battle. Graves, a cautious admiral, maintained a strict adherence to the "fighting instructions," so the British navy was unable to accomplish either of its goals and returned to New York the following day without making a serious try at relieving the siege. The surrender of Cornwallis and the end of all British military resistance was but a matter of time.

II. Prevailing Weather Conditions

Wind direction: 2

Wind change: 5

III. Special Rules

A. Due to the presence of land, the computer cannot command the French fleet.

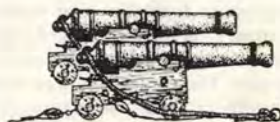
IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Alfred	74	SOL	20	24c	16	2	3/21	26	45
Bellequex	64	SOL	17	20c	12	2	3/21	20	46
Invincible	74	SOL	20	24c	15	2	3/21	26	47
Barfleur	98	SOL	23	30c	18	2	3/24	28	48
Monarch	74	SOL	20	24c	16	0	3/21	26	7
Centaur	74	SOL	20	24c	16	0	3/21	26	9
America	64	SOL	17	20c	12	0	3/21	20	33
Resolution	74	SOL	20	24c	16	2	3/21	26	49

French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Pluton	74	SOL	21	28a	20	0	3/21	24	38
Bougogne	74	SOL	21	28a	20	0	3/21	24	39
Marseillais	74	SOL	21	28a	20	0	3/21	24	40
Diademe	74	SOL	21	28a	20	0	3/21	24	27
Reflechi	74	SOL	21	28a	20	0	3/21	24	18
Auguste	80	SOL	23	34a	22	0	3/21	27	41
Saint-Esprit	80	SOL	23	34a	22	0	3/21	27	22
Caton	74	SOL	21	28a	20	0	3/21	24	42
Caesar	74	SOL	21	28a	20	0	3/21	24	43
Destin	74	SOL	21	28a	20	0	3/21	24	44



SCENARIO 7

Suffren and Hughes

April 12, 1782

I. Introduction

As the American Revolution began to lengthen in duration, it also began to attract foreign powers who saw a chance to take advantage of England's preoccupation with her colonies. France, who had been England's major opponent since the Hundred Years Wars, entered the war on the side of the colonies believing after the American victory at Saratoga that England could not win easily, if at all. With Spain and Holland also declaring war, the conflict began to assume a more international aspect with England being hard-pressed to keep her military commitments in other theatres as well as on the North American continent.

One such theatre was India. Toward the end of the war, France sent Vice-Admiral Pierre-Andre de Suffren de Saint Tropez with a small fleet to protect French interests and disrupt British movements around the Indian subcontinent. This precipitated a series of fleet battles between Suffren and his British counterpart, Sir Edward Hughes, that resulted in garnering Suffren the reputation as France's greatest admiral.

As compared to his British counterparts of this period, notably Howe, Rodney, and Nelson, Suffren's achievements do not appear that spectacular. Yet, in a navy which could never compete with England in either shiphandling, gunnery, or naval tactics, his ability stands out. The battles with Hughes, even though tactically inconsequential, allowed Suffren to achieve what no other French admiral could: to hold the British at bay while accomplishing all of his strategic missions. This was the first time during a war that the British navy was unable to control the seas.

Suffren was able to neutralize the British fleet by a heretofore unknown quality in a French admiral, aggressive and offensive leadership, a quality which was as surprising to his own captains as it was to the British. Through the strength of his personality, he was able to overcome the shortcomings of his fleet and succeed where other French admirals did not.

II. Prevailing Weather Conditions

Wind direction: 5

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Order of Battle

France	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Vengeur	64	SOL	18	22a	12	0	3/21	18	7
Hannibal	50	SOL	12	14a	8	2	3/18	13	57
Sphinx	64	SOL	18	22a	12	0	3/21	18	30
Heros	74	SOL	21	28a	20	0	3/21	24	56
Orient	74	SOL	21	28a	20	0	3/21	24	14
Brilliant	64	SOL	18	22a	12	0	3/21	18	63
Severe	64	SOL	18	22a	12	0	3/21	18	60
Ajax	64	SOL	18	22a	12	0	3/21	18	61
Annibal	74	SOL	21	28a	20	0	3/21	24	58
Flamand	50	SOL	12	14a	8	2	3/18	13	62
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Exeter	64	SOL	17	20c	12	0	3/21	20	10
Hero	74	SOL	20	24c	16	2	3/21	20	10
Isis	50	SOL	12	14c	8	2	3/18	17	61
Burford	64	SOL	17	20c	12	2	3/21	20	—
Monarca	68	SOL	18	22c	14	2	3/21	24	62
Superb	74	SOL	20	24c	16	2	3/21	26	59

Monmouth	64	SOL	17	20c	12	2	3/21	20	57
Worcester	64	SOL	17	20c	12	2	3/21	20	58
Eagle	64	SOL	17	20c	12	2	3/21	20	56
Sultan	74	SOL	20	24c	16	2	3/21	26	64

SCENARIO 8

Battle of the Saintes

April 12, 1782

I. Introduction

The Battle of the Saintes was the greatest British naval victory during the War of Independence. Too late to have anything but a transient effect on the course of the war in America, it nevertheless was a convincing reestablishment of the British navy as the supreme war power on the seas.

As can be seen from browsing through the scenarios covering naval battles during the American Revolution, very few contain American vessels. Colonial America had no navy to protect herself. The British navy had always filled this role for her colonies. During the Revolution, though, America had to look elsewhere for means of combating the British on the seas, hampered by the lack of a unified strategy and the unwillingness of one colony to pay for another colony's defense. In this vacuum, France and her navy played an invaluable role for her ally.

This, the last major naval battle between France and Britain was the reaffirmation of British naval superiority after several strategic defeats earlier in the war. The battle began in the linear order proscribed by the "fighting instructions." As the battle progressed, several holes opened in the French line allowing the British center and van to penetrate and destroy the French fleet piecemeal. Of the thirty vessels in the French fleet, twenty-five escaped. The failure of Rodney, the British Admiral, to follow up his victory saved the remainder of the French fleet from capture.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 4

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Marlborough	74	SOL	20	24c	16	2	3/21	26	71
Arrogant	74	SOL	20	24c	16	2	3/21	26	72
Alcide	74	SOL	20	24c	16	2	3/21	26	54
Nonsuch	64	SOL	17	20c	12	2	3/21	20	73
Conqueror	74	SOL	20	24c	16	2	3/21	26	74
Princess	70	SOL	18	22c	16	2	3/21	25	53
Prince George	90	SOL	21	30c	16	0	3/24	27	24
Torbay	74	SOL	20	24c	16	2	3/21	26	75
Anson	64	SOL	17	20c	12	2	3/21	20	76
Fame	74	SOL	20	24c	16	2	3/21	26	77
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Hercule	74	SOL	21	28a	20	0	3/21	24	51
Neptune	74	SOL	21	28a	20	0	3/21	24	33
Souverain	74	SOL	21	28a	20	0	3/21	24	55
Palmier	74	SOL	21	28a	20	0	3/21	24	4
Northumberland	74	SOL	21	28a	20	0	3/21	24	47

Auguste	80	SOL	23	34a	22	0	3/21	27	41
Ardent	64	SOL	18	22a	12	0	3/21	18	35
Scipion	74	SOL	21	28a	20	0	3/21	24	49
Brave	74	SOL	21	28a	20	0	3/21	24	67

SCENARIO 9

Nymphe vs. Cleopatre

June 17, 1793

I. Introduction

The first decisive battle in the long series of wars stretching from 1793 to 1815. The Captain of the NYPHE, Edward Pellew, was knighted for his victory.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 4

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Nymphe	36	F	11	10c	4	2	4/20	11	—
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Cleopatre	36	F	11	12a	4	2	4/20	10	94

SCENARIO 10

Mars vs. Hercule

April 21, 1798

I. Introduction

A ragwagon duel.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Mars	74	SOL	21	26c	18	2	3/21	26	92
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Hercule	74	SOL	21	28a	20	2	3/21	22	51

SCENARIO 11

Battle of the Nile

August 1, 1798

I. Introduction

The British navy under Nelson boldly entered Aboukir Bay and destroyed the French armada while at anchor. Upon learning of the defeat, Napoleon withdrew his expeditionary army from Egypt.

II. Prevailing Weather Conditions

Wind direction: 4

Wind change: 6

III. Special Rules

A. Anchoring is allowed

B. At the start of the battle the French is unprepared for battle. They begin at anchor and with their left side guns empty. To recreate this, the French player must follow this rule that requires paper and pen.

A ship has to spend two turns to load the first left broadside — else the left broadside cannot be fired — and two turns to put the battle or full sails up — else the ship cannot move. So, each turn, for each ship, note whether the crew is loading the left broadside, or rigging the ship. Therefore, when two Bs are accumulated, that ship may fire its left broadside, and when two Rs are accumulated, it may lift or cut anchor and move.

IV. Special Victory Conditions

A. Surrendered ships which have not been captured or destroyed count half the point value.

B. To win, one side must have a 150 point advantage or better. Any other result is considered indecisive.

V. Order of Battle

French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Guerrier	74	SOL	21	26a	20	2	3/21	23	69
Conquerant	74	SOL	21	26a	20	2	3/21	23	24
Spartiate	74	SOL	21	26a	20	2	3/21	23	70
Aquilon	74	SOL	21	26a	20	2	3/21	23	71
Souverain Peuple	74	SOL	21	26a	20	2	3/21	23	72
Franklin	80	SOL	24	32a	22	2	3/24	26	73
Orient	120	SOL	27	42c	28	0	3/27	40	74
Tonante	80	SOL	24	32a	22	2	3/24	26	75
Heureuse	74	SOL	21	26a	20	2	3/21	23	76

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Culloden	74	SOL	21	22e	16	2	3/21	28	93
Goliath	74	SOL	21	22c	16	2	3/21	26	94
Zealous	74	SOL	21	22e	16	2	3/21	28	95
Omon	74	SOL	21	22e	16	2	3/21	28	96
Audacious	74	SOL	21	22c	16	2	3/21	26	97
Theseus	74	SOL	21	22c	16	2	3/21	26	98
Vanguard	74	SOL	21	24e	18	2	3/21	30	99
Minotaur	74	SOL	21	22c	16	2	3/21	26	1
Defense	74	SOL	20	24c	16	2	3/21	26	70
Bellerophen	74	SOL	21	24c	18	2	3/21	28	2

SCENARIO 12

Ambuscade vs. Baionnaise

December 14, 1798

I. Introduction

This was virtually the only action won by the French against a superior force during the whole course of the war.

II. Prevailing Weather Conditions

Wind direction: 4

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Ambuscade	32	F	8	8a	4	2	4/20	11	7
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Baionnaise	24	F	6	12a	2	0	4/16	9	95

SCENARIO 13

Constellation vs. Insurgent

February 5, 1799

I. Introduction

The American frigate *CONSTELLATION* under Commodore Thomas Truxton met the French frigate *INSURGENT* northwest of Nevis in the Caribbean. The *CONSTELLATION* was both better armed and better sailed (due partly to the fact that the *INSURGENT* had lost her main topmast in a storm just prior to the start of the battle). The *INSURGENT* struck after being raked several times. The *CONSTELLATION* had only three wounded due to enemy fire.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 6

III. Special Rules

A. No anchoring

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Constellation	38	F	14	14e	4	6	4/20	17	13
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Insurgent	36	F	11	16a	4	2	4/20	11	96

SCENARIO 14

Constellation vs. Vengeance

February 1, 1800

I. Introduction

Almost a year after her first engagement with the INSURGENT, the CONSTELLATION chanced upon another French frigate, the VENGEANCE. This ship was more powerfully armed and gave a much tougher account of herself. Yet, after a fierce five-hour engagement, the VENGEANCE was able to escape from the partially dismasted CONSTELLATION only to be beached later to keep from sinking.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 5

III. Special Rules

A. No anchoring

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Constellation	38	F	14	14e	4	6	4/20	17	13
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Vengeance	40	F	15	20a	6	4	4/20	15	97

SCENARIO 15A & 15B

Trafalgar

October 21, 1805

I. Introduction

Lord Horatio Nelson's greatest and final victory. Trafalgar marks the ultimate battle of the era of sailing fleets. Nelson fell in his hour of triumph, but Britain's control of the sea was established for the next hundred years.

To recreate this battle, the two-pronged attack of the British was split into two separate scenarios. The first is SC15A, the second SC15B.

II. Prevailing Weather Conditions

Wind direction: 5

Wind change: 6

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle for SC15A

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Victory	100	SOL	26	28e	22	2	3/24	33	8
Temeraire	98	SOL	24	28c	20	2	3/24	30	9
Neptune	98	SOL	24	28c	20	2	3/24	30	10
Leviathan	74	SOL	21	22c	16	2	3/21	27	11

Conqueror	74	SOL	20	24c	16	2	3/21	26	74
Britannia	100	SOL	26	30c	22	2	3/24	31	12
Ajax	74	SOL	20	24c	16	2	3/21	26	52
Agamemnon	64	SOL	17	20c	12	2	3/21	20	81
Orion	74	SOL	21	22c	16	4	3/21	27	13

Franco-Spanish	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Mont-Blanc	74	SOL	21	28a	16	2	3/21	21	83
Duguay Trouin	74	SOL	21	28a	16	2	3/21	21	84
Heros	74	SOL	21	28a	16	2	3/21	21	56
Bucentaure	80	SOL	23	34a	22	2	3/21	27	85
Redoubtable	74	SOL	21	28a	16	2	3/21	21	86
Neptune	80	SOL	23	34a	22	2	3/21	27	33
Rayo	100	SOL	24	34g	20	0	3/24	25	2
San Francisco									
de Asis	74	SOL	20	24g	16	0	3/21	18	3
San Augustino	74	SOL	21	26g	16	4	3/21	20	4
Santissima									
Trinidad	130	SOL	30	44g	26	0	3/30	30	5

Order of Battle for SC15B

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Royal Sovereign	110	SOL	27	30e	24	2	3/27	36	16
Belleisle	74	SOL	21	32c	16	4	3/21	27	18 ¹
Mars	74	SOL	21	24c	18	4	3/21	29	92
Tonnant	80	SOL	24	26e	20	2	3/24	30	17
Bellerophen	74	SOL	21	24c	18	2	3/21	28	2
Colossus	74	SOL	21	22c	16	4	3/21	27	44
Achille	64	SOL	21	24c	18	4	3/21	29	51
Revenge	74	SOL	21	22e	16	4	3/21	29	90

Franco-Spanish	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Indomptable	80	SOL	23	34a	22	2	3/21	27	87
Fougueux	74	SOL	21	28a	16	2	3/21	21	88
Algeciras	74	SOL	21	28a	16	2	3/21	21	89
Aigle	74	SOL	21	28a	16	2	3/21	21	90
San Justo	74	SOL	20	24g	16	0	3/21	18	6
San Leandro	64	SOL	17	20g	12	0	3/21	15	7
Santa Ana	112	SOL	17	36g	24	0	3/27	27	8
Monarca	74	SOL	21	26g	16	4	3/21	20	9
Bahama	74	SOL	21	26g	16	4	3/21	20	10

SCENARIO 16

The Battle of Lissa

March 13, 1811

I. Introduction

A classic battle of quality versus quantity. Nelson's Trafalgar tactics backfired on the French and Venetian fleets as they attempted to break through the British line.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 6

III. Special Rules

- A. Ships may anchor on a shoal hex.

IV. Special Victory Conditions

None

V. Order of Battle

Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Amphion	32	F	11	10e	4	2	4/20	13	21
Active	38	F	14	12e	6	4	4/20	18	22
Volage	22	F	8	6e	0	8	4/16	11	23
Cerberus	32	F	11	10e	4	2	4/20	13	24
French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Favorite	40	F	14	16a	6	4	4/20	15	98
Flore	40	F	14	16a	6	4	4/20	15	99
Danae	40	F	14	16a	6	4	4/20	15	—
Venetian	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Bellona	32	F	11	12g	4	0	4/20	9	—
Corona	40	F	14	16g	6	2	4/20	12	—
Carolina	32	F	8	10g	2	0	4/16	7	—

SCENARIO 17

Constitution vs. Guerriere August 19, 1812

I. Introduction

The first frigate action of the War of 1812 was fought on August 19, 1812 between the American frigate CONSTITUTION, commanded by Isaac Hull, and the British frigate GUERRIERE, commanded by James Darcas. The GUERRIERE was returning to Halifax for repairs when she was intercepted. Firing first, the GUERRIERE's broadsides bounced ineffectively off the CONSTITUTION's hull, giving rise to its famous nickname "Old Ironsides." The CONSTITUTION's return fire was much more devastating and reduced the GUERRIERE to a mastless hulk. She struck her colors in less than a half hour's fighting. An auspicious beginning for the American frigates.

II. Prevailing Weather Conditions

Wind direction: 2

Wind change: 6

III. Special Rules

- A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Constitution	44	F	18	18e	8	6	4/24	24	14
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Guerriere	38	F	14	10c	6	4	4/20	15	25

SCENARIO 18

United States vs. Macedonian

October 25, 1812

I. Introduction

While cruising the Atlantic, the American frigate UNITED STATES, nicknamed the "Old War Wagon" for its poor sailing ability sighted the British frigate MACEDONIAN, considered the finest in the British Navy, off her bow. The UNITED STATES was the more heavily armed but also the slower sailing of the two. By superior maneuvering though, the UNITED STATES was able to overcome her handicap and gain an advantageous firing position to the MACEDONIAN. The better firepower soon began to tell, and by first firing at the rigging the UNITED STATES slowed down her opponent to where she could rake her with devastating broadsides at close range. The MACEDONIAN was reduced to a defenseless hulk and her captain John Carden, seeing the hopelessness of his position, surrendered. Superior American gunnery and seamanship proved to be the keys in this great victory.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
United States	44	F	18	20e	8	8	4/24	24	15
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Macedonian	38	F	14	12c	6	4	4/20	16	26

SCENARIO 19

Constitution vs. Java

December 29, 1812

I. Introduction

Four months after her victory over the GUERRIERE, while patrolling the South American coast, the CONSTITUTION chanced upon another British frigate, the JAVA. As they closed upon one another, both maneuvered for raking position. Again, American superior gunnery and firepower told as the CONSTITUTION reduced JAVA to a mastless hulk. Unable to protect herself from the CONSTITUTION'S rakes, the JAVA surrendered after two hours of fighting.

II. Prevailing Weather Conditions

Wind direction: 6

Wind change: 6

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Constitution	44	F	18	20e	8	6	4/24	24	14
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Java	38	F	14	18c	6	6	4/20	19	27

SCENARIO 20**Chesapeake vs. Shannon****June 1, 1813****I. Introduction**

The action between the CHESAPEAKE and the SHANNON was the culmination of an unusual set of circumstances and illustrates the code of ethics by which sailing warships abided.

SHANNON was probably the best-led frigate in the British Navy. Captain Philip Broke had commanded her for seven years and had trained the crew daily on gunnery and seamanship. The CHESAPEAKE, on the other hand, though of the high-quality standards set for American frigates had a recent turnover in seamen and officers impairing the effectiveness of the crew.

SHANNON was part of the British blockade of Boston, through which two other American frigates had escaped during a storm the previous week. Disgusted at this, Captain Broke sailed into the harbor sending a formal challenge to duel with the CHESAPEAKE. The latter already responded to the SHANNON's advance, and could not receive it. Both sailed out to a point off the Massachusetts coast, and Captain Broke presented his ship to a rake as he gallantly allowed the CHESAPEAKE first fire. Not to be outdone in this point of honor, Captain James Laurence refused, and both frigates began firing broadside to broadside at pointblank range.

Probably the bloodiest fifteen minutes in the annals of sailing warfare, the CHESAPEAKE had only 15 men unhurt out of her original complement of 150 while 82 Englishmen lay killed or wounded on the Shannon. The terrible destruction upon the American crew was enough to allow the SHANNON to capture the CHESAPEAKE by boarding.

II. Prevailing Weather Conditions

Wind direction: 6

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Chesapeake	38	F	14	16a	6	6	4/20	14	16
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Shannon	38	F	14	14e	6	6	4/20	17	28

SCENARIO 21**The Battle of Lake Erie****September 10, 1813****I. Introduction**

During the War of 1812, control of the Great Lakes was essential for the supply of troops in the far-strung forts protecting the American-Canadian border. On this day, the British and American fleets

met to decide their fate.

After a hard-fought battle in which the flagship LAWRENCE had to be abandoned, the American fleet under Oliver Hazard Perry forced the British to surrender, thereby gaining control of the Lakes and the Northwest Territory.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 6

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Lawrence	20	B	6	8c	0	6	4/16	9	17
Niagara	20	B	6	8c	0	6	4/16	9	18
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Lady Prevost	13	B	3	4c	0	2	4/8	5	29
Detroit	19	B	5	6c	2	0	4/16	7	30
Queen Charlotte	17	B	5	6c	0	4	4/12	6	31

SCENARIO 22

Wasp vs. Reindeer

June 28, 1814

I. Introduction

Master Commandant Johnston Blakely of WASP and Commander William Manners of REINDEER had under them two of the finest crews in their respective navies.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Wasp	20	B	6	8e	0	6	4/16	12	19
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Reindeer	18	B	5	6e	0	6	4/16	9	32

SCENARIO 23

Constitution vs. Cyane & Levant

February 20, 1815

I. Introduction

The last of "Old Ironsides" successful ship-to-ship engagements.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Constitution	44	F	18	18e	8	8	4/24	24	14
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Cyane	24	S	6	8c	0	10	4/16	11	33
Levant	20	S	6	6c	0	8	4/16	10	34

SCENARIO 24

Wasp vs. Frolic

18 October, 1812

I. Introduction

This action is noted for its "defeat snatched from the jaws of victory" aspect. In an hour-long battle, the WASP succeeded in boarding the FROLIC, only to fall victim herself to the Ship-of-the-line POITIERS soon thereafter.

II. Prevailing Weather Conditions

Wind direction: 1

Wind change: 5

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

United States	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Wasp	20	B	6	8e	0	6	4/16	12	19
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Frolic	20	B	6	8c	0	6	4/16	12	—

SCENARIO 25

Victorious & Weazel vs. Rivoli, Jena, Mercure & Mamelouck February 21, 1812

I. Introduction

A French squadron attempted to leave Venice, but was intercepted by Ship-of-the-line VICTORIOUS and the brig WEAZEL. Up against a S.O.L. and three brigs, the British managed to destroy both the RIVOLI and the MERCURE, causing the rest of the fleet to flee.

II. Prevailing Weather Conditions

Wind direction: 6

Wind change: 4

III. Special Rules

A. No anchoring allowed

IV. Special Victory Conditions

None

V. Order of Battle

French	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Mamelouck	17	B	5	6a	0	4	3/12	6	—
Mercure	17	B	5	6a	0	4	3/12	6	—
Jena	17	B	5	6a	0	4	3/12	6	—
Rivoli	74	SOL	21	28a	20	0	3/21	22	—
Britain	Guns	Class	Hull	Crew	Guns	Car	Rigging	PV	No.
Victorious	74	SOL	21	28e	20	0	3/21	22	—
Weazel	20	B	5	6e	0	6	4/12	7	—

MAKING HISTORY

A Brief Accounting of the Wooden Ship Era

By S.Craig Taylor

Time never stands still and history records the changes, advances and declines of civilization with the finality and surety of a chisel hammered into stone. The ships and tactics covered by the WS&IM game did not appear full-blown, but evolved through hundreds of years of thought and development by thousands of men. The events of the years 1793 to 1815 was a culmination of that process. It was also a dead end, because after Napoleon's fall, metal began replacing wood so that by the time of the American Civil War, naval tactics was undergoing a revolution and a reconstruction. But that's for another game to investigate and recreate. WS&IM is for those who want to remember a time when the highest level of technology was a hand-fired cannon and when a nation's history could be determined by a captain and his crew — Ed.

By 1793, the wooden sailing warship with its broadside guns had over two hundred years of steady development behind it. It was a growth and refinement of exponential proportions. A major fleet unit of the Tudor period — Drake's famous flagship H.M.S. REVENGE — was the equivalent of the 20-gun brig from the 1793-1815 era. This refinement extended everywhere: from the tactics used to the size of the crews and cannons. The sailing ship had developed from a clumsy galleon into a highly formidable weapons system.

This greater size and strength enabled ships to carry more and heavier guns. The guns themselves were greatly improved. Although highly inaccurate by modern standards, the guns of the period had far less "windage" (the difference between the size of the shot and the size of the bore) than earlier pieces. There had also been improvements in loading and firing techniques. At Trafalgar, the H.M.S. DREADNAUGHT could loose three broadsides in 3 1/2 minutes while ships of the Armada period averaged only three or four rounds per hour.

Improvements in hull and rigging design also evolved over two hundred years. Ships of the Elizabethan period were slow and had great difficulty working to windward. While later ships still could not sail as close to the wind as a modern sailing yacht, they could make fairly good progress in working to windward. Outstanding hull designs and the practice of sheathing ships in copper below the waterline resulted in some outstanding sailers. H.M.S. VICTORY, one of the fastest three-deckers, could make better than ten knots under sail. U.S.S. CONSTELLATION, the "Yankee Racehorse", could make better than fourteen knots, making her one of the fastest frigates afloat.

As the ships and guns evolved, so did the tactics and the ability to use these ships in the most effective manner. There are two important facts which must be kept constantly in mind when dealing with the subject of tactics: the ships cannot sail directly into the wind, and the ship's guns are mounted to fire only to the sides. Commanders continually strove to gain the weather gauge, placing themselves between the enemy and the wind. This position gives the initiative to the side holding it, as it allows for the choice of exactly when and where to launch the attack. Ships in the lee position find attacking difficult, as beating upwind takes far too long and leaves ships attempting it far too exposed to enemy fire. Ships with the weather gauge are cast in the role of attacker and ships with the lee gauge must follow the attacker's lead and react to his maneuvers. The lee gauge is not without advantages, as the defender can fire his broadsides to rake the approaching enemy and can easily retire to prolong this approach. Ships in the lee position can also aim their fire at the rigging, thus further slowing their approach.

The object of all maneuvers is to place the maximum firepower on the enemy while avoiding the same. Obviously, the best position to maneuver from is the raking position ("crossing the T") where a full broadside can be put into the enemy with no chance of a reply.

Maneuvering so as to oppose the fire of several ships to the return fire of only one ship is also effective, especially if the enemy can be engaged on both sides. This was a common nightmare among captains as their crews were not large enough to work both broadsides at the same time.

When a number of ships is being used together, the most effective formation for getting a maximum concentration of firepower is the line ahead (commonly known as the "line"). Most squadron and fleet actions of the era were fought between opposing lines of ships, all maneuvering in unison in attempts to seize the weather gauge, and then place the massed fire of the line onto an isolated portion of the enemy's line. The line formation also facilitated the passage of flag signals from one end of the fleet to the other.

The intervals between the ships in a line is very important. If they are too close there is a great chance of a collision, and if they are too wide there is a chance that enemy ships may slip through the gaps. Another disadvantage of the line is its inflexibility. Only two basic maneuvers can be performed by a line with any degree of precision: turning in succession and turning together, changing the formation from line ahead to line abreast.

Keeping the line of ships, with their inflexibility, together led to many formal, stilted and indecisive battles. This led the more able commanders to adopt more informal tactics. The line was generally kept together until such time as an opening appeared, at which time the line was abandoned and the ships entered a confused general melee. At Trafalgar, Nelson abandoned the line entirely, and led his ships head-on into a general melee. This was only possible due to the great superiority of his captains and crews and such a maneuver would be suicidal against an equal or superior quality opponent.

Boarding is probably the most costly method of capturing an enemy ship because crew losses, even on the winning side, will greatly reduce the fighting potential of the ship. Boarding should be attempted only after firing has reduced the size of the enemy crew, or if your crew is already far superior in numbers or quality.

Ships were rated according to the number of guns they were designed to carry. Most ships carried more guns than their rating would indicate, especially of the light, short carronades. For

instance, most British "74s" carried at least eight carronades in addition to their long guns, meaning that they actually carried at least eighty-two pieces of artillery on board.

Ships rated as carrying 100 to 130 guns were the most powerful ships afloat and were generally used as flagships for the most senior admirals. These ships were "three deckers"; that is, their guns were mounted on three decks, one above the other. Additional guns were also carried above these on the quarterdeck and forecastle. These huge ships provided ample cabin space for the admirals and their staffs. Their major disadvantage was their clumsiness compared to lower, more maneuverable ships.

Ships rated as carrying 90 or 98 guns were used mainly by the British as flagships on foreign stations and for second-line flag officers. These ships were also three-deckers but carried smaller crews and smaller guns than the larger classes.

Ships rated as carrying 80 guns were extremely powerful two-deckers. Their guns were mounted on two decks, one above the other, with more guns on the quarterdeck and forecastle. These ships were often a match for the 98 gunners in crew and firepower, and, in addition, were lower and more maneuverable.

Ships rated as carrying 74 guns were also two-deckers, and were the basic and most numerous class of ships of the line. The British Navy of the Napoleonic Era felt that the "74" was the match, when properly handled, of any ship afloat. This can be demonstrated in the game by the skillful use of this type's maneuverability (two 60 degree turns allowed as opposed to one) when fighting one of the awesome three-deckers.

Ships rated as carrying 64 guns were a weak class of two-deckers and the smallest class of ships of the line. By 1815 they were being phased out as being too small to lie in the line of battle, as by that time they were smaller than many of the larger frigates.

All ships carrying 64 or more guns on two or three gun decks were called ships-of-the-line. The word was coined during the Angle-Dutch naval wars of the Seventeenth Century to describe large warships capable of standing in a line of battle — that is, ships which could both deal out and absorb enormous punishment. The next class of ships falls under the general term of "frigates". Frigates carried all their guns on one gun deck, plus guns on the quarterdeck and forecastle. A frigate's single gun deck was carried much higher than the lower gun deck on a ship of the line. Frigates were characterized by being low, fast and maneuverable.

Ships rated as carrying 44-50 guns were of several types. The British had both 44 and 50 gun types that carried their guns on two decks. These were not very successful classes, being too slow and clumsy to escape from a ship-of-the-line and too weak to fight one. Another type of 44 to 50 gun rating were the "razees." A razee was an old ship-of-the-line with its upper gun deck cut down to form a powerful frigate. A razee 44 was usually cut down from a 64 and a razee 50 from a 74. Some razees were very successful but others remained as slow and clumsy as before. The British in 1813 launched two monster frigates rated at 50 guns each. The Americans and French both built numerous large frigates rated at 44 guns.

Ships rated as carrying 32-40 guns were all of the classic frigate type, being fast and maneuverable enough to escape from a ship-of-the-line and powerful enough to handle any other vessel.

Ships rated as carrying less than 32 guns varied very widely in size, construction and armament. Many of these smaller vessels were "brigs", having only two masts instead of the usual three. Many of them were armed almost exclusively with carronades. All of them were maneuverable but their speeds varied widely.

The men manning the ships were as varied as the ships they sailed on. Every nation to some extent had trouble manning their fleets and training their crews. How each nation handled this problem largely determined how efficient their navies were.

The British, having the world's largest navy, suffered severe problems. Although blessed with an efficient cadre of well-trained officers and petty officers and possessing a large reservoir of trained seamen from the fishing and merchant fleets, the British were still forced to rely on press gangs and the sweepings from the gaols for a large proportion of their crews. The British command of the seas permitted their efficient cadres to work on this unlikely material and constant drill and practice produced a high level of efficiency on most British ships.

The French problem was a good deal different. Drawn largely from aristocratic families, the French officer corps was purged of its most experienced men by the French Revolution. The navy was also in constant competition with the army for available manpower. What trained

officers and men were available were often seconded to army units, and ended up campaigning in Europe as Napoleon's demands for cannon fodder grew. In addition, the officers and crew spent most of their time blockaded in various ports and were denied valuable sea experience and training. As the poorly trained French lost battle after battle to better-drilled British crews, French confidence and morale also sank.

The Spanish problem was similar to the French one although their officer corps had not been purged. Similarly blockaded in their ports, the nearly bankrupt Spanish monarchy could not even afford to keep an efficient cadre on board their ships. Spanish naval officers, despite their high standards and traditions were forced to fight with hundreds of raw crewmen aboard who had been pressed into service only hours before sailing.

The problems of the United States Navy were comparatively minor due to the small size of the fleet. Pay in the navy was higher than in the merchant marine, enlistment periods were short, the food was the best in any navy and the discipline was very moderate for the day. These factors enabled captains to pick and choose from among a surplus of volunteers. Not being involved in the general European war, the Americans were also blessed with great amounts of sea experience and drill.

The following gives an idea of the proportions of ships of various ratings in a well-balanced fleet:

DATE RATING	NUMBER OF SHIPS IN THE BRITISH ROYAL NAVY				
	1793	1797	1801	1805	1814
120 guns	0	2	2	1	2
110 guns	2	4	4	4	2
100 guns	5	5	5	5	3
90-98 guns	21	20	21	18	8
80 guns	3	6	12	12	5
74 guns	70	84	92	91	97
64 guns	40	42	44	44	1
50 guns	20	23	18	24	10
44 guns	21	21	20	20	3
40 guns	1	4	7	7	8
36-38 guns	28	57	79	88	111
32 guns	53	60	56	61	12
Smaller vessels	234	205	266	462	380

THE VIEW FROM THE QUARTERDECK

A Primer On Naval Tactics

By S.Craig Taylor, Jr.

In warfare, technological advances always outstrip the tactics devised to use them. As soon as one "perfect plan" is devised, an invention or refinement comes along to make it obsolete. The age of fighting sail saw the evolution of naval tactics from being an extension of a land battle (as in Henry VIII's time) to the development of linear tactics, followed by the breaking of the line devised by Nelson. The coming of the powered battleship ended the evolution of sailing tactics, except in the WOODEN SHIPS & IRON MEN game, where the frigates and ships-of-the-line continue to sail and fight.

Because the game was designed to recreate naval combat, the tactics used during that age

can be applied here. As the real-life captains knew, there is absolutely no foolproof formula for victory. Bad luck, adverse conditions, or unforeseen circumstances can ruin the most brilliant maneuvers and tactical combinations. But over several battles, the commander using his ships to their best advantage will win more often than one who relies on luck.

So the first rule for you future Nelsons to consider is an old one: that massing superior forces at the enemy's weak point is as important at sea as on land. In short: "when superior to the enemy, get as close as possible; when inferior, stay as far away as possible." Moving an inferior force too close to the enemy can have severe repercussions. Basically, the closer your inferior fleet is engaged, the more hits it will suffer in a shorter time. It will be defeated faster, not only releasing the superior force for action elsewhere, but giving you less time to respond to the change in the tactical situation.

The opposite is also true; at longer ranges, the number of hits per turn is smaller, so superior forces count for less, and an inferior force can hold on longer. This is easy to see and understand in theory, but with each ship defined in so many ways, how do you determine who has the superior and who has the inferior force?

THE NUMBER OF SHIPS ON BOTH SIDES: A numerical superiority is useful as it permits enemy forces to be overlapped, doubled, or raked. When two ships attack the port side of one ship, only one of them will be fired upon in turn. This is complicated by the often great differences in the strengths of the ships, so that just counting the number of hull points may not be accurate. Superiority in crew quality and/or gun power can more than compensate for inferiority in numbers. Five sloops is not as strong as five ships-of-the-line, granted, but what about three frigates with poor crews and many guns against three frigates with crack crews and fewer guns? Comparing the point values of each ship (using the chart from the "Design Your Own" section) is a more accurate reflection of the power of two opposing fleets.

MANEUVERABILITY AND MOBILITY: A fleet of well-handled two-deckers should outmaneuver handily a squadron of three-deckers. A squadron with intact sails should outmaneuver a squadron with considerable rigging damage. Superior mobility enables a fleet to fight on at least equal terms with ships that are more powerful, but less maneuverable.

SUPERIOR TACTICS: This requires a measure of personal insight, because you must evaluate your skill. What margin of material superiority do you need to win? Are you so tactically superior to your opponent that you can win with an inferior fleet? Or, are you so inferior in tactical skill (or willing to regularly take chances) that you require a greater than normal superiority before closing to decisive range?

As in any game, sound tactics can be learned by experience, by common sense, and by learning from your own and other's mistakes. In WS&IM, even the mistakes commanders made in historical battles can be used. Some of the more important tactical practices are covered below. This advice is based on the assumption that both frigates and ships-of-the-line, plus some merchantmen, are in the battle. Captains and commodores must adjust their own tactics to reflect the composition of their fleet.

1. When vastly superior to a portion of the enemy fleet, rush upon him before he realizes his danger and escape. If, in flying down on him, a few of your ships lose some rigging, don't worry. The enemy is too weak to capture them, and repairs can be made later. Enemy ships that fail to escape are out of the game for good.

When making this decision, consider the position of all ships relative to the wind. Where is the rest of the enemy fleet? If they are upwind, they can swoop down to the rescue. But if they are downwind, it'll take several turns for them to arrive, so loosen your cutlass and dive in.

2. In multi-ship actions, concentrate on crippling a ship, not sinking it. Once a rigging section has been destroyed, the ship loses full sail capabilities, and its battle sail speed is reduced. The ship is no longer hard to catch or to flee from than if it were totally dismasted. It is usually a good idea to destroy a rigging section on a ship in the center of an enemy line, as this greatly embarrasses the maneuverability of the entire line.

3. Ships with elite or crack crews can cause damage at ranges where a green or poor crews cannot reply. Hitting an enemy when he cannot strike back is very useful in "softening up" an enemy, or in carrying out a delaying action against an otherwise superior foe. Firing from a long range does produce a low number of hits per turn, so the advantage should not blind you to the even greater advantages of closing in, especially if you have a material lead.

4. Keep the enemy guessing as to your intended maneuvers. An opponent can often be fooled by ships switching to full sails, then making a move that could have been done under battle sails.

5. In squadron or fleet actions, stay in line formation for as long as possible, as breaking it leads to exposure to defeat in detail. But don't keep the line formation when the situation (and a real superiority) calls for wading in.

6. If the crew quality of your fleet varies, lead the line with one of the lower-quality ships. That way, if any ship gets raked and dismantled, it will be this one, giving the more valuable ships a better chance of reaching decisive ranges in good condition.

7. Use your ships in their proper roles. Ships-of-the-line should be used against enemy liners, and frigates and small vessels against vessels of their own rates, as well as the attack and defense of merchant convoys.

In Harm's Way: The Handling Of Frigates

A ship-of-the-line was built to carry a large number of heavy guns, and to engage anything afloat. It was expected to stand in a line of battle and trade blows with anything that pulls alongside. Being slow and poorly maneuverable, these battleships operated in squadrons to support and protect one another.

A frigate, on the other hand, was not expected to fight anything that came its way; only ships of its own class or lighter. Taking on a ship-of-the-line with a frigate is usually a good way to lose the frigate.

In fleet and squadron battles, the frigate's role is best suited away from the line of battle for a number of reasons. A frigate in a battle line cannot make full use of its superior speed and maneuverability without disrupting the line. Second, the space it occupies could be taken by a larger ship capable of dishing out more punishment. Third, a frigate is a weak link in an otherwise unbreakable chain, inviting a concentration of enemy fire that can swiftly destroy it. And a stricken ship in the midst of the battle line causes great problems in reforming the line, and in sailing around the obstacle.

The place for a frigate is on the fringes of the main battle, on the ends of a line for raking broadsides, or for keeping enemy frigates from doing the same. However, extreme care must be exercised any time frigates are moving within gun range of the battleships, as a miscalculation can be fatal!

The optimum use of frigates is to engage frigates, lighter vessels, and merchantmen. Full use of a frigate's mobility also entails remaining under full sails as much as possible. Do not drop to battle sails and close for a gunnery duel unless the odds are highly favorable. If the odds appear to be even, or unfavorable, continue at full sails, avoid combat, and wait for the next opportunity to pounce.

Frigate-to-frigate engagements fall roughly into two classes. In the first, the objective is to quickly cripple an enemy frigate to prevent interference with more important tasks. Chain shot is employed from close range (preferably in a rake) to destroy a rigging section. Full sails are then used to avoid the cripple, leaving it far behind.

In the second class, the actual defeat of the enemy frigate is the objective. This type of action should be avoided without a large superiority in size, crew quality, and/or numbers. A smaller superiority makes a victory possible, but leaves a crippled victor out of the game as its prize. This tactic should also be avoided in the close proximity of enemy ships-of-the-line; victory is futile if an enemy ragwagon can easily move up to recover the prize, and (to add injury to insult) capture the crippled victor.

By far, the most interesting scenarios involving frigates revolve around the protection and/or attacking of merchantmen. The escorting frigates have several advantages in games of this type. They know exactly where the merchantmen will be at the end of the turn; so they know where the vulnerable spots will be, and can maneuver to cover these gaps. Second, the escorting frigates need only to cripple an opponent, not defeat it, for a frigate missing a rigging section is slower than a merchantman. Defending a slow-moving convoy requires only the occasional use of full sails, so that the escorts are less vulnerable to being crippled than the attackers.

The attacker, of course, has the initiative, and is not restricted to a set sailing pattern. Maximum use should be made of feints; that is, moving into a threatening attack position to force

the commitment of the defenders, then veering off abruptly at a new angle for a more promising attack with the defenders out of position. Pincer attacks that present many avenues of attack are very difficult to defend against, so consider splitting the attackers to threaten the convoy from as many directions as possible.

Although no match for a full-size frigate, smaller ships can be useful for defending merchantmen; if nothing else, they can get in the way, delay until larger ships arrive, and sacrifice themselves if need be. When attacking, these ships should keep their distance until a clear opening appears. They can be very useful in pincer maneuvers.

Care And Handling Of Ships-Of-The-Line

As important as the smaller ships were in the great age of sail, if the situation called for any serious fighting, the ships-of-the-line were sent for. The dashing, racy frigates may have been the glamor ships of the period, but, in most cases, their commanders were the most junior officers. There came a time in the careers of most competent captains when their skills and seniority placed them on the ragwagon's quarterdeck. The fate of nations and empires rested with these ships, and no government could afford to trust them to any but the best available officers.

Frigate tactics are largely the tactics of opportunity; maneuvering to cause or to take advantage of a foe's mistakes. The tactics of handling a line of battleships are far more precise.

Ships-of-the-line maneuver in tight, well-ordered line formations. The advantage is that it is very difficult to attack it without taking at least as much damage as is caused. The line formation contains the maximum possible firepower as all ships have clear lines of fire and are mutually supporting. To maintain this line formation through periods of complicated maneuvering calls for a bit of planning ahead, and an overall plan of action.

But battles aren't won until the signal for General Melee appears, when one side is so damaged and disordered that the other breaks rank to board and capture. When to break is often the critical decision that determines victory or defeat. Novice players often try detaching a ship to obtain a rake. This usually results in the detached ship being left far behind and out of the action, or overwhelmed by a much larger force. Single-ship detachments should not be made. If the reasons for sending a detachment are important enough, send a squadron that can form its own line of battle and support each other.

The essence of fighting a battle of ships-of-the-line is to establish superiority over a portion of the enemy line. The ancient maxim of defeating the enemy in detail applies here with a vengeance. There are three common tactics:

DOUBLE THE ENEMY LINE: A portion of the line engages a portion of the enemy's line, while another squadron passes into the rear of the engaged section. This is a difficult maneuver, but when done well the results are devastating, as at the Battle of the Nile. This can be accomplished if the enemy is at anchor, if a portion of the enemy line is too slow to avoid the maneuver (as with either the uncoppered ships of the American Revolution era, or ships slowed by well-placed rigging hits), or by moving through a gap in the enemy line, then doubling back. A section of a line that is too closely engaged to risk the use of full sails can be doubled by some undamaged ships under full sail.

MASS AGAINST ONE SECTION OF THE ENEMY LINE: This can be done if your ships are sailing at closer intervals than the ships they are opposed to, or by taking advantage of a superiority in ship size and/or crew quality in ship-to-ship duels. It can also be performed by advancing obliquely on the enemy line so that all ships deliver their fire into the same part of the enemy line as they pass, while another section of the enemy line can make only long-range shots at best.

GET AND KEEP THE WIND GAUGE: This gives the initiative, and the ability to engage when and where the situation is favorable to you. The wind gauge is the single most important tactical factor to consider when trying to determine or create a superiority to the opposition. If properly used, the gauge can compensate for an inferior force.

A fleet that cannot get the wind gauge is by definition on the defensive. The best way to fight a defensive battle is by keeping a respectable distance between the fleets. Maintain freedom of maneuver by not allowing the attackers to close. Keep firing roundshot at the rigging, especially when a raking shot presents itself. Any attacking ship that loses a rigging section will fall far

behind. When enough of the attackers are disabled, they may be permitted to close with the now greatly superior defenders. Not all attackers are crazy enough to fall into this trap, and that explains why the often elaborate maneuvers of two fleets of ships-of-the-line sometimes lasted for days.

There are a few tactical rules that prove very useful in otherwise equal battles. In a broadside-to-broadside battle, assuming equal numbers of ships, concentrate maximum firepower on the weakest ship in the enemy line. When it has been disposed of, two ships will be available to engage the next adjoining enemy ship. When parallel to an enemy line, move the line no further than it can move without causing a collision should an enemy ship turn and ram; this can lead to an entire line of ships hopelessly fouled together. When boarding, support the action with the raking fire of grape from supporting ships. This reduces the ship-crippling losses that occur in a melee. Also, try not to have too many ships tied up in boarding actions at any one time; this destroys their mobility, and ability to react to enemy maneuvers.

Psychological factors play a larger part in simultaneous-move games than in sequential-move games, probably because there is more uncertainty. Study your opponents. What are their weak and strong points? What types of maneuvers do they like to use? What are their favorite tactics? Judging from their maneuvers, what are they trying to accomplish? What do they expect to do? What do you think they expect you to do? What can you do to mess up their minds?

When you reach a conclusion, test it against the strengths and weaknesses of the fleets. If he is closing when both fleets are equal in strength, he either does not realize what he's doing, or is feinting. This enables you to get into a position that can receive the attack without moving out of position if it turns out to be a feint.

To summarize: when superior, get in close and exploit that superiority to the fullest. When inferior, keep 'em guessing, and keep your distance. Be like the judo expert who uses his opponent's strength against him by concentrating on his weaknesses. Evaluate carefully how you are superior, and how you are inferior. Then plan the battle to maximize the effects of your superiorities, and to minimize your inferiorities.

A Band Of Brothers:

Multi-Player Games As Group Therapy

It is possible to play this game a thousand times and still fail to have played THE GAME. This is the multi-player version with timed moves and the written communication rule. An experienced player can take a squadron of ships and swiftly form more intricate formations than a marching band at halftime. This is a much simpler task than getting three players to sail in a straight line at the same time. No "idiocy" rule or artificial intelligence routine ever devised can match the effects of a group of gamers just doing what comes naturally.

I consider six people to be the ideal size group for a multi-player game of WS&IM. With a larger group, there are problems in seating everyone close enough to the monitor, and with a smaller group, there is not enough interplay between the various personalities to be really interesting. Besides, any group of six gamers is bound to include at least two genuine yo-yos (one for each side), and these are the people who really make the game interesting.

An evening spent playing a multi-player game of WS&IM can be an enlightening experience, and enable you to learn more about the players on your side than you ever cared. If you are the commander, you learn that:

- your subordinates cannot read your handwriting,
- your subordinates cannot tell left from right,
- your subordinates cannot grasp the simplest concepts of maneuver,
- and that threats of physical violence are often needed to secure compliance with your orders.

As a subordinate, you learn that:

- the commander's handwriting cannot be read,
- the commander issues an order to turn left when the situation clearly calls for turning right,
- the commander believes you can read his mind to attempt such complex maneuvers,
- the commander has a nasty temper.

All this and more has happened during multi-player games that I participated in. I have had three elite 74s lined up to fire into a single enemy ship, only to have their shots blocked by the interposition of our resident yo-yo's green ship. This ship was also dismantled in the exchange, so that it could not move out on the following turn. I have seen a squadron never get into action

because they were hopelessly entangled and fouled with another friendly squadron. I have seen a player get so disgusted with the lack of support he received from another player that he disengaged his squadron and sailed off the mapboard and out of the game. These things can and will happen during a pick-up multi-player game. They can be avoided to some extent if time for planning is available, and if the individual players are willing to modify their individual habits somewhat to conform to the realities of participating in a multi-player game.

The multi-player rules are deceptively simple and require a slight alteration to the computer version. Before the first player's movement phase, insert a timed phase where all players must write down their orders (including anchoring orders) and communicate with each other *using written messages only*. At the end of this timed period (set by the players before the game begins), everybody enters their orders without further comment. Normal conversation is permitted; just nothing about the game.

This timed period should be long enough to write all your orders down and send a couple of messages, but not long enough for lengthy discussions about the current situation, or for the outlining of erratic and complex maneuvers. Messages must be short, complete, and precise. The maneuvers covered must be simple. *You* may be able to sail a squadron through a "figure 8" with the greatest of ease, but that is a far cry from attempting to do so in a tight formation with two other captains. A little extra time spent to ensure that your messages are clearly written and easily readable is usually time well spent. All of this will handicap your movements somewhat, but the other side is equally fettered, a point to keep in mind. Simple plans that would be easily countered in a two-player game often succeed beautifully in these encounters.

Appoint a commander before the game begins. This person should be regarded as a true leader, not a "first among equals." A committee system of command will not work. The commander should be the best, most experienced player available, as he is the most likely to be respected and have his orders followed. Sometimes a less skillful player makes a good commander if he has tact and organizing abilities like an Eisenhower. The other players should agree to be good, loyal subordinates, even if they disagree with the manner in which the battle is being conducted. Intelligent initiatives is fine, but it is foolhardy to follow a plan of battle independent of the rest of the fleet.

If time is available, fleet captains should meet prior to the battle. Admirals of this period always tried to meet with the subordinates to discuss plans, iron out misunderstandings, and devise special signals. Lord Nelson was especially noted for these pre-battle briefings.

Several important items should be on the agenda:

1. The commander should be chosen if this has not already been done.
2. The order of sailing should be set, as well as who should command the Van, Center, and Rear squadrons. The location of the commander can be very important. From the Van squadron, he can lead the battle, providing an example of what is expected from his subordinates. From the Center, he can support either end of the battle line, and from the Rear, his ships can be used as a reserve.

Another option is to divide the entire line of battle between the subordinates and place the commander in a fast frigate behind the line. This gives the commander more time to study the situation, plan the movements of the fleet, and take personal command where most needed. If the commander prefers frequent communication with his subordinates, this option frees him of the time spent writing movement orders.

3. Discuss plans, maneuvers, and counter-plans. Correct the players' conceptions as to how the battle should be fought *before* the game starts. This way, the game can be spent fighting the enemy instead of each other.

4. Work out a shorthand system for sending messages. For instance, it could be established that if a message was sent that contained only a movement notation (i.e., 1R2L), it would be meant for *all* ships. This is a worthwhile way to cover the more common messages.

5. Set up the game, position the ships, and practice maneuvering together. This drill will reveal possible problems and permit their correction.

One final point: though it is ever so hard, try to control your temper. You will no sooner finish cursing out the player behind you for fouling your squadron, then your lead ship will foul a ship in the squadron ahead of you. It happens to everyone, so remember that it's only a game, and few friendships are worth this kind of abuse. So be kind to your partner, even if he is a yo-yo.

THE FRENCH ARE IN!

By John D. Burt

Most 18th century fictional naval heroes share a common trait — they're British. And there's good reason for the Hornblowers and Bolithos; except for the unfortunate Admiral Byng, shot for "losing" at Minorca, the British were winners. This fact is reflected in the scenarios accompanying WS&IM. Frankly, it's hard to win with the French unless your British opponent makes a series of gross mistakes like colliding and fouling his entire fleet. This is fine for the wargamers among us who thrive on taking the underdog and — hope springs eternal — pulling off a major upset. For the rest of us, however, the battles boil down to not losing as badly as your opponent when the sides are switched.

The Design-Your-Own (DYO) concept pioneered by The Avalon Hill Game Company adds a whole new dimension to the game and the period it represents, giving us a fast method to construct well-balanced, exciting scenarios that are free of the baggage of historical bias. For ardent Anglophiles, this can come as quite a shock — witness the Series Replay on the seizure of St. Kitt [see *The General*, vol. 12, #6]. With a DYO game, the French can sail the seas with heads held high, and this article is a compilation of advice learned in the course of many battles.

A general overview of the British and French ships is in order here. As a rule, the French start out with more guns and more crew, a holdover from the way things were in those days. In the historical scenarios, this is a blessing as it gives the French a glimmer of hope. In a DYO, these edges can add up to a rude shock for British players. The catch is that the ships cost more. A squadron of five crack British 80s cost 155 points while the same French squadron costs 165 points. That 10-point difference might not seem like much, but to buy five 80s with 155 points means one ship's crew must be reduced to Poor. Things do even up!

Class I Ships

French 120, 110 guns; British 120, 110, 100, 98 guns

The French hold a decided edge in these ships. Both French class I vessels outshoot every other British ship except the 120. Couple this with an elite crew and the French holds a one hit-table advantage over its opponents.

Crew sizes give the French another big advantage with a Total Melee Strength of 110 TMS points for an elite 120 versus 90 TMS points for the same British ship. The British 110, 100 and 98 guns ships-of-the-line (SOL) are glorified two-deckers in broadside strength and are markedly inferior to the French. For you British players, if you don't want to spend the points for a 120, stick with the class 2 vessels and their greater mobility. French players have a choice, though. Screened as shown in Figure 1, a three-decker can cause extensive damage without being hit in return.

The disadvantage of a three-decker is, of course, its turning ability and its rigging. It can't stay in a standard LIR maneuver (turn left, move forward one hex, then turn right), so your line is short some punch after such a move. So blow its rigging away then move the fighting elsewhere — its immobility will make it nearly useless except for long-range rigging shots. But you don't win battles by crippling an enemy ship aloft. Its position should be in the middle, anchoring the entire squadron and staying in the fight.

Class II Ships

French 80, 74 guns; British 90, 80, 74, 64, 50 guns

The meat of any squadron. Ship for ship, the French have a slight advantage as the British will find themselves shooting it out on a lower hit table. In fact, outside carronade range, the French 80's broadside is as powerful as the British 110 and 100 Class I SOLs. A very worthwhile ship.

The other British ships have their advantages and disadvantages but in the many games I've played my opponents and I have stayed away from them so I'll leave them to you.

With neither side holding a decided edge with their class II ships, superior (or lucky) movement will tell the tale. Watch out for trying a chancy trick move. A single unanswered broadside, especially a rake, can tip the scales to your opponent.

Class III Ships

French 44, 40, 38, 36, 32 guns; British 50, 44, 40, 38, 36, 32 guns

The most powerful ship is, of course, the British 50, being the only frigate that can hit shot for shot with the big boys inside carronade range. It's getting that close that is the tactical problem.

The British 40 is the best all-around ship for its cost, particularly in light of its six carronade points. Since they take gun hits first, it means that the ship can take some damage and still fire its carronades with the same effectiveness. The French 40 has fewer guns although like the bigger ships, once outside carronade range it'll shoot on the same HDT. The Frenchman's advantage in crew points will mean little.

The 44-gun frigates are a completely different story. The French's crew size is double the British 44's crew and nearly equal to a 74. In a squadron action, the French commanders should have one or two of these vessels around to mop up damaged British ships, or board a larger vessel. Standard operating procedure for British players is, given an opening, smash their rigging before you find the crew swarming over the gunwales.

As a general rule, the frigates have no business tangling with SOLs, but amazingly, many players will discount the frigate vessel completely when planning their move or firing their broadsides. Granted, they cannot take much punishment, but if your opponent refuses to shoot at them, you'll be able to do extensive damage with them before they strike.

An important part of the DYO game is what types of ships you purchase. For a novice, this is easy — big ships with elite crews. Experience shows that this ain't necessarily the best way to go. Take a close look at the HDT modifiers. For all ships with 13-24 guns per side, a crack crew will deliver the same broadside as the elite crew. This affects the French 80 and 74 and the British 110 to 74: the mainstays of most squadrons. The extra points saved there could be put to better use.

Example: an elite French 80 and a crack 44 cost 56 points and deliver a basic HDT of 2 and 0 at a range of five hexes not counting the initial broadside. A crack 80 and an elite 44 cost 55 points and deliver 2 and 1 HDTs at the same range. For less points, you get more punch. Something to think about.

When you're buying a squadron, it's a good idea to purchase ships generally equivalent in value. Doing this will minimize your losses if a ship is sunk.

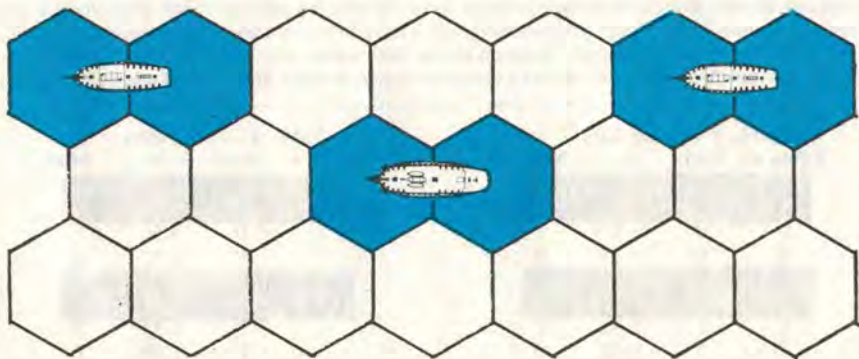


Figure 1: Two French 80s screening a three-decker Class I vessel from an enemy line to starboard. Note that the two ships on the top row do not prevent the third ship from firing (they are outside its field of fire) but they prevent enemy ships from firing back; they present a target closer to the enemy and so must be fired upon.

Tactics For Frogs and Limeys Alike

Once you've picked your ships you are stuck with them for better or worse. The heart of the game becomes maneuver, hitting without being hit, and the subtle art of second-guessing your opponent. The ancient adage, "Do unto others before they do unto you" was never more true. What follows are a few hard-earned helpful hints.

First and foremost is the attitude you take into the game: when playing a DYO scenario with a well-matched opponent, you've got to concede to yourself that *your ships will get damaged and some will be lost*. The days of the overwhelming victory are gone. If a ship is damaged, no sweat, keep on fighting. If you can screen a damaged ship effectively, great, but don't go overboard to do it. On one memorable occasion, an opponent screened a crippled frigate with another frigate *at full sails!* Result: two crippled frigates.

Tables 1 through 4 break down the probabilities in the Hit Tables. Looking at the maximum and minimum values, a player can usually tell when he has a "doomed ship" that is one or two broadsides away from striking. (Note: the average hits is included for the statistical freaks among us — knowing you can expect 2.33 hull hits firing on table 6 only makes the pain worse when you score only 1!)

The owner of a "doomed ship" has three basic choices:

- A. Run, hide and make repairs
- B. Foul or grapple an enemy ship
- C. Position to fire from both beams

Although occasionally useful, option A deprives you of a set of guns and in a close match could leave your opponent with an unanswered broadside or allow him to disengage a ship for a raking maneuver. Neither is a pleasant prospect. Remember that a ship with 12 guns and one lonely hull point still hits as hard as when it had no damage — just not as long!

Option B is well-suited for the French in light of their larger crews. It is risky since there is a chance that a grapple or fouling attempt will fail. A ship gets shot up faster that way. If you do succeed in boarding, send everyone across and do as much damage to his crew as you can. Besides, any crew left on board a ship that strikes must remain on board. Going with everyone keeps them fighting longer! More on melees later. Chances are good your opponent will hold back a watch to man the guns. It should be pointed out to all you eternal optimists that this bloody option should not be tried if the tables show he's got an excellent chance of blowing the rest of your hull apart with one shot.

Then there is option C. Loosely translated, this option becomes "get in there and shake things up!" Loaded guns are no good to a struck ship so if possible, maneuver to unload both sides into the enemy. This stratagem works wonders on an opponent who, seeing the extensive damage to your ship, assigns one vessel to finish you off and ignores possible rakes as he moves off to engage another ship. Double engagements are to be avoided generally, but when you've only a couple of turns left in a ship, you probably won't have to worry about that unloaded broadside. You'll also find that to get into a position to fire both sides, you will most likely screen your own ships from fire and if you're lucky throw a wrench into the finely-tuned enemy battle line.

Table 1 — Hull Hits

Table #	Min.	Ave.	Max.
0	0	0.17	1
1	0	0.50	1
2	0	1.00	2
3	0	1.33	2
4	0	1.83	3
5	1	2.17	3
6	1	2.33	4
7	2	3.00	4
8	2	3.33	5
9	2	3.50	5
10	2	4.17	6

Table 2 — Gun Hits

Table #	Min.	Ave.	Max.
0	0	0.17	1
1	0	0.33	1
2	0	0.50	1
3	0	0.67	2
4	0	0.83	2
5	0	1.00	2
6	0	1.33	2
7	0	1.50	2
8	1	1.50	2
9	1	1.83	3
10	1	1.83	3

Another piece of advice is to ALWAYS be aware of the firepower your opponent can bring to bear.

Example: An opponent recently turned his crippled 120 to keep a crack 80 from gaining a raking position. In the process, he gave an elite 120 a stern rake. Whoops . . .

If you're certain you're going to be hit, minimize the damage.

Melees are risky to all concerned, and should be avoided except as a last resort or under one of the conditions outlined below:

A. You are fouled/grappled by an enemy who doesn't know he's not supposed to melee. The fight is forced upon you so make the best of it. If you can see that a turn's melee will not cause the loss of your ship, hold back a watch to man the guns. At one hex ranges, you might knock off some of his boarding party, and at worse, if you lose the fight, his hull will be that much more damaged. If you're hopelessly outnumbered, fight on and pray for instant telekinetic powers to affect the computer's die rolling.

B. Your crew is assured of victory. If the melee drags on longer than a single turn, some joker on the other side is going to either enter the fight or sneak in the back way and rake you. Should you decide you've got it in the bag and go for the doubled victory points, DO NOT FOUL TO DO IT. You'll have to unfoul to free the ships afterwards and that takes a die roll. If your luck turns bad, there's that joker again.

C. Your ship is about to get nailed with a one-hex rake. In this case, you are grappling and boarding simply to avoid excessive damage to your ship. And there is always the possibility that he'll keep too many watches at the guns to pound you, leaving his ship open to capture. The more crew he throws into the fray, the less he'll shoot with.

D. Another friendly ship will get nailed by a rake. Figure 2 shows an example of this situation. The British crack 74 JENA can deliver a powerful broadside into the unprotected stern of the French 80 MARS. In a lengthy broadside duel with the British 80 Isis, the French SOL would be at a definite damage disadvantage. The French frigate RIVOLI, by grappling and boarding, can take some of the punch out of the shot. If the frigate is an elite 44, the British commander will have to use most of his crew against the attackers to ensure his ship doesn't fall.

If you're forced into one of the above situations — or simply are bloodthirsty — and a melee is imminent, make sure you designate the correct *type* of boarding party. The rules give you the choice between Offensive and Defensive parties. With abject apologies to S. Craig Taylor, Jr., I have never seen a good use for the Defensive flavor simply because it must be attacked before it becomes active.

Example: A crack French 80 has grappled a British crack 74. The British commander, fearing the worst, assigns his entire crew to a DBP. The Frenchman, knowing his opponent uses DBP a lot, gambles and assigns NO boarding party. The result is a one-hex broadside by the French ship with no answering fire from the British, who are standing aboard their suddenly shot-up vessel, waiting for someone to fight. This is not a contrived situation; it actually happened, and a British player learned the hard way that if a boarding party is to be formed, make it offensive!

And, the best and most important tactic of them all — Know Thy Opponent! In the last example,

Table 3 — Crew Hits

Table #	Min.	Ave.	Max.
0	0	0.17	1
1	0	0.33	1
2	0	0.33	1
3	0	0.50	1
4	0	0.50	1
5	0	0.67	2
6	0	1.00	2
7	0	1.00	2
8	0	1.33	2
9	0	1.50	2
10	0	1.67	4

Table 4 — Rigging Hits*

Table #	Min.	Ave.	Max.
0	0	0.17	1
1	0	0.50	1
2	0	1.00	2
3	0	1.33	2
4	0	2.17	4
5	1	2.83	4
6	1	3.33	5
7	2	3.67	5
8	3	4.16	6
9	4	5.16	7
10	5	5.83	7

*when firing at rigging

it was used to great effect. Some tactics will work wonders with one opponent, and lead to a complete disaster with others.

In a game like this, there really cannot be any hard-and-fast conclusions. The British found this out when they tried to avoid defeat by strictly adhering to their "Fighting Instructions," only to discover that while they did not lose, they did not win, either. This is only one gamer's view of an excellent game, where with a little thought and a lot of action, even in defeat, a well-fought match can be enjoyed!

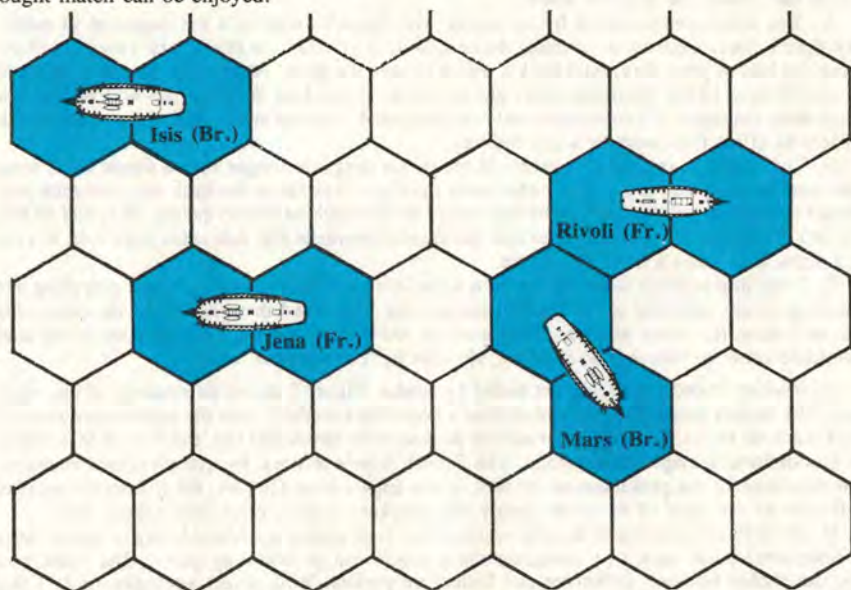


Figure 2: The Jena is threatened by both the Isis and the Mars, with the latter capable of delivering a powerful broadside. If the French player can board the Mars with the Rivoli, at least one British gun crew will have to form a boarding party to defend, taking them away from their guns at a critical moment in the battle.

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A Final Word

For those of you unfamiliar with The Avalon Hill Game Company, we have a board game line which is covered by a fine magazine called *The General*. For over 21 years, *The General* has been publishing articles about a wide variety of games, and, since *WOODEN SHIPS & IRON MEN* began life here with its publication about 1977, a substantial number of articles have been written about the game.

So to assist you in understanding and enjoying the game, we were able to reedit and reprint these articles. If you like what you read, thank the authors for their insight and talent.

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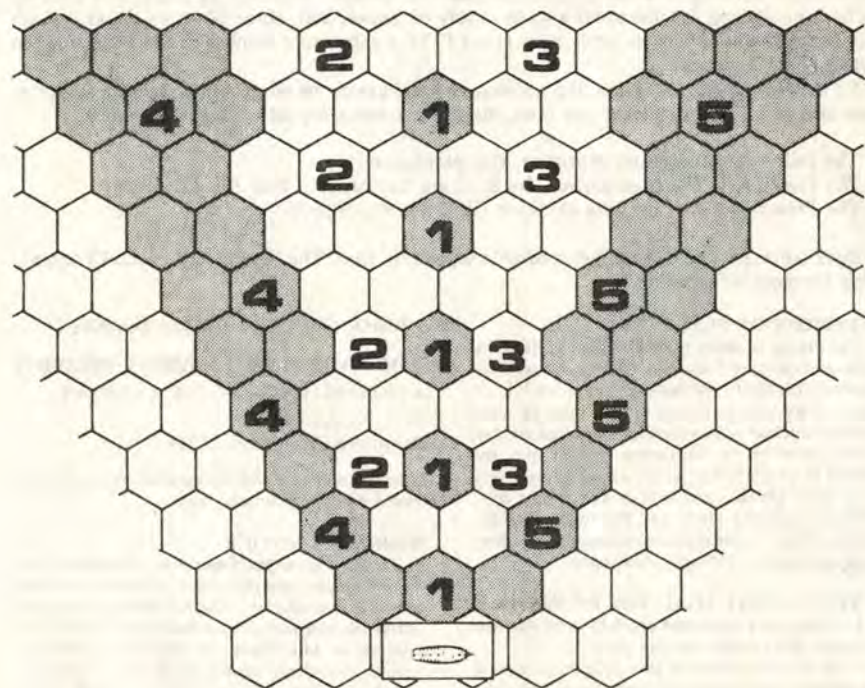
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FIELD OF FIRE DIAGRAM

Where a ship can fire a full broadside is very narrow compared to where partial broadside can be fired. A broadside's field of fire is subdivided into 5 fields:



Fields 1, 2, and 3 can be hit by an entire broadside. Field 4 can be fired at only by a broadside's stern section, and field 5 by the bow. These are considered partial broadsides. A ship cannot fire at more than one target in a turn even if just one section fired. A partial broadside is like a full broadside in every way except that only half the guns fire.

Example: a firing ship has a full broadside of 20 guns. It fires at a ship in field 4. Instead of starting at the 19-21 column on the Hit Determination Table, it must start at the 10-12 column. It's firing 10 guns instead of 20.

Because a broadside is divided into a bow and stern section, it's possible to fire a partial broadside at a target that is not the closest ship in the entire field of fire. A ship can fire at a target in field 4 if there are closer targets in fields 1, 3 and 5, but it may not fire at it if there is a closer target in fields 2 or 4.

Conversely, a ship may fire at a target in 5 if there are closer targets in 1, 2 and 4, but not if there is a closer target in 3 or 5.

When a ship straddles two fields, it occupies the lower-numbered field.

The computer automatically determines whether a ship is firing a whole or partial broadside.



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