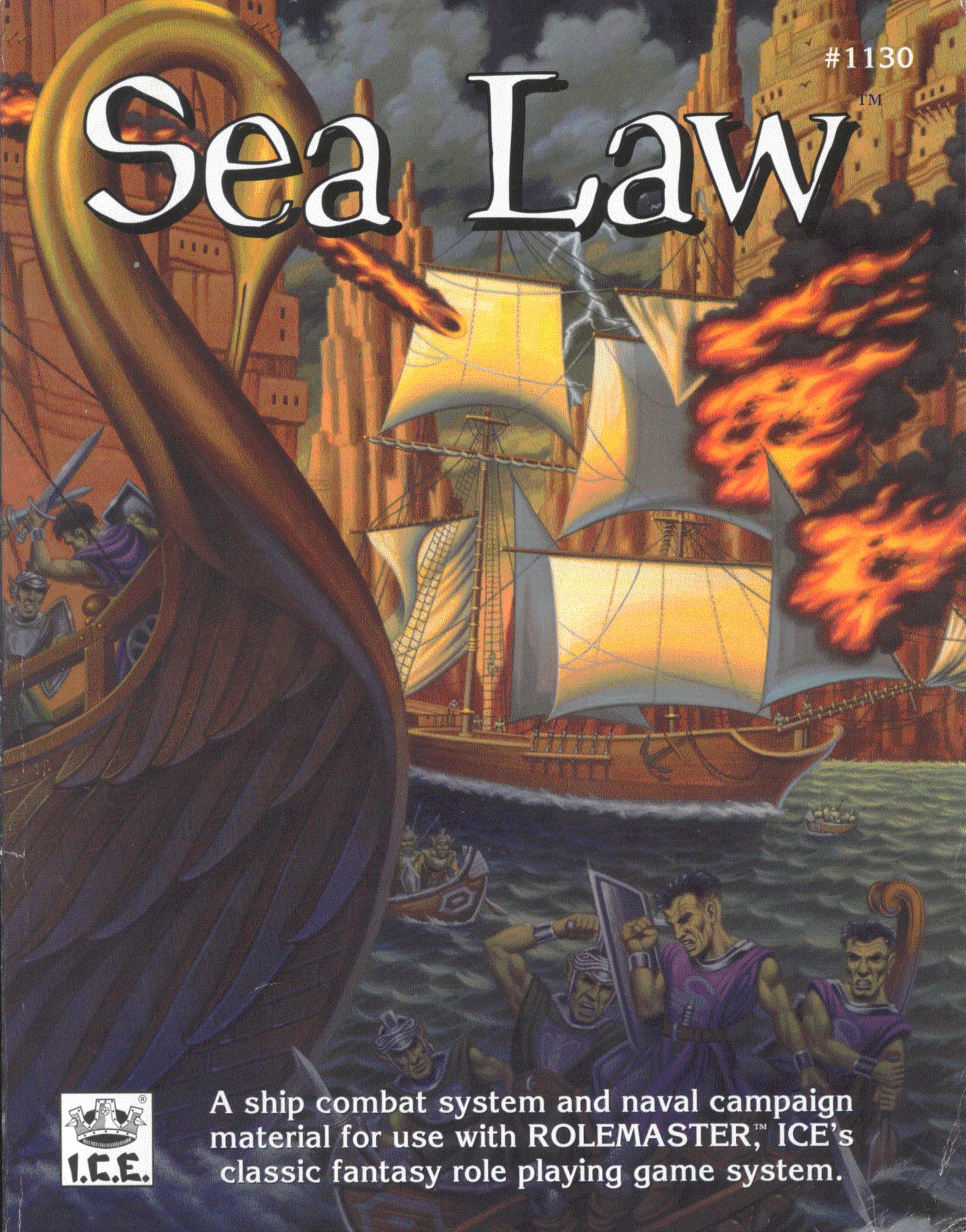


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TM

Sea Law



A ship combat system and naval campaign material for use with **ROLEMASTER**,TM ICE's classic fantasy role playing game system.

SEA LAW™

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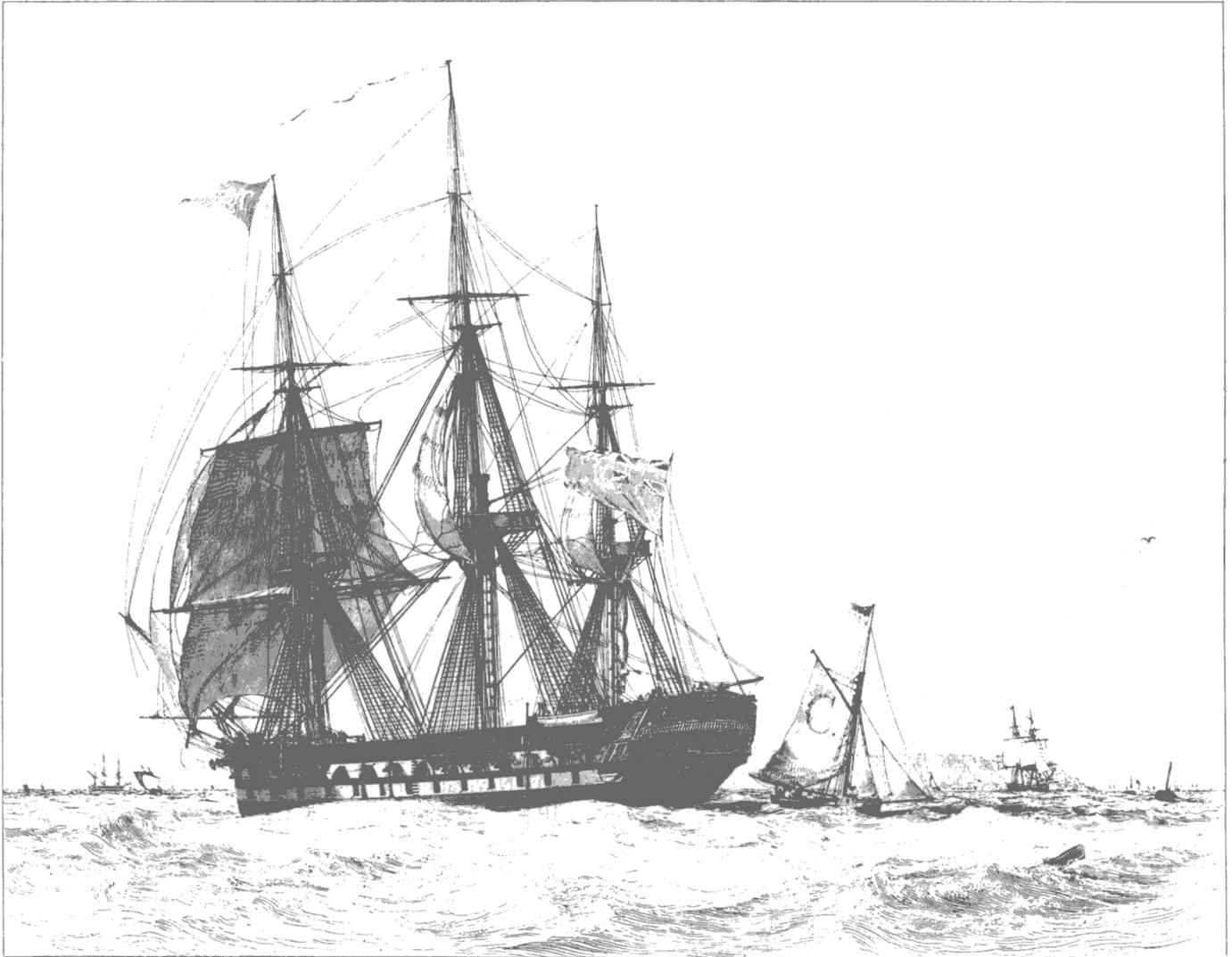
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PART I

INTRODUCTION

This rules supplement for the *Rolemaster*[™] (RM) Fantasy Role Playing system addresses naval combat and ocean-going adventures. It provides rules for ship-to-ship combat, battling sea monsters, storm damage, and a variety of systems for weather generation and adventures at sea. In addition, *Sea Law* includes a ship construction system and a number of pre-designed ships and other campaign data. Most of the information in this supplement concerning national navies, weather patterns, and specific ship types is geared towards ICE's *Shadow World* gaming environment as a sample setting, but it can be used in any setting by following the modification guidelines provided. As always, any rules that do not fit within an individual GM's world framework should be discarded or modified as necessary.

Sea Law is intended to be a supplement to the *Rolemaster* system. References will be made to various *RM* sub-systems such as Armor Type and spell resolution. Obviously, players should have access to, and be familiar with the *RM* role playing game.

Note: For readability purposes, *Sea Law* uses standard masculine pronouns when referring to persons of uncertain gender. In such cases, these pronouns are intended to convey the meanings: *he/she, her/his, etc.*

HOW TO USE SEA LAW

Sea Law is best used when combined with an existing campaign, although it can be used as a stand-alone naval combat simulations game. Any naval combat up to and including the Age of Sail can be recreated using these rules. Naval actions with and without boarding can be gamed out using these rules, as can be assaults by ships on defended ports and the like. Truly ambitious gamers could also play out a campaign game, limiting themselves to a starting fleet and fighting until one side or the other is exhausted and out of ships.

As has been mentioned, however, *Sea Law* comes into its own when combined with an on-going *Rolemaster* campaign and a group of ambitious players. Only in this setting can the rules for ship combat and construction be combined with the various monsters and adventure settings to capture the full unique flavor and drama of this product. Using these rules players can build their own ships, recruit their own crews, and carry out their plans for exploration, conquest, piracy, or simply flight from a difficult situation. It also provides the GM with the tools to allow this course of action, and suggestions and rules systems for creating their own nautical-oriented game.

THE PARTS OF WAR LAW

This book is broken into seven parts.

- Part I — Introduction:** the introduction (which you are currently reading).
- Part II — Environment & Ships:** discussion of the water-borne environment, standard ship terms and sailing techniques.
- Part III — Combat:** a battle system detailing ship to ship and ship to shore combat, boarding, and ramming.
- Part IV — Strategic Activity:** rules for movement and navigation.
- Part V — Ship Construction:** options and guidelines for designing ships, including a large number of sample ships.
- Part VI — Sea Creatures:** rules for handling encounters with non-human NPCs while on board ship, with a number of sample sea creatures and races presented.
- Part VII — Sea Law Campaigns:** a set of guidelines for using *Sea Law* as part of a *Rolemaster* campaign.
- Part VIII — Tables & Forms:** all the combat tables, stat tables, miscellaneous tables, and record sheets.

AUTHOR NOTES—WHY SEA LAW?

Why *Sea Law*? Good question. I was hoping you'd ask. After knocking around in a number of role playing game systems for many years, I realized that I was getting bored. After all, there are only so many sieges a guy can handle before attacking a pile of rocks on a hill loses its glamour. Besides, you usually had to be about tenth level or so before you could afford the necessary troops and/or magic. And then there was always the chance that the owner of the castle would take your visit the wrong way and come looking for your pile of rocks with his own army. No, it was time for a change. What was left? Then it hit me: the Sea!

Most game systems have ignored the sea for one reason or another. Those that do attempt to cover nautical adventuring usually give it a brief once-over and leave the GM to come up with reasons for the PCs to go to sea, and often ignore the systems needed to deal with such adventures to boot. The few combat and ship-building rules systems that do exist are usually spotty, and there is rarely any guidance included concerning these systems. The GMs I've talked to while writing this supplement all complained that, even when their players wanted to sail off into the sunset, they (the GMs) were reluctant to allow this simply because the necessary rules didn't exist. And most of the players I spoke with weren't even aware that they could go to sea in the first place!

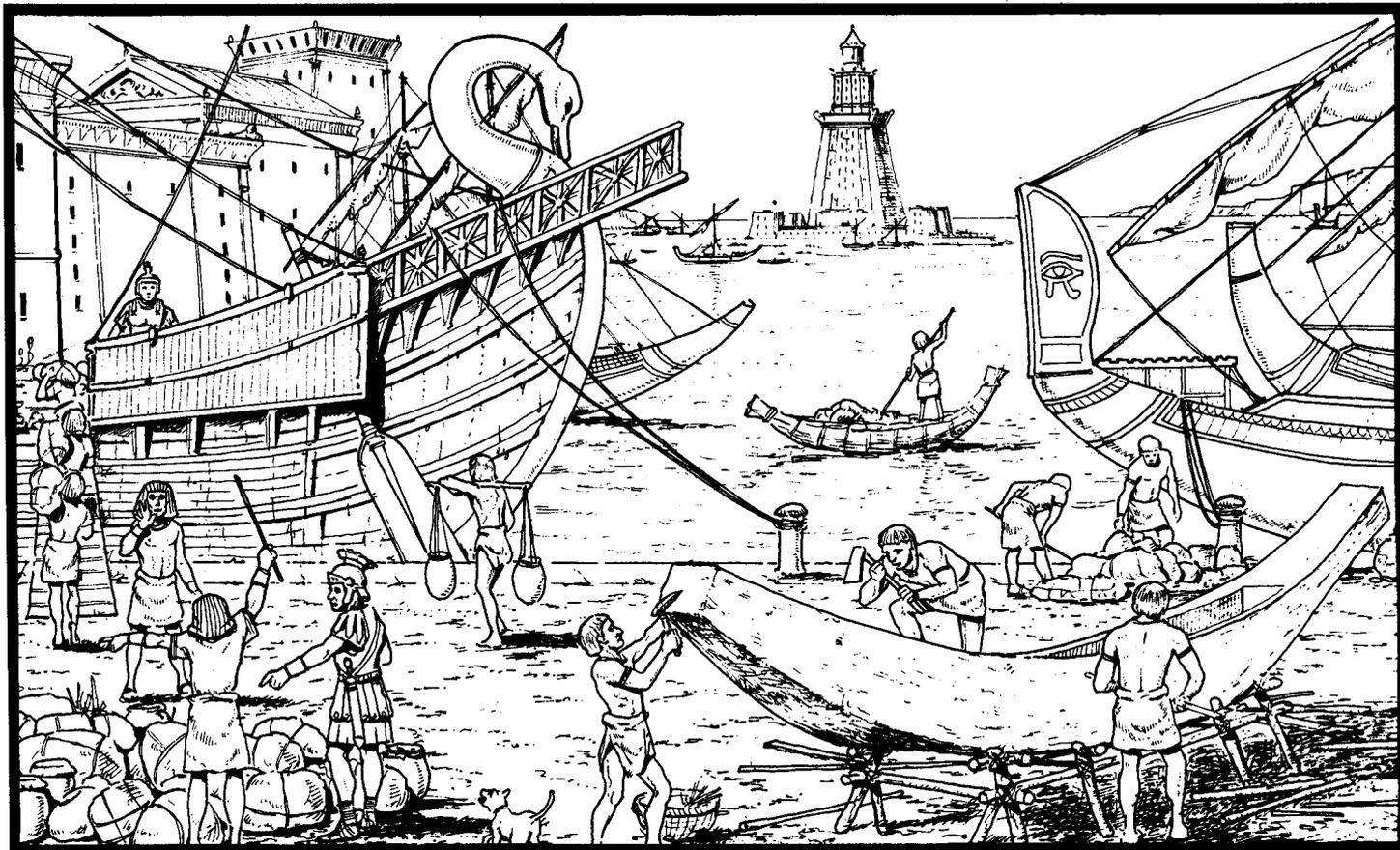
Sea Law attempts to address both problems. Here you will find a reasonably complete, playable combat system along with rules for building your own ships and taking them to sea. A lengthy section has also been included concerning how *Sea Law* can be fitted into any GM's existing campaign. Rules and suggestions for creating nautical societies, reasons for PCs to go to sea, things they can find there, and other surprises are all to be found in this book. In some ways these rules should be considered the core of *Sea Law*; the bones that carry and support the muscle and skin of the combat and ship construction rules.

True, there are things you won't find in *Sea Law*. The combat system was designed to be as detailed as possible, but the accent was on playability. *Sea Law* was designed as a role playing aid first and a tactical simulation second. Some generalizations (such as rigging types, technological levels, and weaponry, for starters) were made to keep the rules simple, and some ships (such as those common to the Orient and Middle East) were left out. But, like all of *Rolemaster*, these rules exist to be used and modified as the players and GM see fit. Running a campaign with an Oriental flavor? You can use the ship construction rules and the examples found in *Sea Law* to build junks and other ship types common to that environment. Gunpowder exists in your campaign? The rules concerning gunpowder weapons were included for just this reason, and to allow players seeking to duplicate their favorite historical situation free reign.

If you, as a GM, have purchased *Sea Law* with an eye towards using it to enrich your current campaign, I strongly suggest that you read the section concerning campaigns first and the combat rules

second. This will give you a better idea of what *Sea Law* is all about, and help you to decide what systems would be most appropriate to your campaign. Where else but at sea can a fifth level fighter find and claim his own kingdom? Ghost ships, mermaids, sea monsters and water elementals all await the PCs bold enough to take to the waves. Sunken treasures, pirates, voyages of discovery, and even shipwreck all await. Read on and enjoy!

A brief note is also in order concerning some of the systems in *Sea Law*. The most important is the concept of Opportunity Fire. Some may feel that this allows a ship to fire whenever it pleases, while others may complain because a ship that selects Opportunity Fire loses all actions in the normal Fire Phase. The concept of Opportunity Fire was created in response to a facet of the Movement System; certain ships have enough movement points to sail right through an opponent's Line of Battle and never get shot at! As most gamers with any knowledge of war during the Age of Sail will recognize, this is not only historically inaccurate, but it gives such ships a tremendous advantage that their real-life counterparts never enjoyed. Ship's officers were always watching for an opportunity to fire along the stem or stern (front or rear) of an opponent, called a 'rake' in the terminology of the times, and would fire at the first such opening. Captains realized that this happened, and often encouraged such behavior. Also, a Captain with a ready gun crew might spot such an opening through the 'fog of war' and open fire. These twin concepts gave birth to Opportunity Fire. Although Opportunity Fire is listed as an Optional Rule, the designer feels strongly that it should be included with the core rules whenever *Sea Law* is used.



1.0 CONVENTIONS & NOTATIONS

This section presents some of the conventions, definitions, and abbreviations unique to *Sea Law*. For the standard *Rolemaster* conventions and notations refer to *ChL* 1.2, *SL* 2.0, and *AL* 1.3 and 2.0.

1.1 ROLEMASTER PRODUCTS

Rolemaster (*RM*) is ICE's complete fantasy role playing system, combining *Arms Law & Claw Law*® (*AL&CL*), *Spell Law*® (*SL*), and *Character Law & Campaign Law*™ (*ChL&CaL*). The rules in *Sea Law* are designed to be in conjunction with the standard *RM* system.

RM is supported by a variety of play aids. Such products can decrease the time and effort required for the creation of an exciting game, and increase the amount of realism and detail obtained during play. These play aids include:

War Law™ (*WL*) — *War Law* is the mass combat system for ICE's *Rolemaster* system. With *War Law* a GM can make numerous detailed decisions for every aspect of battles that can have anywhere from 2 to 1000's of participants. However, *War Law* also includes a very specific, simplified version of this battle system that makes standard decisions for many of the key battle system aspects (e.g., scale, unit size, abstracted losses, unit integrity, morale, etc.).

Creatures & Treasures™ (*C&T*), *C&T II*, *C&T III* — ICE's compendiums of information and statistics for three key elements of fantasy role playing: creatures, treasures, and encounters. They also includes guidelines and statistics for dozens of new races.

The *Rolemaster Companions*™ (*RMCs*) — Compendiums of new spell lists, new professions, new races, new monsters, and a variety of other optional material, rules, and guidelines.

The *Shadow World*® Series — Modules and adventures in a rich, self-contained fantasy environment designed specifically for use with *RM*, but which can be used as isolated or hidden areas in any GM's campaign world.

Space Master™ — ICE's science fiction role playing system is compatible with *Rolemaster*, allowing GMs to inject sci-fi elements into their FRP games and vice versa.

Middle-earth Role Playing™ — A complete system specifically designed to introduce people to fantasy role playing in J.R.R. Tolkien's Middle-earth. It is suitable for those who have never before played a FRP game, as well as more experienced gamers who are looking for a realistic, easy to play FRP system for low-level adventures. It is compatible with *Rolemaster* and can serve as a great introduction to *RM* for novices.

ICE's *Middle-earth*® Module Series — A wide variety of rules, guidelines, and modules for use with fantasy role playing in J.R.R. Tolkien's Middle-earth. Completely compatible with both *RM* and *Middle-earth Role Playing*.

1.2 ABBREVIATIONS

<i>AL</i>	<i>Arms Law</i>
<i>AL&CL</i>	<i>Arms Law & Claw Law</i>
<i>AT</i>	<i>Armor Type</i>
<i>C&T</i>	<i>Creatures and Treasures</i>
<i>ChL</i>	<i>Character Law</i>
<i>DB</i>	<i>Defensive Bonus</i>
<i>DRM</i>	<i>Dice Roll Modifier</i>
<i>GM</i>	<i>Gamemaster</i>
<i>Lvl</i>	<i>Level</i>
<i>MPs</i>	<i>Movement Points</i>
<i>MPT</i>	<i>Movement Point Total</i>
<i>NPC</i>	<i>Non-Player Character</i>
<i>OB</i>	<i>Offensive Bonus</i>
<i>PC</i>	<i>Player Character</i>
<i>RM</i>	<i>Rolemaster</i>
<i>RMC#</i>	<i>Rolemaster Companion #</i> (# = I, II, III, IV, V, VI, or VIII)
<i>RR</i>	<i>Resistance Roll</i>
<i>SeL</i>	<i>Sea Law</i>
<i>SL</i>	<i>Spell Law</i>
<i>WL</i>	<i>War Law</i>

1.3 DICE ROLLS

Each die used in *Rolemaster* is a 20-sided die (or a 10-sided die) which gives a result between 0 and 9. If two of these dice are used, a variety of results can be obtained. However, results between 1 and 100 are the primary basis of the *Rolemaster* system (i.e., *RM* is a "percentile" system).

Note: 20-sided dice and 10-sided dice can be obtained at your local hobby and game stores.

PERCENTILE ("1-100") ROLLS

1-100 Roll—Most of the rolls in *Rolemaster* are "1-100" rolls (also called "D100" rolls). To obtain a 1-100 result roll two dice together—one die is treated as the "ten's" die and the other as the "one's" die (designate before rolling, please). Thus a random result between 01 and 100 (a "00" is treated as 100) is obtained.

Low Open-ended Roll—To obtain a "low open-ended roll" first make a 1-100 roll. A roll of 01-05 indicates a particularly unfortunate occurrence for the roller. The dice are rolled again and the result is subtracted from the first roll. If the second roll is 96-00, then a third roll is made and subtracted, and so on until a non 96-00 roll is made. The total sum of these rolls is the result of the low open-ended roll.

Example: The GM asks a player to make a low open-ended roll, and the initial roll is a 04 (i.e., between 01 and 05). A second roll is made with a result of 97 (i.e., between 96 and 100); so a third roll is made, resulting in a 03. Thus, the low open-ended roll that the GM requested is -96 (= 04 - 97 - 03).

High Open-ended Roll—To obtain a “high open-ended roll” first make a 1-100 roll. A roll of 96-00 indicates a particularly fortunate occurrence for the roller. The dice are rolled again and the result is added to the first roll. If the second roll is 96-00, then a third roll is made and added, and so on until a non 96-00 roll is made. The total sum of these rolls is the result of the high open-ended roll.

Example: *The GM asks a player to make a high open-ended roll, and the initial roll is a 99 (i.e., between 96 and 100). A second roll is made with a result of 96; so a third roll is made with a result 04. Thus, the high open-ended roll that the GM requested is 199 (= 99 + 96 + 04).*

Open-ended Roll—An open-ended roll is both high open-ended and low open-ended.

NON-“1-100” ROLLS

1-10 Roll—In instances when a result (roll) between 1 and 10 is required, only one die is rolled. This gives a result between 0 and 9, but the 0 is treated as a 10. Such a roll is referred to as “1-10” or “D10”.

1-5 Roll—Roll one die, divide by 2 and round up (“1D5”).

1-8 Roll—Roll one die; if the result is 9 or 10, re-roll until a 1 to 8 result occurs (“1D8”).

5-50 Roll—Roll 1-10 five times and sum the results.

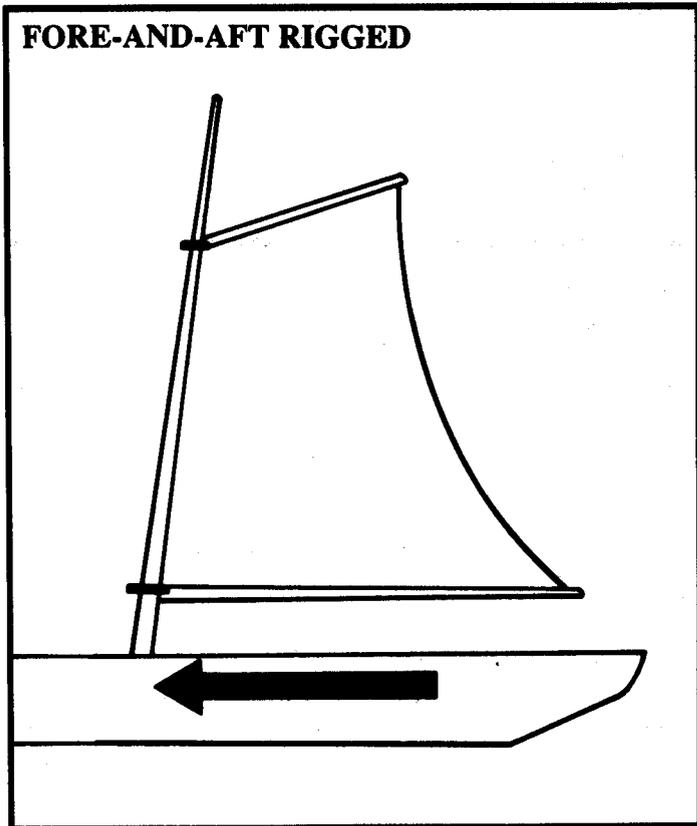
2-10 Roll—Roll two dice, divide each result by 2 (round up), and then add the two results to obtain the “2-10” (“2D5”) result.

Other Required Rolls—Any other required rolls are variants of the above.

UNMODIFIED ROLLS (UM)

Certain results on some rolls indicate an immediate effect and no modifications are considered. These rolls are marked on the appropriate charts with a UM. For example, all weapon attacks result in a fumble if the initial unmodified 01-100 roll falls within the fumble range of the weapon.

FORE-AND-AFT RIGGED



1.4 DEFINITIONS

Before jumping into the main body of these rules, a brief glossary is in order for those who do not have a nautical or naval background. All the general nautical terms used in this supplement can be found below, along with brief definitions. Other terms and concepts unique to this module will also be defined below.

Please note that this is only a partial list of the terms used in this supplement. Others will be explained as they are introduced. GMs may wish to share this section with their players to give them some background knowledge, especially if the PCs are assumed to have a nautical background.

Aft — The rear half of a ship

Armor Type — A numeric representation of the composite armor type of a unit (see AL 4.1).

Attack Roll — A dice roll that determines the success or failure of an attack.

Attack — An attempt by one combatant/unit to damage another.

Ballista — A large crossbow-like siege engine. This is the second-most common naval weapon in Kulthea, and is commonly found in the hands of pirates. It is often used because it is cheaper and easier to use than the mangonel. The ballista has a higher rate of fire and the smaller ones can be easily moved about aboard ship. It is often used to repel boarders, and can also throw Greek Fire (see below). For those readers with a background in Nelsonian navies, the ballista in these rules takes the place of the swivel gun.

Bow — The fore part of a ship

Casualty — A combatant (soldier) who is incapacitated or killed.

Catapult — A typical land warfare engine modified for sea use. Common only on galleys (oared warships) without masts, this is one of the rarest shipboard weapons in Kulthea. It can also deliver Greek Fire.

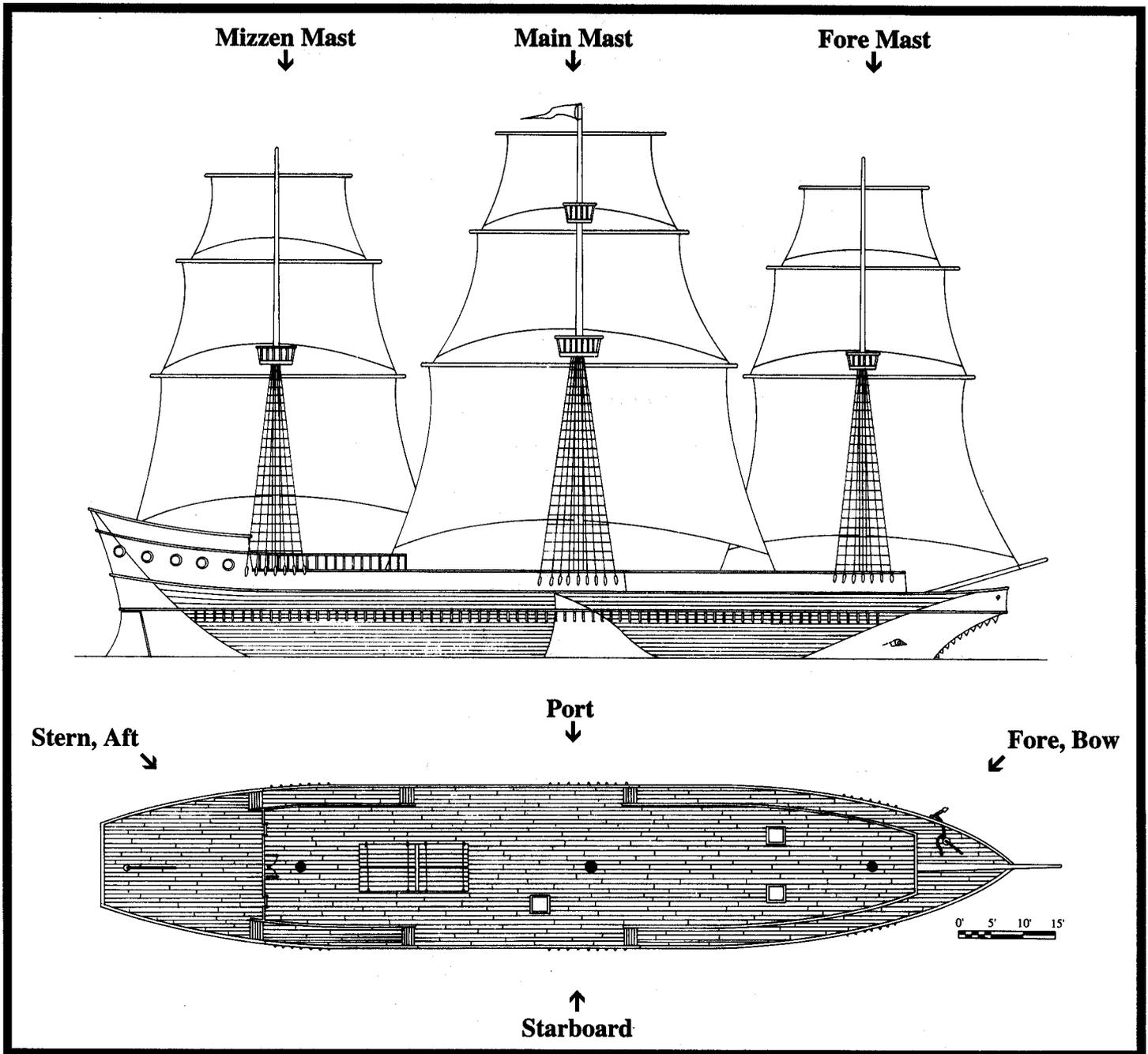
Chance — Sometimes an event has a “chance” or a “percentage chance” of occurring, and this chance is given in the form of “#%.” To determine if the action occurs, make an unmodified, non-open-ended roll. If the result is less than or equal to the “#%”, the event occurs.

Combatant — Each individual participant in a battle is called a combatant.

Decks — The lowest deck is the *hold*, where all the ship’s cargo is stored. Above it is the *orlop deck*. Other decks are (in ascending order) the *lower*, *middle*, and *upper decks*. On the upper deck the aft space is roofed and called the *quarter deck*. Most officers (like the captain) live here. Forward of the foremast, again on the upper deck, is the *forecastle* where most petty officers live and eat. The space between the two smaller decks is called the *waist*, and the ship’s boats are stored here. The space above the quarter deck is the *poop*, and the ship’s wheel is often located here. Above that, but only on the largest vessels, is the *poop royal*. Note that smaller ships might not have some of the decks mentioned here. Some of the ships in the *Shadow World* have variations of this layout, as will be detailed below.

Defensive Bonus — A measure of a combatant/unit’s ability to defend itself. The DB can be augmented with a shield bonus, a portion of the OB, and various other modifiers.

Fore-and-Aft Rigging — Like a lateen except the sails are smaller and are anchored at the bottom by booms (cross bars). This rig requires fewer sailors, but is weaker than the other two types.



Fore — The front half of a ship

Demon Fire (Greek Fire) — This is Kulthea's (and the Ancient World's) version of napalm. A flaming, viscous delivered either by ballista bolt canister, catapult bomb, or from its own tube, Greek Fire is one of the most feared non-magical attacks on the high seas. It is expensive to produce, and thus is fairly rare outside of the war fleets of the major powers in a GM's campaign environment. Ships armed with Greek Fire are truly dangerous at close ranges. Note that mangonels cannot deliver Greek Fire. On Kulthea, this is most commonly called Demon Fire.

Hits (Hit Points) — Accumulated damage, pain, and bleeding, that can lead to shock, unconsciousness, and sometimes death. Each unit/combatant can take a certain number of hits before dissolving or passing out.

Lateen Rigging — A type of sail rigging that uses sails shaped like right triangles

Leader — A leader is a special combatant who can modify the morale and combat capabilities of other combatants and units.

Level — A measure of the experience a unit possesses.

Maneuver Roll — A dice roll used to determine if an attempted maneuver is successful.

Maneuver — An action that involves risk, the use of skill, unusual concentration, etc.

Mangonel — A spring-powered artillery engine. Used like an 18th century ship's cannon, the mangonel is the major naval weapon in Kulthea. It comes in three sizes; light, medium, and heavy. The type carried depends on the size of the ship. Note that mangonels are never found on galleys; their frames and freeboards are too weak to withstand its recoil.

Mass-combat System — A game system that emphasizes rules for battles involving "units" (i.e., groups of similar individual combatants).

Masts — Names of masts depend on the number on a ship. A three-master has (from the fore); *Fore*, *Main*, and *Mizzen* masts. A two-master has (again from the fore); *Main* and *Mizzen*. Some of the ship building powers in the *Shadow World* have built larger vessels with four masts. These have *Fore*, *Main*, *Third*, and *Mizzen* masts. The larger vessels are mainly used for long voyages and are usually square rigged.

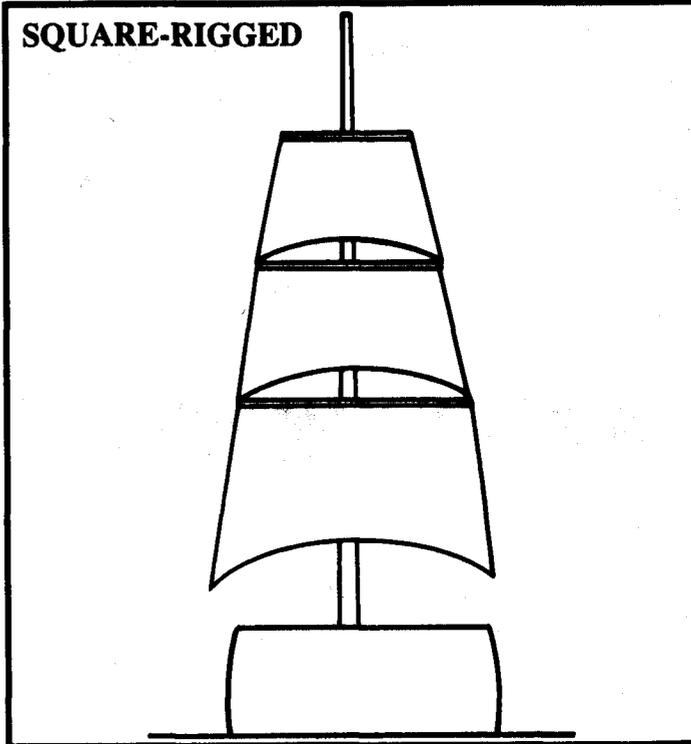
Melee Attack — An attack against a target adjacent to the attacker (e.g., hand-to-hand attacks with swords, axes, pole arms, etc.).

Missile Attack — A ranged attack against a target not adjacent to the attacker (e.g., bows, thrown weapons, slings).

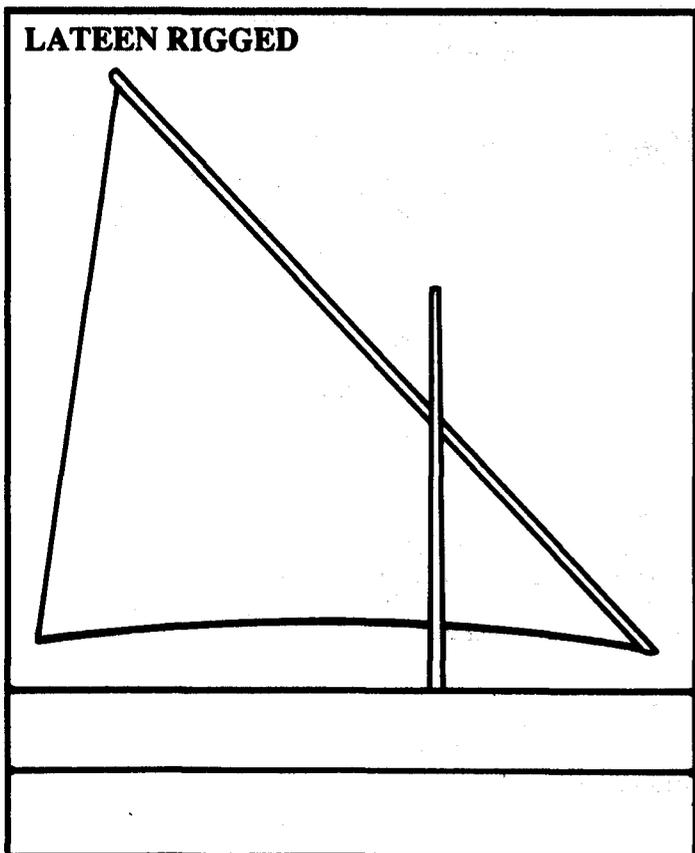
Movement Point — This is an abstraction of actual velocity used to determine how many hexes a ship can move during one turn (of either type). It is effected by the *Sail/Oar State*, the facing of a ship in relation to the wind, and the *Weather/Wind Charts*. Movement Points (or MPs) are determined from the *Movement Profile*, which is explained in the following *Movement* rules. One movement point allows a vessel to move either one hex (200') during a *Tactical Turn* or four nautical miles (\approx 4.5 miles) during a *Strategic Turn*.

Movement — There are two types of movement used in this supplement; tactical and strategic. Each ship has two separate movement rates, one for each type of movement. A *Tactical Turn* lasts 2 minutes of game time, while a *Strategic Turn* lasts four hours of game time.

SQUARE-RIGGED



LATEEN RIGGED



Offensive Bonus — A measure of a unit/combatant's proficiency with its weapons of choice when attacking. A portion of the OB may be applied to enhance the DB in the form of a parry.

Open-ended Roll — See *Dice Rolls* above.

Port — The left side of a ship if facing forward

Sail/Oar State — This is a factor of how much of the ship's available oar or sail power is being used for movement. It helps determine the actual movement rate of a ship.

Ship Types — The definitions of the various ship types found in *Kulthea* will be given in the section detailing ship construction. These types can be used in any campaign and, where possible, historical time frames for these ships will be given for GMs basing their campaign around an equivalent period in our own history.

Spell User — A combatant who can cast spells.

Square Rigging — Uses square sails anchored to the masts at both top and bottom by spars and booms. This rig is the most powerful of the three types discussed here, but takes many sailors to operate.

Starboard — The right side of a ship if facing forward

Stern — The aft part of a ship

Target — A combatant or unit being attacked is called the "target of the attack."

Turn Sequence — The order that activities occur in during a turn of play.

PART II

ENVIRONMENT & SHIPS

Before starting to resolve a sea voyage or a battle at sea, a GM must answer a number of very important questions:

- What is the time and distance scale?
- What is the weather and terrain like?
- What kind of display will be used to represent the ships and the playing surface?
- What ships and crews are involved?

These questions and suggested answers will be discussed in Sections 2.0 and 3.0.

OVERVIEW

For those who have played *Rolemaster* before, *Sea Law* uses a number of terms and concepts that will be familiar. Each ship is rated in terms Offensive Bonus, Defensive Bonus, Armor Type, Movement Rate, etc., just like a *Rolemaster* character. Unlike individual characters, ships have four different types of statistics: Physical Stats, Movement Stats, Combat Stats and Crew Stats.

Those veterans that have used the *Rolemaster* mass combat system, *War Law*, will also recognize similarities between ships in *Sea Law* and units in *War Law*. Ships move, fight and maneuver much like *War Law* units.

2.0 THE PLAYING ENVIRONMENT

In *Sea Law*, specific suggestions for time (and distance) scales, weather, navigation, etc. are presented. A GM should feel free to modify these suggestions to fit specific situations that arise in his game.

These rules refer to “hexes” and “turning hexsides.” GMs who do not want to use hexes can easily use “centimeters or inches” instead of hexes and use “turning 60” instead of “turning hexsides”.

Before beginning play both sides must agree on the scales and rules to be used. Then they must determine the ships and crews to be used (see Section 3.0) and they must set up a playing surface (see Sections 2.2, 2.3, and 2.4).

2.1 SCALE

To resolve actions for ships at sea a GM must choose to use one of the following types of turns/scales:

- *Tactical Turn/Scale*—Tactical Turns are used to resolve actions mainly during ship-to-ship combat and encounters.
- *Strategic Turn/Scale*—Strategic Turns are used to resolve campaign movement and other times when a short turn is not necessary.
- *War Law Turn/Scale*—This type of turn/scale is used to resolve battles that have *WL* units and *SeL* ships on the same playing surface.

TACTICAL TURNS (2.1.1)

Each Tactical Turn is considered to last two minutes (i.e., the same as a *WL* Standard Game turn). Distance is measured in increments (i.e., hexes) of approximately 200 feet per $\frac{5}{8}$ " hex or approximately 60 meters per 1.56 centimeter hex.

We use 200' hexes instead of the 100' hexes used in *War Law* because in ship-to-ship combats the larger scale is more flexible for movement purposes. In addition, at this scale one knot of speed is approximately equal to one movement point. See Section 2.1.3 for suggestions for handling battles involving *WL* units and *SeL* ships.

During boarding actions or if two ships are close enough for the crews to shoot arrows at each other, a GM may wish to further break the Tactical Turn into *RM* combat rounds (10 seconds). In addition, he may also wish to use 10' hexes for the purposes of that specific engagement.

SCALE SUMMARY

Turn Length—120 seconds per turn (12 *RM* rounds)

Hex Size — 1 hex = $\frac{5}{8}$ " = 200 ft ($\approx 1/3840$ scale)

1 hex = 1.56cm = 60m ($\approx 1/3840$ scale)

Note: Unless specific scale miniatures are used, the scale factors above can be varied without significantly affecting most of the rules. Try to keep the changes proportional for both factors (turn length and hex size).

STRATEGIC TURNS (2.1.2)

For Strategic Turns we suggest a period of four hours of game time per turn. If hexes are used, distance can be measured in increments of approximately 24,000 feet per $\frac{5}{8}$ " hex. This is roughly equivalent to 4 nautical miles (1 nautical mile is equal to 6080 feet) or approximately 4.5 normal miles.

The movement rates for *SeL* ships are normally given in hexes and thus are applicable for both Strategic Turns and Tactical Turns. Thus, a ship with a movement rate of 8 can move 1600' during a Tactical Turn and 36 miles (32 nautical miles) during a Strategic Turn. This might seem slow to some, but keep in mind that the maximum speed of sailing ships of the type being considered here was only 11-15 mph! Please note that all these figures are rough approximations made for game purposes only.

SCALE SUMMARY

Turn Length—4 hours per turn

Hex Size — 1 hex = $\frac{5}{8}$ " = 24000' \approx 4 nautical mi \approx 4.5 mi
1 hex = 1.56cm \approx 7315m \approx 7.3km

Note: *The scale factors above can be varied without significantly affecting most of the rules. Try to keep the changes proportional for both factors (turn length and hex size).*

WAR LAW TURNS (2.1.3)

If a GM needs to resolve a battle in which *WL* units and *SeL* ships, use the *WL* Standard Game turn length (2 minutes) and distance scale (1 hex = 100 feet). The *SeL* rules can then be used by multiplying all movement stats and ranges by two.

2.2 TERRAIN

For the purposes of ships, each hex on the playing surface has one of three "terrain type:" all sea, coastal, or land. Normally, ships can freely enter all sea hexes, ships can never enter land hexes, and ships may enter coastal hexes with certain special restrictions. See Section 2.3.2 for guidelines on how to set up a playing surface.

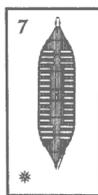
COASTAL HEXES

Hexes with a coastline running through them always require navigational maneuvers if entered. For information on beaching, docking, landing, and running aground, see Section 10.3.

2.3 USING THE DISPLAY SYSTEM IN SEA LAW

THE PLAYING PIECES (2.3.1)

In *Sea Law*, each ship and its combat status are represented by a Ship counter, a section of the Ship Record Sheet (T-5.1), and by various Ship State Counters.



Ship Counter



Sail/Oar Status Counters
(see Section 3.1.4)



Grappled Counter
(see Section 6.5)

THE PLAYING SURFACE (2.3.2)

The playing surface for *Sea Law* Consists of the following components:

The Hex-sheets — 16"x20" hex sheets.

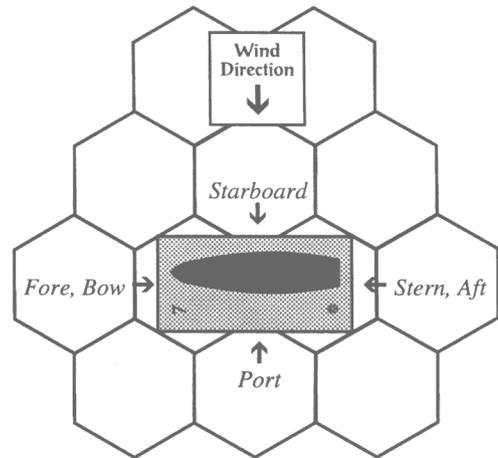
Terrain Counters — Counters representing Coastal hexes.

In order to set up a playing surface, just use the hex-sheets called for and indicate coastal and land hexes with the appropriate counters and sheets of paper (for the land areas). Players and GMs should feel free to make their own battle maps that represents the specific bodies of water that exist in their campaign worlds. You can also use *War Law* terrain sheets to represent coastal and land hexes.

The half-hexes on the edge of the playing surface are considered to be full hexes.

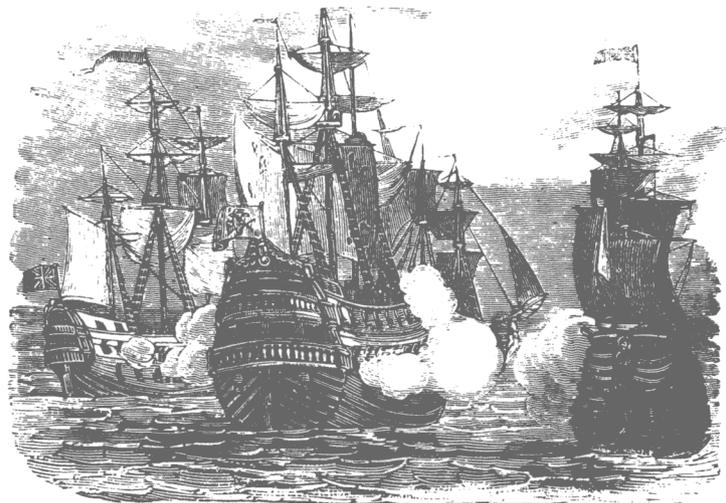
The maps must be oriented so that the wind direction (see Section 2.4) corresponds to a hexside (i.e., it points toward the corner of a hex). You can use the Wind Direction counter for this purpose.

Each ship counter occupies two hexes as shown below.



FRIENDLY EDGES OF THE PLAYING SURFACE

Each side must also have a "friendly edge of the playing surface" (i.e., a direction that its units consider to be "towards friendly territory").



2.4 WEATHER

At the start of each Strategic Turn, the GM should roll on the Weather Table T-4.1 and then on the Sea State Table T-4.2 applying all applicable modifiers (these charts are also reproduced in Part VIII for quick reference). This will give both the wind condition, wind direction, and the sea state for the current Strategic Turn. The wind condition has a significant effect on ships using sails for all or part of their movement power (see Section 3.1.2). Sea conditions, on the other hand, effect all ships equally.

Wind direction is abstracted in *Sea Law*—there are only six directions used: north, northwest, southwest, south, southeast, and northeast. Because a hex has six sides, this enables wind shifts during tactical and strategic movement without having to reorient the playing surface. If your situation calls for a wind directly from the east or west (or for more precise wind directions like east-northeast), you can orient the playing surface so that a hex side corresponds to the actual wind direction.

This table is geared towards ICE's *Shadow World*. GMs using another setting should use it as an example of how to go about creating their own tables or modifying the existing one. In brief, areas that are especially prone to storms or high winds, due to natural or unnatural conditions, have positive modifiers, usually from +5 to +20. Likewise, areas that are particularly calm or free from storms have a negative modifier.



USING THE TABLE

First, one 1-100 roll is made, applying modifiers for the appropriate ocean or sea, the time of year, and any modifier indicated by the previous weather roll. This modified roll should then be used to reference Table T-4.1. Then a second roll is made on the Sea State Table T-4.2 and modified by the Sea State Mod acquired by the first roll.

After determining the weather and sea state for the turn, a 1-8 roll (roll 1-10 and ignore 9's and 10's) is made to determine the wind direction.

INFLUENCE OF OCEANS AND TIME OF YEAR

GMs should note that these rolls are influenced by the ocean occupied by the ship being rolled for. This indicates the great variety of weather patterns found on Kulthea. Some oceans are noted for the violence of their storms, while others are as calm as glass much of the year. GMs designing their own weather tables should use these as guides, keeping in mind that weather changes should never be too dramatic. It isn't likely that the weather would change in four hours from perfect calm to a hurricane unless the ocean or world is noted for the violence of its weather.

Example: *It is the start of the first Strategic Turn of a GM's great nautical adventure. The PCs are aboard their ship (the Seasick Goat) and are ready to set sail. Taking his D100s firmly in hand, the GM makes his first roll and consults the Weather Table T-4.1. The roll was a 62, but since the PCs are sailing on the Dom Usuiv (a body of water) the GM must add 5 to the roll, giving her a 67. It is summer, so there are no other modifications to the roll. A 67 indicates is "Some clouds, Light Winds," a wind velocity of 16-20 mph, Moderate wind conditions, +0 to the next weather roll, +0 to the Sea State roll, and no special effects. Since the roll was on the lower end of its range, the GM opts for a base wind of 16 mph.*

The GM now rolls on the Sea State Table T-4.2 with a +0 modification, the roll is 43 which gives smooth to fairly rough seas, with no special modifications to movement. Finally, a D6 roll of 4 indicates that the wind is from the South. On subsequent strategic turns, the D6 roll will determine if the wind shifts.

T-4.1 • WEATHER TABLE

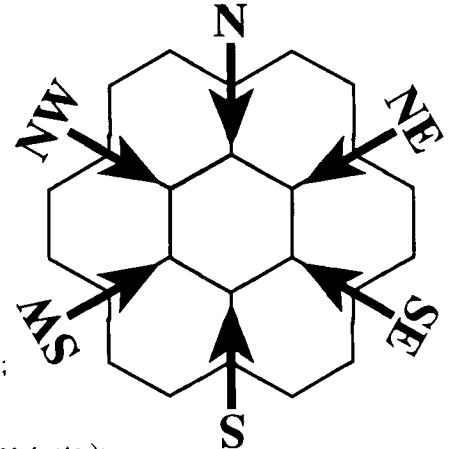
Roll	Result	Wind Velocity	Wind Condition	Mod to Next Roll	Mod to Sea State Roll	Special Effects
99-100	Calm	0-1 mph	None	+10	+30	Becalmed; No sail movement
86-98	Clear, Light Breeze	1-10 mph	Light	+10	+20	None
76-85	Some Clouds, Light Winds	11-15 mph	Light	+0	+10	None
66-75	Some Clouds, Good Breeze	16-20 mph	Moderate	+0	+0	None
46-65	Cloudy, 30% Chance of light rain	21-30 mph	Moderate	-10	-5	None
31-45	Heavy Overcast, 50% Chance of Rain	31-35 mph	Moderate	-15	-10	None
21-30	75% Chance of Light Rain Squall	36-40 mph	Strong	-15	-15	None
16-20	Medium Rains, Winds Picking Up	41-45 mph	Strong	-20	-20	None
11-15	Moderate Gale, Heavy Rains	46-50 mph	Strong	-10	-30	-1 MP for all ships
06-10	Fresh Gale, Seas Getting Rougher	51-65 mph	Strong	-10	-40	-2 MP for all ships
(-49)-05 *	Strong Gale, Lower Sails	66+ mph	Strong	-5	-50	-3 MP for all ships
(-75-50) *	Whole Gale, Could Build to a Hurricane	71+ mph	Strong	-5	-60	-4 MP for all ships
-(100-76) *	Tropical Storm, Find a Port	76+ mph	Strong	+0	-75	-5 MP for all ships
-(150-101) *	Hurricane, Pray to Your Gods	80+ mph	Strong	+0	-100	-6 MP for all ships

*—Once one of the negative results occurs (all rolls are open-ended down), weather is not re-rolled for 1-10 strategic turns.

†—Certain oceans carry the risk of encountering a whirlpool. The chance is 15% per strategic turn (not cumulative) a ship plies its waters. See Part VII for more concerning these whirlpools.

MODIFIERS:

Location	Modifier	Time of Year	Modifier
Malvin Tesea	+0	Summer	-0
Fárok Tesea †	-20	Fall	-5
Dom Usuiv	+5	Winter	-20
Tairken Usuiv †	-15	Spring	-5
Thròk Tesea †	+0		
Kemm Usuiv	+10		
Hulkanen Arûs	-10		
Loorn Tesea	+5		
Kiskaa Arûs	+0		



WIND DIRECTION ROLL:

On the first of a series of strategic turns, Roll 1D6: 1=North; 2=Northeast; 3=Southeast; 4=South; 5=Southwest; 6=Northwest.

On each subsequent strategic turn, roll 1D6: 1-4 = no wind change;

5 = wind “shifts one” clockwise (i.e., from north to northeast, from northeast to southeast, etc.);

6 = wind “shifts one” counterclockwise (i.e., from north to northwest, from northwest to southwest, etc.).

T-4.2 • SEA STATE TABLE

Roll Range	Result
100-31	Smooth to fairly rough; no special modifications
30-21	Rough, some waves of 4-8 feet; galleys at 2/3 maximum speed
20-11	Getting rougher; Galleys at 1/2 maximum speed, sailing ships at 2/3
10(-49)	High waves and spray; Galleys at 1/3, sailing ships at 1/2
(-75-50)	Very high waves; Galleys capsize, sailing ships at 1/3
-(100-76)	Rolling, high waves (30-45'); sailing ships begin taking water.
-(150-101)	Almost 0 visibility, waves of over 45'; sailing ships have 25-60% (depending on size) of capsizing.

3.0 SHIPS AND CREW

3.1 SHIP STATS

Each ship has a number of statistics (i.e., stats) that describe its capabilities. These stats are classified as Physical Stats, Movement Stats, and Combat Stats.

PHYSICAL STATS (3.1.1)

Each ship has a number of statistics that are based on its physical structure. These stats are not often used during combat situations, but can be useful in strategic and role playing situations.

This section provides a brief description for each statistic. Section 12.0 provides some statistics for a variety of sample ships (see Tables T-4.6 and T-4.7). Section 11.0 provide guidelines for determining these statistics for your own *RM* ships.

Ship Class	UC
Size	Sz
Displacement	Ds
Cargo Capacity	CC
Length	Lg
Beam	Be
Draft	Dr
Freeboard	Fb
Decks	De
Number of Masts	NM
Banks of Oars	BO
Rigging Type	RT
Steering Type	ST
# of Seamen	Sm
# of Oarsmen	Om
# of Marines (i.e., fighters)	Ma

SHIP CLASS

Each ship has a Unit Class that reflects its general ship type. Some common ship classes include: triremes, galleys, caravels, cutters, sloops, frigates, etc.

SIZE

A ship's Size stat is a general indicator of its size relative to other ships. The size categories are: Tiny, Small, Medium, Large, and Very Large.

DISPLACEMENT

This stat is equal to the weight of water (in tons) displaced by the ship. This figure includes the weight of the hull, masts, anchors, sails, and other ship equipment. It also includes the weight of the typical crew and cargo.

CARGO CAPACITY

The ship's cargo capacity is given in tons. Passengers will use part of this figure, if there are any on board. Passengers are any non-crew occupants of the ship, and a ship can usually carry 3-8 passengers depending on how crowded their living conditions are on board. For example, slaves are usually packed into crowded holds, while important, paying passengers will be given even better quarters than the crew.

LENGTH

This stat is the ship's center length (in feet) at its waterline. Most ships will be longer at deck level.

BEAM

This stat is the ship's center width (in feet) at its waterline. Many ships will be wider at deck level.

DRAFT

This stat is the depth of water (in feet) from the ship's waterline to its keel (i.e., bottom). This is only an average value since a ship's draft will vary with the load (i.e., cargo) that it carries.

FREEBOARD

A ship's freeboard is the height (in feet) of its main deck (gunwale for an undecked ship) above its waterline. This stat is useful for gaming out melee situations.

DECKS

The main types of decks indicated include: the main deck (if any), the Fore Deck (usually a raised deck in the front of the ship), and the Aft Deck (usually a raised deck in the rear of the ship). In the absence of these decks, codes indicate a variety of special decks:

Bilges Decked	BD
Small Platform	SP
Light Fighting Platform	LFP

NUMBER OF MASTS

This is the number of vertical main masts on the ship.

BANKS OF OARS

This is the number of banks of oars on the ship.

RIGGING TYPE

This is the standard type of rigging (i.e., sail type and arrangement) used on the ship. See Section 1.4 for illustrations of these rigging types. The general classifications used are:

Square Sail	Sq
Lateen Sail	La
Fore & Aft Rigged	FR
Lateen Rigged	LR
Square Rigged	SR

STEERING TYPE

This is the standard type of steering used on the ship. The general classifications used are:

Side mounted Oar	SO
Rudder	Ru

OF SEAMEN / OARSMEN / MARINES

These stats are the number seamen, oarsmen, and marine (i.e., fighters) that are normally on the ship. Values in parentheses indicate optional values. Crews are assumed to be "regular" (see Section 3.2) unless a GM or scenario specifies otherwise.

HISTORICAL/TECHNOLOGICAL CLASSIFICATION (HTC)

Each ship has one of the following four historical/technological classifications (see Section 3.4 for a complete explanation). A ship's HTC can affect its movement options, so this stat is included with the Movement Stats in Tables T-4.6 and T-4.7.

Galley	G
Primitive Sailing Ship	P
Galleon	Ga
Advanced Design	A

MOVEMENT STATS (3.1.2)

Each ship has a number of statistics that are based on its movement capabilities. This section provides a brief description for each statistic. Section 12.0 and Tables T-4.6 and T-4.7 provide some statistics for a variety of sample ships. Section 11.0 provide guidelines for determining these statistics for your own *RM* ships.

Many of these stats are given in terms of movement points, MPs (see Section 5.0); a movement point is roughly equivalent to one knot of speed. A knot is "one nautical mile per hour" or 6080 feet per hour.

Each MP allows a vessel to move one hex during either Tactical or Strategic turns. Thus, a ship that has 10 MPs (a speed of 10 knots) may move a maximum of 45 miles or 40 nautical miles during a Strategic Turn **and** up to 2000' during a Tactical Turn.

Sail Movement Profile in Light Winds	MPL
Sail Movement Profile in Moderate Winds	MPM
Sail Movement Profile in Strong Winds	MPS
Full Sail Bonus	FSB
Full Sail Failure	FSF
Sail Turn Limit	STL
Cruise Oared Movement Points	CMP
Battle Oared Movement Points	BMP
Ramming Oared Movement Points	RMP

SAIL MOVEMENT PROFILES

Each ship has a movement speed under sail that can be determined by referring to its movement profiles, the wind conditions, and the ship's sail status. More about ship speeds can be found in the section concerning ship construction (Section 11.0) and the pre-generated ship tables (Tables T-4.6 and T-4.7).

Each sailing ship has three Sail Movement Profiles based upon the wind conditions: light, moderate, or strong. Each movement profile has three sets of movement points (MPs) available based upon the ship's attitude to the wind:

- Attitude A is heading at up to a 60° angle from the direction that the wind is blowing (i.e., broad reaching and running).
- Attitude C is heading at up to a 60° angle from directly into the wind (i.e., close reaching and beating).
- Attitude B is between attitudes A and C—heading between a 60° angle from directly into the wind **and** a 60° angle from the direction that the wind is blowing (i.e., beam reaching).

Movement Profiles are a game abstraction of a ship's performance (i.e., maximum speed) in relation to the angle of the wind striking her hull and sails (if any). The following diagram gives a broader idea of actual sailing attitudes and terminology.

FULL SAIL BONUS & FAILURE

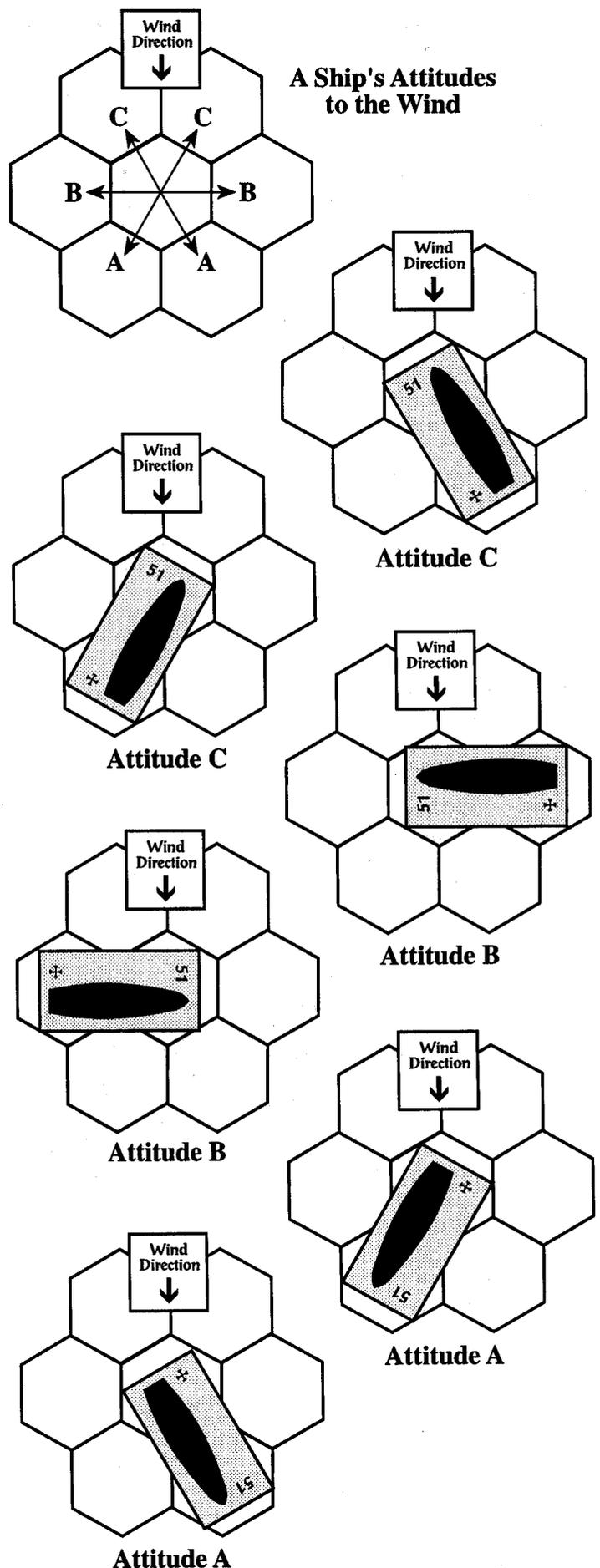
Each ship under sail may attempt to move faster than normally allowed in moderate and strong winds. These two stats indicated how much faster and the chance of failure of sails and rigging. The failure chance represents the danger caused by the extra strain on the rigging and sails. See Section 5.1.2 for details.

SAIL TURN LIMIT

Each ship under sail has a limit on the number of turns it can make during a given movement phase (see Section 5.2.3).

OARED MOVEMENT POINTS

Each ship with oars (i.e., rowing capacity) has three different movement speeds: Cruise speed, Battle speed, and Ramming speed. These movement speeds are given in terms of Movement Points (MPs). Each speed has certain restrictions and effects, see Section 5.2.



COMBAT STATS (3.1.3)

Each ship has a number of statistics that are based on its combat capabilities.

Offensive Bonus	OB
Defensive Bonus	DB
Armor Type	AT
Ram Type & Bonus	RTB
Hull Points	HP
Rigging Points	SP
Oar Points	OP
Artillery & Special Equipment	SE

This section provides a brief description for each statistic. Section 12.0 provides some statistics for a variety of sample ships. Section 11.0 provide guidelines for determining the statistics for your own *RM* ships.

OFFENSIVE BONUS

Each ship in *Sea Law* has an Offensive Bonus. This OB is an abstraction based on the size and stability of the ship, and is a reflection of how good a gun platform the ship makes. The larger a ship, and the broader its deck, the more stable it is and the easier it is to aim weapons mounted on that deck. Of course, a larger ship is easier to hit, which is why ships with high OBs tend to have low DBs.

This is the ship's general Offensive Bonus for artillery attacks, ramming attacks, and grappling attacks. Specific attacks may have special individual OBs which differ from this general OB.

DEFENSIVE BONUS

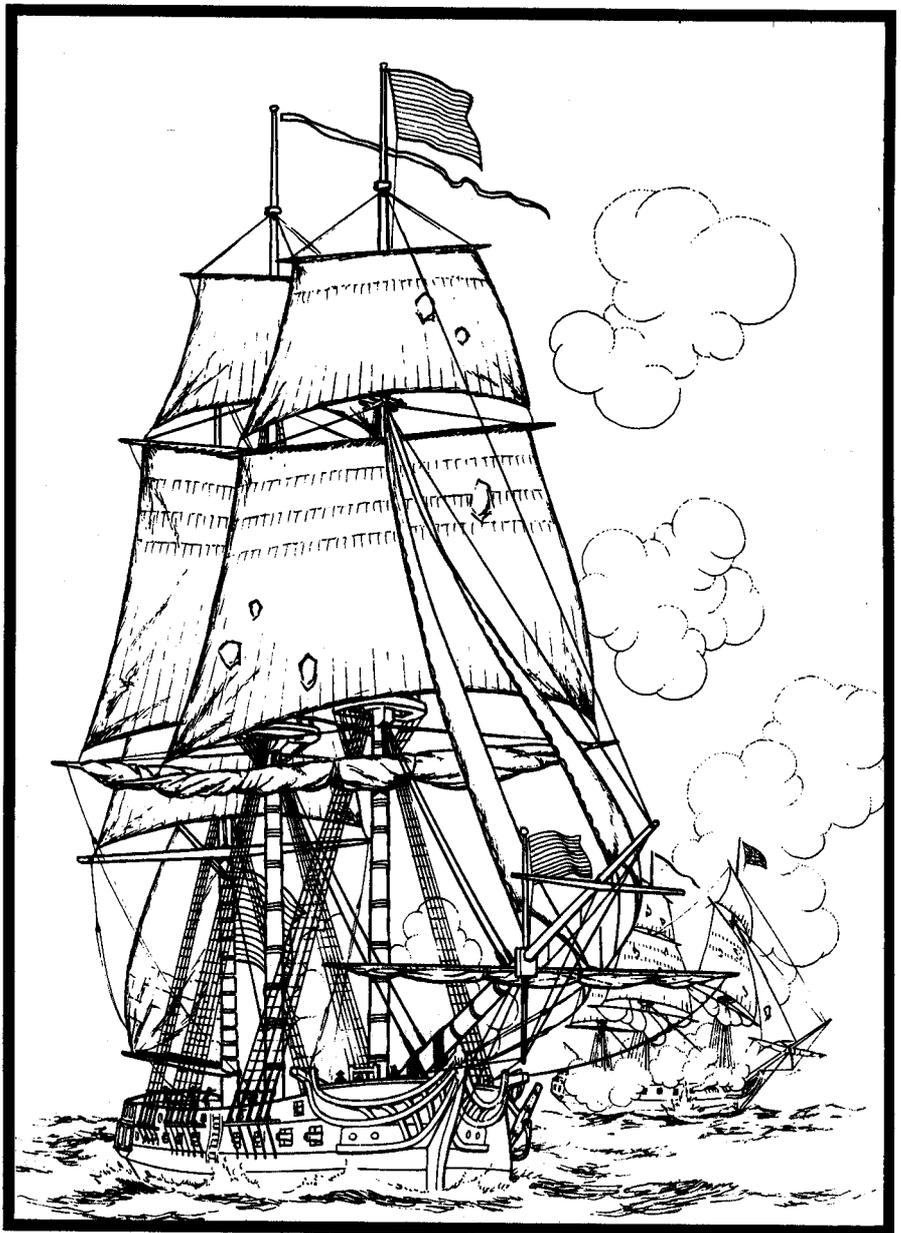
This is a measure of how difficult it is to hit a ship with missile fire, ramming, and grappling. It is based off both the size and general maneuverability of the ship. As noted above, ships with high DBs tend to have low OBs, and vice versa.

ARMOR TYPE

The Armor Type (AT) of ships in *Sea Law* is based on the material they are constructed with. In most cases this is wood, and the type of wood determines the AT. A ship made out of any other material (stone, iron, etc.) is considered to fall into one exceptional AT. ATs in *Sea Law* are used in the same way they are used in the rest of *Rolemaster*. A brief breakdown of ship ATs follows.

AT	Material
W1	Pine.
W2	Teak.
W3	Oak.
W4	Windak (Aged Oak in a non-Kulthea setting).
S1	Hadrock (or any exceptionally hard wood in a non-Kulthea setting) or lesser shore defenses (often soft stone or earth).
S2	Special non-wood material used in ship construction or standard stone shore defenses.
S3	Special non-wood material used in ship construction or special stone shore defenses.

Please note that all monsters in Sections 13.0 and 14.0 have *SeL* ATs assigned to them. GMs wishing to design their own monsters are encouraged to use these examples when assigning ATs to their



creations. As a general rule, unless the creature has an exceptionally strong hide or some sort of natural armor, AT W1 or W2 should be considered the rule.

RAM TYPE

This is the ship's bow type for the purposes of ramming or sheering another ship. The three classifications are:

- None — A normal reinforced bow.
- Ram — A pointed and often armored protuberance at or below the waterline.
- Spur — A ram above the waterline that can be especially damaging to oars in a sheering attack (see Section 6.3).

HULL, RIGGING, AND OAR POINTS

Hull points represent the damage that the ship can take before it becomes un-sailable and begins to sink. Rigging points represent the damage that the ship's sails can take before their operation is hindered or eliminated. Oar points represent the damage that the ship's oars can take before their operation is hindered or eliminated.

SEAMEN, OARSMEN, AND MARINE POINTS

See Section 3.2.

ARTILLERY & SPECIAL EQUIPMENT

Artillery includes the large missile weapons that can fire from the ship. In most fantasy settings, these are usually limited to ballistae, mangonels, and light catapults. However, primitive cannon may be included in some settings.

Special equipment is merely a listing of special or unusual equipment carried by the ship. Examples include: towers, Greek Fire, fire pots, corvi, iron hands, etc. (see Section 6.9).

SAIL/OAR STATUS (3.1.4)

A ship's sail and/or oar status is either:

No Sails & No Oars	None
Full Sails (i.e., normal sails)	FSa
Battle Sails	BSa
Oars	Oars
Full Sails & Oars	FSO
Battle Sails & Oars	BSo

Normally, this status is determined by the ship's captain; however, this status can be effected by combat damage and other factors (see Part V—Combat for details). The half inch counters can be used to mark the sail/oar status of ships on the playing surface.

None—If a ship has her sail/oar state designated as *None* she can only drift with the winds and currents. If there is no wind a ship with pure sail power is also considered at *None* status (this is called being *Becalmed*) and must be towed by her ship's boats if any movement is desired. If the ship is powered only by sails but they are not being used (due perhaps to combat damage) and there is a wind her base movement is considered to be one in combat turns and two in strategic turns (this simulates the effect of wind on the ship's hull), but only in the direction the wind is blowing.

Full Sails—A ship in the *Full Sails* state has the standard Sail Movement Profiles as provided in the ship stats.

Battle Sails—The *Battle Sails* state represents the practice of using less rigging and sails while in battle. This practice reduced the danger of rigging damage and its potential severity, along with freeing up sailors to man the ship's weapons. Only ships with the following Rigging Types may use the Battle Sail state: *Fore & Aft Rigged*, *Lateen Rigged*, and *Square Rigged*. A ship in the *Battle Sails* state must reduce its MPs by half of its normal base MPs (round down), but all normal damage to its sails are halved (round up) and all sail criticals are reduced by one degree of severity (ignore 'A' crits).

Oars—A ship in the *Oars* state may only move using oars. Depending upon its oarsmen's current exhaustion state (see Table T-4.4), the ship may use its cruise, battle, or ramming MPs.

Full Sail & Oars—A ship in the *Full Sails & Oars* state may increase its base MPs by half of its Cruise Oar MPs (round up). This state may only be used in Light or Moderate wind conditions. Treat the oarsmen as if they are using battle movement.

Battle Sail & Oars—A ship in the *Battle Sails & Oars* state may increase its Battle Sail MPs by half of its Cruise Oar MPs (round up). This state may only be used in Light or Moderate wind conditions. Treat the oarsmen as if they are using battle movement.

DAMAGE STATUS (3.1.5)

As a battle progresses a ship may take damage that affects its capabilities. This damage is recorded as: hull damage, rigging damage, oar damage, seaman damage, oarsmen damage, marine damage, and weapon damage. Each type of damage has a "damage track" on the Ship Record Sheet T-5.1 (see Section 3.3).

3.2 CREW STATS

Each ship has a number of statistics that are based on its crew capabilities.

Seamen Points	CP
Oarsmen Points	OP
Marine Points	MP
Seamen Quality	SQ
Oarsmen Quality	OQ
Marine Quality	MQ
Oarsmen Exhaustion Points	EP

This section provides a brief description for these statistics. Section 12.0 provides some statistics for a variety of sample ships. Section 11.0 provide guidelines for determining the statistics for your own *RM* ships.

SEAMEN, OARSMEN, AND MARINE POINTS

These points represent the damage that the ship's crew and fighters can take before the operation of the ship and its fighting ability is hindered or eliminated.

SEAMEN, OARSMEN, AND MARINE QUALITY

This stat is an abstract measure of the capabilities of the ship's crew and fighters. The ratings used are: Crack, Elite, Veteran, Regular, Reservists, Green, Poor/Slave. Crews are assumed to be "Regular" unless a GM or scenario specifies otherwise.

OARSMEN EXHAUSTION POINTS

This is the number of exhaustion points (ExP) that the ship's oarsmen have. A crew's Fully Rested ExPs and its Recovery Rate is determined by the Oarsmen Quality stat as indicated in the Crew Quality Chart.

Normally crews use ExPs as Follows:

Cruise Speed	1 ExP every 5 turns
Battle Speed	1 ExP every turn
Ramming Speed	5 ExPs every turn

CREW QUALITY CHART			
Abbr	Quality Rating	Fully Rested ExPs	Recovery Rate
C	Crack	80	1 ExP every 2 turns
E	Elite	65	1 ExP every 3 turns
V	Veteran	50	1 ExP every 4 turns
R	Regular	40	1 ExP every 5 turns
Rv	Reservists	30	1 ExP every 7 turns
G	Green	25	1 ExP every 8 turns
P	Poor/Slave	20	1 ExP every 10 turns



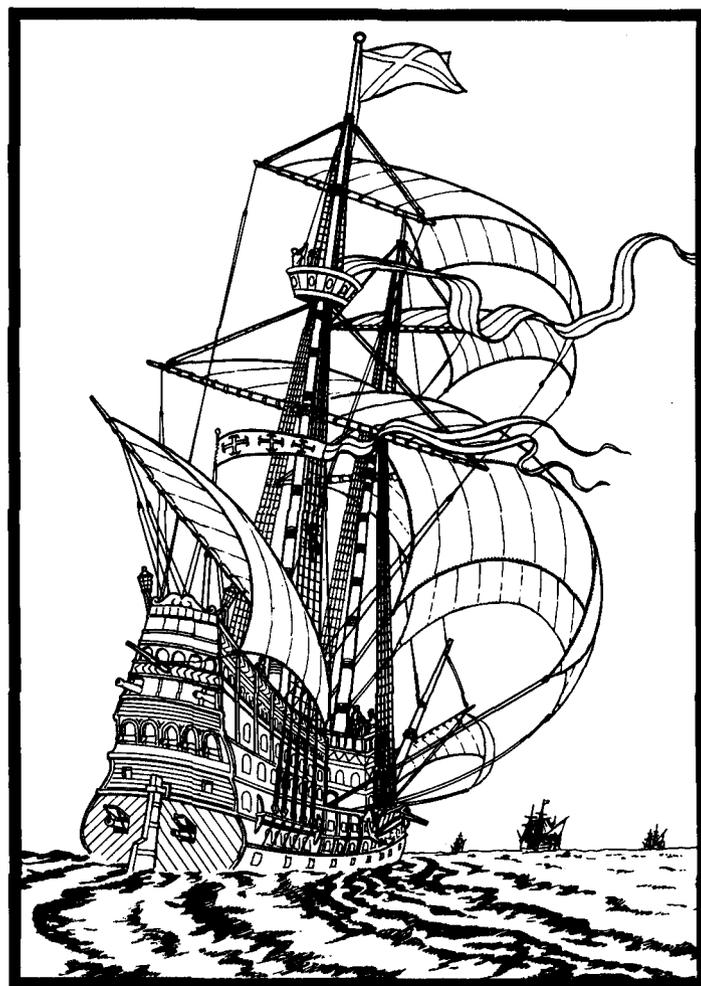
3.4 HISTORICAL/ TECHNOLOGICAL CLASSIFICATION (HTC)

These rules tie in with Section (12.0) concerning sample ship types. Each ship type belongs to a particular historical period, which limits the amount of technology used in its design. This can be due to a number of reasons, such as lack of knowledge of better types of rigging or, as was the case with many galley designs, a lack of need to advance the basic design. This classification (HTC) determines what type of movement a ship can use and, to a limited extent, what type of weapons can be carried and what sort of society would build and use such a ship. GMs are encouraged to take note of the HTC of ships when they are designing their own worlds. After all, a frigate (a high HTC-rated ship) would hardly be found in a society which had just learned how to sail out of sight of land!

ASSIGNING THE HTC

When using Section 12.0 concerning historical ship types, the HTC is determined by the years a particular design was used. For ease of play there are four basic HTCs. The first is Galley, and covers all oared and oar/sail ships built or used before roughly 1200 AD. For example, a Viking longship, a Carthaginian Bireme, and a small general merchant (600 BC-1200 AD) all fit into this HTC. Ships in the Galley HTC are limited in their movement options, as explained in Section 5.1.5. Ships from the later Mediterranean period (1000-1700 AD) are also included in this HTC, due more to limits in their design than any technological shortcomings.

The second HTC covers Primitive Sailing Ships. All of the Non-Viking Atlantic Ships listed in Section 12.0 and other early sailing ships fit into this HTC. The basic requirement for the Primitive Sailing Ship HTC is either a single mast (such as the cogs) or rigging limitations (such as the caravels). Again, this HTC affects how a ship can move (see Section 5.1.5). Please note that some of the older sailing ships (such as the Phoenician merchantman and certain Viking ships) can fit into this HTC at the GM's discretion.



The third HTC is named after its only member; the Galleon HTC. In terms of historical ship design the Galleon marked the transition from slow, ponderous ships such as the cog to more maneuverable ships such as the Nelsonian ships-of-the-line and agile sloops and frigates. This is due to a combination of rigging types and advances in both rigging and ship design. Galleons do not turn well, and respond slowly to course changes, but they are still much superior to the two previous HTCs. In a fantasy world with a similar technological background to our own, this would be the pinnacle of ship design.

The final HTC is Advanced Designs. Frigates, sloops, ships-of-the-line, and advanced merchantmen are all included in this HTC. These ships tend to have more than one mast and the ability to rig studding sails along their hulls to generate more speed. Moveable spars allowing variable sail area (Battle Sails) are also features of these designs. Built to cruise unlimited distances on the open ocean, ships of this HTC are indeed the pinnacle of sailing ship design. In a typical fantasy world these ships would be rare indeed, common only to societies spending most of their lives at sea (such as island nations and those with extensive, long-distance trade routes).

As mentioned above, HTC affects both a ship's allowable movement and sail status, as shown in Section 5.1.5, as well as limiting a ship's weaponry and some other options. GMs should review this material carefully, especially when working ships into their existing campaigns.

PART III

TACTICAL ACTIVITY

The following sections deal with movement, maneuvers, and hostile encounters, whether it be ship vs. ship, or ship vs. monster combat. Any time exact ship positions, movement, or activity is needed, these tactical rules are used. If a ship is simply moving from point A to point B, without hostile encounters or dangerous situations, the strategic rules can be used (see Section 9.0).

Most often in a *Sea Law* campaign, the game will move from a strategic level to a tactical level, and then back again. This happens, as for example, a ship leaves its port and sails uneventfully for a few days. For this, strategic movement is used. When they are attacked by pirates or a sea monster, or encounter a deadly hidden reef, tactical combat and movement rules should be used. Refer to Section 9.0 for guidelines on determining when combat occurs.

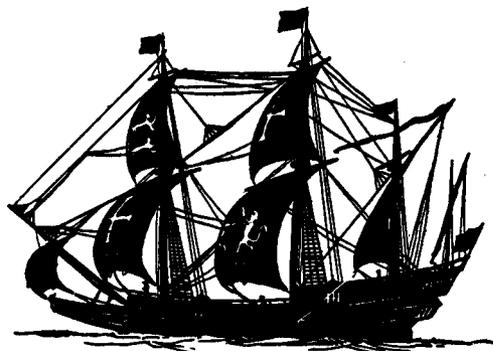
4.0 TACTICAL SEQUENCE OF PLAY

In *Sea Law*, it is assumed that there are only two opposing forces: Side-A and Side-B. This can be easily extended to handle multiple force battles moderated by a GM.

Once the two forces are arrayed on the playing surface and will soon be engaged in combat, play proceeds using the following sequence of phases. This sequence is repeated until the battle is over. A battle ends upon mutual agreement of the two players or when conditions agreed on are met.

Turn Phases

- 1) Recovery Phase
- 2) Order Phase
- 3) Movement Phase
- 4) Grapple Phase
- 5) Missile/Spell Phase
- 6) Melee Phase
- 7) Orientation Phase



4.1 RECOVERY PHASE

During this phase, the following activities are resolved:

- 1) At the beginning of every Strategic Turn (i.e., every 4 hours), a weather and sea state rolls are required (see Section 2.4). If this occurs during a battle, the roll is made during this phase.
- 2) During this phase, all ships that have been reduced to 0 Hull Points or have received a sinking critical are assumed to sink. Each crew member has a chance equal to double his Swimming skill bonus to escape the hulk before it goes under.
- 3) A roll must be made during this phase for each active fire (see Section 7.5).

4.2 ORDER PHASE

During this phase, each side must record the following information (i.e., issue the following orders):

- 1) Each spell user must declare or record the spell(s) to be cast this turn (see Section 7.6). All non-attack spells take effect immediately, including spells that effect movement. Attack spells are resolved during the Missile/Spell Phase.
- 2) Because ship movement is simultaneous, the planned movement (i.e., orders) for each ship must be secretly recorded (i.e., ordered) during this phase. Grappled and/or fouled ships may not move, so no movement may be recorded for them.

4.3 MOVEMENT PHASE

The movement for each ship is resolved during this phase. First, roll for sail failure for each ship using all or part of its full sail bonus (see Section 5.1.2). Then movement is resolved, all resulting collisions (see Section 5.7) and ram attacks (see Section 6.2). At the end of normal movement, sheering attacks (see Section 6.3) are resolved, and then drift movement is resolved for grappled ships, fouled ships, and ships in the “No Sails & No Oars” state (see Sections 3.1.4 and 5.4).

4.4 GRAPPLE PHASE

During this phase, grappling and ungrappling are resolved and boarding actions can be ordered. A grappled ship may not move, it only drifts.

- 1) If two ships end the Movement Phase in adjacent hexes, one or both ships may attempt to grapple each other (see Section 6.5).
- 2) If two ships are grappled after all grappling attempts have been resolved, then one or both ships may attempt to ungrapple (see Section 6.5).
- 3) If two ships are fouled **and/or** grappled after all ungrappling attempts are resolved, then one or both ships may order a boarding action (see Section 6.4). Boarding actions are resolved during the Melee Phase.

4.5 MISSILE/SPELL PHASE

All missile attacks and spell attacks are resolved simultaneously during this phase (see Section 6.1).

4.6 MELEE PHASE

All boarding actions ordered during the Grapple Phase are resolved during this phase (see Section 6.4).

Note: *You may want to use the optional rules (Section 8.0) which utilize normal **RM** combat rounds (1 Round = 10 seconds) to resolve melee—there are 12 **RM** rounds in a Melee Phase.*

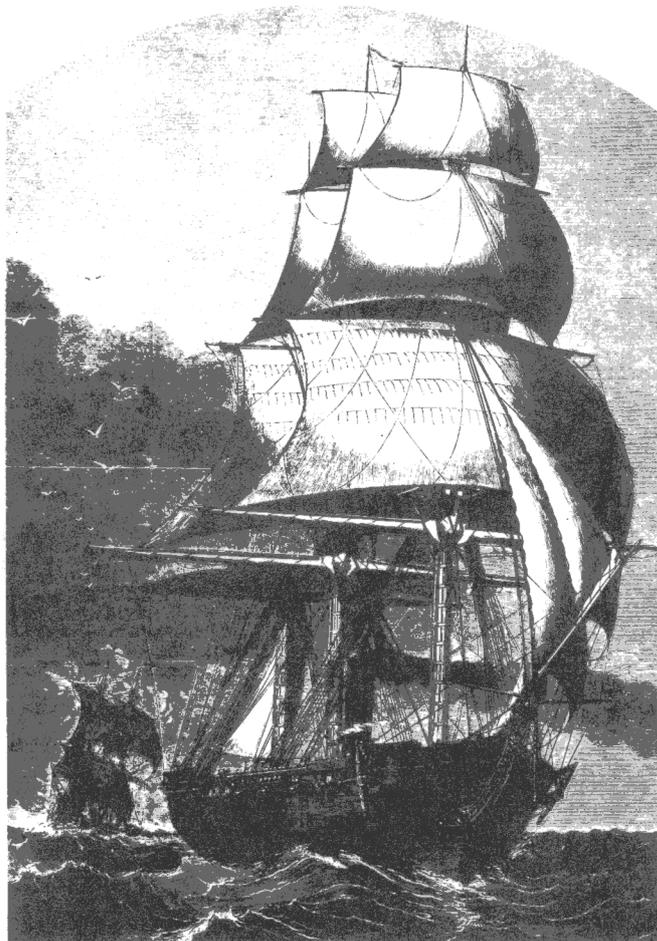
4.7 ORIENTATION PHASE

A number of different activities are resolved during the Orientation Phase.

- 1) In a GM moderated battle, orientation rolls may be required for any captain who has his vision of the battle obscured (due either to smoke, fog, or some sort of magical attack). This roll is a Static Maneuver of a difficulty determined by the GM. Failure requires the GM to restrict the ship’s actions during the following turn.
- 2) Each fouled ship may attempt to unfoul itself (see Section 7.3). A fouled ship that fails to unfoul may not move next turn, it will only drift.
- 3) During this phase, each unfouled ship may change its Sail/Oar status (see Section 3.1.4).
- 4) Weapons may be reloaded. Weapons requiring multiple turns for reloading may be partially reloaded (see Section 6.1.2).
- 5) Check morale for each ship with at least 50% casualties and/or that has lost a “leader.” (see Section 7.1).

THE TURN SEQUENCE SUMMARY

- 1) **Recovery Phase**
 - Weather & sea state rolls at beginning of a Strategic Turn.
 - Resolve ship sinkings and crew survival.
 - Roll for active fires.
- 2) **Order Phase**
 - Record spells to be cast and resolve non-attack spells.
 - Record planned ship movement.
- 3) **Movement Phase**
 - Roll for sail failure for all ships using a full sail bonus.
 - Resolve ship movement, collisions, and ram attacks.
 - Resolve sheering attacks and drifting.
- 4) **Grapple Phase**
 - Resolve grappling attempts.
 - Resolve ungrappling attempts.
 - Order boarding actions.
- 5) **Missile/Spell Phase**
 - Resolve all missile attacks and attack spells.
- 6) **Melee Phase**
 - Resolve all boarding actions.
- 7) **Orientation Phase**
 - Resolve orientation rolls.
 - Resolve unfouling attempts.
 - Change Sail/Oar status.
 - Reload and partially reload weapons.
 - Check morale for ships that lost a leader or with 50%+ casualties.



5.0 TACTICAL MOVEMENT

During the Order Phase, each side may order (i.e., plan and record) movement for some, all, or none of its ships (see Sections 4.2 and 5.5). Then during the Movement Phase the movement orders are executed for all ships, one movement point (MP) at a time (Section 5.6).

There are two basic kinds of tactical movement used by the ships discussed in these rules (Section 3.1.4):

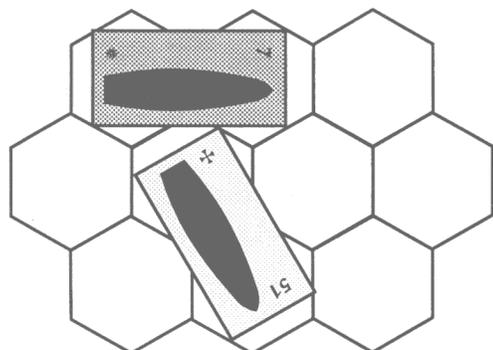
- Sail Movement. This includes movement using Sails & Oars (used by Norse long ships and some Greek ships).
- Oared movement.

Sail movement is the most common among the cultures discussed in Part VI—Campaigns. If GMs have given their campaign a Greek, Roman, or Dark Ages flavor, Oared and Sails & Oars movement will be much more common. This arrangement is also common in many primitive or coastal trading cultures, such as the Vikings and the peoples of the Mediterranean Basin during the period after the fall of Rome to just after the voyage of Columbus.

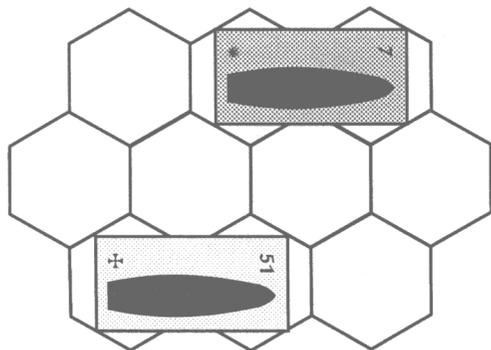
5.1 SAIL MOVEMENT

Basically, a ship using sail movement moves by entering its front hex and expending one MP. Such a ship may turn by expending 2 MPs to move the rear half of its counter 60° (i.e., one hex). The frequency of such turns is limited (Section 5.2.3). Such a ship using sail movement may also use one MP to “Pause” and not move forward or turn (this represents the ship “Backing Sail”).

A ship may use some, none, or all of its available MPs during each Movement Phase.



Starting Positions



Positions after Ship #7 has expended 1 MP and moved forward one hex, and after Ship #51 has expended 2 MPs and turned.

SAIL MOVEMENT SUMMARY

- 1) Determine the current weather and wind velocity/direction (Section 2.4). During most battles this will be constant.
- 2) Calculate the ship's *base MPs* for this turn using the ship's Movement Profile for the current wind conditions and the direction relative to the wind in which the ship starts the turn (see Section 5.1.1).
- 3) Calculate the ship's *available MPs* for this turn. Modify the ship's base MPs by factors such as: the use of battle sails, the use of the full sail bonus, the use of Sails & Oars, weather conditions, and/or combat damage to sails, oars, and/or hull (Section 5.1.2).
- 4) Plan/Order the ship's movement during the Order Phase (Section 4.2).
- 5) Execute the ship's movement during the Movement Phase. The ship's movement may be affected by failure in using the full sail bonus (Section 3.1.2) or by interacting with other ships (i.e., collisions, ramming, etc.), Section 5.7 and 5.8.

BASE MOVEMENT POINTS (5.1.1)

A ship's base MPs available for a turn is determined by its Movement Profile for the current wind conditions (i.e., light, moderate, or strong) and the direction relative to the wind (i.e., A, B, or C) in which the ship starts the turn.

For a sailing vessel the wind direction has a great impact on its speed based on its Movement Profile. The wind direction is determined by the relative facing of the ship's bow to the wind direction (Section 2.4).

Once the wind direction is determined, the ship's Movement Profile will determine its base MPs.

Example: A typical movement profile (*Large Carrack in a strong wind*) would be: A-9; B-6; C-3. This means that the ship would have 9 MPs at attitude A (broad reaching). Similarly, the ship would have 6 MPs at attitude B and 3 MPs at attitude C.

AVAILABLE MPS (5.1.2)

To determine a ship's available MPs for a turn, the ship's base MPs are modified by a variety of factors.

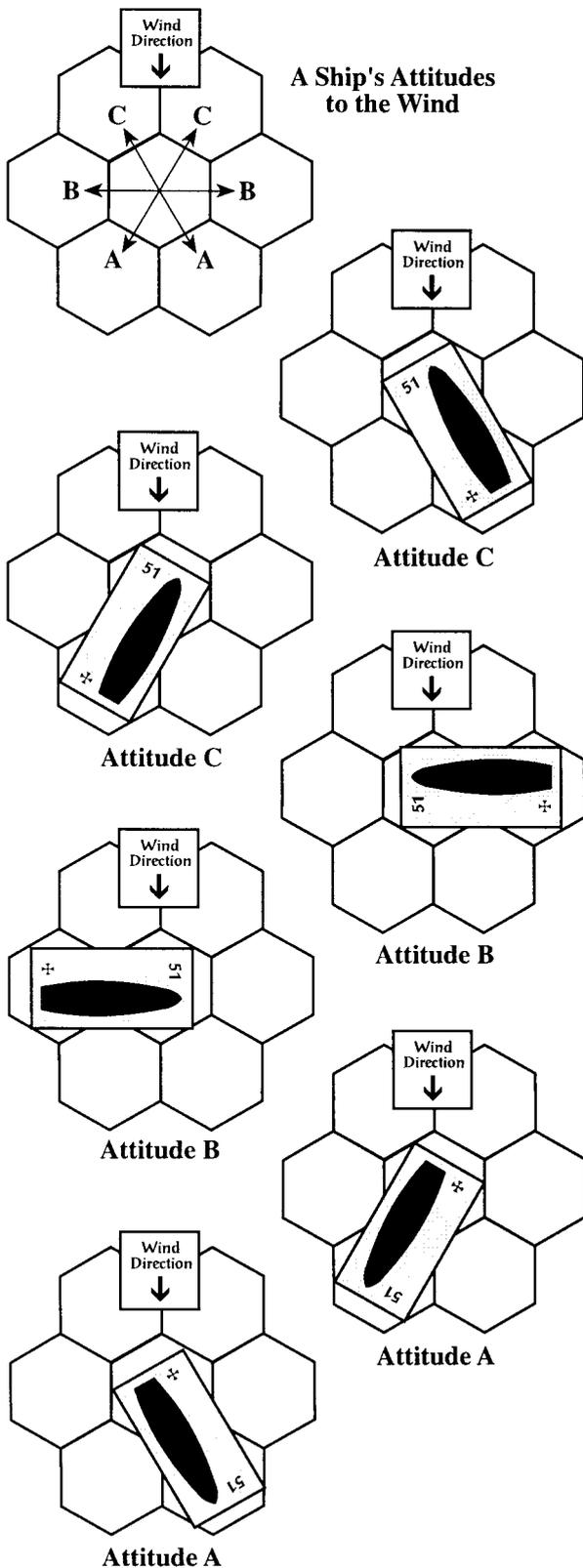
Available MPs =

Base MPs

- Battle Sail Modifier, half of Base MPs (round down)
- Weather Modifier, based on harsh sea and wind state
- Damage Modifiers, based on damage taken by ship & crew
- + Sails & Oars Modifier, half of Cruise Oar MPs (round up)
- + Full Sail Bonus, requires failure roll during Movement Phase

BATTLE SAIL MODIFIER

Using Battle Sails (Section 3.1.4) represents the practice of using less rigging and sails while in battle. This practice reduced the danger of rigging damage and its potential severity. Only ships with the following Rigging Types may use the Battle Sail state: Fore & Aft Rigged, Lateen Rigged, and Square Rigged. A ship in the *Battle Sails* state must reduce its MPs by half of its normal base MPs (round down), but all normal damage to its sails are halved (round up) and all sail criticals are reduced by one degree of severity (ignore 'A' criticals).



A Ship's Attitudes to the Wind

WEATHER MODIFIER

Unusually harsh weather (Section 2.4) will reduce the MPs available to ships. Table T-4.1 provides the standard weather modifiers for a ship's available MPs.

Example: *The Large Carrack in the examples above has a movement profile of A-9, B-6, C-3 in a strong wind. In moderate gale (-1 modifier to MPs, see Table T-4.1), its available MPs would be A-8, B-5, C-2; and in a strong gale (-3 modifier to MPs, see Table T-4.1), its available MPs would be A-6, B-3, C-0.*

DAMAGE MODIFIERS

Damage to rigging, hull, and crew will reduce the MPs available to a ship. The Damage Effects Table T-4.4 provides the standard damage modifiers for a ship's available MPs.

Example: *The Large Carrack in the examples above has a movement profile of A-9, B-6, C-3 in a strong wind. If it has lost one rigging section (i.e., taken 25% of its rigging points), it loses 25% of its movement points (round down for the loss) and may not use full sails—the modified movement profile is A-7, B-5, C-2. For two lost rigging sections, the resulting movement profile is A-5, B-3, C-2; for three lost rigging sections, it is A-2, B-1, C-1; and for four lost rigging sections, it is A-0, B-0, C-0.*

SAILS & OARS MODIFIER

A ship in one of the Sails & Oars states may increase its MPs by half of its Cruise Oared MPs (round up). This state may only be used in Light or Moderate wind conditions. Treat the oarsmen as if they are using battle movement.

Example: *An "Advance HTC" Galley has a movement profile of A-5, B-3, C-2 in a moderate wind and a Cruise Oared MPs stat of 2. Thus, under Full Sails & Oars, its available MPs are A-6, B-4, C-3. Under Battle Sails & Oars, its available MPs are A-4, B-3, C-2.*

FULL SAIL BONUS

Each ship under sail may attempt to move faster than normally allowed in moderate and strong winds. A ship's Full Sail Bonus indicates how much faster it can move, and its Full Sail Failure stat indicates the chance of failure of sails and rigging. The failure chance represents the danger caused by the extra strain on the rigging and sails.

Each turn, a ship's player must decide to use some, none, or all of its Full Sail Bonus. The chance of failure is proportional to how much of the Full Sail Bonus is used. All ships roll for Full Sail Failure at the beginning of the Movement Phase. If a failure occurs, the ship takes a 'B' Rigging—roll on the Rigging Critical Table T-2.2.

Certain ships (including the one used in the example) do not have a Full Sail Bonus. This is based on their HTC (see Section 3.4), and reflects limitations of their rigging, masts, and basic ship design.

Example: *A Small Cutter has a Full Sail Bonus of +2 and a Full Sail Failure of 6. Thus, in moderate or strong winds it could attempt to move 2 extra MPs (failure on 01-06 on 1D100) or 1 extra MP (failure on 01-03).*

Certain ships (including the one used in the example) are not able to use Battle Sails. This is based on their HTC, and reflects limitations of their rigging, masts, and basic ship design. Players should be familiar with their ship's HTC before beginning play.

Example: *A Large Carrack has a movement profile of A-9, B-6, C-3 in a strong wind. If Battle Sails are used, its base MPs of 9 in attitude A would be reduced by 4 (half of 9 rounded down) to 5 MPs. Thus, its available MPs would be A-5, B-3, C-2 due to using Battle Sails.*

TURNING (5.1.3)

A ship using sail movement may turn by expending 2 MPs to move the rear half of its counter 60° (i.e., one hex). The frequency of such turns is limited (Section 5.1.4).

A ship that starts a turn with 0 MPs may still turn once.

LIMITATIONS (5.1.4)

A ship uses 1 MP to move ahead and 2 MPs to turn, but there are several limitations placed upon this process.

CONSECUTIVE TURNS

A ship using sail movement may only turn once per hex in a given Movement Phase (i.e., a ship must move forward at least one hex between turns).

TURN LIMITS

During each Movement Phase, a ship using sail movement may not turn more times than its Sail Turn Limit Stat.

Example: *A Small Cutter has a Sail Turn Limit of 3, so it may only make 3 turns during each Movement Phase.*

PAUSE LIMITS

After using one MP to Pause, a ship using sail movement must move forward at least once before it can Pause again.

MOVEMENT PROFILE LIMITS

A ship's movement profile (modified as indicated in Section 3.1.2) limits the number of consecutive hexes the ship may move in each direction.

Example: *The Viking Long Ship in the examples above has a movement profile of A-9, B-6, C-4 in a strong wind. If such a ship starts the turn in attitude A, it has 9 MPs available for the turn. However, if it turns to attitude B, it may only move 6 hexes in that direction.*

HEADING 'INTO THE WIND'

If a ship is heading in attitude C and then turns to the other attitude C, it has "headed into the wind" and must end all movement for the current Movement Phase immediately.

LIMITS BASED ON HTC (5.1.5)

Galley HTC — A ship with this Historical/Technological Classification (HTC) (see Section 3.4) may not use Battle Sails—its masts and rigging are too limited. Also, such a ship has no Full Sail Bonus.

Primitive Sailing Ship HTC — A ship with this HTC may use Battle Sails, but it takes an extra Turn to change to this status. Such a ship has to physically lower sails instead of just changing spar positions. Also, such a ship has no Full Sail Bonus due to limitations of early square and lateen rigging.

Galleon HTC — A ship with this HTC can use Battle Sails with no restrictions. It can also use its Full Sail Bonus, but it takes them an extra Turn to prepare to use it. Such a ship cannot, however, turn quickly. Instead of using 2 MPs to turn (see 5.1.3), a Galleon HTC ship must use of 3 MPs.

Advanced Design HTC — A ship with this HTC may use both Battle Sails and its Full Sail Bonus with no restrictions.

5.2 OARED MOVEMENT

Basically, a ship using oared movement moves in a manner similar to ships using sail movement. However, oared movement gives a ship more options for turning and reverse movement. The allowed options are (see Section 5.2.3):

Maneuver/Turn	Restrictions	MP Cost
Pause	Cruise & Battle only	1 MP
Forward	All Speeds	1 MP
Turn & Forward	All Speeds	1 MP / 2 MPs
Bow Turn	Cruise only	1 MP
Stern Turn	Cruise only	1 MP
Backward	Cruise only, no Forward	2 MPs

A ship may use some, none, or all of its available MPs during each Movement Phase.

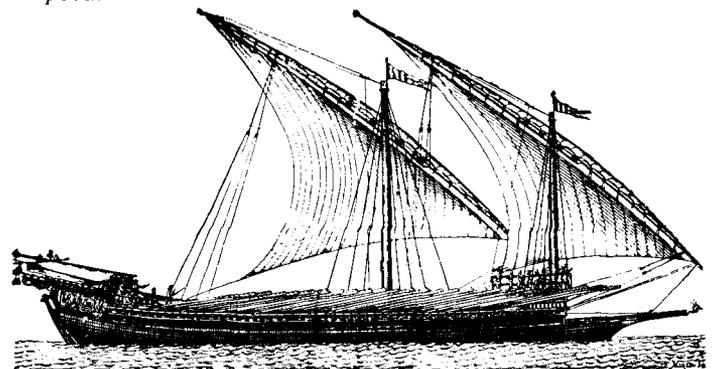
OARED MOVEMENT SUMMARY

- 1) Determine the current weather and wind velocity/direction (Section 2.4). During most battles this will be constant.
- 2) Determine the ship's movement speed (Cruise, Battle, or Ramming) and thus the ship's base MPs (see Section 5.1.2).
- 3) Calculate the ship's *available MPs* for this turn. Modify the ship's base MPs by factors such as: weather conditions and/or combat damage to oars and/or the hull (Section 5.2.2).
- 4) Plan/Order the ship's movement during the Order Phase (Section 4.2).
- 5) Execute the ship's movement during the Movement Phase. The ship's movement may be affected by interacting with other ships (i.e., collisions, ramming, etc.), Sections 5.7 and 5.8.
- 6) Record the one "exhaustion point" (ExP) used if Battle speed was used this turn, and five ExPs if Ramming speed was used. If cruise speed is used, one ExP is used every five turns—the GM or players may decide to ignore this to *simplify play* or they may record turns of cruise speed at the bottom of each ship sheet (marking off one ExP whenever five are recorded).

BASE MOVEMENT POINTS (5.2.1)

A ship's base MPs available for a turn is determined by its movement speed for the current turn (Cruise, Battle, or Ramming). A ship's speed can be changed at the very beginning of a Movement Phase by including the change in the ship's movement orders. A ship may not change from Cruise Speed to Ramming Speed in one turn, it must change from Cruise to Battle one turn and from Battle to Ramming the next turn.

Example: *Typical movement speeds (Greek Bireme) would be: Cruise-3, Battle-5, Ramming-6. This means that the ship would have 3 MPs if at Cruise speed. Similarly, the ship would have 5 MPs at Battle speed and 6 MPs at Ramming speed.*



AVAILABLE MPS (5.2.2)

To determine a ship's available MPs for a turn, the ship's base MPs are modified by a variety of factors.

Available (Oared) MPs =

Base MPs

- Weather Modifier, based on harsh sea and wind state
- Damage Modifiers, based on damage taken by ship & crew

WEATHER MODIFIER

Unusually harsh weather (Section 2.4) will reduce the MPs available to ships. Table 2.4.1 provides the standard weather modifiers for a ship's available MPs.

DAMAGE MODIFIERS

Damage to rigging, hull, and crew will reduce the MPs available to a ship. The Damage Effects Table T-4.4 provides the standard damage modifiers for a ship's available MPs.

URNS AND MANEUVERS (5.2.3)

A ship using oared movement may use the following movement maneuvers during the Movement Phase.

Maneuver/Turn	Restrictions	MP Cost
Pause	Cruise & Battle only	1 MP
Forward	All Speeds	1 MP
Turn & Forward	All Speeds	1 MP / 2 MPs
Bow Turn	Cruise only	1 MP
Stern Turn	Cruise only	1 MP
Backward	Cruise only, no Forward	2 MPs

Pause (P)—The ship uses 1 MP, but does not move and remains in the same hex(es).

Forward (F)—The ship uses 1 MP and moves forward one hex (see the diagram on page 22).

Turn & Forward (fL, fR)—The ship uses 2 MPs and turns (left or right) while moving forward one hex (see the diagram at the right). This only costs 1 MP for small ships. A ship using Battle or Ramming speed may not use two consecutive Turn & Forward maneuvers (i.e., at least one Pause or one Forward maneuver must be used between two Turn & Forward maneuvers).

Bow Turn (bL, bR)—The ship uses 1 MP and moves (left or right) its bow one hex while keeping its stern in the same hex (see the diagram at the right). This may only be done at Cruise speed.

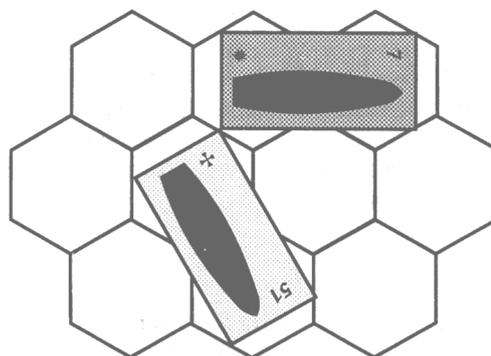
Stern Turn (sL, sR)—The ship uses 1 MP and moves (left or right) its stern one hex while keeping its bow in the same hex (see the diagram at the right). This may only be done at Cruise speed.

Backward (B)—The ship uses 2 MPs and moves backward one hex (see the diagram at the right). This may only be done at Cruise speed. In addition, the ship may not use Backward movement in the same turn that it uses forward movement (i.e., Forward or Turn & Forward).

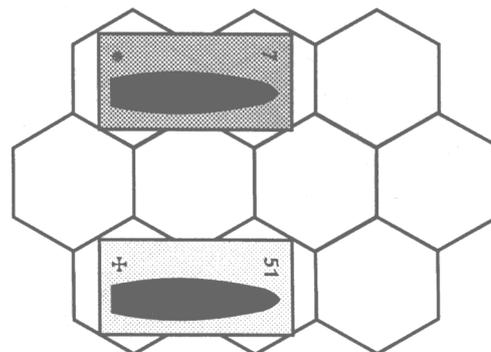
LIMITATIONS (5.2.4)

A ship using Battle or Ramming speed may not use two consecutive Turn & Forward maneuvers (i.e., at least one Pause or one Forward maneuver must be used between two Turn & Forward maneuvers).

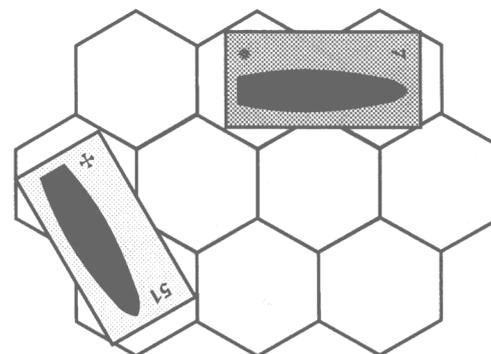
A ship may not change from Cruise Speed to Ramming Speed in one turn, it must change from Cruise to Battle one turn and from Battle to Ramming the next turn.



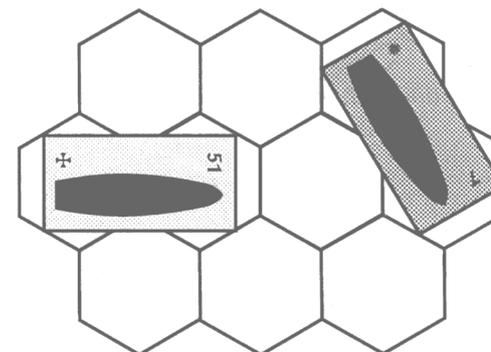
Starting Positions



Positions after Ship #7 has expended 2 MPs and performed a Backward maneuver, and after Ship #51 has expended 1 MP and performed a Stern Turn maneuver.



Starting Positions



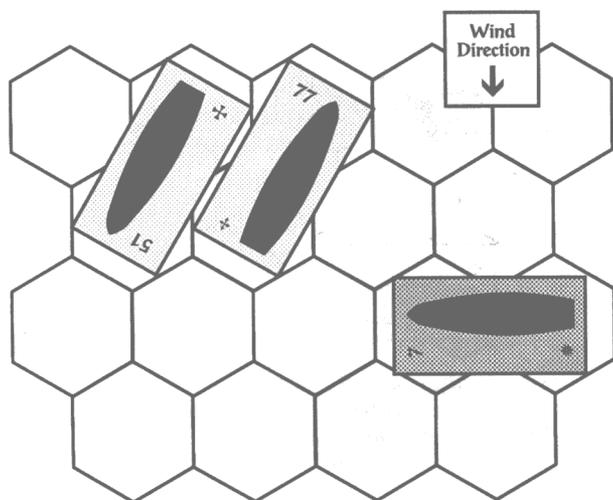
Positions after Ship #7 has expended 2 MPs and performed a Turn & Forward maneuver to the right, and after Ship #51 has expended 1 MP and performed a Bow Turn maneuver.

5.3 MOVEMENT OF SEA-CREATURES

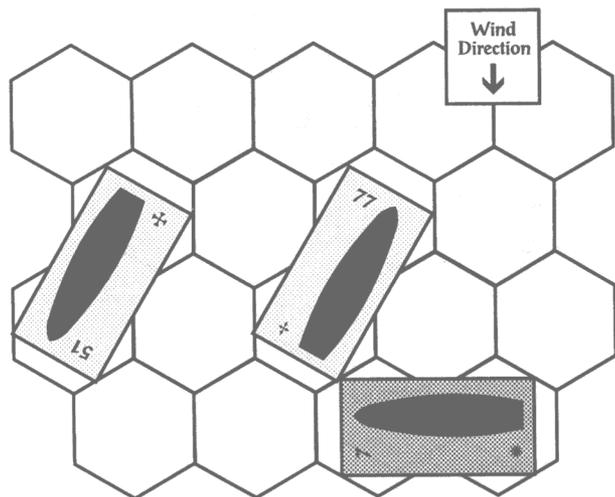
Movement of sea-creatures is handled in a manner similar to that for oared ships (see Part VI for details). All sea-creatures listed in this supplement will have two movement rates given; one in feet per *RM* round and one in *Sea Law* MPs.

5.4 DRIFTING

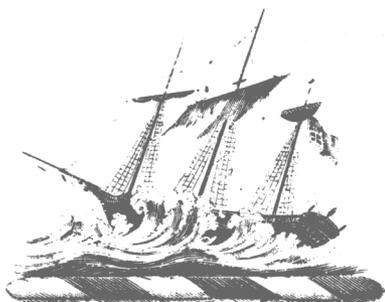
If a ship has not moved Forward or Backward for two Movement Phases, it will drift one hex in the direction that the wind is blowing.



Starting Positions



Positions after the ships have drifted.



5.5 RECORDING MOVEMENT ORDERS

Each side should have enough Movement Record Sheets to be able to record the movement orders for each of its ships.

During every Order Phase, each player must record the movement orders for each ship in the ship's order space for the current turn. The codes for the various types of movement are given in the following chart:

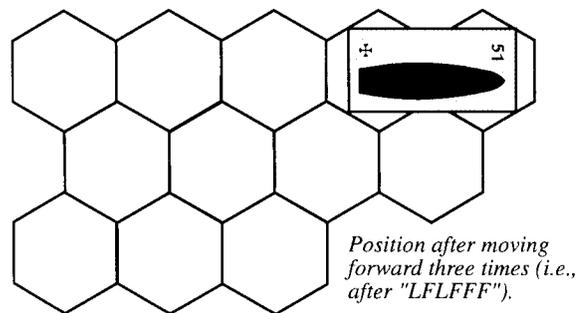
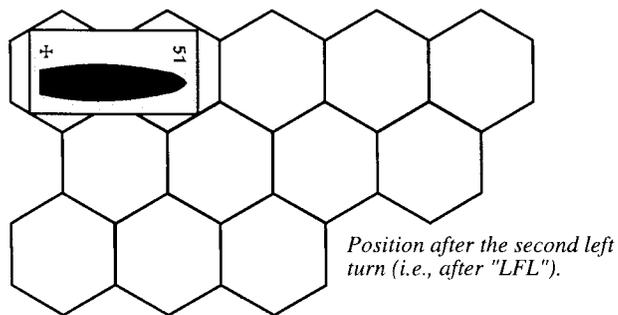
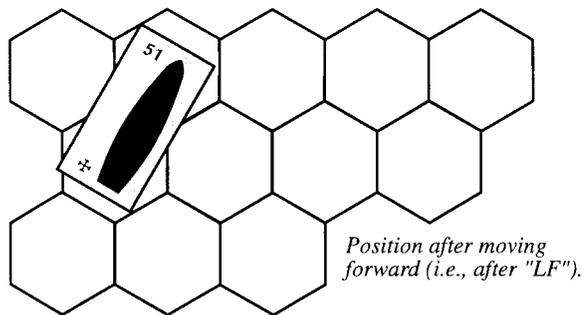
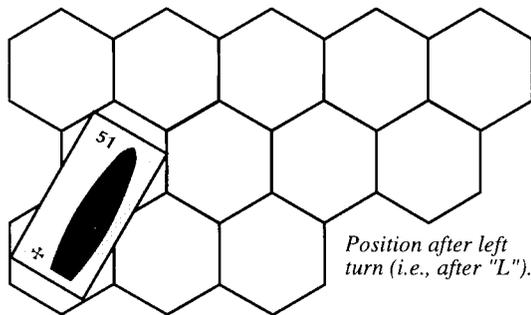
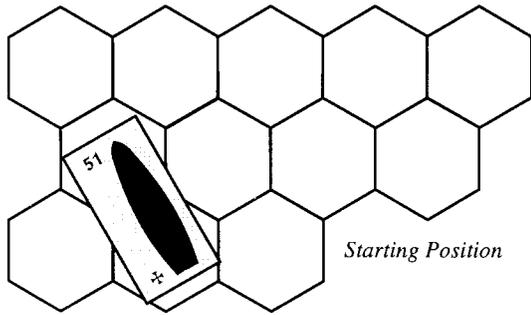
MOVEMENT/MANEUVER OPTIONS CHART			
Maneuver/Turn	Code	Restrictions	MP Cost
Sail Movement:			
Pause (Back Sails)	P	none	1
Forward	F (or #)	none	1
Turn Left	L	none	2 †
Turn Right	R	none	2 †
† — 3 MPs for Galleons.			
Oared Movement:			
Pause	P	Cruise & Battle only	1
Forward	F (or #)	All Speeds	1
Turn & Forward, Right	fR	All Speeds	1 or 2 ‡
Turn & Forward, Left	fL	All Speeds	1 or 2 ‡
Bow Turn, Right	bR	Cruise only	1
Bow Turn, Left	bL	Cruise only	1
Stern Turn, Right	sR	Cruise only	1
Stern Turn, Left	sL	Cruise only	1
Backward	B	Cruise only, no Forward	2
‡ — 1 MPs for small ships, 2 MPs for all other ships.			
Miscellaneous Orders (use notes area):			
Speed Change	<i>new speed</i>	See Section 5.2.1	—
Reload	Reload	Give which weapon	—
Anchor Orders	<i>varies</i>	See Section 8.7	—

The following guidelines also apply:

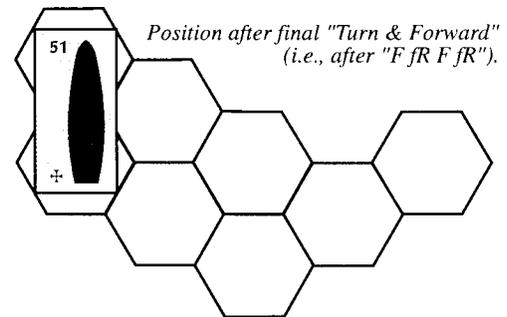
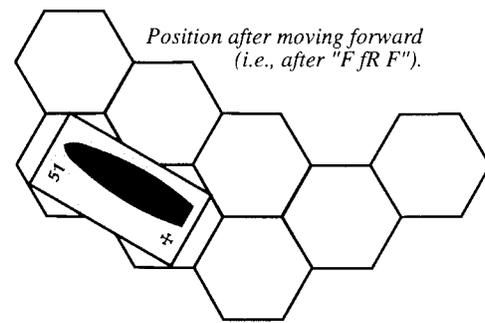
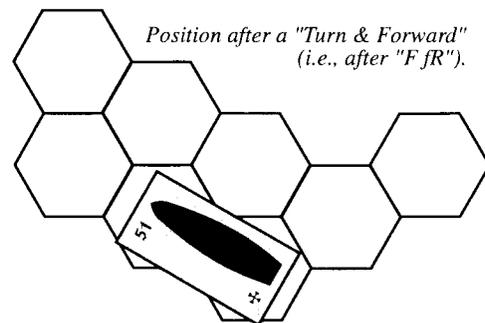
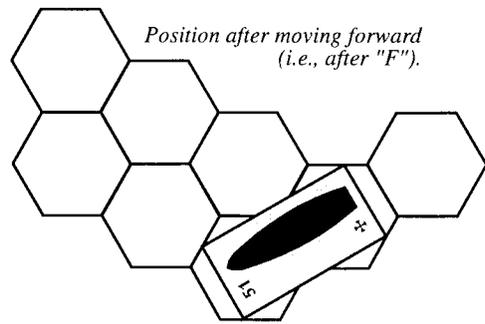
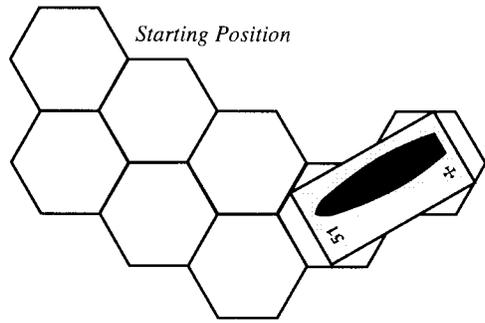
- A ship does not have to give orders to use all of its available MPs
- A ship may only give orders to make maneuvers until its available MPs are used.
- As alternate notation, a number indicates the number of hexes moved forward.
- The codes for the various maneuvers must be given in the order in which movement is to be executed.
- At the beginning of the Movement Phase, each player may examine the other player's orders.
- If illegal orders are given for a ship or the orders are incorrectly recorded, the ship's movement will end at the first incorrect/illegal order.

Example: A ship using sail movement has 8 available MPs and a turn limit of 2. Its movement orders are "LFLFFF," so it turns left, moves forward one hex, turns left, and then moves forward three hexes. This order could be written as "LIL3."

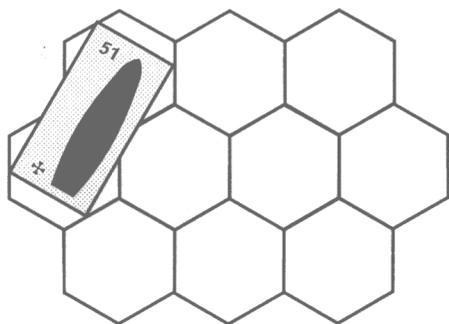
The order, "LL4," is illegal because it has consecutive turns (see Section 5.1.4), it would result in the ship making a right turn. The order, "LFLFL," is illegal because too many turns are made, it would result in the ship moving "LFLF."



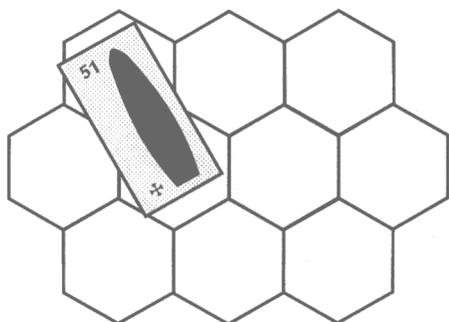
Example: A medium-sized ship using oared movement at Battle speed has 6 available MPs. Its movement orders are "F fR F fR," so it moves forward one hex, turns, and moves one hex forward right, moves forward one hex, turns and moves one hex forward right.



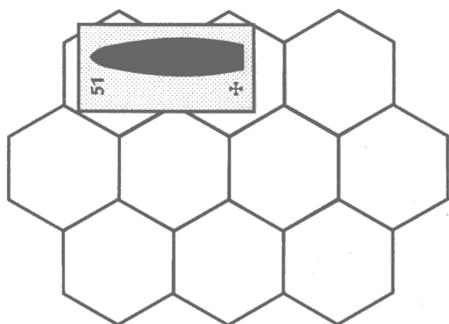
Example: A medium-sized ship using oared movement at Cruise speed has 4 available MPs. Its movement orders are "sR sR B," so it turns its stern right twice and then moves backward one hex.



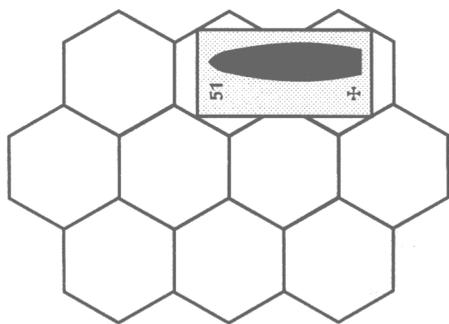
Starting Position



Position after a stern turn (i.e., after "sR").



Position after a second stern turn (i.e., after "sR sR").



Position after moving backward (i.e., after "sR sR B").

5.6 EXECUTING MOVEMENT ORDERS

During the Movement Phase, the movement orders for all ships are executed as written. If it is obvious that ships will not run into each other (i.e., their movement paths will not cross), such ships can just move as indicated on their movement orders. Otherwise, the movement orders must be executed one MP at a time.

If a ship's available MPs decreases between the Order Phase and the resolution of its movement, its orders still apply but only up to the point for which it still has MPs.

Example: A ship with six available MPs has the following movement orders: F fR F fR. If it loses one or two MPs, its orders become: F fR F. If it loses three MPs, its orders become: F fR.

First the side with the most ships expends one Movement Point (as indicated on the Movement Record sheets) for each of its ships that still has MPs left to expend. Then the other side expends one MP for each of its ships that still has MPs left to expend. This process continues until no ships have MPs left to expend.

Note: If both sides have the same number of ships, randomly determine (i.e., roll dice) which side will move first.

Note: This movement execution scheme is suggested because it simplifies resolving movement. However, the optional rules in Sections 8.2 and 8.3 can add more flavor and accuracy to combat if a GM is willing to take longer to resolve a battle.

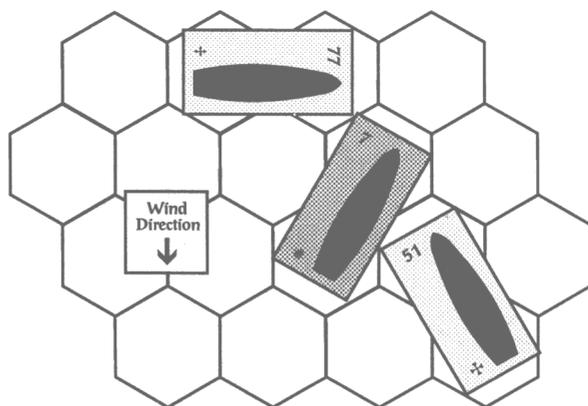
COLLISIONS AND RAMMINGS

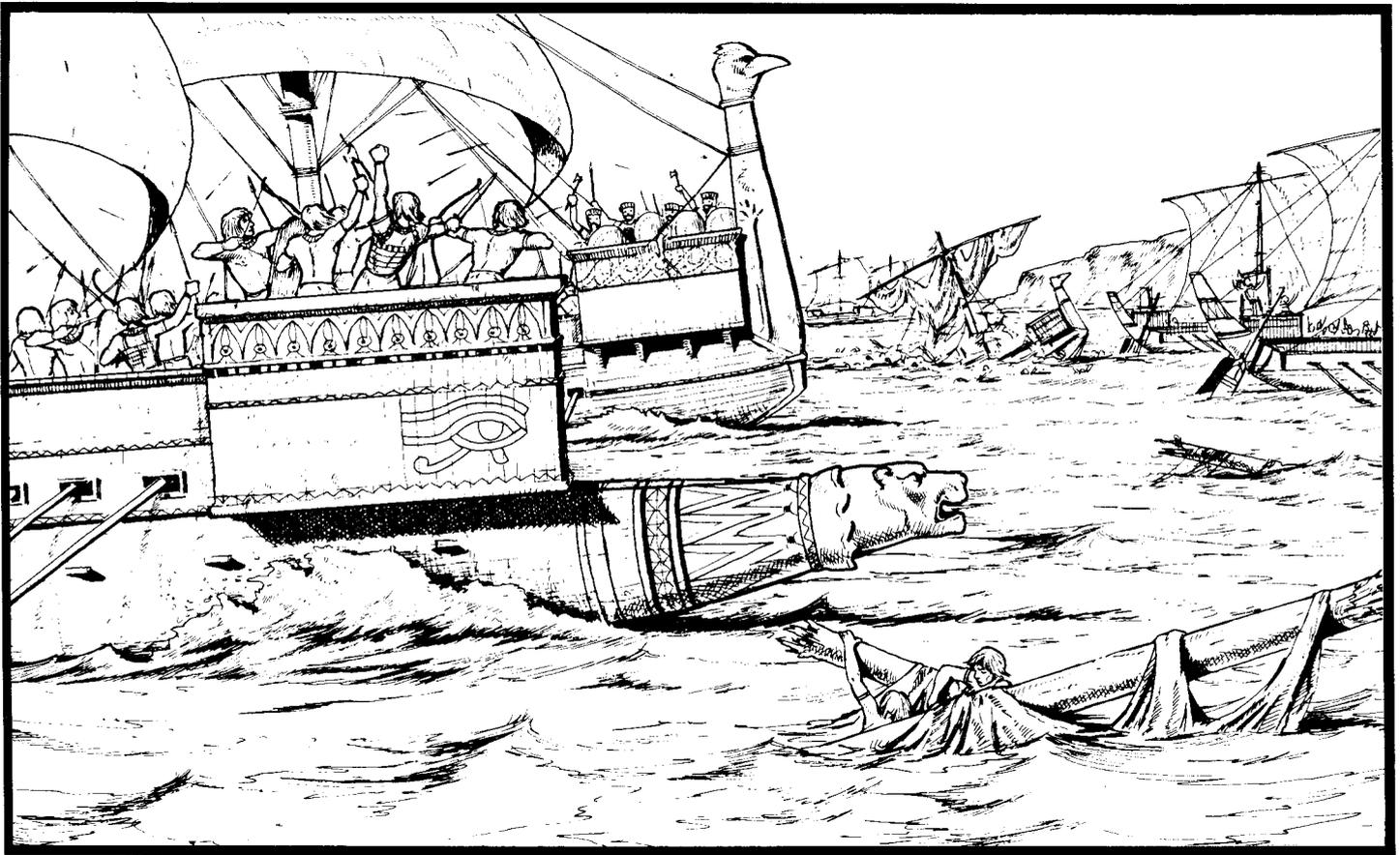
If a ship has orders to occupy a hex already containing a ship, those ships run into each other. All movement for the ships immediately ends for the current Movement Phase. This situation is resolved as either a collision or a ramming (see Sections 5.7 and 5.8).

Ramming — The moving ship is ordered to move forward (a Forward maneuver or a Turn & Forward maneuver) into a hex already occupied by another ship. If the ships are on opposing sides, the moving ship rams the other ship. Otherwise, a collision occurs. In both cases, the moving ship does not move into the hex occupied by the other ship.

Collision — The ships collide. This can occur due to Backward maneuvers, drifting, various turning maneuvers, or two ships on the same side running into each other.

Example: If ship 77 makes a Turn & Forward right (fR) maneuver, it will ram ship 7. If ship 51 moves forward or makes a Turn & Forward (fR or fL) maneuver, it will ram ship 7. If ship 7 drifts or makes a Turn Right maneuver, it will collide with ship 51.





DRIFTING

At the end of movement all ships that have not moved for two consecutive Movement Phases (counting the current Phase), must drift (Section 5.4).

5.7 COLLISIONS

If two ships are involved in a collision (see Section 5.6), then the ships may become:

- Fouled (i.e., their rigging and sails are entangled); the chance of the ships being fouled can be determined from the Fouling Chart—roll once per collision.
- Disabled/Crippled (i.e., its oars are damaged). Only ships using Oared Movement can be disabled. The chance of each ship being disabled can be determined from the Disabling Chart—one roll per ship per collision.

In addition all grappling attempts between the two ships are modified by +20%.

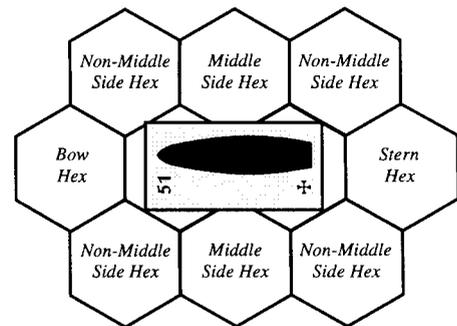
FOULING CHART

	None	La	Sq	LR	FR	SR
None	0	—	—	—	—	—
Lateen Sail (La)	5	10	—	—	—	—
Square Sail (Sq)	5	10	15	—	—	—
Lateen Rigged (LR)	10	15	20	35	—	—
Fore&Aft Rigged (FR)	10	20	25	35	40	—
Square Rigged (SR)	15	25	30	40	45	50

DISABLING CHART

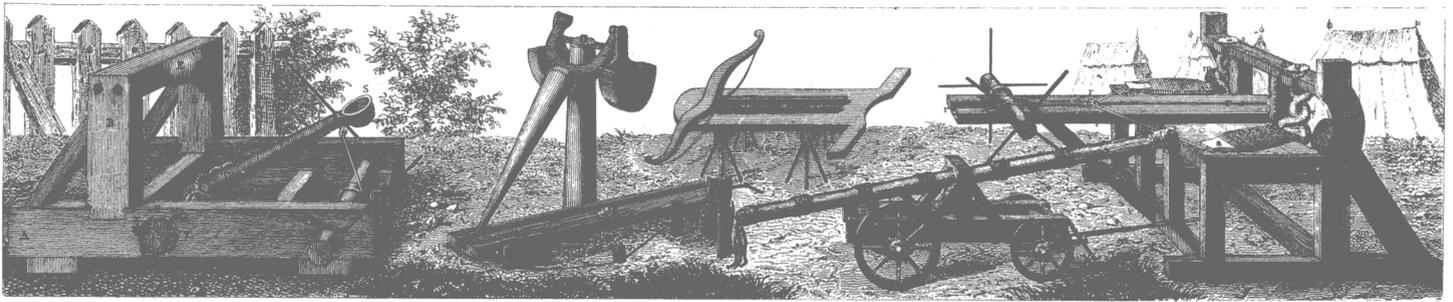
Contact Point(s)	Oarsmen Quality						
	P	G	Re	R	V	E	C
Bow or Stern Hex Only	20	15	15	10	10	5	5
1 Non-Middle Side Hex	70	60	50	40	30	20	10
1 Middle Side Hex	90	80	70	60	50	40	30
2 Side Hexes	100	95	90	80	70	60	50

Note: A target being rammed increases these chances by 20%; the ship doing the ramming reduces them by 20%.



5.8 RAMMING

If a ship rams another ship, all of the collision effects apply **and** the ramming ship may make an immediate Ram attack (Section 6.2). A target being rammed increases its Disabling chances by 20%; the ship doing the ramming reduces its Disabling chances by 20%.



Ballistae—Ballistae work with a windlass and bow string which will hurl either a rock or large “arrow.” The rock-throwing ballistae will throw a 25 to 50 pounds stone ball between a distance of between 350 and 450 yds with decreasing accuracy (at extreme ranges accuracy is very bad). Arrow-throwing ballistae fire 5 or 6 lb., iron-tipped arrows out to ranges of 450 to 500 yards.

Seagoing ballistae are the same as their land-locked counterparts; a large crossbow that flings a rock or a rather massive bolt at its target. Ballistae are light and quick-firing, making them the weapon of choice on smaller warships. Most large ships carry ballistae as a matter of course, to provide covering fire for their mangonel crews and to deliver Greek Fire. Ballistae are the most common ship weapon in Kulthea.

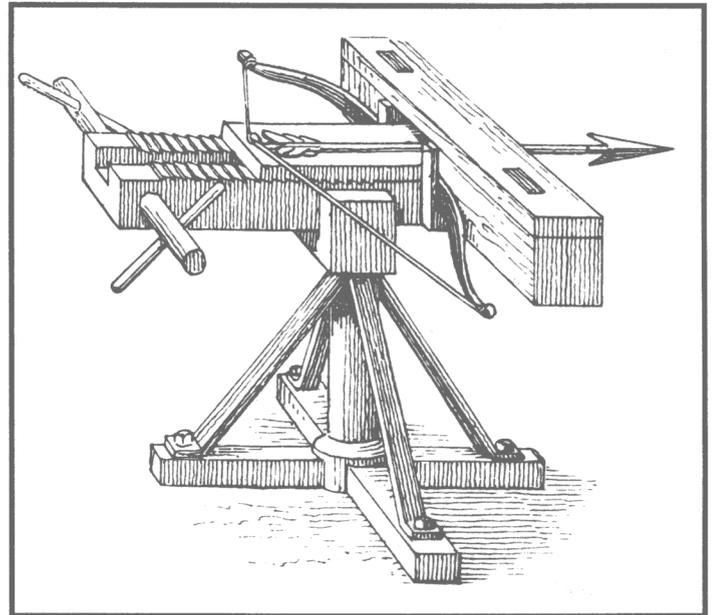
Catapults—Catapults are built on a heavy frame, either wheeled or not. The rock, dead horse, or ball of flaming hay is placed in the cup or sling at the end of the arm. The arm is held at the pivot end in tightly twisted rope and drawn down by use of a windlass. It will hurl rocks up to 65 lb. out to a maximum range of 700 yards. If the catapult is armed with a cup rather than a sling, the maximum range is cut by 25%.

Catapults are usually encountered only on galleys without masts, and they are quite rare on Kulthean seas. Many shore positions use some catapults, as their range and payload exceeds that of the mangonel. At sea catapults are becoming very rare. Catapults can deliver Greek Fire.

Mangonels—This mangonel is a special fantasy weapon that uses spring power to achieve a higher “muzzle” velocity than other mechanical weapons. Historically, the term mangonel is sometimes used to refer to certain catapult weapons as well as to spring powered weapons.

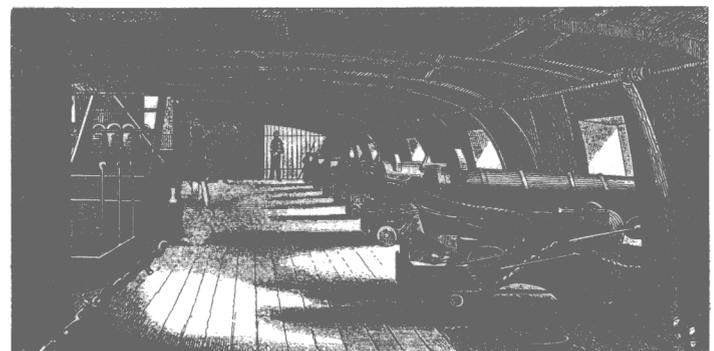
As mentioned above, the mangonel is the main weapon of the navies of Kulthea. A mangonel is an artillery engine that uses spring tension to shoot a rock (or shell) from point A to point B. It is reasonably accurate, and can use either direct or arced fire. The one

drawback to the mangonel is its weight, which limits its use to the larger, stronger ships. Mangonels are relatively quick to load, which gives them a reasonable rate of fire. They are not as fast as the ballistae, but quicker than the catapults.



Trebuchets—These are rather ponderous machines that are usually built on site as they are needed. Trebuchets are almost never used on ships (certainly never historically). The trebuchet uses an arm up to 50 ft. in length. When the sling end of the arm is released, a counterweight of up to 20,000 lbs falls, yanking the sling forward. This action will throw a 300 lb. rock up to 375 yards.

Guns—Sakers, Demi-Culverin, Culverin, Demi-Cannon, and Cannon are historical representations of various gunpowder weapons.



6.1 MISSILE ATTACKS

Missile weapon fire in *Sea Law* includes *small arms fire* (e.g., bows, slings, muskets, etc.) and *artillery fire* (e.g., ballistae, mangonels, catapults, trebuchets, cannon, etc.). All missile attacks are simultaneous, so the order in which missile attacks are resolved is not important.

SMALL ARMS FIRE (6.1.1)

Small arms fire is resolved by using the Grape vs. Crew Ship Attack Table T-1.5 with a maximum result of 30 and a maximum range of 1 hex. One marine point making such an attack has an OB Mod of -100, but two marine points may combine to make one attack modified by -70. Seamen on ships without marines can make missile attacks (see below).

The number of marine points that may make missile attacks each turn is limited by the size of the ship:

- Tiny 1 Point
- Small 2 Points
- Medium 4 Points
- Large 8 Points
- Huge 16 Points

Alternatively, GM may use the *War Law* procedure to resolve such attacks against the crew and marines on a ship (see *WL* Section 16.6).

SPECIAL MODS

Range Mod: The Range Mods given in *Arms Law* for the type of small arms used should be applied; otherwise this mod is +0.

Weapon OB Mod: Some weapons have OB Mods that are added to their weapon attacks.

Target Ship DB: Each ship in *Sea Law* has a DB based on that ship's size and maneuverability. This number is subtracted from all attacks (a ship with a positive DB is easier to hit).

Firing Ship OB: Each ship in *Sea Law* has an OB based on that ship's size and stability. This number is added to all attacks (a ship with a **negative** OB is harder to hit from).

Average Marine OB: This is the marines' average Missile OB for the weapon being used; if one is not given, use: Poor/Slave = -10; Green = +0; Reservists = +10; Regular = +20; Veteran = +30; Elite = +40; Crack = +50. If seamen are used for small arms fire, reduce all of these values by 20.

ARTILLERY FIRE (6.1.2)

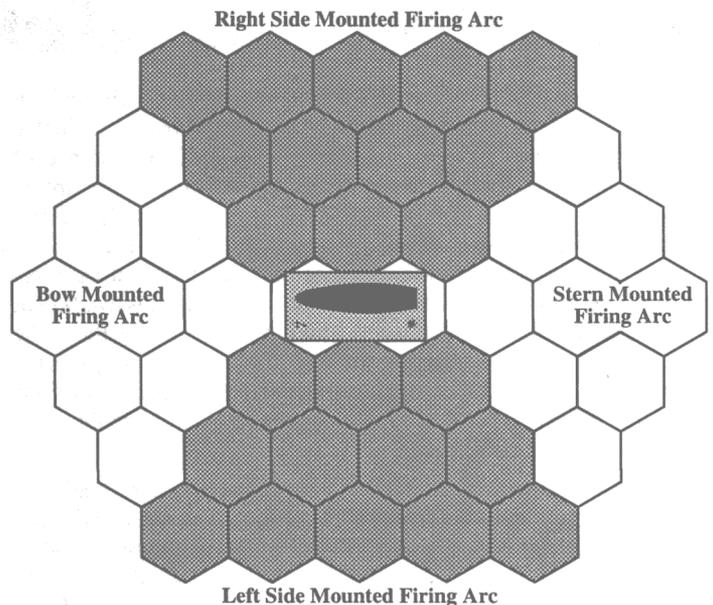
Most missile combat in *Sea Law* will take place at fairly close range and with the attacking ships in direct line-of-sight of each other. There is no particular order for these attacks, and mangonels are considered to be as fast as ballistae. Some, all, or none of the weapons that can bear on an enemy vessel during that Missile/Ram Phase can fire.

Since each weapon is aimed and fired separately, they do not all have to be fired at the same target. If the weapons of a broadside are directed at the same target, they may be resolved as one attack (see below) or they may be resolved individually. Note that weapons fired as a broadside are given an additional OB bonus (see below).

Note: *Pirates will usually shoot for the rigging, since this slows a ship down and allows them to catch and board her. Shooting for the hull is the most effective way to sink a vessel, and this is usually the last thing a pirate wants to do!*

FIRING ARCS

Normally each artillery weapon on a ship is mounted in one of four different ways: bow mounted, stern mounted, left side mounted, or right side mounted. An artillery weapon's firing arc is determined by how it is mounted (see the diagram below). An artillery weapon may only make an attack against a target that is at least partially in its firing arc. In most cases, only one or two weapons may be bow (or stern) mounted.



THE SHIP ATTACK TABLES

The specific ship attack table (T-1.1 to T-1.6) used to resolve artillery fire against ships is determined by the target (hull, rigging, crew/weapons, or indirect fire) and the type of ammunition used (ball, chain, or grape). Weapons are restricted as to the targets they may choose and ammo they may use (see the Target and Ammo Restrictions Chart).

SPECIAL RESTRICTIONS

The following restrictions are summarized on the Weapon Attack Stat Chart and the Targeting & Ammo Chart.

- Crew/weapon targets may only be chosen at a range of 2 or less.
- Hull targets may only be chosen at a range of 12 hexes or less.
- Grape ammo may only be used at a range of 2 hexes or less.
- Chain ammo may only be used at a range of 6 hexes or less.

TARGET AND AMMO RESTRICTIONS CHART		
Weapon	Allowed Targets	Allowed Ammo
Lt. Ballistae	Crew	Grape
Other Ballistae	Hull, Rigging, Crew	Ball, Grape
Mangonels	Hull, Rigging, Crew	All
Catapults	Indirect	Ball
Trebuchets	Indirect	Ball
Swivel Guns	Crew	Grape
Other Powder Weapons	Hull, Rigging, Crew	All

WEAPON ATTACK STAT CHART

Weapon	Allowed Target Choices	Range Mod based on # of Hexes														Max Result
		1	2 *	3	4	5	6 **	7	8-9	10-12 ***	13-16	17-22	23-30	31-45		
Small Arms Fire ‡																
1 Marine Point	C	-100	na	na	na	na	na	30								
2 Marine Points	C	-70	na	na	na	na	na	60								
Ballista																
Light (LtBa)	C	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	30	
Medium (MdBa)	H,R,C	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	60	
Heavy (HvBa)	H,R,C	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	90	
Mangonel																
Light (LtMa)	H,R,C	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	60	
Medium (MdMa)	H,R,C	-30	-50	-70	-100	-200	-300	na	na	na	na	na	na	na	90	
Heavy (HvMa)	H,R,C	-20	-30	-40	-60	-80	-100	-200	-300	na	na	na	na	na	105	
Catapult																
Light (LtCa)	I	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	60	
Medium (MdCa)	I	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	90	
Heavy (HvCa)	I	na	0	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	105	
Trebuchet																
Light (LtTr)	I	na	-50	-100	-300	na	na	na	na	na	na	na	na	na	120	
Medium (MdTr)	I	na	-35	-75	-100	-300	na	na	na	na	na	na	na	na	135	
Heavy (HvTr)	I	na	-25	-50	-100	-200	-300	na	na	na	na	na	na	na	150	
Greek Fire Tube §																
Swivel Gun (SG)	C,R	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	30	
Saker (Sa)	C,R,H	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	60	
Demi-Culverin (dCu)	C,R,H	-20	-30	-40	-60	-80	-100	-200	-300	na	na	na	na	na	105	
Culverin (Cu)	C,R,H	0	-10	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	na	120	
Demi-Cannon (dCa)	C,R,H	+10	+0	-10	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	135	
Cannon (Ca)	C,R,H	+20	+10	+0	-20	-30	-45	-60	-75	-90	-95	-100	-200	-300	150	

* – Max range for Crew/Weapon target choice & for grape ammo. ** – Max range for chain ammo. *** – Max range for Hull target choice.

§ — Use the Grape vs. Crew/Weapons Ship Attack Table T-1.5, but all criticals are fire criticals.

‡ — Use Attack Table T-1.5, but ignore all hull and rigging damage and treat all criticals as an additional “†” crew damage.

WEAPON STAT CHART

Weapon	Ammo lb	Ammo Types	Av. Crew	Fum-ble	Fire Rate §
Ballista, Light	15	G	4	3	2/0
Medium	25	B,G	8	4	3/0
Heavy	50	B,G	11	5	5/0
Mangonel, Light	10	B,G,C	5	4	5
Medium	20	B,G,C	9	5	7
Heavy	40	B,G,C	12	6	9
Catapult, Light	25	B	5	5	8
Medium	50	B	8	6	10
Heavy	75	B	12	7	13
Trebuchet, Light	100	B	10	2	13
Medium	200	B	15	3	15
Heavy	300	B	20	4	20
Greek Fire Tube	–	special	3	10	5
Swivel Gun	1	G	1	2	4
Saker	6	B,G	2	3	5
Demi-Culverin	9	B,G,C	3	4	8
Culverin	18	B,G,C	3	4	8
Demi-Cannon	24	B,G,C	5	4	8
Cannon	32	B,G,C	5	4	8

§ — This is the approximate reload time in rounds. Even though some weapons can reload and fire more than once in a SeL turn (2 minutes), each weapon can only make one attack each turn. (i.e., the multiple firings are considered to be one attack).

TARGETING & AMMO CHART

Indirect Attack (I) — Non-indirect fire weapons that fire from a higher elevation (≈100') must use the Indirect Attack Table.

Rigging Attack (R) — No restrictions.

Hull Attack (H) — 1-12 hex range only

Crew/Wp Attack (C) — 1-2 hex range only

Ball Ammo — No special range limit. Ball ammo is any single projectile (e.g., boulder, bolt, cannonball).

Grape Ammo — Maximum range is 2 hexes. Grape ammo is an ammo load that consists of numerous small projectile designed to damage crew and weapons (e.g., small stones, bundle of arrows, cannister of bullets).

Chain Ammo — Maximum range is 6 hexes. Chain ammo is an ammo load that consists of small chunks of material linked together; it is designed to damage sails (e.g., links of chain).

Ram Attack (R) — Special; 1 hex range.

Sheer Attack (S) — Special; 1 hex range. If a target has no oarsmen/oars, ignore the damage.

NON-SHIP TARGETS

Use Table T-1.1 against structures and Table T-1.3 or T-1.5 against ground troops or other groups of people.

MODIFICATIONS TO THE ATTACK ROLL

Range Mod: The Range Mods given in the Weapon Attack Stat Chart must be used.

Ship OB Mod: Each ship has an OB Mod that is added to each weapon attack.

Weapon OB Mod: Some weapons have OB Mods that are added to their weapon attacks.

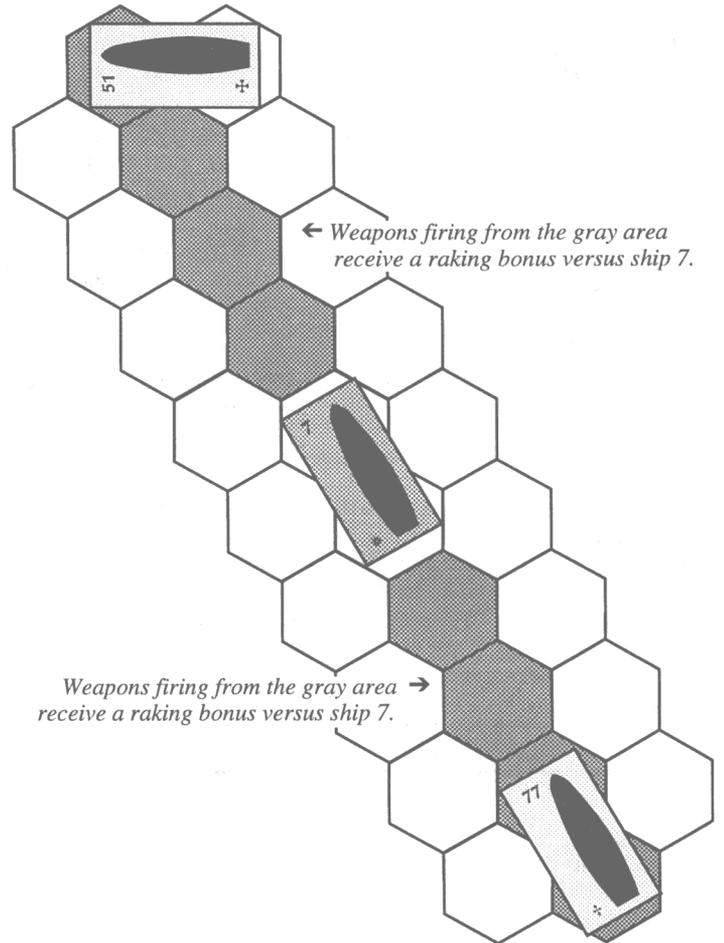
Broadside Bonus: A Broadside attack must use all weapons of the same type that are available to fire on one side of a ship; a minimum of four weapons must be fired. A Broadside attack receives a +20 OB modification. For every extra four weapons fired (in addition to the minimum of four), a Broadside attack receives an additional +10 OB modification. In addition, the allowable damage for the weapons used increases by one weapon type (i.e., a Medium Mangonel Broadside attack becomes a Heavy Mangonel attack). In addition, some GMs may wish to double all damage (but not Crits) inflicted by a Broadside attack.

Initial Broadside Bonus: In addition to the modifications listed above for the Broadside, the first Broadside of each side (port and starboard) of a ship receives a special +10 bonus. This bonus may be applied only once per combat, as the first broadside was often the most effective. If one or more weapons on that side of the ship have fired previously, this bonus **may not** be applied.



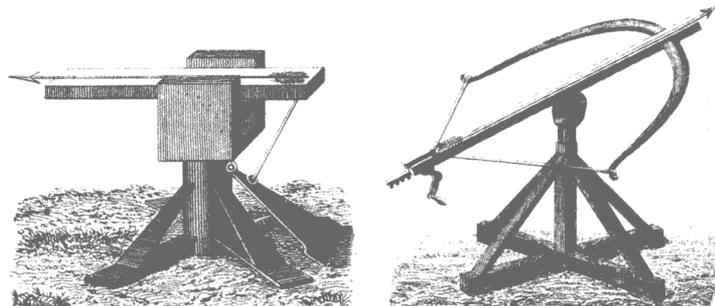
Target Ship DB: Each ship in *Sea Law* has a DB based on that ship's size and maneuverability. This number is subtracted from all attacks (or added in the case of a ship with a **positive** DB, which makes it easier to hit).

Raking Bonus: Non-indirect attacks fired directly into the stern or bow of a ship receive a +20 Raking Bonus—in the diagram below, any weapon in the gray area firing at ship 7 receives the Raking Bonus (e.g., ship 77's bow guns would receive a Raking Bonus against ship 7). Broadside attacks receive this bonus if any of the weapons firing in the Broadside would receive a Raking Bonus (e.g., ship 51's left Broadside would receive a Raking Bonus against ship 7 in the diagram below).



RELOADING

Each weapon has a reload time given in normal *RM* rounds for situations involving that type of time scale. Even though some weapons can reload and fire more than once in a *SeL* turn (i.e., 2 minutes, 12 rounds), each weapon may make only one attack a *SeL* turn (i.e., multiple firings are assumed to be one attack with multiple projectiles). Medium and heavy trebuchets require one turn to reload after firing (i.e., they can only attack once every other turn).



6.2 RAMMING ATTACKS

A ramming attack is handled differently from normal combat. It occurs during the Movement Phase, and only when the ramming ship attempts to enter the same hex as another vessel (see Section 5.6). The attack is resolved immediately. A ship using a ramming attack immediately ends its movement.

MAXIMUM RESULTS

Each Ramming attack has a maximum result based upon the attacker's size, the defender's size, and the attacker's bow type (Hull, Spur, or Ram). The chart at the bottom of the Ramming Ship Attack Table T-1.7 provides these maximum results.

EFFECTS ON THE RAMMING SHIP

The ramming ship takes a ram attack based on the size of the target minus one. Remember this attack is heavily modified by the Point of Impact modifications (see the chart below).

MODIFICATIONS TO THE ATTACK ROLL

Ship OB Mod: Each ship has an OB Mod that is added to each ramming attack.

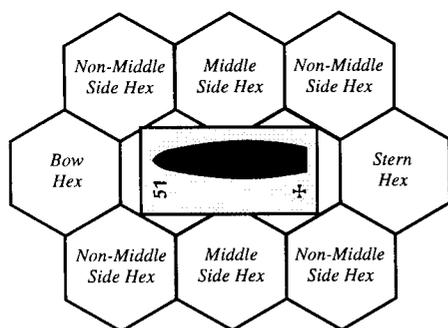
Ram OB Mod: Some rams (and spurs) have OB Mods that are added to their attacks.

Size & Bow Type Mod: Each Ramming attack has an OB Mod based upon the attacker's size, the defender's size, and the attacker's bow type (Hull, Spur, or Ram). The chart at the bottom of the Ramming Ship Attack Table T-1.7 provides this mod.

Point of Impact Mod: Each ramming attack has an OB Mod based upon the point of impact on the target ship (see the Chart below).

Target Ship DB: Each ship in *Sea Law* has a DB based on that ship's size and maneuverability. This number is subtracted from all attacks (or added in the case of a ship with a **positive** DB, which makes it easier to hit).

POINT OF IMPACT MODIFICATIONS CHART	
Impact Point on Target	Mod
Bow Hex, with Ram	-30
Bow Hex, with Spur	-20
Bow Hex, no Ram or Spur	-10
Non-Middle Side Hex	+10
Stern Hex	+20
Middle Side Hex	+30



6.3 SHEERING ATTACKS

A ship can make a sheering attack at the end of a Movement Phase if:

- During the Movement Phase, the bow (i.e., front half) of the sheering ship moved into and/or out of one of the target's "middle side hexes" (i.e., one of the hexes in the positions marked "Middle Side Hex" in the diagram at the bottom of the previous column).
- During the Movement Phase, no collision occurs between the sheering ship and the target ship (see Section 5.7)
- The target ship is using oars.

Even if the ships involved are not adjacent at the end of the Movement Phase, a sheering attack is still resolved if the conditions above are satisfied.

MAXIMUM RESULTS

Each Sheering attack has a maximum result based upon the attacker's size, the defender's size, and the attacker's bow type (Spur, or No Spur). The chart at the bottom of the Sheering Ship Attack Table T-1.8 provides these maximum results.

COUNTER ATTACK ON THE SHEERING SHIP

The target ship makes a sheering attack on the attacking ship, but the maximum result is one less than normal and there is an additional OB Mod of -30.

MODIFICATIONS TO THE ATTACK ROLL

Ship OB Mod: Each ship has an OB Mod that is added to each ramming attack.

Sheering OB Mod: Some spurs have OB Mods that are added to their attacks.

Size & Bow Type Mod: Each sheering attack has an OB Mod based upon the attacker's size, the defender's size, and the attacker's bow type (Spur, or No Spur). The chart at the bottom of the Sheering Ship Attack Table T-1.8 provides this modification.

Target Ship DB: Each ship in *Sea Law* has a DB based on that ship's size and maneuverability. This number is subtracted from all attacks (or added in the case of a ship with a **positive** DB, which makes it easier to hit).

Type of Pass Mod: A sheering attack receives a modification based upon how many of the target's ship's "side hexes" it moves into and out of during the Movement Phase. A target's side hexes are marked "Non-Middle Side Hex" and "Middle Side Hex" in the diagram at the left. These mods are summarized in the chart below—only one of these mods can apply to a given sheering attack.

TYPE OF PASS MODIFICATIONS CHART	
Type of Pass	Mod
Into or out of a "Middle Side Hex"	-20
Into and out of a "Middle Side Hex"	+0
Into and/or out of a "Middle Side Hex" and into and/or out of one "Non-Middle Side Hex"	+10
Into and/or out of a "Middle Side Hex" and into and/or out of two "Non-Middle Side Hex"	+25

6.4 MELEE COMBAT

The best way to handle boarding actions resulting from boarding actions is to use deck plans and the *War Law* standard game rules. However, to speed play, we include some very simple rules for resolving melee combat that results from boarding actions during ship to ship combat.

INITIAL BOARDING PARTY & REPELLING PARTY SIZES

A ship may assign one "boarding party" or one "repelling party" (i.e., a group to repel boarders) to each ship that it is grappled/fouled with. At the beginning of the Melee Phase, both sides should secretly record all boarding or repelling parties on their Ship Record Sheets. These parties may be made up of any combination of the ship's available marines, seamen, and/or oarsmen. Crew assigned to these parties are not available for other activities until the Melee Phase of the next turn.

The number of crew that may initially be assigned to a boarding party is limited as indicated in the Boarding Chart (see also the diagram below) in terms of crew points (i.e., marine, seamen, and/or oarsmen points). Any number of crew points may be assigned to a repelling party, but the actual number that can attack a boarding party is limited to two times the size of the boarding party.

These boarding/repelling party assignments may result in four different situations:

- **Boarding Party versus Repelling Party** — The parties attack each other once as outlined below. If the boarding party is eliminated, the combat is over and new parties may be assigned next turn. If the repelling party is eliminated and the boarding party survives, the boarding party captures the ship. If neither party is eliminated, both sides can reinforce or remove crew from their parties during the next Melee Phase (unlimited for the repelling party, see below for the boarding party).
- **Boarding Party versus Boarding Party** — The parties attack each other once as outlined below. If neither party is eliminated, the combat is over and new parties are assigned next turn. If either party is eliminated, the surviving boarding is "on the opposing ship"—on the next turn, the boarding party can be reinforced (see below) and the defending ship may assign a repelling party.
- **Repelling Party versus Repelling Party** — No combat occurs.
- **Boarding Party Unopposed** — Boarding party captures the ship.

BOARDING CHART

# of Common Hexsides	Boarding Party Ship Size				
	Tiny	Sm.	Md.	La.	Huge
1, Bow/Stern to Bow/Stern (A)	1	1	2	2	3
1, Bow/Stern to Side (B)	1	2	2	3	4
1, Side to Side (C)	1	2	3	4	5
2, Side to Bow/Stern (D)	1	2	4	6	8
2, Side to Side (E)	1	3	6	8	10

Note: This chart gives the maximum initial boarding party size and the maximum reinforcement that may be added in each following turns. This number is doubled if the ships are side by side (i.e., both of the ships have two hexes adjacent).

REINFORCING BOARDING PARTIES

If a boarding party is facing a repelling party (i.e., is not facing another boarding party) and it survives its first melee combat, it may be reinforced the next turn by an amount equal to the limit given on the Boarding Chart.

CALCULATING FORCE STRENGTH

Each point of crew assigned to a boarding party or a repelling party has a strength point value as defined in the Melee Strength Point Chart. Thus, each boarding party and each repelling party has a Strength Point Total (SPT) that is used in resolving combat. Remember, any number of crew points may be assigned to a repelling party, but the actual number that can attack a boarding party (i.e., contribute to the SPT) is limited to two times the size of the boarding party.

MELEE STRENGTH POINT CHART

Crew Type	Quality						
	P	G	Re	R	V	E	C
Marines	4	5	6	7	8	9	10
Seamen	2	2	3	3	4	4	5
Oarsmen	1	1	2	2	3	3	4

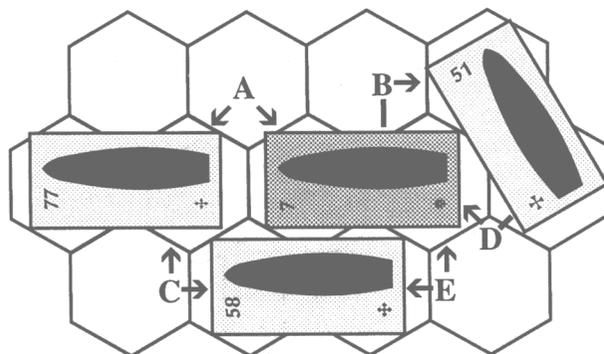
Note: P=Poor/Slave; G=Green; Rv=Reservists; R= Regular; V=Veteran; E=Elite; C=Crack.

RESOLVING MELEE COMBAT

During the Melee Phase, the boarding party and repelling party attack each other by rolling on the Melee Combat Table T-4.3. These attacks are resolved simultaneously and are based upon the attacking party's Strength Point Total.

T-4.3 • MELEE COMBAT TABLE

Strength Pt Tot.	Roll (non-opened)					
	01-15	16-40	41-60	61-80	81-95	96-100
01-05	0	0	0	0	†	1
06-10	0	0	0	†	1	1
11-15	0	0	†	1	1	2
16-20	0	†	1	1	2	2
21-25	†	†	1	1	2	2
26-30	†	1	1	2	2	3
31-40	1	1	1	2	3	3
41-50	1	1	2	2	3	4
51-60	1	1	2	2	3	4
61-80	1	1	2	3	4	5
81-101	1	2	3	3	4	5
101-120	1	2	3	4	5	6
121+	1	2	4	5	6	8



- A — Ships 7 and 77 are both "1, Bow/Stern to Bow/Stern" (case 'A') for the purposes of the size of boarding parties against each other.
- B — Ship 7 is "1, Bow/Stern to Side" (case 'B') for the purposes of the size of a boarding party against Ship 51.
- C — Ships 77 and 58 are both "1, Side to Side" (case 'C') for the purposes of the size of boarding parties against each other.
- D — Ship 51 is "2, Side to Bow/Stern" (case 'D') for the purposes of the size of a boarding party against Ship 7.
- E — Ships 77 and 58 are both "2, Side to Side" (case 'E') for the purposes of the size of boarding parties against each other.

6.5 GRAPPLING AND UNGRAPPLING

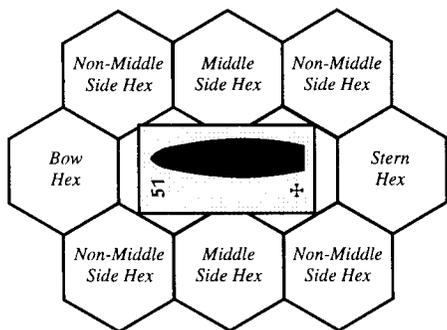
During the Grapple Phase, each ship may attempt to grapple and/or ungrapple ships in adjacent hexes. Each ship may only attempt a limited number of grapples and ungrapples each turn (see the Grapple & Ungrapping Chart). One crew point must be assigned to each grapple or ungrapple attempt. Such crew points are not available for other activities during the current turn.

The chance of successfully grappling or ungrapping can also be obtained from the Grapple & Ungrapping Chart.

GRAPPLE & UNGRAPPLING CHART					
# OF GRAPPLES/UNGRAPPLES ALLOWED					
Contact Point (s)	Ship Size				
	Tiny	Small	Med	Large	Huge
Bow or Stern Hex Only	1	1	2	2	3
1 Non-Middle Side Hex	1	2	3	3	4
1 Middle Side Hex	1	2	4	5	6
2 Hexes	1	2	4	8	12

% CHANCE OF GRAPPLING							
Contact Point(s)	Crew Point Quality						
	P	G	Re	R	V	E	C
Grappling Chance:							
Bow or Stern Hex Only	20	25	30	35	40	45	50
1 Non-Middle Side Hex	30	35	40	45	50	55	60
1 Middle Side Hex	40	45	50	55	60	65	70
2 Hexes	45	50	55	60	65	70	75
Ungrapping Chance	30	35	40	45	50	55	60

Note: If individual crew men have unusually high Grappling Hook skill, these % chances can be modified accordingly.



6.6 ELEMENTAL SPELL ATTACKS

The discussion in this section assumes that the casters of the elemental spells are on a ship that ends its movement within range of an opposing ship. Spell casters that are on the target ship or flying around it must use the normal *Spell Law* tactical rules to determine their required flying maneuvers, rates of fire, and effects.

All spells with a 50'-200' range may only fire at adjacent hexes, spells with a 201'-400' range may fire out to 2 hexes, spells with a greater range must be handled as special cases. Use the 51'-100' range OB mod for attacks against adjacent hexes (i.e., a 1 hex range) and the 201'-300' range OB mod for attacks at a 2 hex range.

The number of rounds required to prepare a spell will affect the maximum number spells a caster may cast per turn, PPs required, and the attack's OB Mod due to number of spells cast. A spell caster may elect to spend fewer PPs and to take a lower Prep OB Mod by casting fewer spells than he is capable of casting in a given turn.

Attacks against ships and their crew are resolved on the standard Sea Law attack tables as shown on the table below. Spell Failures use the Spell Failure chart in *Spell Law* (or, if desired, these attacks can be simply considered as having no effect).

ELEMENTAL SPELL ATTACK CHART				
Spell	Attack Table	Max Result	OB Mod	Special Notes
Shock Bolt	T-1.5	30	-50	#1
Water Bolt	T-1.5	60	-35	#1
Fire Bolt	T-1.5	60	-25	#1, #2
Ice Bolt	T-1.1, 1.2, 1.3	60	-25	—
Lightn. Bolt	T-1.1, 1.2, 1.3	90	-20	#3
Cold Ball	T-1.5	60	-30	#1
Fire Ball	T-1.5	60	-40	#2

Note: Roll each ball attack separately. Roll once for each type of bolt attack made against the same target in the same turn; this attack will be modified as indicated at the bottom of this chart.

Note #1: Ignore hull and rigging hits and treat all criticals as Weapon/Crew criticals.

Note #2: Roll a fire critical of equal severity to any other critical obtained.

Note #3: Roll a fire critical of one severity less than any other critical obtained.

EFFECTS OF MULTIPLE BOLTS				
# Bolts Cast (PP Mult)	Prep Rnds / Spell (1 caster)	Prep OB Mod	Max Result Change	% Failure Chance (1 caster)
1	2	-25	+0	2
2	2	-20	+0	4
3	2	-10	+0	5
4	2	+0	+6	7
5	1	+5	+6	9
6	1	+10	+6	11
7	0	+15	+12	13
8	0	+20	+12	14
9	0	+25	+12	16
10	0	+30	+15	18
11	0	+35	+15	19
12+	0	+40	+15	20

6.7 CREATURE ATTACKS VS. SHIPS

COMBAT INVOLVING MONSTERS

Creatures attack differently than ships, as they have their own, natural weapons and are often capable of attacking more than once during a Combat Round. If the monster has a Ram attack it is resolved during the Movement Phase as if the monster was a galley.

MONSTERS AND OPPORTUNITY ACTIONS

Creatures are not allowed to declare Opportunity Fire (see Section 8.9) or Opportunity Spells unless they are of Average or above Intelligence (see monster listings). Note that certain monsters (such as the Black Ships and Ghost Ships) are actually ships. They should be treated as a normal ship opponent except where otherwise noted (see Section 14.3).

MULTIPLE ATTACKS BY MONSTERS

Most creatures have two (or in some cases more) attacks which they are capable of using. In most cases a creature will use the attack which has the best chance of hitting its target (i.e., a Dragon might choose to use his breath weapon, since it has the best chance of hitting). A successful hit with any attack other than a breath weapon or a spell could allow the creature to strike again. The GM should roll d100 (modified by the creature's Movement Modifier), and if the roll is greater than 60 a second attack is allowed. If the second attack is a Grapple/Envelope (such as that of the Kraken), the number rolled need only be greater than 40. This reflects the fact that these creatures use their first attack to prepare their prey for their primary Grappling attack.

MONSTERS' OBs, DBs, AND STATS

As indicated in Sections 13.0 and 14.0, each monster has a *Sea Law* OB. This number is added to the d100 roll in the same fashion it is for ship-to-ship combat. It is modified by the same factors as well (ship's DB, Captain skill, but not weather). The DB of a monster in *Sea Law* combat is considered to be 0 if the creature is Large, +10 if it is smaller than that, and -10 for anything bigger than Large. This is a rather simplified approach, and GMs wishing to use the original *Creatures and Treasures* DBs should feel free to do so. Keep in mind, however, that doing so will make your monsters much harder to hit (subtracting 50 from the chance to hit a whale with a mangonel makes things rather tough for the ship).

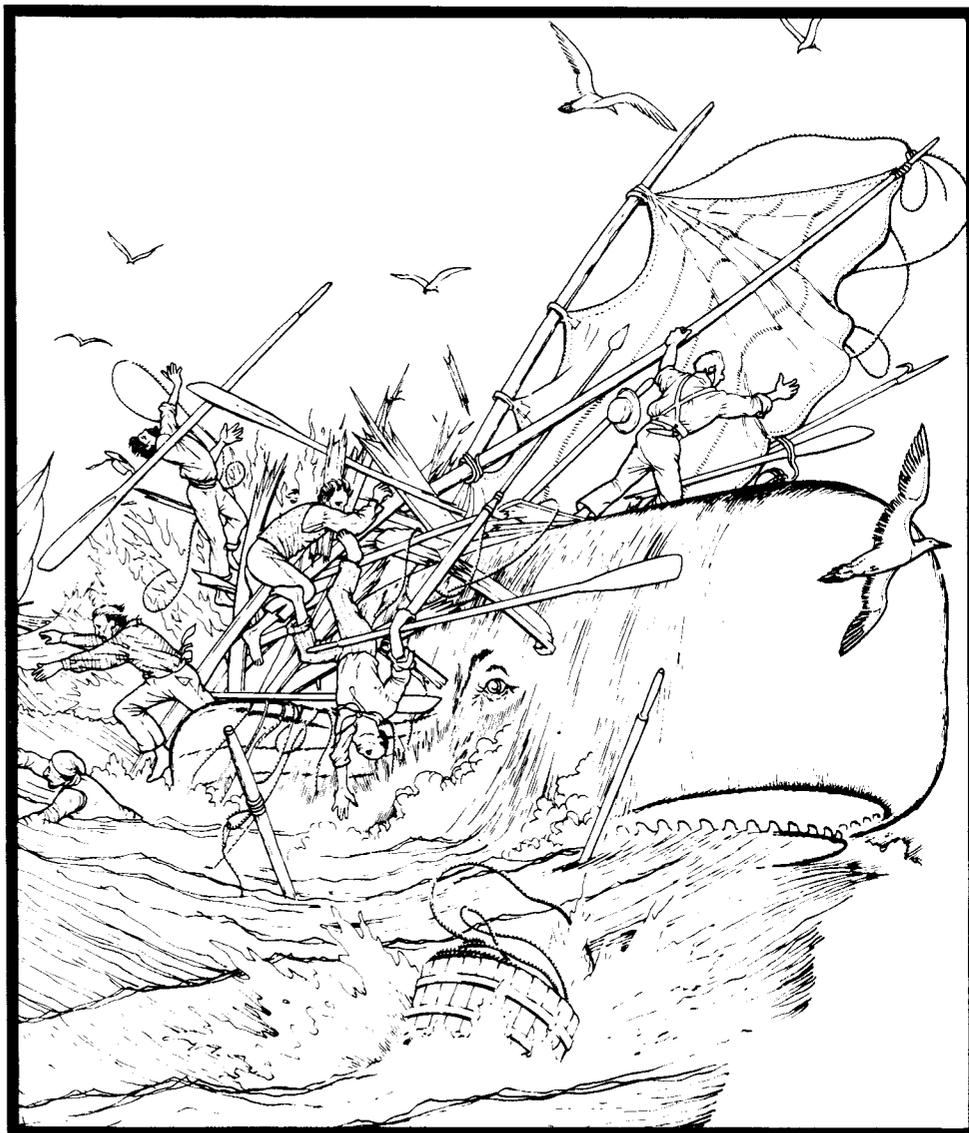
MONSTER ATTACKS

Creatures in *Sea Law* use the Ship Attack Tables as indicated in the Creatures Stat Table T-4.5. Creatures that use spells or related attacks will use the tables and related rules contained in the Magic section of this chapter. Creature grapple attacks use Attack Table T-1.5, but all criticals are Huge Creature Grapple criticals (i.e., do not use the critical types indicated on the attack table). These criticals are resolved on the Huge Creature Grapple Critical Strike Table T-2.6.

6.8 SHIP ATTACKS VS. CREATURES

CRITICALS VS. MONSTERS

When attacking a monster with ship weapons the critical hit tables provided for ship use will not apply. Instead, GMs should use the proper *Arms Law* critical tables (substituting Krush for Impact against the smaller monsters). Keep in mind that attacks against all Large and Super Large monsters will use the original *Arms Law* critical tables.



6.9 SPECIAL ATTACKS

Greek Fire — As mentioned above, certain ships in the Shadow World use Greek Fire as a weapon. Although it may be somewhat outdated considering the variety of destructive fire spells available to magic using characters, Greek Fire has the advantage of being more reliable and less easy to counter.

Greek Fire is usually delivered through a tube mechanism mounted in the fore of a galley, although some sailing ships carry it in side-mounted tubes. A Greek Fire attack from a tube may only have a range of hexes and it uses Attack Table T-1.5 with a maximum result of 60 and a -50 modification at a range of one hex and -75 at a range of two hexes. All resulting criticals are resolved on the Fire Critical Strike Table T-2.7. See the Section 7.5 for more details on the effects of fire on ships.

Greek Fire can also be encountered as the payload of either a catapult/trebuchet or ballista canister—the attack always uses Attack Table T-1.3 with an additional -20 modification. All normal non-critical damage is ignored, and a fire critical being delivered instead of the normal critical indicated. Double the normal fumble range—if a fumble results, the attacking ship takes an 'C' fire critical in addition to the normal fumble result.

This is one of the most dangerous weapons carried on a ship. Each time a critical hit of 'B' severity or greater is inflicted on a ship carrying a Greek Fire tube, there is a 15% chance that the reservoir will leak, the ship will be attacked by its own Greek Fire. This chance is increased by 5% for each level of severity above 'B' (e.g., a ship that takes an 'E' crit will have a 30% chance of having its Greek Fire storage tank leak). If its Greek Fire leaks, a ship will take a 'C' critical resolved on Table T-2.7.

Flaming Projectiles — A flaming projectile is a ballista bolt or chain ammo (see Section 6.1.2 for restrictions) with flaming material attached. Due to the reduced aerodynamics of the material attached to the projectile to create the flame, modify a flaming projectile attack by -10.

Roll an additional 'A' fire critical if a normal critical is achieved by a flaming projectile attack. If a flaming projectile attack results in a fumble, the attacking ship takes an 'A' fire critical in addition to the normal fumble result.

Corvus — A corvus is a long ramp with a large spike at the end. Before use, the spike end of the ramp is hoisted up; and then it is cut loose to fall onto the deck of an adjacent ship. A ship with more than one mast may not carry a corvus.

- A corvus can only be used against a ship in an adjacent Bow Hex or an adjacent Bow Non-middle Side Hex (Section 6.2).
- The ships are automatically grappled (Section 6.5).
- The boarding party size is increased by 3 (Section 6.4).
- All degrappling attempts are modified by -30.

Iron Hand — An iron hand is a special grappling missile that can be fired from ballistae and mangonels. An iron hand attack only has a range of one hex and the attack has an 80% chance of a successful grapple (see Section 6.5). Normal artillery rules apply (i.e., field of fire, rate of fire, etc.).

Tower — A tower is a raised fortified area on the bow and/or stern of a ship. A ship with more than one mast may not carry a tower. Each tower can hold up to two marine points that receive a +25 modification to their small arms fire attacks due to the elevation of the towers (see Section 6.1). As long as there is at least one marine point manning a tower, the tower will count as 15 melee strength points for a repelling party (see Section 6.4).

6.10 HTC WEAPON RESTRICTIONS

As noted in Section 3.4, the HTC of a ship limits what weapons it may carry. This is intended to reflect both technological limitations and, to a certain extent, historical accuracy. In addition it may reflect limitations of ship design.

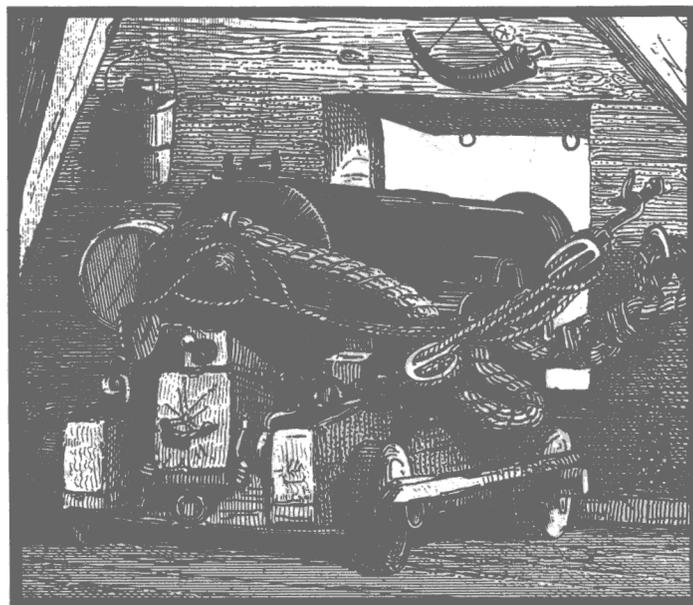
Galley HTC—Ships of this HTC are normally limited to Catapults, Ballistae, Rams/Sheers, and Greek Fire tubes. Due to the layout of their oar decks, weapons fitted in BroadSides are not allowed. Also note that a Galley fitted with a fixed mast (such as those used in the Mediterranean after 1000 AD) cannot use catapults. Ballistae may be fitted, but only in the bow of the ship. Ships such as the Viking longship cannot be fitted with Rams.

Primitive Sailing Ship HTC—These ships, like all ships with fixed masts, cannot use catapults. In addition they may not be fitted with any weapon larger than Light Mangonels. On the smaller ships, such as caravels, only Ballistae would be carried. This is due to the weakness of their structure as compared to that of later design types. It also reflects the level of shipboard weapons technology associated with these ships. Rams/Sheers are not allowed on these ships.

Galleon HTC—Ships of this HTC can carry any type of Non-Catapult weapon up to and including Heavy Mangonels and all the gunpowder weapons. These ships marked a transition period in both weapons and sailing technology. Note again that they may not carry Catapults or Rams/Sheers.

Advanced Design HTC—These ships can carry any missile weapon, but there are restrictions based on the size of the ship. See Tables T-4.6 and T-4.7 for restrictions. Of course, these ships cannot carry Catapults or Rams/Sheers.

More detailed discussions concerning shipboard weapons can be found in Sections 11.0 and 16.2.



7.0 MISCELLANEOUS

The following are miscellaneous rules dealing with morale, repairs, magic, ship damage, fire, etc. These rules are used with the standard tactical rules, but they will be used less frequently as the specific situations they cover are rarer.

7.1 MORALE CHECKS

Morale checks (MCs) at sea are somewhat different from those found in *War Law* for land combat. The crew of ship (with the exception of slave galleys) is usually better-trained than their land counterparts, and will “break” much later than comparable land troops. Crew quality also plays a major role in when a crew “breaks,” and what they do when they break. A crew on a ship has no where to “run”—its fate is directly linked to its ship’s fate.

Note: While there are some similarities to the WL morale system, SeL’s system has crews breaking much later than their land bound counterparts. Given the nature of sea combat (often a battle to the death—those who doubt this should review the Anglo-Dutch wars of our own history) and the environment where it takes place, surrender is viewed as a last-ditch option, and one which is not very attractive. Also, ship’s crews work as a team 24 hours a day, and have a cohesion that is not often found in armies of the same period. Note that troops at sea can still use WL rules for morale. Just because they are at sea does not mean that they are as well-trained or share the same outlook as their sailor companions!

WHEN A MORALE CHECK IS REQUIRED

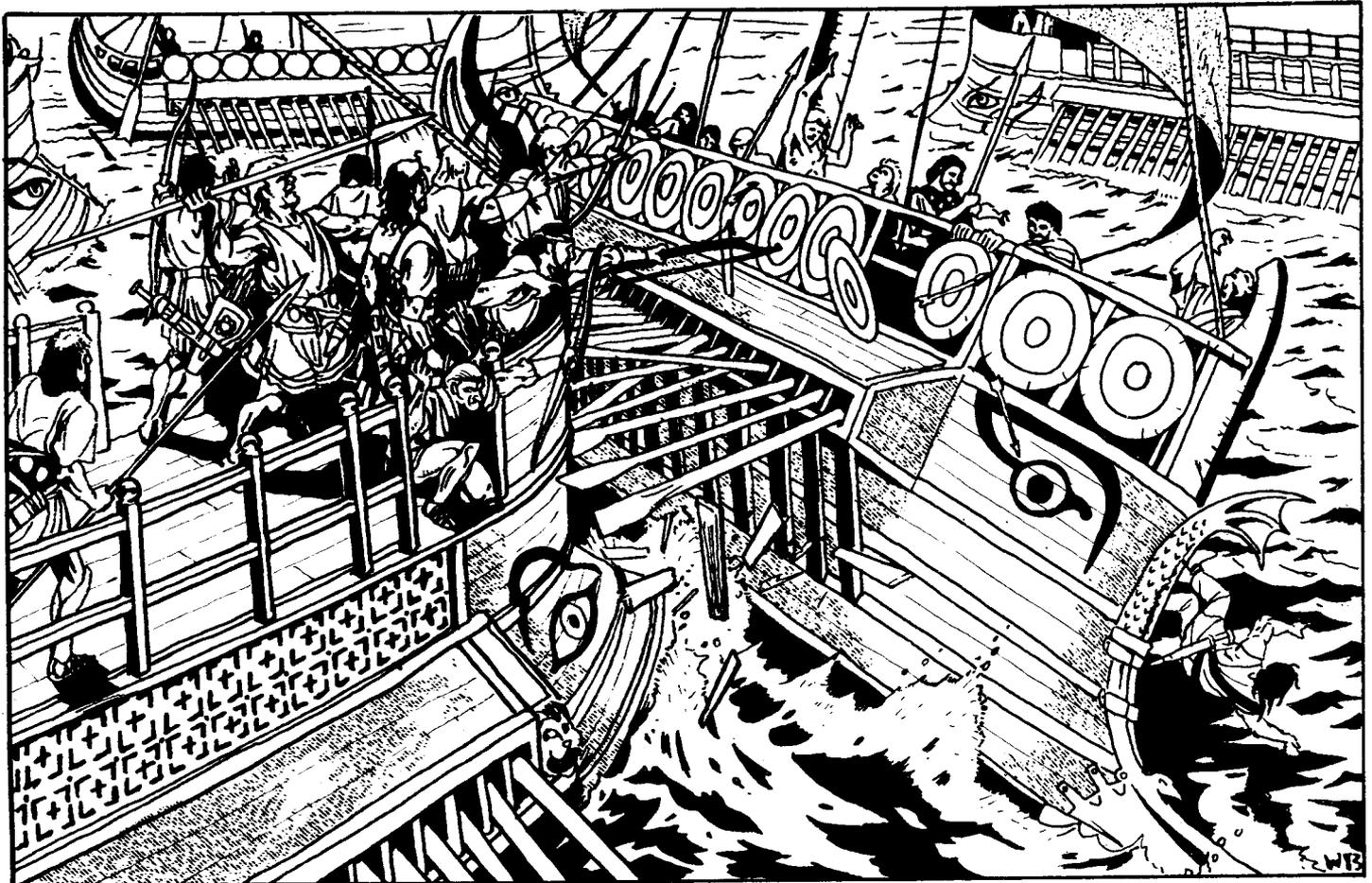
A ship’s crew must make a Morale Check (MC) during the Orientation Phase if one or more of the following occurs:

- During the turn, a popular (Leadership Bonus of 50+) ship’s officer or the ship’s Captain was “killed” (includes any wound that seems to have “killed” the leader). In addition, the GM may decide to include player characters in this grouping, thus requiring a MC each time a PC is killed in combat.
- During the turn, the casualty percentage for the ship’s crew reaches 50% or more for the first time.
- During the turn, the casualty percentage for the ship’s crew reaches 60% or more for the first time.
- During the turn, the casualty percentage for the ship’s crew reaches 70% or more for the first time.
- During the turn, the casualty percentage for the ship’s crew reaches 80% or more for the first time.

Regardless of circumstances, a crew will never have to make more than one Morale Check in a given turn.

AUTOMATIC SURRENDER

Once a ship has taken 90% casualties, its crew will automatically surrender, regardless of their quality and/or any actions taken by their officers and/or the PCs. No Morale Check is involved. A crew of lower quality will often surrender before this, but even a Crack crew will surrender once it has taken 90% casualties.



MORALE CHART		
Crew Quality	Base Morale Value	% Casualties Before Surrender is Possible
Poor / Slave	10	50%
Green	20	50%
Reservists	30	50%
Regular	40	50%
Veteran	50	60%
Elite	60	70%
Crack	70	80%

MODIFIERS TO MORALE CHECKS	
Reason for Modifier	Modifier
Officer/PC Direction *	+50% Leadership Bonus (round up)
Popular Officer killed during the current turn	-5
Captain killed during the current turn	-10
Losses Over 50% of Crew	-10 per 10% > 50%
Ship has been Boarded by the Enemy	-15
Conflict with Racial/Cultural Enemy	+10
Attacked by "pirates" who do not kill prisoners §	-10
Attacked by "pirates" who kill prisoners §	+10
Each PC Alive and Acting as Leader (optional) §	+2 / PC

* — To use this bonus, the Captain (or other commanding officer) must be able to communicate with his crew (either by using a megaphone or magical means).
 § — Applies only to Morale Checks made to determine if a crew surrenders.

RESULTS	
Modified Roll	Result
101+	No Effect
91-100	Crew demoralized: -5 to ship's OB
81-90	Crew demoralized: -10 to ship's OB
71-80	Crew demoralized: -15 to ship's OB
61-70	Crew demoralized: -20 to ship's OB
≤ 60	Crew demoralized: -25 to ship's OB. Possible Surrender if 50% or more casualties.

BASE MORALE VALUE

A crew's Quality (i.e., Crack, Elite, Veteran, etc.) determines its Base Morale Value (BMV) as indicated on the Morale Chart. If a crew consists of different Quality Seamen, Oarsmen, and/or Marines, average (round up to nearest factor of 10) the different Base Morale Values to obtain the "crew's" Base Morale Value and Quality.

Example: A ship has Regular Seamen (BMV=40), Regular Oarsmen (BMV=40), and Elite Marines (BMV=60). The average is $46.666 = (40+40+60)÷3$. When rounded to the nearest factor of 10, this is 50. So, the crew's Quality is Veteran and its BMV is 50.

MAKING A MORALE CHECK

To make a Morale Check, roll 1-100 (open-ended) and add the crew's Base Morale Value and any applicable modifiers (see the Morale Chart). Apply the modified roll to the Results section of the Morale Chart.

SURRENDER

If a Morale Check is 60 or less **and** the ship's crew has sustained 50% or more casualties there is a chance that they will surrender. This percentage is 60% casualties for Veteran crews, 70% for Elite crews, and 80% for Crack crews.

To determine if such a crew surrenders, make a second Morale Check. If this Morale Check is less than or equal to 100, the crew surrenders.

Example: The crew of a ship being boarded by pirates has its popular First Officer is killed, so a Morale Check is called for. The crew is rated as Elite (giving them a Base Morale Value of 60), and has taken 55% losses. The Captain is still alive, and can use half of his Leadership Skill bonus (+15) to modify the Morale Check. So the MC modified roll is $85 = 45(\text{roll}) + 60(\text{BMV}) - 5(\text{officer death}) - 15(\text{boarded})$. Thus the ship suffer a -10 to her OB due to crew members trying to hide below and otherwise shirk duty.

If the roll had been a 15, the modified roll would have been 55 and the ship would have a -25 OB mod. Since the crew is elite, no surrender MC is required (the casualty % would have to be at least 70%).

7.2 BATTLE REPAIRS

Damage taken during combat is often quite drastic, and thus difficult to fix. However, most sailors are well-trained to make repairs and only the most serious damage must be taken care of while docked. Assume that a ship can repair 5 points of combat damage per day, 10 if no other action is taken. Holes in the hull can be patched with canvas and wood, but can only be repaired in a shipyard or while the ship is careened.

It will take 1 day to repair damage to a mast, 2 days if a new mast must be fabricated. Masts repaired in this fashion are slightly weaker than the original, and reduce speed. The MP profile of the ship is reduced by 1 at Full Sail Status only, until a new mast is put on in a shipyard.

Weapons damaged or destroyed in combat can only be repaired if enough spare weapons were carried to sea or they can be scavenged from a prize. In a similar fashion crew losses can only be replaced in port or by taking on volunteers from a prize vessel.

Note that almost any kind of damage, both combat and storm-related, can be repaired at sea. Sailors in this era were very inventive and skilled craftsmen, and sailing ships could remain at sea as long as they had supplies of water and food. This is reflected in the above rules provisions. GMs should not alter these rules too much, or it will offset the balance of play.

REPAIRS DURING BATTLE

Only simple "repairs" may be made during battle—we suggest that these repairs be limited to the following:

Bailing (per crew point)slows hull hits per round by one as long as bailing continues

Pumping (1 crew pt per pump) ..slows hull hits per rnd by 5 as long as pumping continues

Replace Sail (2 crew pt) ..repairs one rigging section unless a mast has fallen, takes 2-6 turns

7.3 UNFOULING

Unfouling is handled just like ungrappling (see Section 6.5)—success is dependent upon the quality of the crew which is attempting the unfouling. Use the Grappling and Ungrappling Chart (Section 6.5) to determine the number of attempts that can be made and the chance of success. The chance of unfouling is reduced by 10% if the fouled ships have two “contact point” hexes.

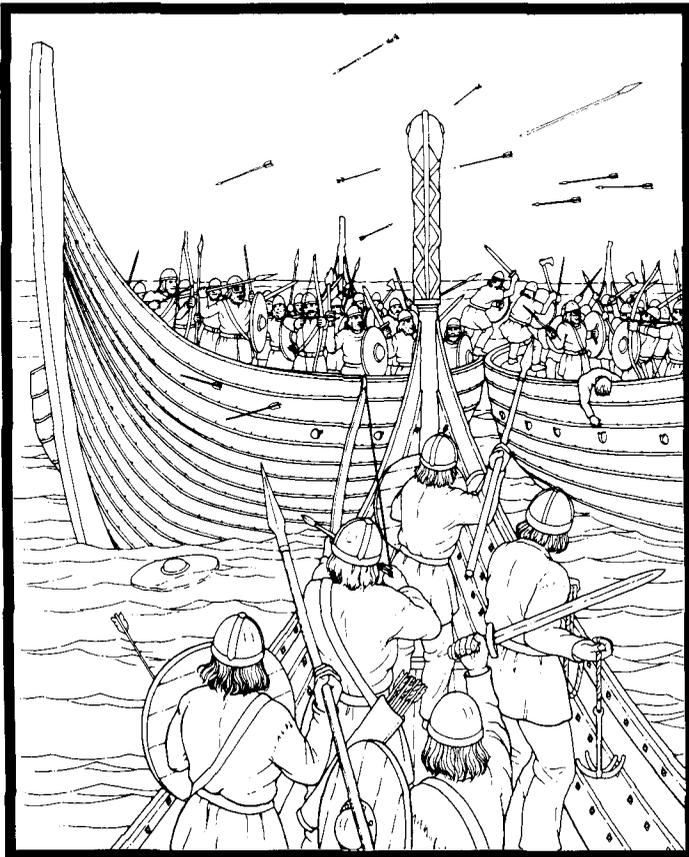
7.4 POST-BATTLE CASUALTY DETERMINATION

Now that all the ballista bolts, mangonel projectiles, stones, rams, cutlasses, and other engines of destruction have had their shot at your ships, you probably think it’s all over, right? Wrong! It’s time to consider what all that damage has happened to your crews.

Some of the casualties you recorded represent dead crew members, some represent the wounded, and some represent shirkers (i.e., those who cowered and refused to help during the fight). The following procedure can be used to determine how many casualties can recover and participate as crew members:

Dead — Assume that 40% are dead or too seriously injured to return to duty. If superior medical resources can be quickly accessed on board or nearby, a GM can lower this to 15-35% (the 5-25% “saved” would then be treated as “Wounded”).

Wounded — Assume that 40% are injured but can eventually return to duty. Recovery takes 1-50 days; use an average of 2% per day or roll for each casualty. If normal medical resources are not available, a GM should shift up to half of the wounded into the “Dead” category.



Dazed — These are crew members that were temporarily incapacitated (i.e., knocked unconscious, pinned by debris, dazed, etc.). They can immediately return to duty after combat. The chart below summarizes the percentage of casualties that fall into this category.

Shirkers — These are the crew members that broke, cowered, and refused to fight. They are available to return to duty, but how they are treated will depend upon whether or not anyone noticed their actions, the harshness of the leaders, and a variety of other factors. The chart below summarizes the percentage of casualties that fall into this category.

Note: Most crews do not wear armor, but a GM may use the War Law Section 25.4 optional rules to shift casualties due to armor.

CASUALTY PERCENTAGE CHART

Casualty Type	Crew Quality						
	P	G	Re	R	V	E	C
Dead *	40	40	40	40	40	40	40
Wounded *	40	40	40	40	40	40	40
Dazed	0	5	5	10	15	20	20
Shirkers	20	15	15	10	5	0	0

* — Dead and Wounded percentages may shift due to the quality and availability of medical resources.

PC AND NPC CASUALTIES

After combat, a GM may want to determine the fate of specific PCs and NPCs that were on a ship that took casualties during the battle. First determine the percentage of the entire crew that were casualties (i.e., divide the number of casualties by the crew size and then multiply by 100). This is the chance that each PC or NPC is a casualty (roll for each one).

If a character is a casualty, roll 1-100 (not open-ended) and add the character’s level times two. Then refer to the Character Casualty Chart and use the modified roll to determine the critical(s) that the character takes. These criticals can then be resolved normally. Use slash, puncture, and crush criticals; determine randomly or use whatever critical type was most prevalent during the battle.

CHARACTER CASUALTY CHART

Modified Roll	CHARACTER'S AT				
	12, 20-19	11,15 16,18	4, 8,10, 14,17	3, 6,7, 9,13	1, 2,5
91+	A	A	A	B	C
81-90	A	A	B	C	D
71-80	A	B	C	D	E
61-70	B	C	D	E	E, A
51-60	C	D	E	E, A	E, B
41-50	D	E	E, A	E, B	E, C
31-40	E	E, A	E, B	E, C	E, D
≤ 30	E, A	E, B	E, C	E, D	E, E

7.5 FIRE

This section contains a discussion of fire and its role both in combat and at sea. Even today a fire on board a ship is one of the most feared events of life at sea, and this was magnified in the days of wooden ships. Most of the ships covered in this supplement are of wooden construction, and the fear of fire plays a great role in the lives of their crews.

STARTING A FIRE

Any time a fire attack is used, there is a base 5% chance that the flames will catch and a fire will start. Fire Critical results of 21+ automatically start a fire (see Table T-2.7).

Open flames are forbidden on all wooden ships, and cooking is done in a specially constructed oven (see Part VII — Sea Law Campaigns for more concerning this). However, accidents do sometimes occur. Each week at sea, there is a base 5% chance that a fire will start through some accident or another. This chance should be modified if there are a number of inexperienced hands among the crew, careless passengers, or any other events the GM feels increases the chance of fire. A ship which does not have a special fireplace or oven has the basic chance of fire starting increased to 25% per week. All fires started in this manner initially do 5 points of hull damage and an 'A' Fire critical.

FIRES SPREADING

A GM should check for fire spread each turn there is a fire on board (roll once for each fire). There is a basic 5% chance that any non-combat fire will spread in its first two turns of existence. For each turn beyond 2 that the fire burns its chance of spreading increased by 10% (i.e., it has a 5% chance in turns 1 and 2, a 15% chance on turn 3, a 25% chance on turn 4, etc.). After a fire spreads, the basic chance returns to 5% and the process starts over again.

- If a fire spreads, the ship takes an 'A' Fire critical. If this critical result is 21+, another fire starts and both fires may spread next turn.
- If a fire does not spread, it causes 2 hits in its current location (i.e., hull or rigging)—a fire on the deck causes one hull hit and one rigging hit.

FIGHTING FIRES

Many ships carried pumps that could be used both to pump out water and serve as a primitive fire engine. Ships not so equipped (mainly smaller ones) are liberally equipped with buckets. The first turn a fire is noticed, a GM should immediately switch to the Tactical Turn scale and begin fire-fighting operations. During combat this is already in force, so no changes are necessary.

To attempt to extinguish a fire, crew points are assigned to fire-fighting (see below for the chances of putting out a fire). This chance re-

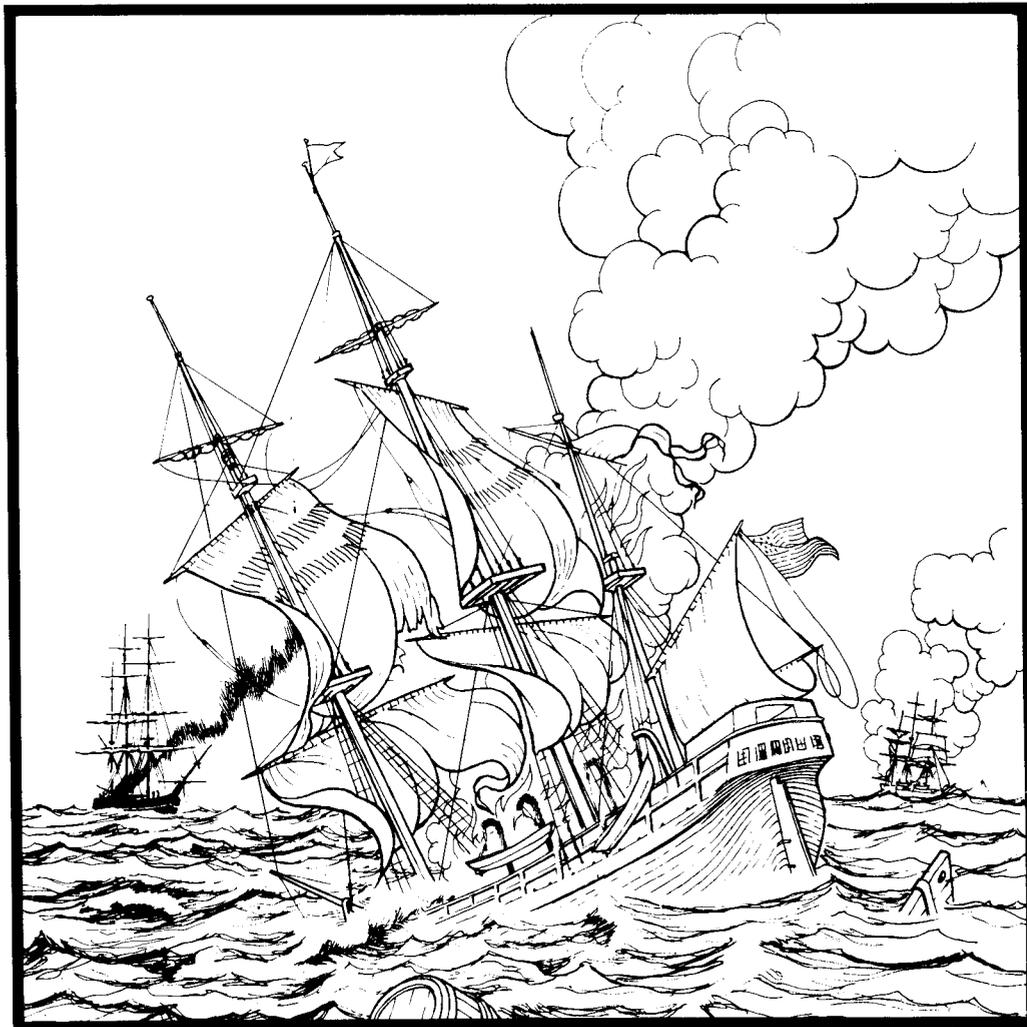
mains constant until a pump is employed (this takes 2 Tactical Turns, 4 when not in combat). Then the chance increases by 10% per turn.

Crew Points Assigned	Chance of Extinguishing Fire
1	10%
2	20%
3	25%
4+	30%

Such fire pumps operate by trailing lengths of hose over the side and using sea water to fight the fire. As a result, the ship must come to a complete stop while such activity is in progress, or the hoses will not draw properly. Also, the sails are usually hauled in or taken down when fires start to prevent them from burning and adding to the chaos of a fire at sea. On ships without pumps, buckets are lowered with rope into the sea and then the sea water is flung onto the fire. Fresh water will **never** be used to put out a fire, unless it is a dire emergency and the captain is close to another source of fresh water.

OPTION — MAGICAL FIRES

If a GM feels wants to play down the potential danger to ships of Fire Elemental spells, he can use the following guidelines and rational. Magical fire attacks (such as Fire Balls and Fire Bolts) do not start fires, as they are not actual fires but rather a burst of elemental energy. They are considered to burn for one turn only before their energy is spent.



7.6 MAGIC IN THE TACTICAL SEQUENCE

This section covers the effect spells and spell-like attacks have on both combat and movement in *Sea Law*. More details on magic and magic-users in campaigns can be found in Part VII – Sea Law Campaigns. Any spells that effect the weather will also be described in Part VII. Only spells that effect movement in Tactical Turns and combat spells will be discussed here.

SPELLS AND MOVEMENT

There are a number of spells that can have an effect on movement. Any spell that calls up wind (such as those found on *Weather Ways* and *Wind Law* and other such spell lists) will add 1-2 (depending on spell strength) to a ship's MPs for the duration of the spell. Since the direction of the wind generated can be determined by the spell caster, this is useful for escaping into the wind or for additional speed when running with the wind. The increase is to the MPs in both Normal and Full Sail Status. Galleys also benefit in this manner, but they cannot use their oars while using a spell to increase their sail MPs.

Other spells, such as those found on *Weather Ways*, can be used to influence the weather in a ship's area. This could be used to create (or remove) fog, which acts as a combat hindrance. It could also be used to summon up a storm to disable an enemy fleet. GMs should refer to the section concerning storm damage in Part VII when determining the effects of these spells.

MAGIC IN COMBAT

Magic in ship combat is used in much the same fashion as it is in land combat, except for the changes noted below (Section 6.6 provides some guidelines for handing this). Basically, a GM should allow each spell caster to commit as many spells during an Order Phase as he would be able to prepare and cast in 12 normal RM 10 second rounds. Declaring an "Opportunity" spell counts as a spell caster's entire spell allotment during the Order Phase, no matter how many he would normally be allowed to cast.

OTHER USES FOR SPELLS

Inventive players will find any number of uses for spells during the course of a *Sea Law* campaign. The GM should be prepared for this and allow the players as much reasonable leeway as possible. Keep in mind that many of the Alchemist spell lists could be used for ship construction. These, along with many other spell lists, are detailed later in this section.

SPELL CASTING MODIFICATIONS (7.6.1)

All spells cast while aboard a ship at sea have a +5 Extraordinary Spell Failure modification (see *Spell Law* Section 10.9)—if the ESF rules are not being used, just double the Unmodified (UM) spell failure chances. This reflects the motion of the ship and the constant activity going on around the spell caster. If the seas are rough or worse, the ESF mod is +10 (non-ESF users should quadruple the UM spell failure chances).

In addition, all Base Attack Rolls are modified by -10 and all Elemental Attack Rolls are modified by -20.

If a GM wishes to allow characters to develop skill in casting spells on a ship at sea, use the "At-sea Spells" skill with a Development Point cost that is the same as Spell Mastery. Each rank in this skill decreases the modifications mentioned above by one (to a minimum of +1 for the ESF and -1 for the BAR and EAR mods).

SPELLS USEFUL IN SEA LAW (7.6.2)

This section presents a number of guidelines for using specific spells and spell lists with *Sea Law*. Since these guidelines are keyed to the author's specific campaign, a GM should examine them and modify them so that they are appropriate for his campaign.

Please note that this list is by no means comprehensive. Players are bound to find ways to apply spells that are not included here, or come up with different ways to use the presented spells. GMs should be prepared for this and be ready to improvise. A player should not be prohibited from doing something just because it isn't covered here!

SPELL LAW — CHANNELING

Barrier Law (Open List) — All the spells in this list work normally, with the exception of the *Earthwall* spells which cannot be used at sea. Only water walls can be placed atop the surface of the water (at the GM's discretion). Such a water wall slows a ship passing through it, causing it to lose 1 MP that turn.

Weather Ways (Open List) — These spells are quite useful in a *Sea Law* campaign. *Breeze Call* (7th level) increases a ship's MP by 1 in the specified direction. *Wind Mastery* (15th level) can increase the MPs by a maximum of 2. This increase is only available in one aspect of the original Movement Profile. Spells such as *Fog Call* (8th level) and *Precipitation Call* (11th level) can be used to conceal a ship or act as a hindrance in combat.

Lofty Movements (Open List) — This spell list is most useful to a PC who spends a great deal of time in the rigging of a ship. The spells *Waterwalking* and *Waterrunning* are extremely useful for moving from ship to ship. Specially trained marines, with this spell cast upon them, could theoretically move across the water and board an enemy ship.

Light's Way (Open List) — Most of the combat spells in this list can be directed against crew members of an opposing ship, but not the ship itself. The one exception to this is *Lightning Call* (25th level)—it attacks as a Lightning Bolt (see Section 6.6).

Calm Spirits (Closed List) — These spells would be useful for dealing with monsters that are not Undead (it would not work against the crew of a Black Ship, for example). *Lord Calm* and *Mass Calm* would be effective spells to cast upon the crew of an enemy ship, especially as it is being boarded, for the boarding party would encounter no resistance from those affected.

Creations (Closed List) — Obviously, this spell would be useful for supplies on long voyages. If a ship had an on-board spell caster who had access to this list, it could carry more cargo or weapons since there would be no need to stock food or fresh water.

Locating Ways (Closed List) — These spells would be useful for a navigator, but only *Lord Location* (20th level) would be really useful for navigation out of sight of land. The other spells would prove most useful in a situation where visibility of the coastline is limited (such as a dense fog, storm, etc.), or possibly even the location of hard-to-detect reefs or submerged rocks. The spells with long ranges could be used to track known ships without visually sighting them.

Protections (Cleric Base List) — The *Temperature Sphere* spell could protect part of the ship from the enemies' fire-based attacks.

Summons (Cleric Base List) — Like Calm Spirits, above, this list would be very useful for dealing with sea monsters. *Summons I-X* (levels 1-9) could be used to summon a creature to battle a sea monster if necessary. The *Demonic Gate* spells would also be useful, but slightly harder to control. Note that the range of most of these spells is 100'; so a particularly mischievous caster could cast this spell, summoning a creature on board a nearby enemy vessel.



Nature's Movement (Animist Base List) — See Lofty Movements, above, for guidelines for the use of this list.

Animal Mastery (Animist Base List) — See Summons, above, for guidelines for this list.

Nature's Protection (Animist Base List) — The *Underwater Breathing* spell would be useful for making subsurface battle repairs, as well as sneak-attacks upon enemy vessels. A group of trained marines with this spell cast upon them could easily ambush a ship.

Nature's Lore (Animist Base List) — *Nature's Awareness* (level 2) would be very useful for locating and tracking sea creatures, especially if the PC is a whaler. *Rain and Storm Prediction* (levels 3 and 4) will also prove very useful. When they are used the GM should inform the PCs of the weather roll for the period the spell covers. This rule of thumb holds true for all weather prediction spell lists. This could require that the GM determine the weather for days in advance.

Moving Ways (Ranger Base List) — As Lofty Movements, above.

Nature's Way (Ranger Base List) — As the above Animist Base List. Note that this list combines some of the animal tracking abilities of the Animist Base List Animal Mastery. *Shelter Finding* (7th level) could, at the GM's discretion, be used to locate a safe anchorage.

Holy Vision (Astrologer Base List) — *Starpaths* (level 1) is an ideal navigation spell. It allows the PC to determine his position automatically (within the limits of the spell itself; i.e., the sky must be clear).

Starlights (Astrologer Base List) — Most of these spells can be used against crew members of a ship and not the ship. *Flare* (level 8), *Starfires* (level 25), *Starhand* (level 30), and *Starfires True* (level 50) are the main exceptions to this rule (see Section 6.6).

SPELL LAW — ESSENCE

Essence Hand (Open List) — The *Aiming* and *Lord Aim* spells would function normally if cast upon a ship's weapons.

Essence's Perception (Open List) — The upper level spells here (15th level *Long Eye*, for example) would be useful for keeping watch at sea.

Spell Wall (Open List) — This list has some powerful protection effects. It can be used to protect a ship from magical attacks if the radius of the specific spell is large enough.

Lesser Illusions (Open List) and **Illusionist Base Lists** — With some of the higher level spells, an *Illusion* or *Phantasm* could be created to appear to be a ship, a reef, a sea monster, or other major distraction in a sea battle.

Unbarring Ways (Open List) The 20th level spell *New Gate* could be used to create a hole in the hull of a ship. This would inflict 10-50 hull hits and cause 5% leakage.

Physical Enhancement (Open List) — Spells such as *Watervision* (level 7) and *Waterlungs* (level 8), and their upper level counterparts, could prove useful for underwater excursions. If cast on underwater boarding parties, the *Mass Watervision* and *Mass Waterlungs* would be particularly helpful.

Lofty Bridge (Closed List) — Used like Lofty Movements, above. *Portal* spells can create temporary holes in hulls, as *New Gate* on the Unbarring Ways list, above. Flying or teleported boarding parties would probably be extremely successful. It is important to note that such special movement spells are particularly useful at sea, where getting from one place to another without a ship is difficult.

Spell Enhancement (Closed List) — Some spells extend the duration of a spell already in effect. More importantly, however, some spells extend the range of spells, making certain spells, with only 50' or 100' ranges much more potent.

Dispelling Ways (Closed List) — After a quick read through the list of spells effective against ships, a caster will quickly realize the importance of these defensive spells. The 100' R spells have a good chance of protecting all (or most) of many ships.

Rapid Ways (Closed List) *Haste* and *Speed* spells, cast upon the crew, will *not* make the ship move faster—however, they will help them reload faster.

Shield Mastery (Closed List) *Deflections* and *Aim Untrue* would be very effective against ship to ship missile fire.

Magician Base Lists — All of the Magician Base Lists could prove very useful in combat (see Section 6.6). *Airstop* (Wind Law, 5th level) could be used to halt a ship's movement for the duration of the spell. A *Whirlwind* (Wind Law, 14th level) would use the Ramming Critical Strike Table T-2.4 for damage to a vessel. *Water-Ice* (Ice Law, 12th level), cast upon the water around a ship, could slow the ship down as the ice accumulates on it. It will lose 1 MP for every 100 cu' of ice frozen to its hull. *Beacon* (Light Law, 13th and 19th level) is useful for signaling at long distances. *Part Water* (Water Law, 25th level) would be an effective barrier to ship movement.

Light Molding (Illusionist Base List) — Combat spells effect ships as outlined above.

Alchemist Base Lists — Any list dealing with construction (such as Inorganic Skills) could be used to help construct a ship (see Part V). The more exotic spells (such as *Work Eog*, 25th level) can be used to help construct a ship out of material other than wood. The *Imbedding* spells can be useful on ship missile ammo. Such ammo could have imbedded *Fireballs*, *Sudden Light*, *Mass Confusion*, etc.

Body Reins (Monk Base List) — Used as Physical Enhancement, above.

Matter Disruption (Evil Magician Base List) — This list can be used to attack ships made out of a material other than wood. When necessary, attacks use the appropriate Critical Strike Tables T-2.1 to T-2.8.

Fluid, Solid, & Gas Destruction (Sorcerer Base Lists) — These spell lists are used in combat as the Magician Base Lists discussed above. *Unwater* (10,000 cu') (14th level) cast below a ship, could be devastating, making it capsize as it falls, and water rushes in to fill the space left by the destroyed water.

SPELL LAW — MENTALISM

Brilliance (Open List) — Combat effects are as discussed above.

Solid, Liquid, & Gas Manipulation (Closed Lists) — These spell lists act as the Magician Spell Lists discussed above. *Water Corridor* and *Water Bubble* spells (on Liquid Manipulation) are very useful for underwater travel. The *Water Corridor* is limited, however, in that it must be open at the top, and accomplishes little if it does not reach the ocean floor (allowing people to walk on a solid surface), although in any case it would provide a barrier which ships could not cross.

Shifting (Closed List) — These spells act as Physical Enhancement, above.

Liquid, Solid, & Gas Alteration (Mystic Base Lists) — As the Magician Base Lists, above.

ROLEMASTER COMPANION I

Earthblood's Ways (Arcane List) — For an interesting twist, a GM could place an Earthnode out at sea or under the water.

Entity Mastery (Arcane List) — Aside from the advantages of summoning Elementals for combat, this list allows casters to create Golems and Constructs. A modified being of that nature, made of a hard, light substance and equipped with a means of water mobility, could become a magical, animate ship or torpedo.

Shapechanging Ways (Arcane List) — Since humans are somewhat "out of their element" at sea, this list can change a spell caster into a water-based creature or being.

Druidstaff (Druid Base List) — *Warp Wood* (4th level) would be a extremely useful attack spell against most wooden ships.

Individual Spells — *Current Command* (12th level) and *Destination Sail* (20th level) have obvious sea/ship related uses.

ROLEMASTER COMPANION II

Changeling (Warlock Base List) — For those going out to sea for a long period of time, gills, fish-like scales, and other adaptations might be useful.

Glyph Law (Runemaster Base List) — It should be noted that *Glyphs* can be placed upon water.

Warding Law (Runemaster Base List) — A *Ward* could be placed around a ship so that if another ship got close, a *Fireball* or other destructive spell would be released. This would help protect the ship from ramming and/or boarding attempts.

Highriding (Warrior Mage Base List) — The *Platform* spell on this list would be a good last-ditch spell to cast if the caster's ship was sinking (especially in shark-infested waters).

Wood Shaping (Arcane List) — Many of these spells would be very valuable on board or against a wooden ship.

Conveying Ways (Magician Base List) — With access to spells such as *Mass Water Steed*, a sea-borne cavalry could be created.

ROLEMASTER COMPANION III

Way of the Navigator (Navigator Arcane List) — All the spells on this list are invaluable to a sailing ship.

Plasma Mastery (Arcane List) — Aside from *Plasma* attack spells, the *Alter State* spell could put a large hole in the side of an enemy ship, or destroy its mast.

ROLEMASTER COMPANION IV

Arachnemancy (Evil Magician or Cleric List) The *Minor* and *Major Web* spells would be very useful for grappling and boarding a ship.

Counterspells (Closed Essence List) — Many warships, would, in a high-magic world, have *Counterspells* vs. *Fireballs* or other common attack spells.

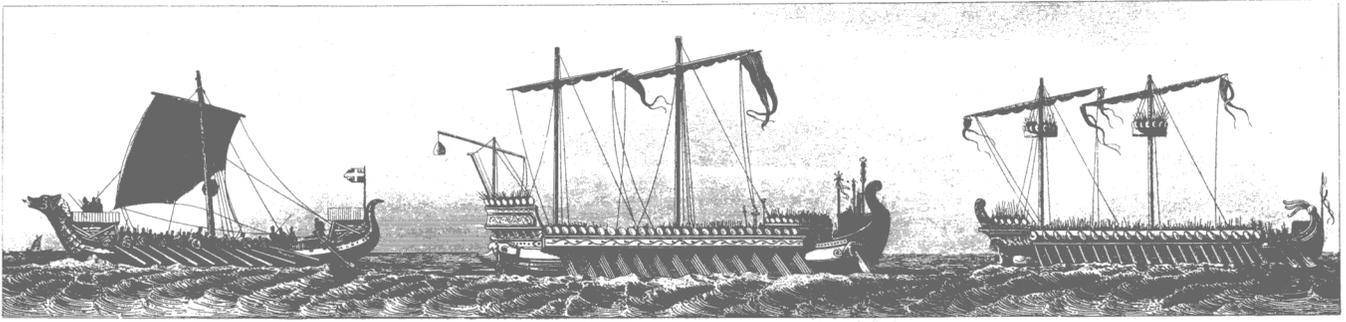
Acid Law (Arcane List) — Perhaps even more effective than fire, these spells could quickly destroy or sink a ship. Of particular use would be *Corrode Wood*, *Acid Mass*, and *Acid Storm*.

ROLEMASTER COMPANION V

Force Master (Forcemage Base List) — *Point/Unpoint* and *Field/Unfield* spells would be useful in either aiding or fending off grapple attacks. Also, the matter-destroying spells on this list would be effective in attacking a ship.

Shock Waves (Forcemage Base List) — *Shockwaves* are potent attacks against ships, and the *Sonar* spell would be as useful underwater as its real-world equivalent.

Gravity Law (Forcemage Base List) — Many of the spells on this list, particularly the high level *Explode* and *Implode* spells would inflict *Sea Law* criticals on ships.



Structure & Perimeter Wardings (Alchemist Base Lists) — GMs running a long term *Sea Law* campaign may wish to make the spells on these lists applicable to ships.

Fisherman's and Pirate's Way (Professional Guild Lists) — Obviously, these lists are tailor-made for sea travel and are very useful.

ROLEMASTER COMPANION VII

Water Forms (Elementalist Base List) — Many of these spells are useful, but the *Wave* and *Whirlpool* spells can be used as attacks in sea battle. The *Lord Wave* spell will capsize any ship (some GMs may allow a maneuver roll to avoid this).

Magical Ropes (Closed Mentalism List) — These spells are useful for grapple attacks.

Bubble Magic (Closed Channeling List) — *Bubble Conveyance* spells are useful for traveling underwater.

ELEMENTAL COMPANION

It is easy to use the *Elemental Companion* in a *Sea Law* campaign. Elementals attack as normal monsters as outlined in Section 6.7. GMs may wish to limit the existence of Flame and Earth Elementals at sea, but other than that there should be no problems. A summary of useful Elemental Spells can be found below.

Of all the spell casters, elemental magic users might be the ones most commonly encountered at sea. This is particularly true of those using Water as their element (summoned Water Elementals might be able to tow a ship in becalmed water or with no sails or oars. Water walls could cut a ship's MP by 1, etc.). GMs should keep this in mind when placing spell casters on NPC ships.

GMs should familiarize themselves with the section of the *Elemental Companion* concerning Drakes and their elemental properties before including a Sea Drake in an adventure. Much of the material in this section is invaluable for the proper use of this deadly creature. Many of the other elemental creatures contained in this section can be included in *Sea Law* with minimal conversions.

Lesser Elemental Area Attacks (Open List) — These spells (with the exception of *Lesser* and *Minor Elemental Storm*) are designed to attack characters rather than ships. *Lesser Elemental Storm* (level 8) and *Minor Elemental Storm* (level 25) can effect ships and characters. *Lesser* and *Minor Elemental Storms* effect ships by damaging their rigging with high winds (reduce MP by 1 until repairs are made) and have other effects based on the type of elemental force used. When possible, criticals should be rolled on the *Sea Law* critical strike tables.

Lesser Elemental Attacks (Open List) — These attacks work in the same fashion as the Magician Base Lists in *Spell Law*, with some modifications. The critical hit depends on the elemental force being used, and GMs should be prepared to modify some results to make them apply to ships.

Elemental Attack Enhancement (Closed List) — These spells can be used to increase the effectiveness of the above lists.

Elemental Continuation (Closed List) — As above, this list is useful when combined with some of the elemental attack spells.

Elemental Molding and Elemental Pooling (Closed Lists) — These spells will prove useful if a PC decides to create a ship from elemental forces.

Enhance Elemental Criticals, Duration, Radius, Ranging, Potency, and Targeting (Closed Lists) — These spell lists can be used in conjunction with the elemental attack lists to have the desired effects.

Greater Elemental Area Attacks (Closed List) — These spells are very effective when used against ships. The *Storm* spells (levels 6, 8, 10, 18, 20) are the most effective for this purpose. Their criticals should, when possible, be translated to the proper *Sea Law* critical strike tables. If this is not possible, apply any additional damage to the ship and the critical result to a crew member who was near the focal point of the attack.

Greater Elemental Attacks (Closed) — As Lesser Elemental Attacks, above.

Elemental Area Attack Law (Base List) — Use this list as Greater Elemental Area Attacks, above.

Elemental Attack Law (Base List) — See above for more details.

Elemental Fires (Base List) — This list would prove useful in the construction of a ship from elemental materials.

Temperance (Base List) — As Elemental Fires, above.

SPELL USER'S COMPANION

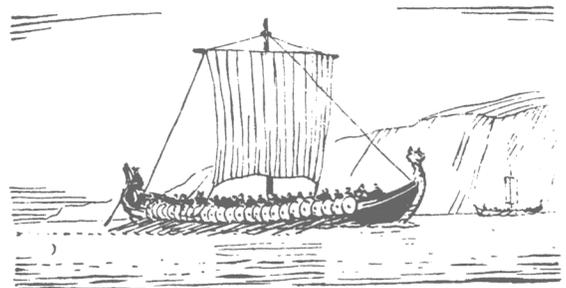
Construction Ways and Matter Shaping (Closed Essence Lists) — These lists would be very useful when constructing a ship or making repairs after a battle.

Friction Mastery (Closed Essence List) — *Decrease Liquid Friction* can add 1 or 2 MP to a ship's total, while *Increase Liquid Friction* will decrease the total by the same amount.

Rending Ways (Sorcerer Base List) — These spells are useful for causing damage directly to a ship.

Fortification Mastery (Arcane List) — *Wood to Stone* could be devastating to a wooden ship, causing it to sink "like a rock." *Ram* will act as a ramming attack. *Dome* and *Bastion* are useful protection spells that can protect a whole ship. *Automatic Engine* would be useful to cast upon a ship's weapons.

Sailing Law (Prosaic List) — Like other lists of its type, this spell is obviously going to be very useful on a ship.



8.0 TACTICAL OPTIONAL RULES

The following rules are all purely optional. Many of them add more realism, and more complexity to the game. Each GM must decide whether or not to use each optional in his own campaign.

8.1 GUNNER'S OB MOD

A GM may decide that a trained gunner can give a weapon a OB modification. Each artillery weapon (see Section 6.1.2) "aimed" by a character (i.e., the gunner) possessing the Siege Weapons Skill is given a +2 OB mod for each of the gunner's skill ranks. The skill bonus has been reduced from the normal progression (i.e., +5/+2/+1) because the weapon is being fired from a ship (an unstable platform with restricted fields of fire).

This bonus is not applicable to individual weapons fired as part of a broadside (see Section 6.1.2). If the GM wishes, a broadside attack can receive an OB mod of +1 for each Siege Weapons skill rank of a "Chief Gunner" or of the "Officer in Charge" of that section of guns. Instead of using the Chief Gunner's skill rank, you may use the average the Siege Weapons skill ranks of the gunners for all of the weapons used in the broadside.

You should find that using these rules speeds up combat considerably, as ships will hit each other more often than they would otherwise. It also reflects the impact of trained officers and gunners on naval combat.

8.2 PROPORTIONAL MOVEMENT

Using the standard movement rules (Sections 5.6), all ships use one MP at a time until all MPs have been used. This is easy to resolve. However, the slower ships will use all of their MPs and effectively stop dead in the water while the faster ships expend the rest of their MPs. This option rules alleviates this problem—movement is resolved in 20 segments and each ship's MPs are expended proportionally over the course of those segments.

The Proportional Movement Chart indicates which ships (based upon their total MPs) can expend a MP during a given segment. Movement is resolved one segment at a time, starting with Segment #1 and ending with Segment #20. For example, on Segment #1 all ships that started the Movement Phase with 8 MPs or more must expend a MP as recorded on their Movement Record Sheets (see Section 5.5); on Segment #2 all 7 MP and 14+ MP ships expend a MP; on Segment #3 all 6 MP, 9-13 MP, and 15+ MP ships expend a MP; etc.

On odd numbered segments, the side with the most ships expends one MP (as indicated on the Movement Record sheets) for each of its ships that must expend a MP during that segment; then, the other side expends one MP for each of its ships that must expend a MP during that segment. On even numbered segments, this order is reversed. In other words, the two side alternate who expends MPs first during a segment.

PROPORTIONAL MOVEMENT CHART (Optional)

Segment #	Ship's Movement Points																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-	-	-	M	-
3	-	-	-	-	-	-	M	-	-	-	-	-	-	M	-	-	-	-	-	M
4	-	-	-	-	M	-	-	-	-	M	-	-	-	-	M	-	-	-	-	M
5	-	-	-	M	-	-	-	M	-	-	-	M	-	-	-	M	-	-	-	M
6	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	M
7	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M
8	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	M	-	M
9	M	-	M	-	-	M	-	-	M	-	-	M	-	M	-	M	-	M	-	M
10	M	-	M	-	M	-	M	-	M	-	M	-	M	-	M	-	M	-	M	-
11	M	-	M	-	M	-	M	M	-	M	M	-	M	-	M	-	M	-	M	-
12	M	-	M	-	M	M	-	M	M	-	M	M	-	M	M	-	M	-	M	-
13	M	-	M	M	-	M	M	-	M	M	-	M	M	-	M	M	-	M	M	-
14	M	M	-	M	M	-	M	M	-	M	M	-	M	M	M	-	M	M	M	-
15	M	M	M	-	M	M	M	-	M	M	M	-	M	M	M	-	M	M	M	-
16	M	M	M	M	-	M	M	M	M	-	M	M	M	M	-	M	M	M	M	-
17	M	M	M	M	M	-	M	M	M	M	M	-	M	M	M	M	M	M	M	-
18	M	M	M	M	M	M	M	M	M	-	M	M	M	M	M	M	M	M	M	-
19	M	M	M	M	M	M	M	M	M	-	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

8.3 OPPORTUNITY MOVEMENT

This optional rule allows a ship's captain to attempt to cancel his movement orders and issue new ones during a Movement Phase. A captain may attempt to change his orders whenever it is his side's turn to expend a MP (see Sections 5.6 or 8.2). A modified, open-ended 1-100 roll is made and the results from the Opportunity Movement Chart are implemented.

MODIFICATIONS

The roll made to attempt to change orders is modified by half (round up) of the captain's leadership skill bonus and by a crew quality modifier. If the ship is using sail-only movement, the seamen quality is used. Otherwise, the average (round up) quality of the seamen and oarsmen are used. The crew quality modifiers are: Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30.

Note: We recommend that this optional rule be used only if the rules in Section 8.2 are also being used. Otherwise, the faster ships can wait for slower ships to run out of MPs and then change their orders for all of their remaining MPs.



OPPORTUNITY MOVEMENT CHART

Modified Roll	Result
101+	New movement orders may be recorded for the ship's remaining MPs (i.e., not for those already used).
91-100	The movement orders must be executed as recorded.
76-90	The movement orders must be executed as recorded, and the ship's available MPs are reduced by one.
05-75	The movement orders must be executed as recorded and the ship's available MPs are reduced by one and no more attempts to change movement orders may be made this turn.
< 05	The entire ship's crew is thrown into a state of confusion. The ship's available MPs are reduced by two and no more attempts to change movement orders may be made this turn or on the following turn and the ship must expend the rest of its MPs in forward movement.
Modifications:	
• Half of the Captain's Leadership skill bonus (round up).	
• <i>Crew Quality Modifiers:</i> Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30.	

8.4 INDIVIDUAL GRAPPLING HOOKS

A GM may decide to resolve grappling on a more detailed level than that provided by the guidelines in Section 6.5. If this rule is used, an number of individuals on a ship may throw grappling hooks to attempt to grapple an adjacent ship. A 1-100 roll modified by the thrower's skill bonus in throwing a grappling hook—a result over 100 indicates that the hook has stuck and the ships are joined at that spot. Any individual on a ship being grappled may attempt to cut a grappling hook line by making a Hard Maneuver Roll. If there are three or more grappling hook lines still anchored to a ship after all cutting attempts have been resolved, the ships are "grappled" and boarding can now occur.

As stated in Section 6.5, individuals throwing grappling hooks or cutting lines are not available for other activities during the turn.

8.5 RAMMING OPTIONS

All of these optional rules affect ships involved in a ramming attack (see Section 6.2).

Defensive Fire — Just before a ramming attack is resolved, the ship being Rammed may fire any weapons it can bring to bear. Such attacks are subject to a special -20 modification in addition to normal modifications. Any weapon fired in such a manner may not make an attack during the following Missile/Spell Phase.

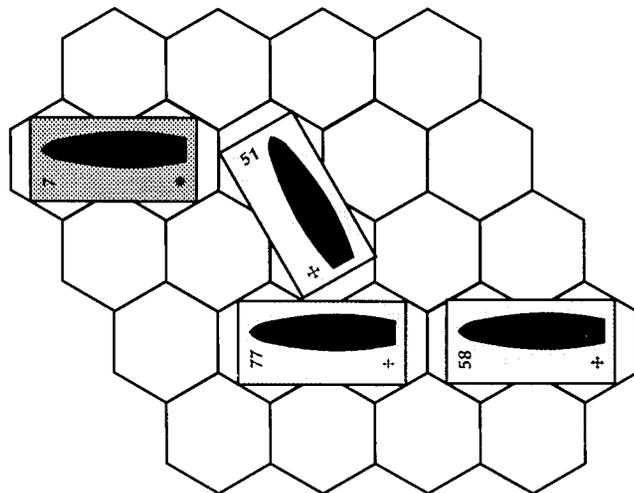
Using Deck Plans — When resolving a Ramming attack, a GM might wish to use detailed deck plans to determine where the ram actually hits. Deck plans may also be useful when executing any boarding action that follows a successful Ram.

Bow to Bow Ramming Attacks — This types of ramming attack is actually as detrimental to the attacking ship as to the target. In this case, each ship involved should make a ramming attack against the other ship (see Section 6.2).

8.6 BLOCKED WIND

If a ship using sail movement has another sailing ship in its "stern hex" (see diagram below), its "wind is blocked" and its available MPs is reduced by 2 if it is using full sails and by 1 if it is using battle sails.

Example: In the diagram below, Ship 7's wind is blocked by Ship 51, Ship 51's wind is blocked by Ship 77, and Ship 77's wind is blocked by Ship 58.



8.7 ANCHORING

This section presents guidelines for using anchors: anchoring, up-anchoring, cutting anchor, and pivoting at anchor. The chart below summarizes the Movement/Maneuver options (see Section 5.5). All missile attacks made from an anchored ship receive a special +10 modification.

Anchor Normally — Any ship may issue an Anchor Normally movement order. When a ship records an anchor order, it continues its normal movement for that turn and then starts the next turn anchored. Anchored ships may not give normal movement orders. The only movement orders that a normally anchored ship may give are Up-anchor or Cut Anchor (it may not pivot).

Anchor at Bow, Anchor at Stern — Only ships with an Advanced Design HTC (see Section 3.4) may anchor at bow or stern. Anchor at Bow and Anchor at Stern orders are handled just like Anchor Normally orders (see above). However, a ship anchored at its bow may Up-anchor, Cut Anchor, or Bow Pivot, while a ship anchored at its stern may Up-anchor, Cut Anchor, or Stern Pivot.

Up-anchor — If an anchored ship gives the Up-anchor order for two consecutive turns, it is no longer anchored and may move normally on its next turn. A ship may not give other movement orders while Up-anchoring (i.e., no Pivot orders).

Cut Anchor — If an anchored ship gives a Cut Anchor for one turn, it is no longer anchored and may move normally on its next turn. A ship may not give other movement orders while cutting it anchor (i.e., no Pivot orders). A ship that cuts its anchor may not anchor again until it mounts a spare anchor (takes 1-5 hours if it has one) or obtains a new anchor.

(Bow or Stern) Pivot, (Left or Right) — A ship that is anchored at its bow or stern (see above) may Pivot left or right. One or two such pivots may be ordered each turn. A ship anchored at its bow may only give Bow Pivot orders (i.e., it moves its stern hex 60° for each order—a Stern Turn, see Section 5.5). A ship anchored at its stern may only give Stern Pivot orders (i.e., it moves its bow hex 60° for each order—a Bow Turn, see Section 5.5).

8.8 CREW MANEUVERS

A GM may want to require moving maneuver rolls (see *Character Law*) for certain facets of ship operation (e.g., Sail/Oar Status changes, upping anchor, etc.). Most normal ship operation maneuvers are *Routine* for Crack, Elite, and Veteran crews; *Easy* for Regular and Reservist crews; and *Light* for Green and Poor/Slave crews. Such maneuver rolls are modified by:

- The Leadership bonus of the officer in charge
- The crew quality modifier of the crew members involved: Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30
- +20 for each consecutive round of attempting the maneuver
- +25 if in combat (due to the urgency of the situation)
- Any applicable skill bonuses that the crew has (see Section 8.10)

8.9 OPPORTUNITY FIRE

At the beginning of a Tactical Turn, each captain may declare Opportunity Fire for any of his weapons that loaded and ready. Then, at any time during the Tactical Turn, the captain may attempt to have those weapons fire at a target that presents itself (just as is the case in *Arms Law* opportunity fire). A captain may only declare Opportunity Fire for one group of weapons, they must have the same firing arc, they must all be fired at the same target, and all weapons with the same firing arc must be included.

As soon as a captain wants to use his Opportunity Fire, normal resolution of the tactical sequence stops. The target chosen must be within the firing arc and range of the Opportunity Fire weapons. If not, Opportunity Fire is lost and play resumes. If the target is valid, the captain rolls 1-100 (open-ended), modifying the roll with his Tactics skill bonus.

MODIFICATIONS

The roll made to attempt to change orders is modified by the captain's Tactics skill bonus and by a crew quality modifier. The crew quality modifiers are: Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30.

If a declared Opportunity Fire (OF) has not been used when the Missile/Spell Phase begins, the OF weapons may be fired normally with a -10 modification.

ANCHOR MANEUVERS OPTIONS CHART			
Maneuver/Turn	Code	Restrictions	MP Cost
Anchor Normally	aN	anchored normally	0
Anchor at Bow §	aB	anchored at end of turn	0
Anchor at Stern §	aS	anchored at end of turn	0
Up-anchor *	U	needs 2 crew pts.	2 turns
Cut Anchor *	cA	needs 1 crew pt.	1 turn
Stern Pivot, Left *	spL	aS & only 2 per turn	—
Stern Pivot, Right *	spR	aS & only 2 per turn	—
Bow Pivot, Left *	bpL	aB & only 2 per turn	—
Bow Pivot, Right *	bpR	aB & only 2 per turn	—

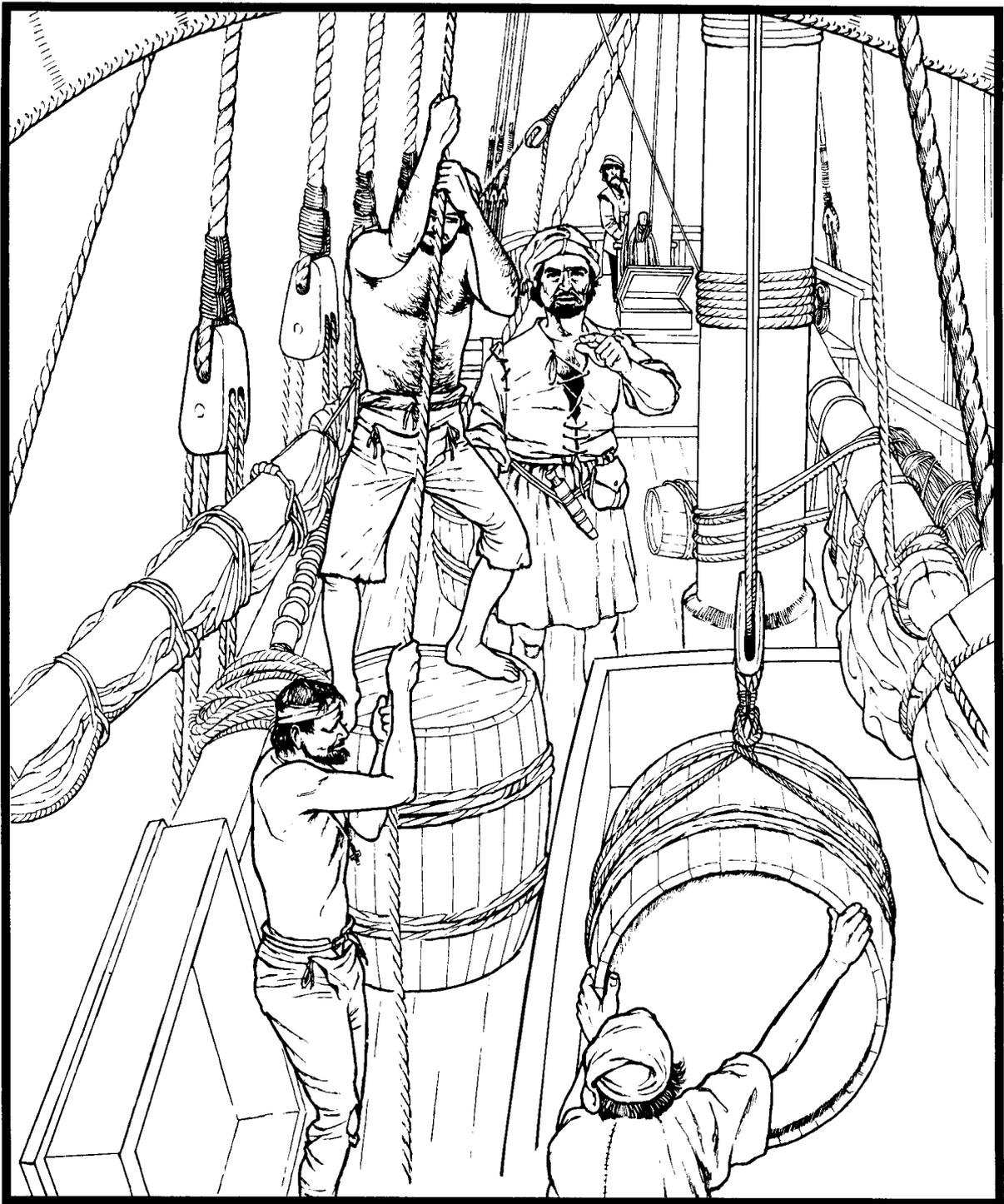
* — Only ships already anchored may issue these orders.
 § — Only ships anchored in these manners may pivot.

OPPORTUNITY FIRE (OF) CHART	
Modified Roll	Result
126+	The OF attacks are made with no penalty.
111-125	The OF attacks are made with a -10 penalty.
91-110	The OF attacks are made with a -20 penalty.
76-90	No Opportunity Fire (OF) this turn, but the OF weapons may make a normal attack modified by -20 during the Missile/Spell Phase.
11-75	The gun crews are confused, the OF weapons may not make any attacks this turn.
≤ 10	The gun crews are thrown into a state of confusion for the rest of this turn. The Opportunity Fire weapons will fire at the first "friendly" target that enters their firing arc during the current turn.

Modifications:

- The Captain's Tactics skill bonus.
- *Crew Quality Modifiers*: Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30.





This process simulates the series of commands that must be given for a ship to fire, and the confusion that often occurs when a target of opportunity is engaged.

Example: At the start of a Tactical Turn, Fearless Fosdick decides he wants Opportunity Fire for all weapons on the right side of his ship, and makes his wish known. During the Movement Phase the flagship of his nemesis, Billy Bob Joe, happens to blunder past. Fearless calls for his Opportunity Fire. Luckily, Billy Bob Joe is in his starboard (right) arc of fire, so Fosdick proceeds.

Fosdick only has a +35 Tactics skill bonus. Fosdick's crew is rated as Regulars, so the crew modifier is +0. Rolling, he gets a 40, bringing his total to 75. Not good enough, and Fosdick curses as Billy Bob Joe continues on, using his last MPs to sail out of danger. If Fosdick's roll had been 56+ (or if he had a higher skill bonus) he would have managed to get his crew going and fired. Also, due to his bungled attempt at Opportunity Fire, his OF weapons (i.e., the right side mounted weapons) will not be able to fire in the upcoming Fire Phase.

8.10 USING RM SKILLS

The skills discussed in this section can be important for naval campaigns. These skills are not new; they are described in the *ChL* optional rules (Section 14.1.4) and the *RM Companions*. They are described in detail here for those who do not own those products. In addition, some of the skills have been expanded or modified to fit better with the framework of *Sea Law*.

A GM can use the DP costs given in *RMCI* or he can use the following guidelines. For PCs created to fit into a naval campaign, a GM may wish to allow each player to assign three of these skills a DP cost of 1/3, and the others a DP cost of 2/5. For characters joining a naval campaign at a later date, a DP cost of 2/5 can be assigned to each of these skills. This assignment can be made regardless of a PC's original Profession or any other profession-related considerations. If you want to run a naval campaign, the necessary skills shouldn't be out of reach of your characters!

Boat Pilot (Me/Ag) (Static Action)—This skill is used to determine the position of the ship through the use of primitive charts called *rutters*. Each sea and ocean in Kulthea has its own unique set of *rutters*, and PCs must develop this skill separately for each sea. The skill is halved when used in an unfamiliar area. The skill allows the PC to read *rutters*, and, if combined with Map Making (see below) put together his own *rutter*.

Crafting (Re/Ag) (Static Action)—This skill is divided into six sub-areas, each of which must be learned as a separate skill. The six are: Carpenter, Cooper, Net Maker, Sail Maker, Siege Engine Maker, and Shipwright.

Grappling Hook (Ag) (Maneuver)—This skill allows PCs to toss grappling hooks. The hook can be thrown 20' horizontally and 10' vertically per skill rank learned, modified by Strength (it can be thrown an additional number of feet equal to the character's strength bonus). This skill is quite useful when it comes time to close with and board an enemy ship.

Mapping (Re/Me) (Static)—This skill is the bonus for using and making maps. It can be combined with the Boat Pilot skill as discussed above.

Navigation (Re/In) (Static Action)—This is the bonus used when attempting to follow a course and/or determine a ship's position. Used in conjunction with Boat Pilot it allows a PC to chart and follow a course to almost anywhere in Kulthea.

Rope Mastery (Me/Ag) (Static Action/Maneuver)—This skill allows PCs to tie knots, splice lines, and perform routine actions in the rigging of a sailing ship. It also substitutes for Grappling Hook (at 1/2 rank). This skill is essential for anyone planning to work in the rigging or sails of a sailing ship.



Rowing (See *ChL* Section 14.1.4)

Sailing (See *ChL* Section 14.1.4)—This skill is considered essential for any character planning a series of adventures at sea. Without it characters must make a RR versus 7th level attack each time they go to sea or suffer Sea Sickness. A character with sea sickness is -20 to all rolls, bonuses, and actions. It also gives PCs an understanding of sailing jargon (things like 'Topside,' 'Hal-yards,' and other arcane terms). Lastly, Sailing determines just how good a PC is in a boat, and can modify the DB of his vessel in combat.

Siege Weapons (Ag) (Static/Maneuver)—This skill allows PCs to both understand and use the weapons most commonly found at sea. It conveys both knowledge of and the ability to use mangonels, ballistae, catapults, and Greek Fire.

Weather-Watching (See *ChL* Section 14.1.4)

OTHER SKILLS

A ship's officers should develop Tactics, Administration and Leadership skills as well as the skills described above.

8.11 OPERATING UNDERWATER

In a *Sea Law* campaign, it is likely that the player characters will go underwater at least once, whether it be to find a sunken treasure, to fight a sea monster, or to simply fix a hole in the hull. In order to do this more easily, there are a number of spells in *Spell Law* and the *Rolemaster Companions* to assist characters, such as *Waterlungs*, *Watervision*, *Underwater Movement*, *Water Corridor*, *Water Bubble*, etc. Certain magic items (such as a *Potion of Waterbreathing*) will also be of assistance.

Even if a character has a *Watervision* spell cast upon him, however, the GM might wish to require a source of light for him to see at great depths, where the light of the sun cannot reach. If that is the case, his sight range is limited by the amount of light as well as the range of the spell (use whichever is shorter). At night, a light source is definitely required.

Without a magical means of seeing, a character range of vision is limited by the depth and clarity of the water. In extremely clear water, near the surface (no deeper than 20'), the range of vision is about 100'. This will quickly shorten to 10' at a depth of 50'-100'. Murky water will shorten this further. As a GM, do not be afraid to rule that a character cannot see at all in deep, murky water, for this would certainly be the case. Light, particularly magical light (which may be the only source of light under the water) will help characters to see in deep, even murky water, up to probably half of its normal radius of effect. Remember, however, that it will also draw under-sea creatures like a beacon.

Characters without a magical aid to assist their breathing should be very limited to the length of time that they can operate underwater. Such characters can hold their breath for a number of minutes equal to their Constitution stat divided by 20. However, after they have held it for half of the maximum time allowed them, they begin



to operate less efficiently, as they become more and more conscious of their rapidly depleting air. Such characters have an additional modification of -30 to all actions (added to those modifiers discussed below). See the *Arms Companion* for information on the *Holding Breath* skill, and *RMCV* for rules regarding drowning.

If a *Water Bubble* or *Water Corridor* is created, characters can operate normally within them, and if an *Underwater Movement* spell is cast upon a character, he can move and act freely. If no such magical aids are present, a land-dwelling creature is at -30 to all moving maneuvers while underwater. If the GM wishes, however, he can allow characters to develop a skill to offset this penalty. For *Underwater Maneuvering* skill, use the *Development Point* cost of *Hostile Environments* given in *RMCII* (use 2/4 if not available). The skill *ranks* developed from this skill will be added to any attempt to make a moving maneuver underwater, up to a maximum of 30 (thereby offsetting the underwater modification completely).

UNDERWATER COMBAT (8.11.1)

Combat underwater is different from combat above the water due to the density of the medium in which the combatants battle. Because of this, a creature native to the seas, or a character with an *Underwater Movement* spell cast upon him, is at a great advantage.

It is difficult to get any object moving as fast underwater as above water, so slashing and crushing weapons are lessened in their effect, and missile weapons are difficult, if not impossible to use. Refer to the following chart to find the penalties for underwater combat:

Weapon	Modifier
Crushing weapons	-50
Slashing Weapons	-30
Thrusting Weapons	-5
Bows	-75
Crossbows	-50
Slings	-120
Thrown weapons	-100

A GM may also want to reduce the severity of *Slash* and *Krush* criticals by one (e.g., 'E' to 'D', 'D' to 'C', 'C' to 'B', etc.).

UNDERWATER SPELL CASTING (8.11.2)

If cast underwater, a spell normally requiring preparation rounds (i.e., a non-instantaneous, Class II or III spell) has an *Extraordinary Spell Failure* modification of -20. This modification can be canceled by an *Underwater Movement* spell or by *Underwater Maneuvering* skill (each skill *rank* reduces the ESF chance by one).

Almost all spell effects underwater, however, remain unchanged. The exception are elemental spells. All fire-based spells are ineffective. The exception to this rule are spells which deal with heat (like *Heat Solid* or *Boil Water*) which operate normally.

Impact criticals are reduced by one level of severity. Ice-based spells (such as *Ice Wall*, but not *Call Cold*) are increased in area of effect by 50%, but *Ice Bolts* still have their impact criticals reduced.

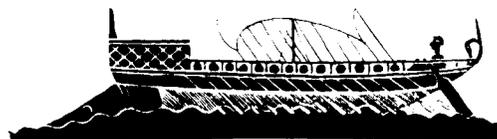
Light-based spells have their ranges cut by 50-75%, depending on the murkiness of the water—they are diffused and dispersed in the medium. Air and wind spells will in many cases be useless since there is no air for them to effect.

Earth-based spells work normally, although their effectiveness is probably limited unless cast near the ocean floor. Other Elements, such as nether or plasma, have their effects modified as the GM sees fit, although the effects probably should be very minimal if any.

PART IV

STRATEGIC ACTIVITY

Unlike tactical activity, strategic activity does not involve precise movement, maneuvering, and combat. Part IV describes how to handle a *Sea Law* campaign in between the battles. Handling long voyages and navigation are described in detail.



9.0 STRATEGIC MOVEMENT

This section details how to handle ship movement from a starting point to a destination. If a combat occurs during a voyage, a GM should change to Tactical Movement (see Section 5.0).

9.1 SCALE AND CONVENTIONS

As outline in Section 2.1.2, a Strategic Turn is equal to four hours of game time and a hex equal to 4 nautical miles (≈ 4.5 miles). This scale is used mainly for large engagements and campaign play. GMs and players should be aware that these scales can be modified based on play needs. The scale one hex = 4 nautical miles is obviously far too small for a GM's world map or for charts in the possession of the average PC. In these circumstances the GM should feel free to modify the scale conventions, as long as certain factors are kept in mind.

First, the Strategic Turn time scale (i.e., 1 turn = 4 hours) should not be changed. If needed, a GM can create a "super Strategic Turn" by combining two turns and creating an eight hour turn. This can and should be done in the course of extended campaign play; when the PCs are more concerned with sailing from Point A to Point B with little fuss and delay. For ease of play and conversions, it is highly recommended that any changes to the Strategic Turn be made simply by adding two (or more) of them together to make a "super Turn."

When changing the scale of the hexes on a campaign map to something larger than one hex = 4 nautical miles, keep in mind that ship MPs are equal to one knot of speed. Thus a ship with 10 MPs is sailing at roughly 10 knots. The scale of a campaign map can be any that is convenient for the GM (the designer's world uses 50 mile hexes), as long as ship speeds are kept in mind. On a normal Strategic-scale map, a ship with 10 MPs would be able to move 10 hexes in one Strategic Turn, while on a map scaled to one hex = 50 nautical miles the same ship would be moving just under one hex in the same time! As long as these considerations (scale and ship

speed) are kept in mind, conversions to the Strategic Scale are both simple and helpful in the context of campaign play. See the following sections for more details concerning the use of the Strategic Turn systems.

9.2 USING MPS

The Tactical Movement Profiles can be used for determining how many MPs a ship has for Strategic Movement. A Strategic Turn is equal to four hours, and a standard hex is equal to 4 nautical miles (or 24000'), each Strategic MP is equal to roughly one knot (i.e., one nautical mile per hour). Thus, a ship with a movement rate of 14 can move 56 nautical miles (14 knots x 4 hours) during a Strategic Turn, or 14 hexes (56 ÷ 4 nautical miles per hex).

Note that wind direction is important in determining how many MPs a ship has for Strategic Movement. The same conventions used in *Sea Law* tactical movement (see Section 5.0) should be used to determine how many MPs a ship actually has during a Strategic Turn (see Sections 5.1 and 5.2).

9.3 WHEN DOES CONTACT OCCUR?

Combat in *Sea Law* can occur when two (or more) ships (or a ship and a sea creature) enter the same strategic-hex (i.e., a 4 nautical mile hex) during a Strategic Turn. A GM can then shift play to the Tactical Turn scale and the range between the two opponents is determined. Ship versus ship combat will be covered first; rules covering the distance determination process for a monster attacking a ship can be found at the end of this section.

Ships can be spotted while still on the Strategic Map. GMs and players should refer to the Spotting Chart, below, to determine when a ship can be spotted. Once a ship has been spotted, the player controlling the ship doing the spotting can elect to close with the other ship(s). Play at this point can either remain on the Strategic scale or revert to Tactical scale. Once the ships are in the same Strategic hex, the GM should switch over to Tactical scale.

Unless specified otherwise in a scenario or the GM decides that it would be inappropriate (i.e., in the case of a pirate), a ship is assumed to be flying the flag of the kingdom of its origin, some sort of kingdom-related colors, or the pennant of the Captain. Once a ship has been spotted, the character who spotted the ship(s) may wish to attempt get more information about it (e.g., ship type, nationality, identity, etc.). Spotting during normal (Clear) weather is an *Easy Static Movement*, while identifying a vessel is one difficulty level harder. Spotting increases by one level of difficulty as the weather becomes progressively worse, and is always limited by the current visibility, which is based on the Weather Roll and is detailed below. Consult the following chart to determine at what distance a ship can be Spotted.

SPOTTING CHART	
Conditions	Maximum Spotting Distance
<i>Daylight:</i>	
Clear Skies	20 Miles
Cloudy, Overcast	10 Miles
Misty or light drizzle	1 mile
Light Fog or rain	1000 feet
Heavy fog or downpour	20 feet
<i>Night (Double distance if target has lights):</i>	
Clear, moonlit, many stars	8 miles
Moonless, cloudy	2 miles
Misty or light drizzle	1000 feet
Light fog or rain	500 feet
Heavy fog or downpour	10 feet
Note: If a telescope or similar spotting tool is not used reduce these distances by half (round up).	

TELESCOPES AND SIGHTING

The above table assumes that a telescope or other such spotting tool is being used. If not, decrease the allowable ranges by half. Telescopes of good make will increase the spotting ranges by up to two times, but these will cost roughly ten times that of normal instruments. Of course, magical instruments will have their own modifications to sighting ranges.

Once a ship has been spotted and identified, it is up to the captain to decide on a course of action. In a role playing situation, PCs should be allowed, as much as possible, to determine the actions of their ship, while the GM is responsible for the actions of their opponents. Keep in mind that pirates will usually attack unless the odds are obviously against them, and ships from hostile powers or kingdoms will attack or report the position of the PCs' ship. Should both groups decide to fight, it is time to proceed to Tactical scale and turn sequence—place the ships in the appropriate relative position about 30 hexes (6000' or approximately one nautical mile) away from each other.

If one ship decides to flee, it will escape if it is faster than the pursuer when moving away from the pursuer. Something unusual may happen to change this (e.g., a wind shift, equipment breaks on the fleeing ship, its oarsmen become exhausted, etc.). A GM can use the difference in the movement rates of the two ships to determine how long it takes for the distance separating the ships to become greater than the Maximum Spotting Distance (i.e., at that point the ships lose contact with each other). A fleeing ship may be forced to head in a direction in which it does not wish to go.

If one ship decides to flee, it will be caught if it is slower than the pursuer when moving away from the pursuer. Something unusual may happen to change this (e.g., a wind shift, equipment breaks on the pursuer, visibility drops, etc.). A GM can use the difference in the movement rates of the two ships to determine how long it takes for the distance separating the ships to become approximately one nautical mile (i.e., 6000'—30 Tactical hexes—action should move to the hex sheets).

COMBAT AND SCALE

Given the distance involved in the Tactical Turn hex (200 feet), combat may quickly close to adjacent hexes (see Sections 6.2 and 6.4). When this occurs, GMs might wish to transfer the action to an even larger scale—one hex equals 10' or 20'. The enclosed deck plans included in Section T-5.3 can be used for this purpose. The position of all weapons and crew members should be marked using small counters or markers or miniatures. At this distance range has little or no effect on siege weapon combat, and all artillery missile fire can be considered to be taking place at a range one hex. This can make for a much more exciting battle as two ships pour mangonel projectiles and ballista bolts into each other. The deck plans may be copied for personal use only, and PCs should have one or two handy for any ships that they happen to own!

Nothing in the way of combat will occur while the ships are operating in Strategic Scale. The distances are far too great for anything other than a very potent magical attack, due to both weapons and gunnery technology in the societies covered by this supplement. GMs allowing weapons with ranges greater than four nautical miles should simply switch to Tactical Turns while retaining the Strategic movement scale, unless playing space allows the use of Tactical Turn movement scales.

COMBAT WITH MONSTERS

Contact with sea monsters and other such animals follows a different procedure than that detailed above. In most cases such a creature won't be spotted until it would be seen on the tactical map. GMs may choose to ignore the spotting rules given above when dealing with monsters and just start action in the Tactical Scale, with the monster a reasonable distance from the target ship (e.g., if the monster surprised the ship use 1-5 hexes; otherwise, use 11-20 hexes).

Note that an encounter with a monster can rarely be handled using the Strategic Scale. If a random encounter indicates a sea monster, the GM should immediately switch to the Tactical Scale and run things from there. Hostile monsters will generally move straight towards the target ship, with little in the way of evasive action. Most monster attacks will likewise be blunt and "to the point."

9.4 OTHER STRATEGIC ACTIONS

Aside from movement, there are other actions which can take place during a Strategic Turn. These include repairing damage sustained from either a storm or combat (see Section 7.2), fishing, taking navigation sightings (see Section 10.0 for details), and other activities that do not fit into the Tactical framework. Fishing would involve casting lines over the side and supplementing the food supply of the ship. Assume that one Strategic Turn spent in this way will give the ship enough food for one day. Nets can also be used for this activity, and they half the time required, more if the ship is a specially-built fishing boat.

10.0 NAVIGATION

The subject of navigation is a very important consideration in any nautical campaign. Unless magical means are available (and these are not always usable), navigation is the only way to assure that a vessel will arrive at her desired destination. Most of the navigation information found in this section will be based on ICE's *Shadow World* gaming environment. However, guidelines for conversions to other settings will also be included.

10.1 NAVIGATION SKILLS

For game purposes, navigation rests on four secondary skills (see Section 8.10):

- *Boat Pilot*, used mainly for navigation on known waterways.
- *Mapping*, which allows a navigator to chart his course, use maps, and make maps for later use.
- *Navigation*, which is used for position fixes, navigation when out of sight of land, and other such activities.
- *Astronomy*, which is not necessary, but can be used in conjunction with Navigation to determine a ship's position.

Any PC desiring to be a ship's captain should have at least two of the first three of these skills, with all three being ideal. In ideal cases the captain should be able to check the navigator's course calculations and take his place when required. Navigators should, of course, develop all of the first three skills.

10.2 NAVIGATION PROCESS

Navigation itself is based on the latitude/longitude method of plotting position on the surface of a planet (Kulthea in our case). Latitude lines are angular measurements north or south from the equator—the equator is at 0° latitude, while the poles are at 90° north latitude and 90° south latitude. Longitude lines are angular measurements east or west from an arbitrary 0° line that runs from pole to pole—the measurements run 0°–180° to the east and to the west.

Each degree of measurement is further subdivided into minutes and seconds, which allows much more precise measurements of location. The latitude of a ship can easily be determined by observing the behavior of the sun and stars, but longitude can only be measured by techniques that require a very accurate timepiece. Most navigators on the *Shadow World* can only approximate their longitude, based on estimating the speed at which their ships travel. This is known as “dead-reckoning”—with careful record keeping and experience, it can give reasonably accurate position estimates.

GAME MECHANICS

To determine a ship's position, a navigator must make a *navigation maneuver*: toll 1-100 roll (open-ended) and add any appropriate modifications:

Modified Navigation Roll = 1-100 (open-ended)
+ navigation bonus + half of Astronomy bonus (round up)
+ Difficulty Mod

The results of this maneuver are obtained using this modified roll and the Navigation Chart. Note that an absolute failure or blunder can lead to completely wild locations which bear little or no relation to the ship's actual position, and the GM should refer Section 10.3. Nobody said this was easy.; or safe, for that matter...

If the navigator is attempting to locate his position without navigator's instruments (compass, hour-glass, cross-staff, astrolabe, etc.), increase the difficulty by three (e.g., light becomes very hard). Using a chart or very high quality instruments can reduce the difficulty by one. The Astronomy skill bonus can only be used if the character is using the stars to fix a position, which requires proper tools and (of course) clear skies for at least 10 minutes.

NAVIGATION NEAR A COASTLINE

Once a ship comes within sight of a coastline navigation becomes much easier. While the ship is in sight of land, reduce the difficulty for all orientation/navigation rolls by two (by three if proper charts are available). You can also use Boat Piloting skill instead of Navigation skill once a ship is near a coastline that is covered by the Boat Piloting skill—in this case, use the full Boat Piloting skill bonus and half the Navigation skill bonus (round up).

Note that most prudent captains (and anyone with Boat Pilot skill above Rank one) will take depth soundings when near shore. If soundings are not taken, there is a 5% chance each turn (increase to 20-50% chance in unfamiliar waters) that a ship will run aground.

CATCHING NAVIGATION ERRORS

A GM may allow a qualified character to “check” a navigator's results. The checking character then makes his own navigation maneuver with a difficulty at least one greater than the original navigator's. If he succeeds, he realizes if a mistake has been made.



NAVIGATION CHART

Modified

Roll	Result
176+	<i>Absolute Success:</i> You determine your location to within 2 miles. You get a +20 to all navigation and perception rolls for the next hour.
111-175	<i>Success:</i> You determine your location to within 10 miles.
91-110	<i>Near Success:</i> You determine your location to within 25 miles, but you are not confident. You may try again after 10 minutes of contemplation.
76-90	<i>Partial Success:</i> You determine your location to within 50 miles, but you are not aware that you are that far off. You may not try again for 2 hours.
05-75	<i>Failure:</i> Your location determination is off by 50-100 miles, but you are not aware that you are that far off. You may not try again until the next normally scheduled position fix.
-25-04	<i>Absolute Failure:</i> Your location determination is off by 50-500 miles, but you are not aware that you are that far off. You may not try again until the next normally scheduled position fix, and any navigation attempts you attempt for the day are modified by -50.
≤ -26	<i>Blunder:</i> Your location determination is off by 50-1000 miles, but you are not aware that you are that far off. You may not try again until the next normally scheduled position fix, and any navigation attempts you make in the next week are modified by -50.

Modifications:

- Navigation bonus
- Half of Astronomy skill bonus (round up)
- + Difficulty Mod (routine:+30; easy:+20; light:+10; medium:+0; hard:-10; very hard:-20; extremely hard:-30; sheer folly:-50; absurd:-70)

10.3 NAVIGATION HAZARDS

RUNNING AGROUND

Should a ship run aground, she will probably suffer damage—roll on the Ramming Attack Ship Table T-1.7 (maximum result based on a Type 7 attack). The attack's OB is 10 times the MPs the ship had allocated for the turn. The result is applied to the ship at once and her movement is stopped. If the damage is greater than 10 hits, the ship is grounded. If this occurs the ship cannot move until floated off the obstruction by high tide or until towed off (e.g., by the ship's boats).

Ships can run aground at any time—it is possible to run aground during combat; and the results can be fatal. Note that: monsters never run aground, a "Ghost Ship" only takes quarter damage and never become stuck, a "Black Ship" can ground (but this is rare). Please see the Section 14.3 for more details on these ships and their crews.



Purposely *beaching* or landing a ship (safely) requires a Hard piloting maneuver. Failure results in damaging the ship as if it ran aground. *Docking* in a ready-made docking facility is easier—a Medium maneuver difficulty. Failure in this case means that the ship takes a Ramming attack as in running aground, but the OB and the damage taken is only half of that for running aground.

GETTING LOST

Should a navigator fail (i.e., 75 or less) a navigation maneuver (i.e., a position check) three times in a row, his ship is "lost" and the GM should take over plotting the ship's movement. Any navigation attempts made while lost are modified by -50 (in addition to all other modifications).

Each Strategic Turn while lost, a navigator can indicate which direction the ship is taking. He then makes a navigation roll (see Section 10.2). If he fails, the ship moves in a random direction for one Strategic Turn (roll 1D10 for direction moved— 1: north; 2: northeast; 3: east; 4: southeast; 5: south; 6: southwest; 7: west; 8: northwest; 9-10: direction indicated by navigator). If he succeeds, he determines his location as outlined in the Navigation Chart and movement may proceed normally (hopefully back on course).

Movement during storms is considered lost movement, with the direction based on the wind direction (e.g., if the wind is from the northwest, roll 1-10— 1-4: southeast; 5-6: south; 7-8: east; 9: southwest; 10: northeast). Distance moved is based on the velocity of the wind and the length of the storm (i.e., if the wind is 30 MPH the ship will be blown 30 miles off course each hour the storm lasts). The navigator may only attempt to determine his position after the storm blows itself out, as accurate sighting from the wave-washed deck of a ship in the grips of a hurricane is rather tricky (to say the least!).

10.4 SPELLS AND NAVIGATION

As you can see, there is a great deal of emphasis on navigation by *manual means*. *Should a GM's players have spells that will assist them* (such as some of the Navigator Base Lists from *Shadow World*), by all means let them use them! These rules are intended to allow non-magical characters to get around on the ocean without having to hire a spell user. Besides, you could always apply the "Getting Lost" rules (Section 10.3) to the outcome of some spell failure or another...

SPELLS IN SEA LAW

The subject of magic as it applies to both navigation and movement also bears looking into. Certain spell lists, especially those found in the Navigator base lists *Weather Mastery* and *Path Mastery*, can have a profound effect on both movement and navigation. Other lists that can have an effect on movement, navigation, or information retrieval (about unknown areas) are given below on a realm per realm basis. GMs should consult *Spell Law* for details of their effects.

Channeling: Weather Ways, Locating Ways, Nature's Lore (Animist Base List), Communal Ways (Cleric Base List), Holy Vision (Astrologer Base List),

Essence: Essence Perceptions, Detecting Ways, Water Law and Wind Law (both Magician Base Lists), Fluid Destruction, Gas Destruction (both Sorcerer Base Lists)

Mentalism: Sense Mastery, Liquid Manipulation, Gas Manipulation, *Sense Through Others* (Seer Base List), Liquid Alteration, Gas Alteration (both Mystic Base Lists)

Navigator Base Lists: Details can be found in the *Shadow World Master Atlas* "World Guide" in Part XIV.

Elemental Companion: If the *Elemental Companion* is available, some of the spells it contains could prove useful to the PCs. These include spells dealing with elemental summoning and control. It is left to the GM to determine how effective these methods would be.

Rolemaster Companion I: The individual spells (Section 3.6) *Current Command* and *Destination Sail*

Rolemaster Companion II: *Commune* (Necromancer Base List), *Lore's Master* (Sage Base List), *Spirit Mastery and Visions* (Shaman Base Lists)

Rolemaster Companion III: *Way of the Navigator* (Arcane Society List)

Rolemaster Companion V: *Weather Mastery* (Druid Base List), *Pirate's Way* and *Fisherman's Way* (Both Professional Guild Lists)

Spell User's Companion: *Sailing Law* (Prosaic List)

Alchemy Companion: *Divinations and Region Lore* (Geomancer Base Lists)

10.5 STARS AND NAVIGATION

For GMs desiring even greater realism, a further discussion of navigation as it relates to Kulthea (ICE's *Shadow World* gaming environment) is in order. This supplement assumes navigation by both sun sighting and the use of stars and constellations to determine one's position. It also assumes the use of fairly primitive instruments.

Navigators in Kulthea rely on a variety of constellations, depending on which side of the equator they happen to be sailing on. The northern skies are dominated by ten major constellations which are important for navigation. The southern skies are dominated by the same constellations, but their significance is different. The constellations are discussed below. Each culture on Kulthea has different names for each constellation, so the most common name(s) will be given.

The Tiller—First in importance is the Tiller, so-called because navigators rely on this star cluster to point the way north. It is *Kulthea's version of the Big Dipper, with the North Star on the Tiller's handle*, showing helmsmen which way to steer. This constellation is known as the Tiller throughout most of the known world, as its importance has moved through the language barriers. This is the most commonly-used constellation in Kulthean navigation.

The Compass—Second in importance is the *Compass*. Visible through most of the year from all oceans in Kulthea, the *Compass* is used as a secondary navigation aid for finding north, as it is centered in the north part of the sky. It moves through both hemispheres through the year, starting high in the north sky and ending low in the south. The *Compass* is commonly used as a navigational aid in the north, since it is visible there longer than it is in southern skies.

The Barque—The *Barque* is commonly used by the cultures in southern Kulthea, as it is most commonly seen there. As its name suggests, the *Barque* is shaped roughly like the ship of the same name, with its "masthead" indicating north. The *Barque* is used in the south as the *Compass* is in the north. Used in combination with the *Tiller* it is a very accurate navigational aid.

The Dancer—The *Dancer* is of little navigational use. It rises in the east and eventually sets in the west. Shaped vaguely like a dancer, the *Dancer* is most often used to find east and west, as its brightest stars (in the dancer's arms) indicate these two directions.

The Dagger—The *Dagger* gets its name from its distinctive shape. It is composed of six stars, with the 'pommel' and the 'quillons' indicating north, east, and west respectively. The point star is the weakest of the lot, and it makes finding south with this constellation difficult. The *Dagger* is most commonly used in the skies around Kulthea's equator.

The Unicorn—The *Unicorn* has a shape similar to the creature of the same name, with the star horn indicating northeast. It is of little navigational use, and is commonly used in the North.

The Dragon—The *Dragon* is one of Kulthea's largest constellations, being composed of 25 stars. The *Dragon* bears a strong resemblance to the beast of the same name, and is used by navigators of *Palia* to find all the cardinal directions. The stars of its mouth indicate north; its tail south; the wings west; and its clawed feet east. Only *Palian*-trained navigators use the *Dragon*, and this makes them instantly recognizable in Kulthea's seafaring community. The *Dragon* is visible mainly in Southern skies, and is usable through most of the year.

Other Constellations—The remaining three constellations, the *Owl*, *Scarab*, and *Stylus*, are not used often in Kulthea for navigation. All three are commonly seen in equatorial skies, occasionally becoming visible in the north and much more common in the south. There they are used to indicate both north and west (especially the *Stylus*, whose 'point' is a reliable indicator of west). The *Owl* is a very faint constellation, and its appearance is considered a bad omen by the seafarers of Kulthea. The *Scarab* is used mainly by the peoples of the islands surrounding *Iyxia*, and it gives them all four cardinal directions.

PART V

SHIP CONSTRUCTION

This section contains all the information you need to construct *Sea Law* sailing ships and galleys. It is recommended that you use the pre-designed ships (historical and Kulthean) found in Section 12.0 for your first few nautical adventures. Once you (the GM) are

comfortable with the mechanics of the ship operation rules, feel free to design some ships and to allow the PCs to begin designing their own ships.

11.0

DESIGNING & CONSTRUCTING SHIPS

The process of building an oceangoing vessel, be it a galley or a sailing ship, is a very complex business. After a plan is drawn up, the long process of locating the right woods, cutting and fitting them, and then finally outfitting the completed vessel is undertaken. It can take years to build a perfect example of a naval architect's art; but it is also common to knock together a cheap ship to haul cargo from one coastal town to another. With these rules you will be able to build either type of vessel, and hopefully anything in between.

There are four basic steps to ship construction:

- 1) Determine the design and materials to be used
- 2) Determine the hull stats
- 3) Determine the movement/rigging stats
- 4) Establish the ship's OB and DB

THE BASIC DESIGN

For simplicity, each ship is assumed to fit into one of a certain number of ship types (see Section 11.2). This also applies to any ship the GM or PCs want to build. We also strongly suggest a ship's "design" (as outlined in the rest of this section) be based upon one of the specific historical or Kulthean ships given in Section 12.0. A GM may wish to ignore these restrictions and introduce non-standard ship designs, but such innovations are not covered by these guidelines.

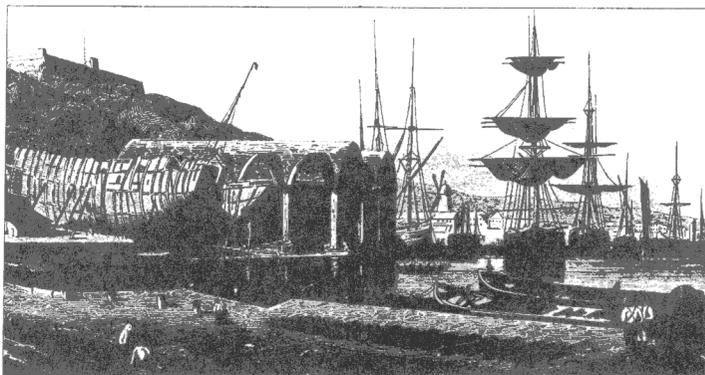
The actual, minute details of a ship's design would usually be handled by a professional naval architect. However, a GM may allow a PC(s) to handle the details of ship design. In this case, make a static maneuver roll (modified by "ship design" skill bonus) for each component of the ship that is non-standard. In addition, a roll is made for overall design (i.e., how it all fits together). A failed maneuver means that there is a problem with the component rolled for—the PC(s) should be unaware of this until the problem comes into play (e.g., a faulty rudder that a chance of breaking whenever it is used).

11.1 CONSTRUCTION MATERIAL

Assuming the PCs have a ship design, they will still need to find the material for the ship. This material is usually wood. For the purposes of this supplement there are assumed to be five major types of wood used for ship construction:

- Pine (AT: W1), the most common and weakest of the woods
- Teak (AT: W2), used due to its resistance to ocean mollusks
- Oak (AT: W3), the most common material
- Windak (AT: W4), a tree native to Jaiman
- Hadrock (AT: S1), a tree found in a few locations on Kulthea that is known for its resistance to all forms of sea mollusks and its incredible strength

It is also possible, if the characters have access to the proper spells, to build ships out of stone, iron, or similar materials. These are all classed as magical hulls for combat purposes and are assumed to be AT S2 (see Section 11.7).



10.2 TYPES OF SHIPS

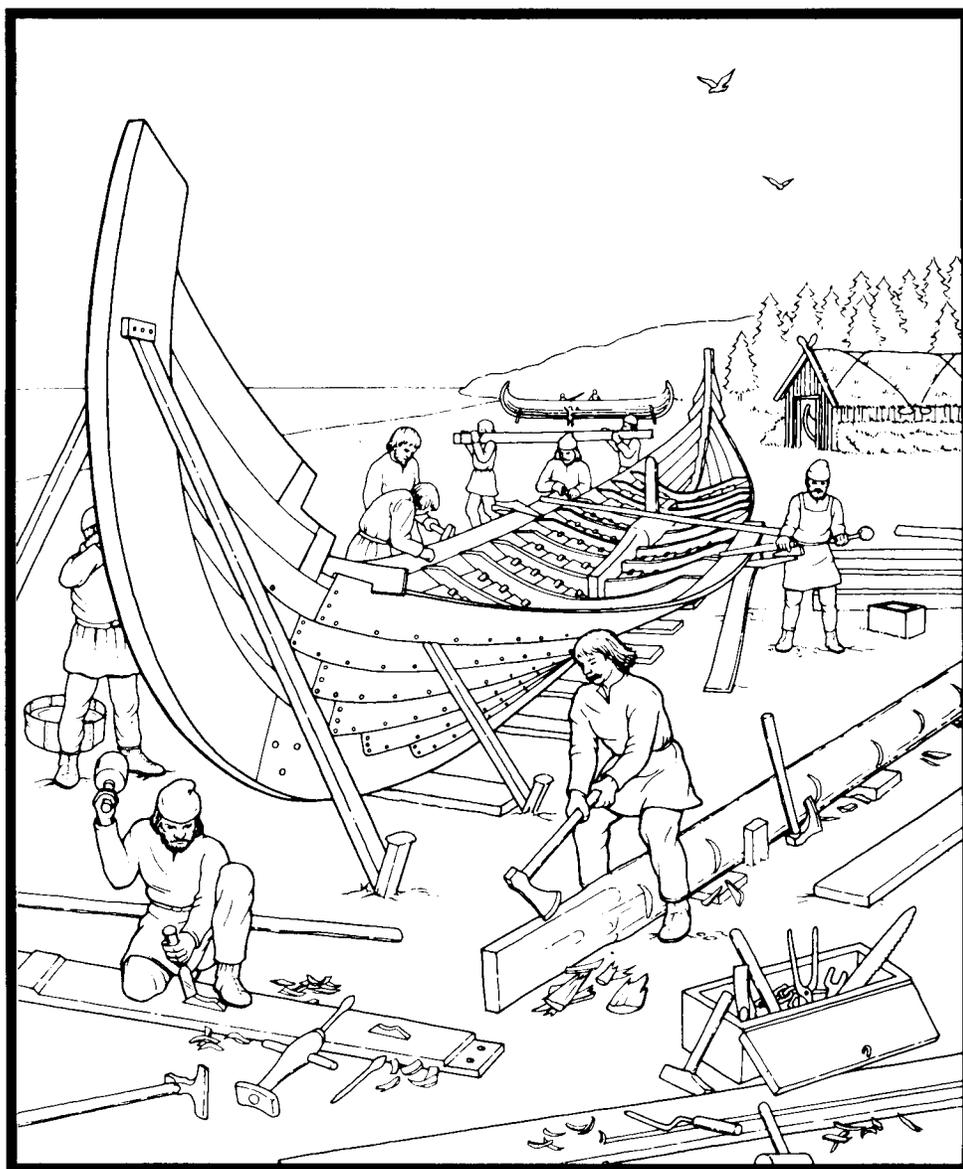
While there are a number of different ship types, only a few of the more basic types will be considered for ship construction. Examples of most of these ship types are described in more detail in Sections 12.0. Note that certain ship types, such as the China Clippers, have been left out. It was felt that their level of technology was way beyond anything commonly found in a fantasy environment, as were the trade reasons for their construction.

The ship types presented in this section roughly correspond to the Historical/Technological Classifications (HTCs) introduced in Section 3.4. However, a ship of the Merchantmen type has the Primitive Sailing Ship HTC or the Advanced Design HTC, depending on its rigging type and its realm of origin.

Galleys: There are many types of galleys. The *trireme*, a galley with three banks of oars, comes in either the *aphract* (without a deck) or *cataphract* (decked) configuration. Another type, the *hemiolia*, was used almost exclusively by pirates. It has two decks of oars; usually, 12 in the lower and 13 in the upper. Its close relative was the *triemiolia*, which was designed to chase pirates. Both the hemiolia and triemiolia come with a single mast and can be sailed as well as rowed. Both are also aphracts. The final type of galley is the *longship*, a vessel quite similar to the Viking vessels of our own history. This is the most seaworthy of the galleys, and can actually be used on the open seas. Note that the longship is not fitted with a ram, and cannot be designed to use one.

Primitive Sailing Ships: These are the most simple sailing vessels. These ships are usually smaller and slower than their more advanced cousins, and have less cargo capacity. If your campaign is firmly grounded in a Middle Ages-type setting, these will be the most common vessels. In Kulthea these are commonly used by the less-advanced states and are rarely seen in the fleets of the more advanced naval powers. The *cog* is the first of these simple vessels. It has fore and aft castles for archers and sports a single mast. Depending on the flavor of your campaign it is either square or lateen rigged. Next in the evolutionary line is the *caravel*. Slightly smaller than the cog, the caravel is very seaworthy, and historically was the first true ocean-going vessel used commonly in the ancient world. Finally we come to the *carrack*, the largest of our three simple sailing ships. Bigger than the caravel, the carrack was less seaworthy—it was used extensively as a merchantman.

Galleons: These vessels deserve a section to themselves. Larger than any ships before them, the galleons served as a bridge between the ships discussed above and the more advanced designs of the mid-16th to 18th century vessels of our history. In Kulthea, galleons are commonly found in the fleets of the more powerful nations that have passing interest in controlling the



oceans near their coastlines. Galleons are large, four masted vessels that can serve as a combination warship-merchantman. They are almost twice the size of the average carrack, but they are not known for their maneuverability.

Merchantmen: These ships are especially designed for transporting goods. They are all fairly large and ponderous, designed to move cargo and not be especially fast or agile about it. This category includes a great variety of vessels, such as the low draft “floating hold” flyut, small river boats, and massive merchantmen that are capable of defending their cargo from pirates. More detail, including Kulthean names, can be found in Section 12.0.

Advanced Designs: These ships mark the pinnacle of naval design on Kulthea. These ships are found in the navies of the most powerful nations and kingdoms whose life depends on their seafaring. Some of the more powerful pirates also use these vessels. Most of these vessels are designed for war. They range from the small sloop, for which the island city-state of Annachon is especially famous, to the frigates produced in the shipyards of Palia. It is worth noting that most of these ships are bigger and faster than their more primitive counterparts.

Other Vessels: This grouping includes fishing boats, native outriggers, ships’ boats, and any other primitive or general-purpose craft the GM may wish to create. None of these vessels are especially noteworthy.

11.3 THE HULL

The first thing a GM or PCs must do is decide the ship type (Section 11.2). Is it a “Advance Design” sloop or a “Primitive Sailing Ship” cog? This is restricted by the HTC level of the area in which the ship will be built.

Once the ship type has been determined, the materials for the ship’s hull must be considered (see Section 11.1). What sort of trees grow in the area? Are the PCs willing to pay extra to get better wood? Is better wood, in fact, available? You will have to answer all these questions, and many more, before you can begin calculating the hull statistics of any ship.

It should be noted that there are certain conventions usually observed in ship design. For example, a sailing ship will usually have a length:beam ratio between 4:1 and 6:1, or one foot of beam for every four to six feet of length. This ratio can be modified, giving more length for galleys and fast sloops or more beam for cargo ships and stable warships.

Displacement — Based upon the ship type, modify the tonnage based on similar ships presented in Section 12.0 (see also Tables T-4.6 and T-4.7). For example, a medium sloop is 100 feet in length, is 23 feet wide, and has a displacement of 300 tons. If you want a smaller sloop, say 90’x20’, it might only displace 270 or so tons. Use common sense!

Hull Points — This is a measure of how much damage a ship can take before she starts to sink. As with displacement, this factor should be estimated by comparing it to similar ships. Then, this result should be multiplied by all applicable “Hull Point Modifiers” (round up). This varies from x0.7 for ships constructed from pine to x2.0 for ships using Hadrock (see Section 11.1).

Other Stats — Based upon the ship’s type, the other hull stats should be proportional to the ship’s displacement. These stats include: length, beam, draft, freeboard, and decking type.

Example: *A particularly ambitious group of PCs decides to have a fast frigate built of Hadrock in an area that has never built anything more elaborate than the local headman’s longship. The base HPs are 400 (average for a frigate). The final HP total is $560 = 400 \times 2.0 \times 0.7$ (due to advanced design problems). Normally such a ship would take one year to build (see below). If the PCs decided to rush things, their HP total would go down to $392 = 560 \times 0.7$.*

HULL POINT MODIFIERS

Multiplier	Reason/Cause
x0.7	Ship built of pine (AT: W1)
x1.0	Ship made of oak or teak (AT: W2, W3)
x1.5	Ship made of Windak (AT: W4)
x2.0	Ship made of Hadrock (AT: S1)
x0.5	Not built in a shipyard (applies to anything PCs make without proper facilities)
x0.7	Construction rushed (see below)
x0.7	Built in an area not as advanced as the design (e.g., a sloop built in a yard that normally builds galleys)
x0.7	All prototype ships (applies to all new ships designed by PCs that don’t fit into the groupings above; like the wiseguy who builds the HMS Victory)

11.4 RIGGING & MOVEMENT PROFILES

Once the actual hull has been built and the hull points determined, it’s time to rig the ship and decide which movement profile it uses. It is strongly suggested that a GM use the material in Tables T-4.6 and T-4.7 as guidelines for assigning Movement Profile MPs and turn limits. The following common-sense guidelines are included for GMs desiring greater leeway in designing their ships.

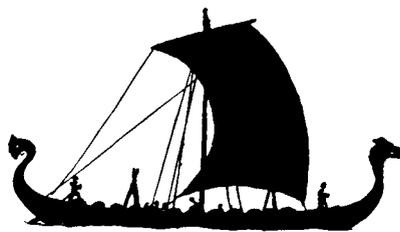
If the PCs have designed a ship which is similar to, say, a frigate but is shorter, it should have a slightly higher turn number than a normal frigate. If the design has a lower displacement than the original, or has an additional mast, the GM may decide to increase the MPs by one in each Profile. But use common sense! The fastest ship in **any** game should be fifteen knots (or 15 MPs in the best wind profile). Unless design considerations dictate otherwise, GMs would do well to assign each ship a set of movement characteristics belonging to an existing design that is closest to the PC’s ship.

RIGGING AND MOVEMENT PROFILES

Selection of a movement profile is based on two things: the size of the ship in question and the type of rigging she has. As mentioned in the previous section, there are three types of rigging dealt with in this supplement; fore-and-aft, square, and lateen. The fore-and-aft rig is common with smaller ships, and allows them to run fast and close to the wind. The square rig is more common with large ships needing a great deal of canvas to drive their bulk through the water. The lateen rig lies somewhere between the two in terms of efficiency, and is commonly used on galleys with sails. Note that longships are square rigged.

What does all this mean in terms of Movement Profiles? Each profile was designed to simulate a particular type of rigging under normal wind conditions. The Historical Ship Chart reflects these considerations when dealing with particular rigging types. Note that a square rig, especially those common to earlier designs, are slow when compared to lateen and fore-and-aft rigging types. Later square rig designs were faster due to the addition of moveable spars and other advances borrowed from both lateen and fore-and-aft rigging layouts. When determining the Movement Profile of a PC design, the GM should take the HTC classification of the new ship and compare it to the existing ship designs. The Movement Profile should be determined by both this and the type of rigging used. Keep in mind that an advanced rigging profile usually accompanies an advanced ship design, and that no shipwright in his right mind would put a lateen rig on a longship! These guidelines should be kept in mind when assigning MPs.

All other necessary statistics, such as Sail Points and the like, should be based off the closest approximation to the new design that can be found on Tables T-4.6 and T-4.7. Keep in mind that a faster ship will have more Sail Points than a slow ship, and that galleys with greater speed will have more Oar Points than a slow merchant galley. Use common sense, and your designs will also make sense!



11.5 SHIP'S OB AND DB

Once a ship's hull and rigging stats have been determined, it is time to calculate the ship's OB and DB. This is a fairly simple process, and is based off the size of the ship and its intended purpose when constructed.

SHIP'S OB

A ship's basic OB is calculated from two things: the ship's Size and the mission it was designed to complete. These two factors will give you an OB for any ship you may have designed in the course of your campaign.

The OB number based on a ship's Size is taken from a number of considerations. The larger a ship, the more stable a weapons platform it became. This made the job of the gunners much easier, as a larger ship will ignore many small swells which would disturb a smaller ship.

SIZE OB CHART	
Size	Bonus to Ship's OB
Tiny	-10
Small	-5
Medium	0
Large	+5
Very Large	+10

The second factor to be considered is the purpose for the ship's construction. Was she intended to be a merchant vessel, a warship, or general exploration ship? Most ships designed by PCs will fall into the last grouping, although other types are possible. The following chart should be consulted to determine the OB modifiers based on design type.

CONSTRUCTION OB BONUS	
Design Purpose	Bonus to Ship's OB
Merchantman	-5
Warship	+5
Exploration or General Use	0
Ship is a Galley	-2

Note that a ship designed to operate as an armed merchantman (such as those used by the British East India Company in our own history) would qualify as General Use ships and not as merchantmen or warships! This grouping would also cover the ships used by Columbus and other explorers of his day.

These OB designations and considerations also apply to galleys, although a galley designed for exploration would be very rare (their range was far too limited to make them practical for such undertakings!).

Example: A group of wealthy PCs has decided to have their own ship built in the local shipyards. Through talks with the GM they have determined that their ship is roughly the same size as a Sloop and will be used for exploration and occasional acts of piracy (this group has a little of the wild side in them!). A Sloop has the Size rating S (-5 to its OB) and the General Use design gives it a 0 modification, so the PCs' ship's net OB will be -5.

SHIP'S DB

A ship's DB is calculated like its OB is, except that only Size plays a major role here. There are certain other considerations, such as rigging type and whether the ship is a galley or not; but, on the whole, Size is the main factor.

Like *Arms Law*, a ship's DB in *SeL* is subtracted from an attack's chance to hit. Unlike *AL*, ships in *SeL* can have negative DBs, making them easier to hit than smaller, more agile ships. This is balanced by the fact that larger ships make better gun platforms, and as such have higher OBs than the smaller ships with high DBs. Given the scale in *SeL*, a ship's DB is also a reflection of its maneuverability and response time to its helm if sudden action is required. Refer to the chart below when calculating DBs.

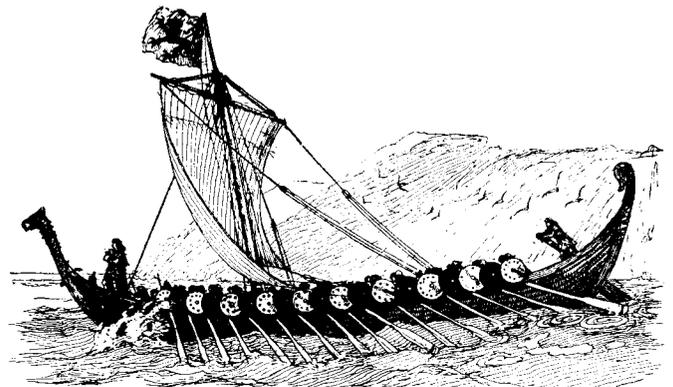
Example: The PCs in the previous example must now determine the DB for their new ship. It is a Small sized ship (+10 DB) and uses a Rudder (+2), giving it a total DB of +12. This means that 12 is subtracted from all attacks against that ship. If the PCs had gone with a Steering Oar instead of a Rudder, their DB would have been 8 instead of 12 (a Steering Oar gives a -2 modification).

SHIP'S DB CHART	
Size/Other Consideration	DB Modifier
Tiny	+20
Small	+10
Medium	0
Large	-5
Very Large	-10
Galley	+2
Ship uses Rudder	+2
Ship uses Steering Oar(s)	-2
Ship has the Galleon HTC	-5

11.6 CONSTRUCTION TIME

The average building time of a ship displacing 600-650 tons is one year. For each 100 ton increase, add one month to this base. Smaller ships subtract one month for each 50 tons of difference. For example, it takes approximately one year to build a frigate (610 tons), 15 months to build a galleon (900 tons), and one to two months to build a trireme (70 tons).

GMs should also feel free to increase or decrease building times based on material availability, the number and quality of shipyards in an area, and so on.



11.7 MAGICAL CONSTRUCTION

Constructing ships with magical means and/or materials is handled somewhat differently. Alchemists can be used to form materials such as stone or iron for ship construction. Spell lists useful here include Organic Skills and Inorganic Skills. For ease of play, all magical materials are lumped into one armor type (S2). Construction time is based more on spell and material availability than anything else, so it is left to the GM's discretion and the alchemy guidelines he is using. Please note that this type of construction is very rare, at least on Kulthea, since it involves a great investment of both time and money. Wooden ships are much more common on the sealanes than their more exotic magical relations.

The *Alchemy Companion* is filled with spells, rules and professions useful in the creation of magical ships. The Engineer profession, found in that book, would be very useful in creating a ship, particularly a warship, as his spells for creating and defending fortresses could be applied to a large seaborne craft. A GM might even want to allow this profession to create explosives for cannons or other weapons. The Tinker is another profession that would be well-suited to ship construction, and in particular, repair.

Ships can be constructed so as to have magical powers, like a magic item. Imbedded spells, spirits, and even demons are possible. With an imbedded *Fly* spell (modified to handle the great weight), a ship might be made to sail the skies as well as the seas. Defensive-minded Alchemists might create a ship with imbedded defensive spells, such as *Aim Untrue* to foil missile attacks, or *Cancel Essence* to protect a ship from spells. Practically any power or ability that can be bestowed upon an item can be given to a ship, or a part of it, such as its weapons, sails, etc. The only limitation is the level of the Alchemist(s) and the time required to build the ship. The *Alchemy Companion* gives guidelines for how long such magical imbedding takes.

SHIP CONSTRUCTION IN A HIGHLY MAGICAL WORLD

In a world where magic, particularly high-powered magic, is fairly common, ship construction might be quite different from the standard procedure presented in Sections 11.1 through 11.6. To respond to an highly magical environment, many ships would be have special features.

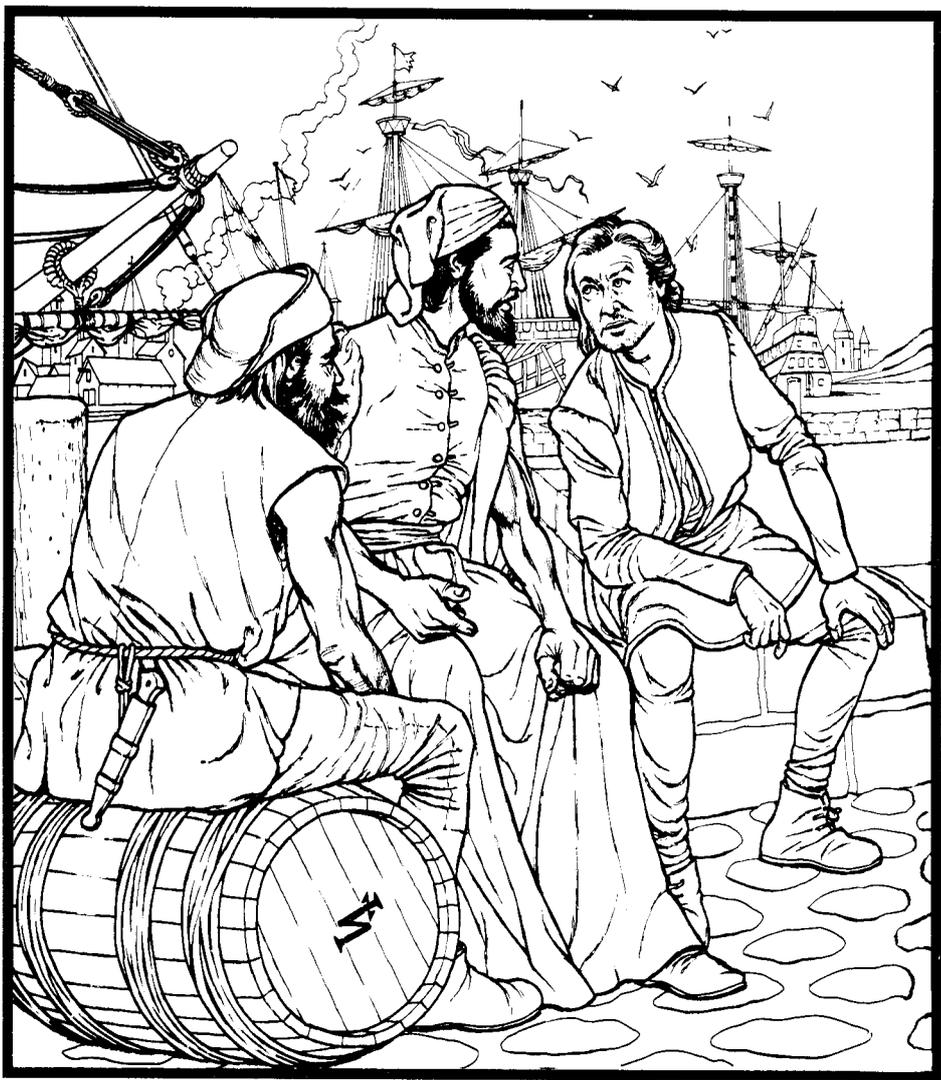
Example: *Due to a number of spells which allow people to operate underwater, walk on the water, or ride sea-borne mounts, this type of tactic might become common. In such an environment, ships could be modified to make it easier to send off boarding parties on top of the water (or even under it). This could be accomplished by having side-hatches, or even hatches which open below the water line (magically sealed). Similarly, ships could be equipped with defenses which make it difficult for such invaders to climb their sides. These could include arrow slits and murder holes for defenders to strike at such attackers, or spikes and barbs to make climbing difficult.*

11.8 CREW, CARGO, AND WEAPONS

Once a ship basic structure has been determined, it's time to move on to such considerations as crew size, cargo capacity, and weapons. Tables T-4.6 and T-4.7 provide typical crew complements, with notes for the maximum number of men that can be carried on one ship. The maximum cargo capacity of ships and the heaviest weapons they can carry are also noted. It is worth stating here that only galleys without sails or rigging can carry catapults. No other ships may carry these weapons, as the arced fire would rip apart the firing ship's rigging!

The crew numbers given in Tables T-4.6 and T-4.7 are the ideal, and not always the rule. A normal ship can carry an additional number of men equal to roughly one third of the ship's normal complement. These extra men can be additional troops, passengers, etc. For a short time, a ship can function with as little as 10% of her normal crew, and this is referred to as its "skeleton crew."

For a more detailed discussion of the make-up of a ship's crew, and the rules and procedures for arming and provisioning ships, see Part VII "Sea Law Campaigns"—this includes details concerning shipboard ranks, positions, and equipment.



12.0 SAMPLE SHIPS

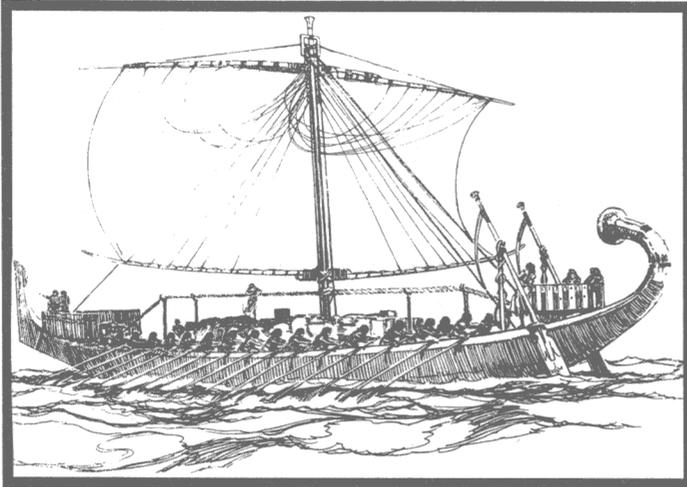
The following sections includes sample fantasy and historical ships. These can be used in *Sea Law* campaigns, or as examples. GMs and players should examine these closely while designing their own ships.

12.1 HISTORICAL SHIPS

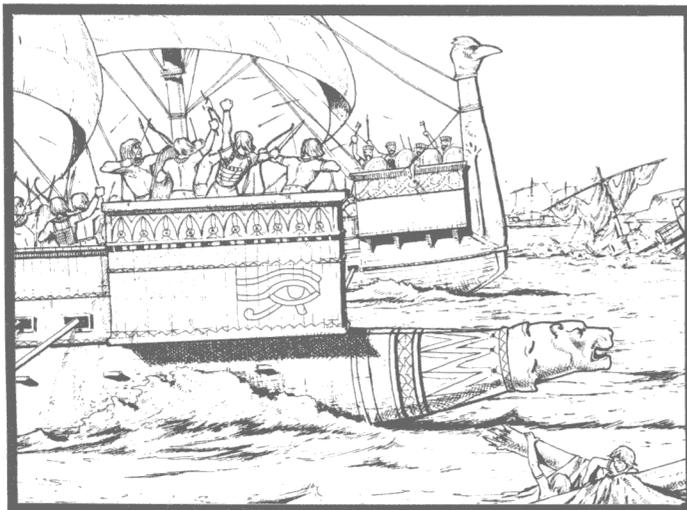
The ship types described in this section are only representative of the broad range of ships that were used in various historical periods. In many cases, the statistics given are only estimates based upon limited historical information.

EGYPTIAN ($\approx 2000 - 600$ B.C.)

Merchantman — This was one of the first ships built around a strong keel, but was still only suitable for relatively calm seas and coastal water.

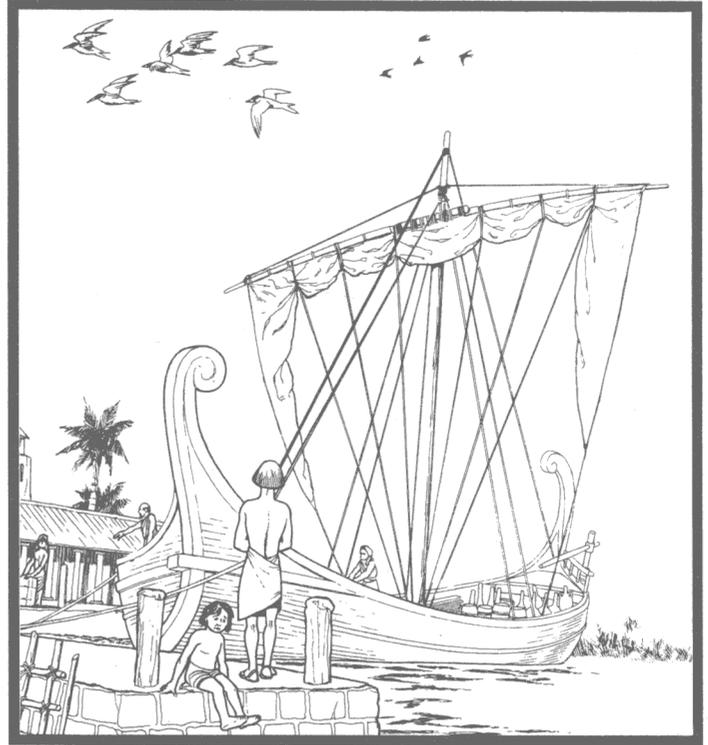


War Ship — Similar to the merchantman, this ship had a raised edge around the hull to protect the oarsmen from archers. It often had a crow's-nest and a good position for the steersman.



PHOENICIAN ($\approx 1500 - 300$ B.C.)

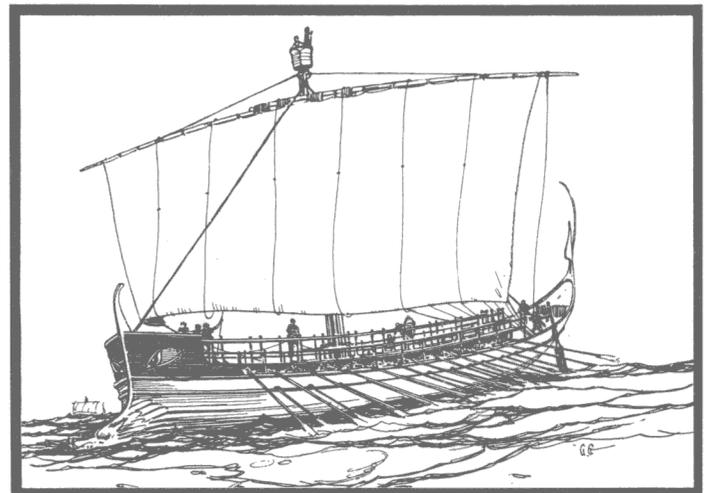
Merchantman — These ships were strong, fast, and seaworthy.
Bireme — These ships had a shallow, flat hull with a light fighting deck above the oarsmen.



GREEK ($\approx 1200 - 100$ B.C.)

Pentakonter — An early Greek fighting ship later replaced by the bireme and trieme. Its oarsmen were also lightly armed and armored fighters.

Bireme — This ship was similar to the pentakonter, but it was larger, had a second bank of oars, and had a ram.



Recon Boat — This ship was similar to the pentakonter, but it was smaller and faster.

Early Trieme — This ship had three banks of oars and was longer and faster than earlier Greek ships.

Trireme — This decked trireme was faster than earlier ships and had an upwardly extended hull that protected the oarsmen.

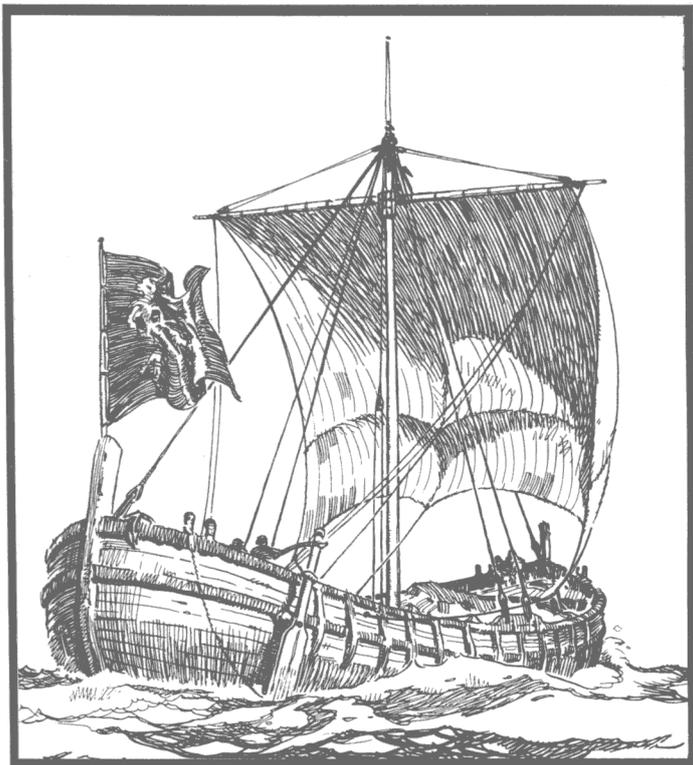
Pentere — This ship was a large heavy galley, that was slower and less maneuverable than biremes and triremes, but which could carry more marines and equipment.

Quadrireme — An even larger version of the pentere.

GENERAL MERCHANTMEN

(≈ 600 B.C. – 1200 A.D.)

Merchantman (small, medium, large, fast) — Of course there were numerous types of merchant ships during by this period, but most had the same general dimensions, speeds, and other stats.



CARTHAGINIAN

(≈ 450 – 100 B.C.)

Bireme — This ship was an improved version of the Greek bireme.

Pentere — This was the Carthaginians' heavy fighting vessel.

BYZANTINE

(≈ 400 – 1200 A.D.)

Early Galley — This small but fast ship was used as a message ship and light raider for centuries.

Dromon (Small, Large) — This was the standard Byzantine war ship.

ROMAN

(≈ 400 BC – 300 A.D.)

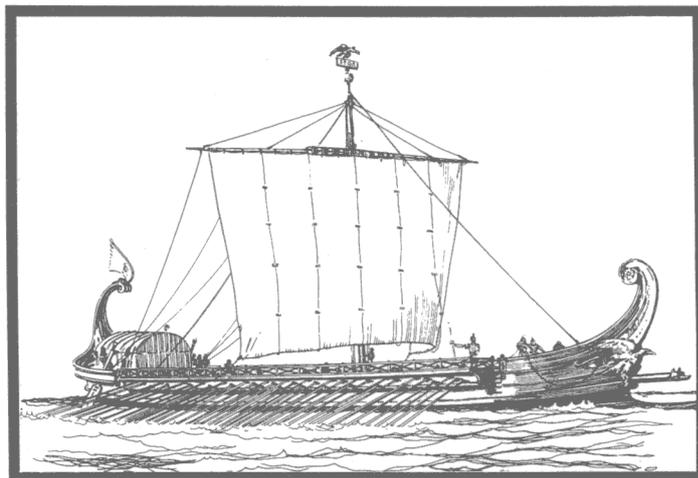
Early Bireme — An improved version of the Carthaginian bireme.

Quinquereme — An copy of the Carthaginian pentere.

Later Bireme — A much improved bireme that was able to operate in the coastal Atlantic.

Liburna — A small galley that was used for picket duty, screening, patrols, raiding, etc.

Large War Ship (Sextere, Heptere, Octare, Novare, Dekare) — These large, clumsy ships were used during the Roman Civil War. They relied on grappling, boarding tactics, and their artillery.



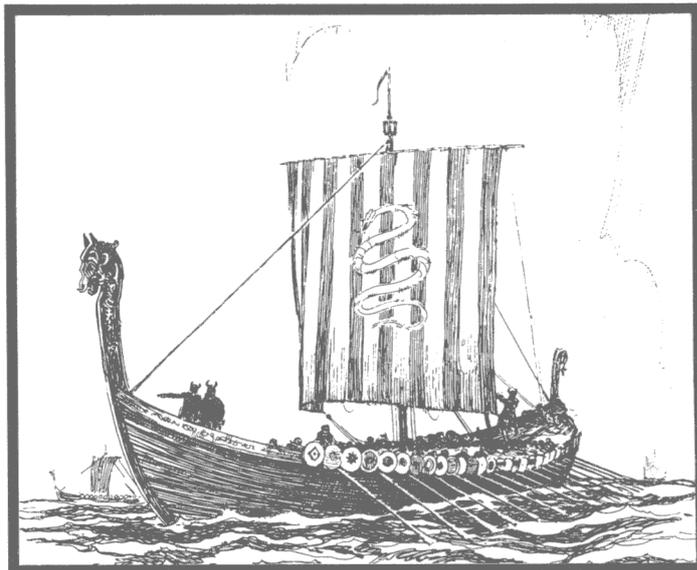
VIKINGS

(≈ 400 – 1200 A.D.)

Merchantman (Small, Large) — These ships were very seaworthy. The smaller ones usually restricted travel to coastal areas, enclosed bodies of water (e.g., the North Sea and Mediterranean), and large rivers. The larger ones were suitable for long, open sea voyages.

Warboat — This was the standard Viking warship; it was very seaworthy and suitable for long voyages.

Long Ship — This ship was just a larger, faster warboat whose larger crew allowed extended cruising times.



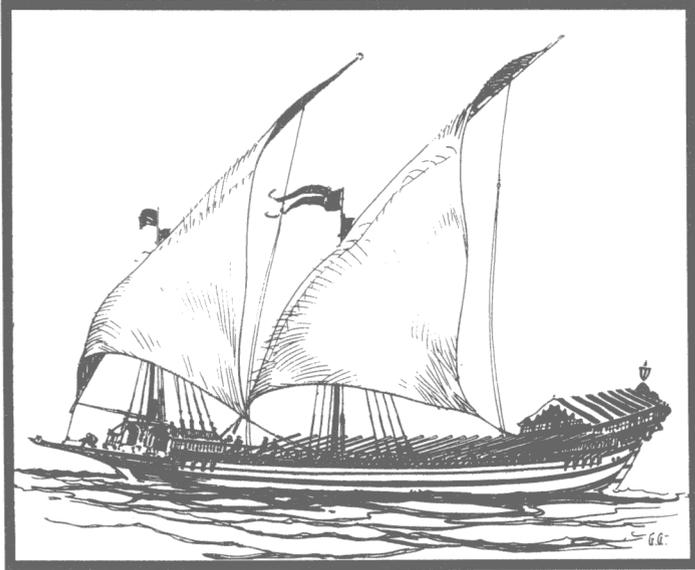
MEDITERRANEAN (≈ 1000 – 1700 A.D.)

Recon Galley — A small, maneuverable ship used for messages and reconnaissance.

Cargo Galley — A larger slower galley used primarily for transporting troops and cargo.

Early Battle Galley — The main war ship in most navies of the 13th and 14th centuries.

Latter Battle Galley — The main war ship in most ships of the 15th and 16th centuries. They were heavier and mounted more guns than the earlier versions.



OTHER ATLANTIC SHIPS (≈ 900 – 1600 A.D.)

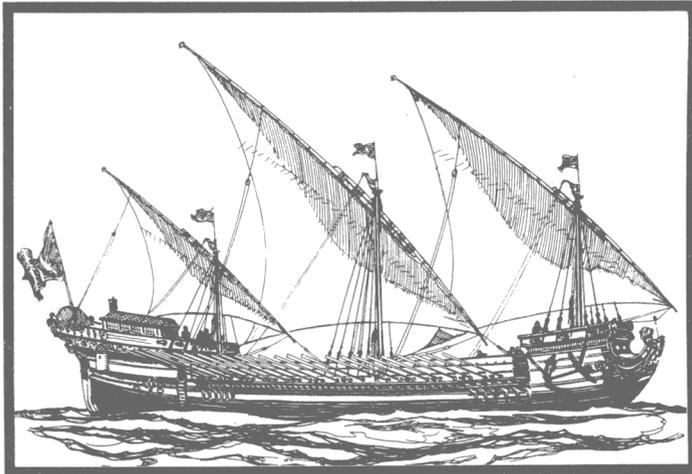
Small Cog — These short, tubby ships had a large draft, but they also had a very large cargo capacity with a relatively high speed.

Cog (Medium, Large) — This was a larger cog with a rudder, a full deck, a raised fore deck (forecastle), and a raised aft deck (sterncastle).

Caravel (Small, Large) — The caravel was a small ship with a round bow and a square stern.

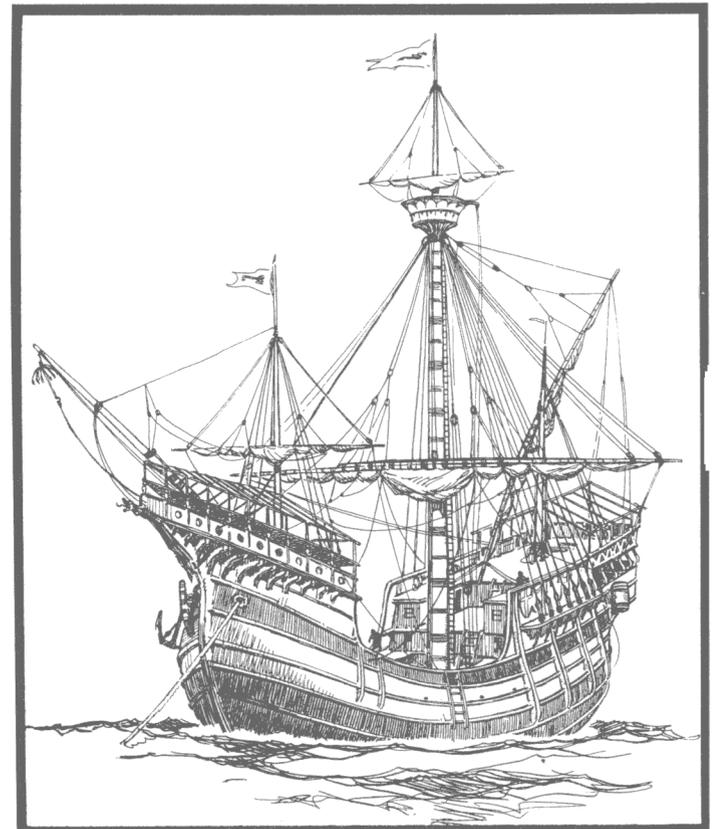


Galleass — A very heavy, sluggish galley that carried a large number of guns.



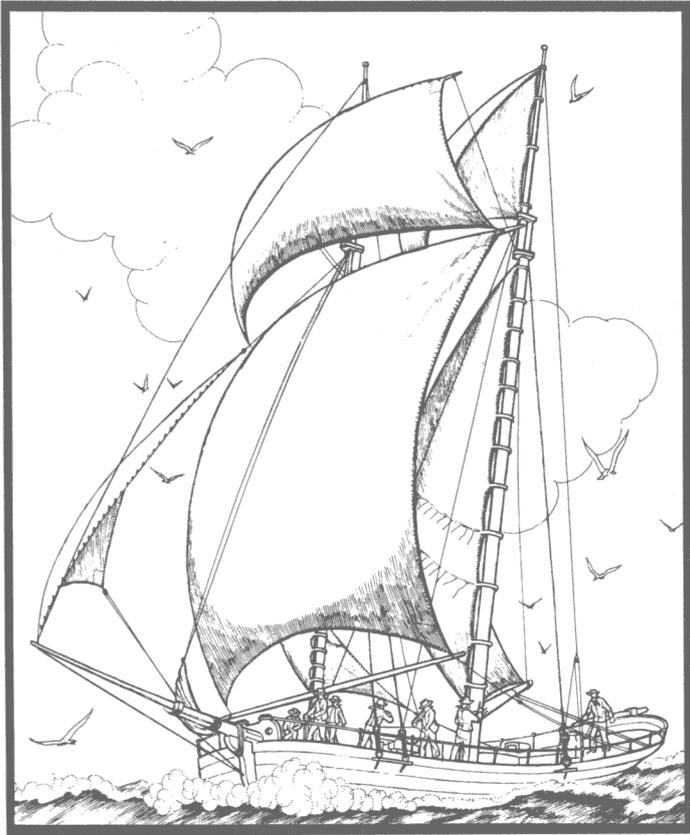
Merchant Galley — These galleys were slow and clumsy using oars, but were faster using sails.

Merchantman — This ship is representative of the standard smaller merchant vessels used in Europe during this period.



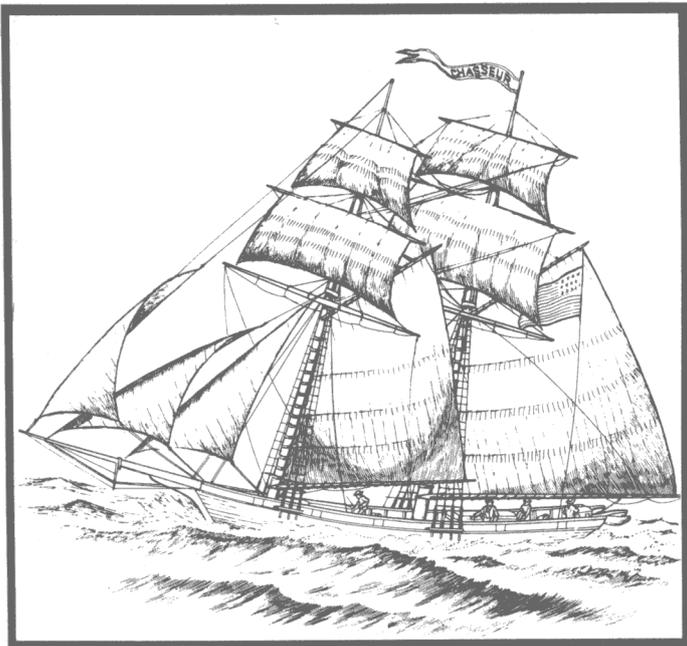
LATER SHIPS (≈ 1600 – 1800 A.D.)

Cutter (Naval, Small, Medium) — This ship was small, single-masted, and fore-and-aft rigged. It was fast and maneuverable.



Sloop/Schooner (Small, Large) — A sloop mounted a bowsprit almost as long as its hull, allowing an enormous amount of sail area in relation to tonnage. She was very fast and incredibly maneuverable. Any guns were mounted on the main deck.

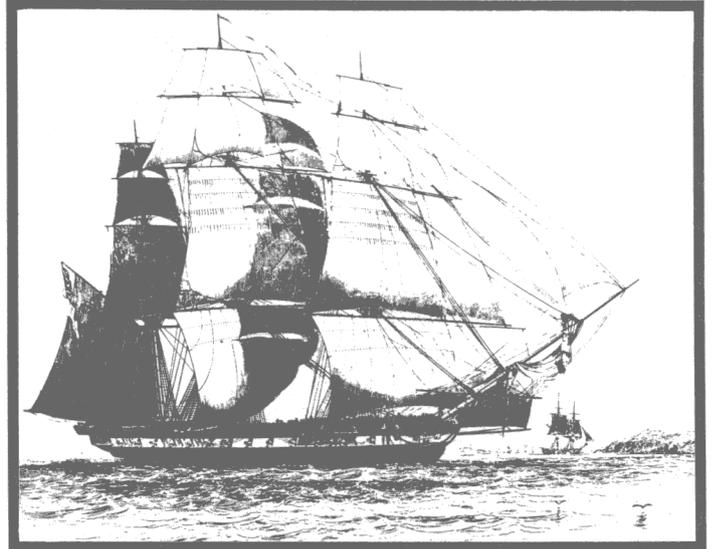
A schooner had many of the same properties as the sloop. However, it had two masts and it has a narrower, shallower, and longer hull—making it quicker in the water, but slightly less maneuverable.



Brig/Brigantine — A Brig was a two-masted ship that was square-rigged except for a fore-and-aft rigged mainsail. A Brigantine was a Brig that had its entire mainmast fore-and-aft rigged.

Flute — The Flute was a flat bottomed extremely wide craft that was not very fast or maneuverable. However, it had a very large cargo capacity, it was easy to sail, and it was inexpensive to build.

Frigate (Slow, Fast) — A warship that was smaller and faster than a ship-of-the-line. It was used for a variety of purposes: scouting, picket duty, patrols, raiding, etc.



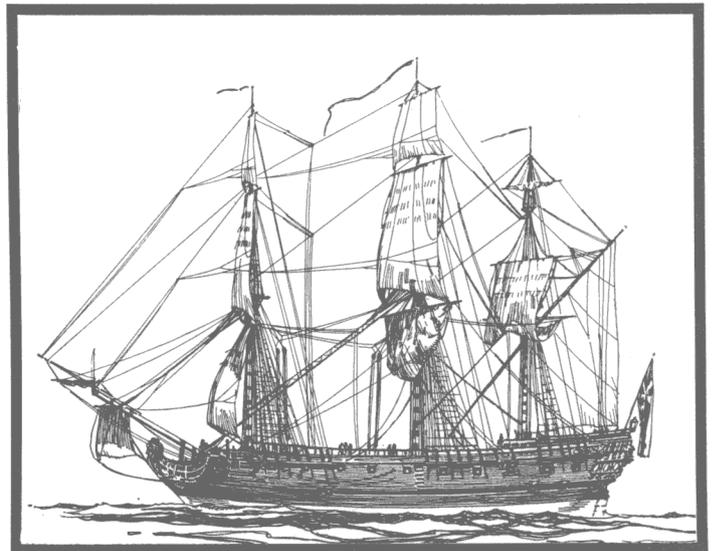
Ship-of-the-line (Slow, Fast) — The main line capital warship of any fleet.

Galleon — An older main line warship. See Section 3.4.

Galley — A large oared ship, usually lateen rigged.

Gunboat — A small, oared ship that usually mounted one or two very large guns in its bow.

Merchantmen (Small, Medium, Large, Very Large) — The standard cargo carriers of the period.



12.2 SHIPS OF THE SHADOW WORLD

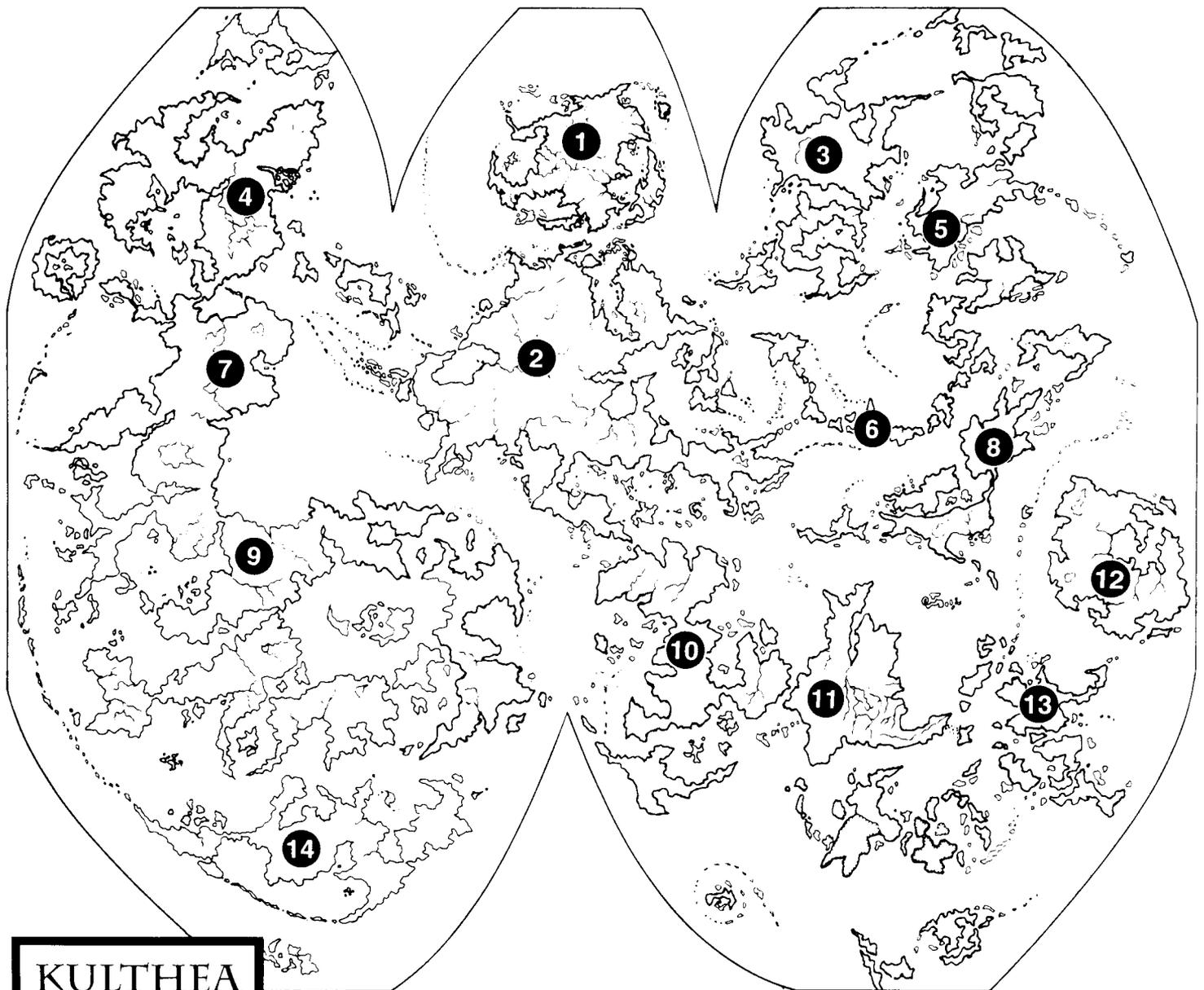
This section provides some detailed examples of ships common to the seas of Kulthea. These are presented according to the continent or country that builds and/or uses them. Notes are included at the start of each section concerning common design practices and/or limitations of a particular area.

JAIMAN (12.2.1)

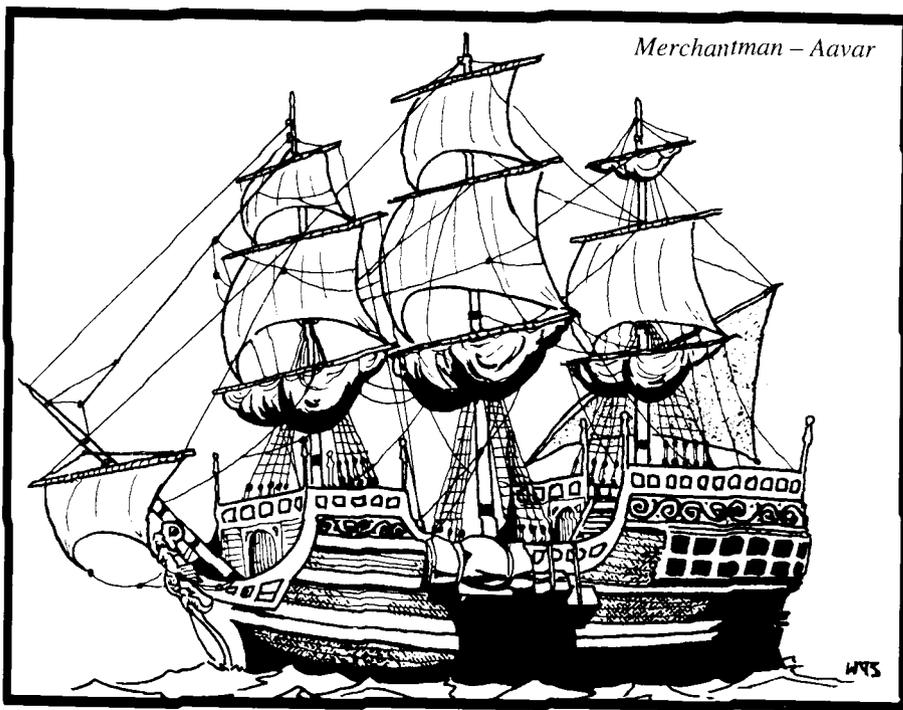
Located in the northern region of Kulthea, Jaiman has developed a very advanced system of shipbuilding and design. This is due in no small part to the continent's location and the condition of the seas that surround it. Some of the island groups that surround the continent (in particular the two islands known as the Sisters that lie between Jaiman and Emer) have pushed shipbuilding to the very limits possible (given the technology available on Kulthea at this time).

Sloops: Built of Hadrock at the city of Annachon (one of the cities on the Sisters) these are the most sought after warships on all Kulthea. Large for their size, these ships are both fast and well-armed. Game statistics can be found in the chart following this section. Annachon will not sell these ships to anyone other than the representative of a government. Sloops built by Var'Lis (the other city in the Sisters) are of lower quality, but are also highly desired. Var'Lis will sell their ships to anyone.

Merchantmen: There are two main types of merchantmen used in Jaiman: Nors and Aavars. The Nor is a shallow-draft vessel used mainly in coastal trade between the inland nations. It has great cargo capacity, but is slow and not very seaworthy. They are rarely seen beyond the coastline of Jaiman. The Aavar is a very stout ocean-going merchant vessel which is also armed with mangonels for protection. Aavars are encountered both near the coast and in the seas surrounding Jaiman. Their seakeeping qualities are excellent, and they are much desired by other countries. It is one of the most copied designs on Kulthea, since it is not as advanced as the Annachon sloop and can be built out of almost any wood.



- | | | | |
|--------------|-----------|--------------|---------------|
| 1 - Jaiman | 5 - Gaalt | 9 - Thuul | 13 - Murlis |
| 2 - Emer | 6 - Iyxia | 10 - Falias | 14 - Mythenis |
| 3 - Kelestia | 7 - Agyra | 11 - Govon | |
| 4 - Mulira | 8 - Palia | 12 - Foleenn | |



EMER (12.2.2)

Located to the south of Jaiman, Emer is not quite as nautical as her northern cousin. Most of Emer's most advanced ships are in fact purchased from the yards of Jaiman. The southern coast of Emer is home to some galleon-type vessels, as their cargo capacity and defense abilities are much admired in those violent waters. Most of the royal fleets of Emer use galleons, although some in the north use frigars.

Galleons: Some of these ships are the largest on Kulthea. Usually made out of oak or some other similar wood, Emer's galleons are used both as warships and merchantmen, if the voyage is long enough to justify the use of such a large ship. Galleons made in Emer mark the peak of such vessels' design. All are large, close to the maximum allowed for that class, and carry many marines and heavy mangonels.

Kalks: Commonly found in the southern kingdoms, kalks are simple merchantmen, often using lateen or fore-and-aft riggings and made out of low-quality oak or pine. These ships are commonly used for the coastal trade, with few

straying out of sight of land. They can carry a respectable amount of cargo, and don't need as many crew members as some of their Jaiman counterparts.

Sloops: These ships are purchased from Jaiman. Local copies are somewhat inferior. They are used by all powers on coastal Emer as scout ships as well as for light commerce. They are also very popular with pirates in the region.

Frigars: Also purchased from Jaiman. These medium warships are more common in the northern part of Emer than they are in the south. They are rarely used against galleons, since they cannot carry enough mangonels or marines to make much of a dent in such giants. However, their speed and maneuverability allows squadrons of them to defeat galleons from time to time.

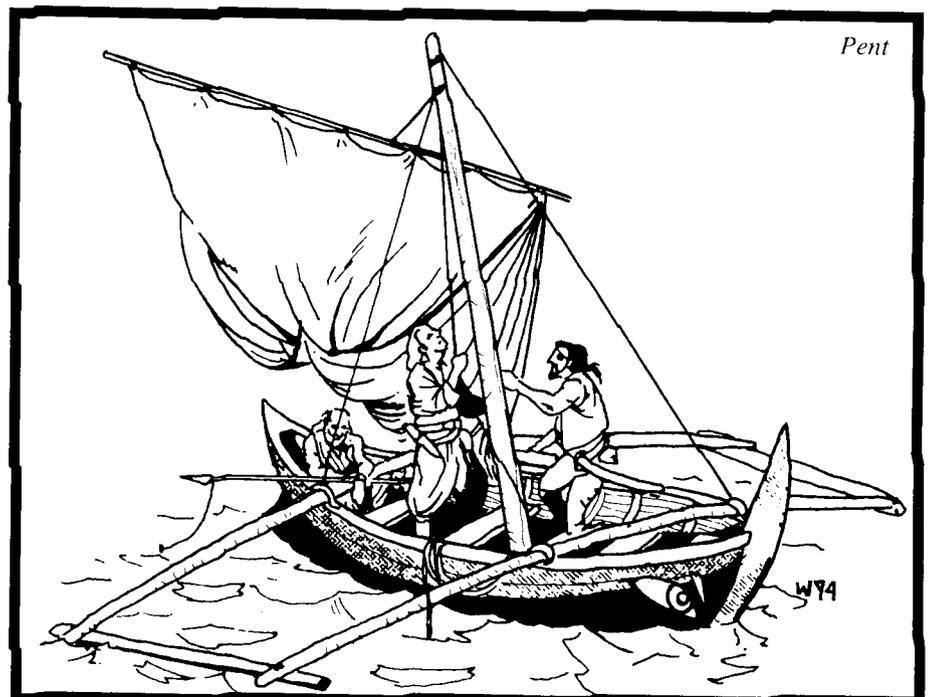
Frigars: These large ships are the primary warships of the fleets of Jaiman. Roughly frigate size, these vessels are used to patrol the sealanes around Jaiman and drive off pirates, who are a constant threat to commerce here. While not as heavily armed as some of the ships of Emer or Palia, frigars have better sea-keeping abilities and are faster. Occasionally a frigar falls into the hands of one of the more successful pirates, and they are often sold to kingdoms on Emer.

Pents: The pent is a form of outrigger canoe used by the Ku'Tivar; the natives of the Sisters. These ships are not ocean-going, but are used in the basin surrounding the Sisters. Some have been reported that are capable of carrying 100 warriors, but the 10 warrior size is most common. Pents are used to transport raiding parties from island to island, but are also occasionally used for trade purposes.

Lighter: This small boat is one of the most common fishing/patrol/light commerce boats in Jaiman waters. It is easy to sail, reasonably fast and seaworthy, and has a small crew. Most navies use it for light anti-piracy duties and convoy escort, along with scouting missions. Annachon is unique in its lack of lighters, preferring to use its excellent sloops for such tasks.

Barch: A barch's size is somewhere between a sloop and a frigate. It is commonly used by all navies as a convoy escort. This is another much-copied Jaiman design, and is very popular with pirates. Barches are also used as light merchantmen by some shipping concerns, especially when high-value cargos have to be delivered in a hurry.

Corvar: The corvar is a medium-sized merchantman that is very common throughout Kulthea. It uses a square rig, as do most of the ships listed above.

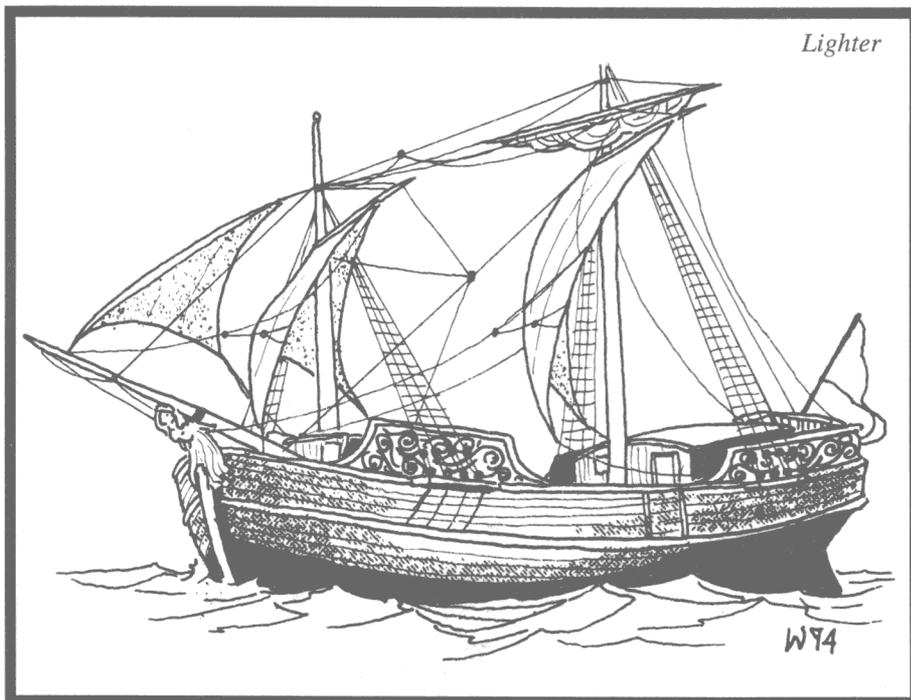


Coasters: These are almost flatbottomed merchantmen used exclusively for the grain and oar trade along Emer's coast. They would not stand up to use in the open sea, and rarely carry more than one mast. Designed to carry a great deal of cargo, coasters do not require many men to crew fully. They are slow, however, and not very capable of defending themselves.

Lighters: These ships are exactly like their Jaiman namesakes. They are used for more or less the same purposes, although some kingdoms use them to patrol their coastlines, taking advantage of their shallow draft to keep smuggling in check.

Nars: Some of the more northern cultures, especially those considered primitive by Kulthean standards, use longships such as the Nars with great frequency. These ships vary in size, but usually carry some 25 oarsmen, are square-rigged (with only one mast and sail), and can carry a reasonable amount of cargo. Some types exist mainly for merchant concerns, and have deeper holds. Others are designed for war, and carry marines instead of cargo. All have garishly painted sails and can be found plying the waters around Emer in all weather states and times of the year.

Galleys: The sheltered inland seas and waterways of Emer are home to a great variety of galleys. While there are innumerable types found here, certain general classes are in wide use. The Pais is a type of cataphract which is commonly used as a warship by major powers. The R'es is an aphract which is used mainly as a merchant vessel. The Pais is equipped with a ram. Pirates on these waters use Ga'Razes, which are modified hemiolias.



Lighter

Cor: The cor is a version of the cog which is used in the same waters as the galleys. It is most often encountered as a merchant ship. In these waters cors are often lateen rigged.

Caravel: These ships are common as scout ships in the southern fleets of Emer. They are also popular with pirates in those regions, as they are faster than most of the government patrol ships.

KELESTIA (12.2.3)

Shipbuilding in Kelestia is slightly more advanced than Emer in that there are no galleys used on the waters surrounding the continent. Most of Kelestia's advanced ships are purchased from Jaiman, and these are found mainly in the royal fleets.

Ships from both Emer and Jaiman are common in Kelestian waters. GMs should feel free to draw ships from the other two continents to fill out fleets of Kelestian kingdoms.

Vors: These fairly complex merchantmen form the backbone of Kelestia's oceanic trade. They are designed with good sea-keeping qualities and cargo capacity in mind. Vors are also common in the fleets, where they are used as patrol ships and convoy escorts.

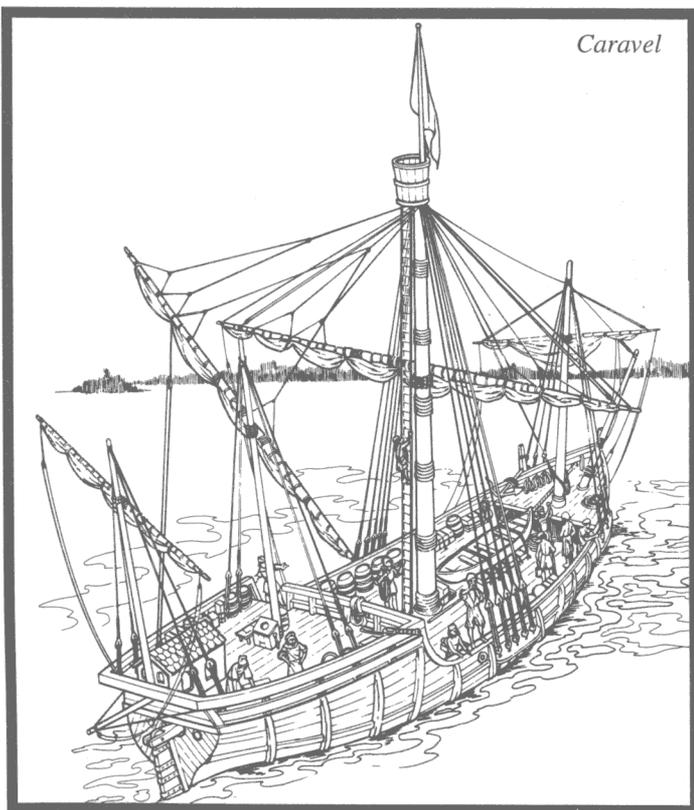
Illias: Based on caravels, the Illias are the most common warships used in Kelestia's fleets. They are also occasionally encountered in merchant service.

Carracks: These large, ponderous vessels are used for the heavy coastal cargo trade. They are also encountered on voyages of exploration, often in company with Illias.

Frigars: Purchased from Jaiman by the wealthier kingdoms of Kelestia, these ships are identical to the frigar discussed above. They are always used as warships, and usually serve as flagships.

Ra'Vir: The Ra'Vir is a form of longship used by the more primitive tribes in northern Kelestia. Slightly smaller than its Emer cousins, the Ra'Vir is intended mainly as a trading ship. Unlike many other longships on Kulthea, the Ra'Vir has a cargo hold.

Ketch: This is the most common non-military sailing vessel in Kelestia. It is a variant of the lighter built in Jaiman, and is commonly used as a large fishing vessel or a small merchantman. Ketches are also encountered in the hands of pirates.



Caravel

MULIRA (12.2.4)

Shipbuilding in Mulira is less advanced than in Kelestia. They have little or no access to the technology of Jaiman, and have been forced to rely on their own designs. The caravel is the most advanced design type commonly encountered in the waters around Mulira, and it makes up the bulk of that continent's war fleets. Longships are quite common, especially in the northern portion of Mulira. The commerce lanes here are much less developed than those found to the east, and coastal trade is the rule rather than the exception. Any goods brought in from outside Mulira are in great demand. Galleys are not quite as common here as in the southern corners of Emer, but they are used by some kingdoms. Piracy is not common here, simply because there is nothing of value to capture.

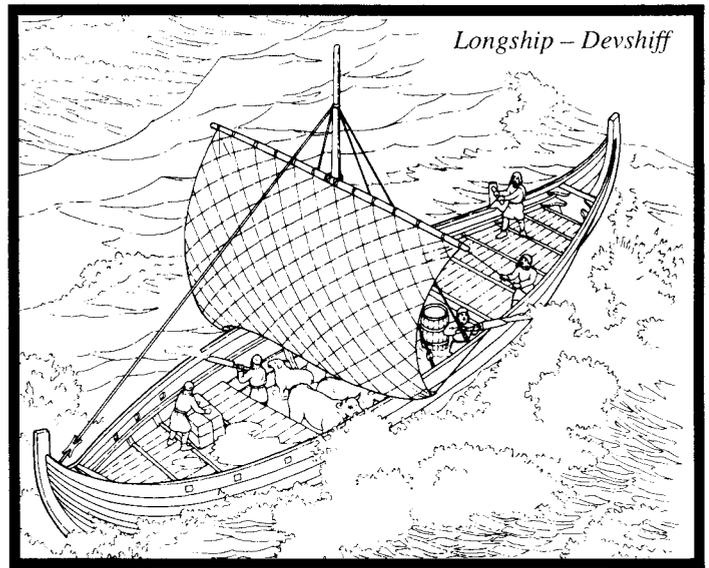
Dors: These are the Muliraian version of cogs. They are commonly used as both merchant ships and warships, much like the galleons of Emer. Most dors are armed with ballistae in both fore and aft castles.

Coasters: These ships are the most advanced products of the Muliraian shipyards. They resemble the lighters of Jaiman, and are used as fishing boats as well as harbor patrol craft.

Yars: The yars are the longships of the northern tribes. Larger than any others found on Kulthea, the Muliraian yars are feared by most naval powers on the continent. The great yars have decks and are armed with ballistas. They are commonly used by the chieftains of tribes as flagships, and can carry upwards of 120 warriors. The lesser yar is by far the most common, and is the size of a greater longship. Like their counterparts throughout Kulthea, yars have masts, and the great yar even has a hold. It is occasionally used as an exploration ship.

Aurs: The aur is the Muliraian version of the carrack. It is commonly found serving as a merchantman, especially for the grain trade. Aurs are never used as warships, and seldom carry any weaponry. They are not exceptionally seaworthy, and seldom stray out of sight of the coast.

Veris: The veris is the ultimate warship of Mulira. A version of the caravel, the veris is armed with light mangonels, and is used as an all-purpose warship and convoy escort. Veris used to deal with northern yars usually carry a good number of marines.



GAALT (12.2.5)

Ship designs in Gaalt are similar to those in Mulira. They produce a local version of the galleon, but on the whole their shipbuilding technology is rather behind that of Jaiman or even Emer. Longships are very common in the northern part of the continent, both as merchantmen and warships. Surprisingly, galleys are also common in the southern oceans, especially on the Dom Usuiv.

Mercantile: This is the catch-all sailed merchantman commonly encountered in waters around Gaalt. It is a variant of the caravel, using the lateen rig almost exclusively. The mercantile is found in two sizes, the smaller being referred to as the mercantila. They have decent cargo capacity and require a small number of hands.

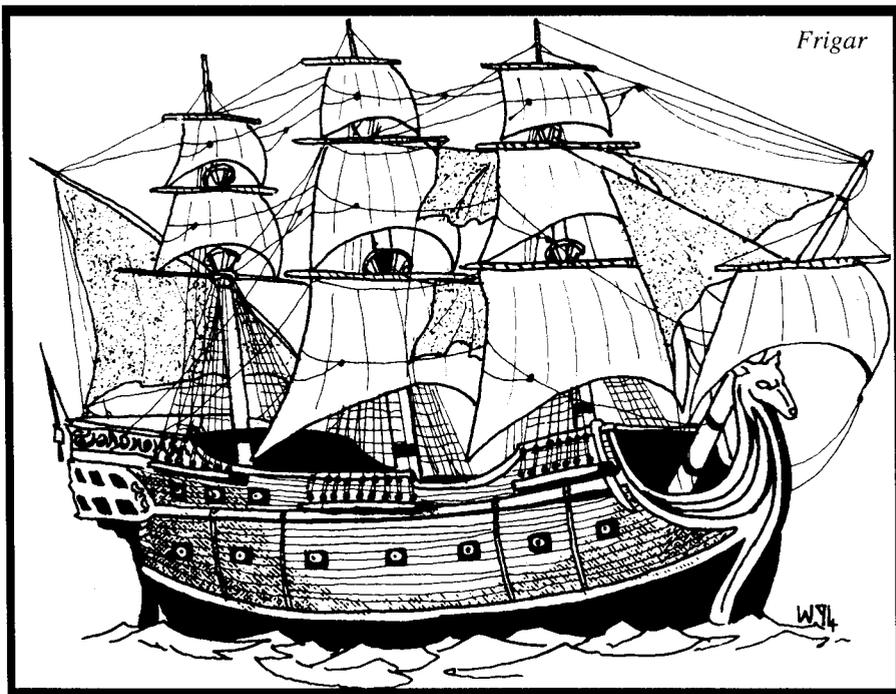
Ketch: This is the Gaalt version of the Jaiman lighter. It is used by most navies as a patrol ship and is occasionally used by merchant companies as a convoy escort.

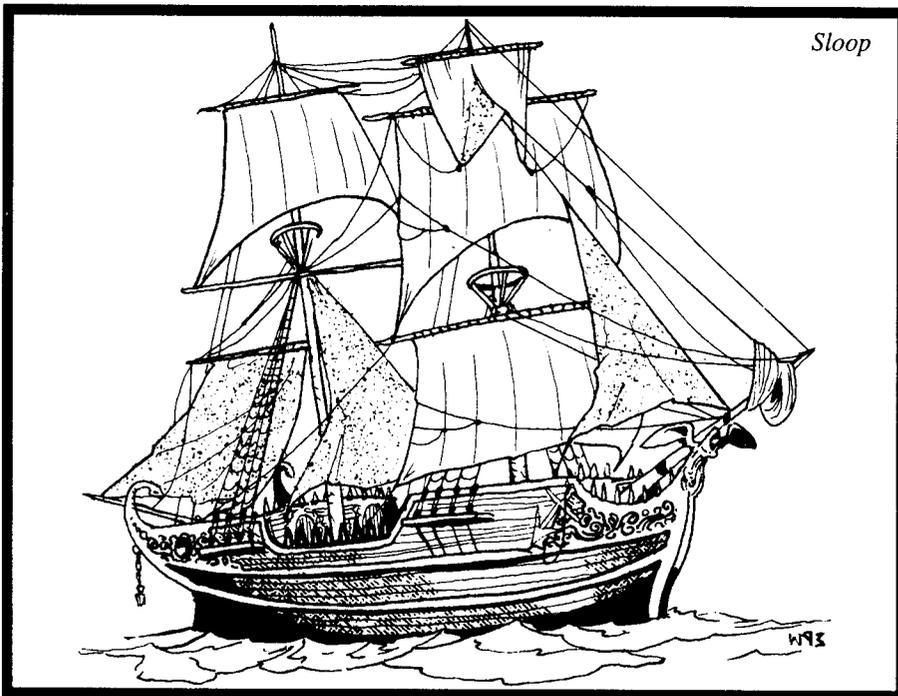
Garron: This is the Gaalt version of the galleon, and is the mainstay of Gaalt's royal fleets and larger merchant houses. Encountered throughout the continent, the garron is a massive vessel, larger than the galleons of Emer. It is used as an exploration vessel as well, and has made calls in ports as far away as Kelestia. Garrons are the only warships in Gaalt that are armed with mangonels. While stable, these ships are not known for their outstanding agility.

Galleys: Any number of galley designs can be found in Gaalt, especially in kingdoms bordering the Dom Usuiv. Cataphract triremes are the most common, followed by hemiolias and triemiolias. All are used by merchant houses, royal fleets and pirates alike. Only the royal fleets of some of the smaller kingdoms along Gaalt's southern coast use slaves as rowers.

Longships: These are commonly used by the northern tribes. Two main versions exist: the Garshiff, a large longship used in war; and the Devshiff, a smaller vessel used mainly as a merchantman. Both are sturdy and quite maneuverable for their size.

Caravels: These small, fast warships are used by all navies in Gaalt as both scouts and light escorts for convoys. They are much like their relatives in the other navies of Kulthea.





IYXIA (12.2.6)

The broken nature of the Iyxian continent has encouraged an advanced level of shipbuilding. While not as advanced as their neighbors in Jaiman or Palia, mainly due to a shortage of quality timber, Iyxia has managed to design some of the most advanced ships on the seas of Kulthea. Due to their need for wood and other shipbuilding supplies, Iyxia has developed an extended system of trade with other continents. As a result their merchant fleet is one of the most advanced on Kulthea. Their military fleets have not been able to keep pace, however. The fact that Iyxia is home to the Navigators might have something to do with this.

Merchantmen: The name is slightly misleading, since this large, deep-draft vessel was designed to carry cargos of lumber and other shipbuilding materials. This is one of the largest cargo vessels in Kulthea, and they are usually owned by kingdoms and manned by navy crews. All are armed with ballistas.

Brigantines: Designed to escort the merchantmen, the brigantine is a fast, mangonel-armed warship slightly larger than a Jaiman sloop. These ships are used for convoy escort and some scouting duties. This is one of the most advanced warships in Iyxian navies.

Frigates: Similar to Jaiman frigars (but slower and slightly smaller) these are the main Iyxian warships. Frigates are rarely found outside the largest royal fleets.

Galleons: These ships serve as the workhorses of the trade fleets and navies of Iyxia. They are identical to the galleons of Emer.

Corsairs: Smaller than a Jaiman sloop, these warships are used royal navies and pirates. They act as scoutships and raiders. Naval corsairs are armed with light mangonels, while those in pirate hands carry ballistas.

Mercantile: These ships are based off the Gaalt design, and more details on them can be found above. These are the primary trade and supply ships of the Iyxian kingdoms.

Coaster: These flat-bottomed cargo ships are used for the grain trade and other such bulk cargos. They rarely leave the coast.

AGYRA (12.2.7)

Shipbuilding on Agyra is considered more of a luxury than a necessity. As a result their technology level is fairly low. Galleys are quite common here, and no ships larger than carracks exist in Agyra's royal navies. Most of the continent's trade is coastal, with goods moving from the fertile north to the more arid south.

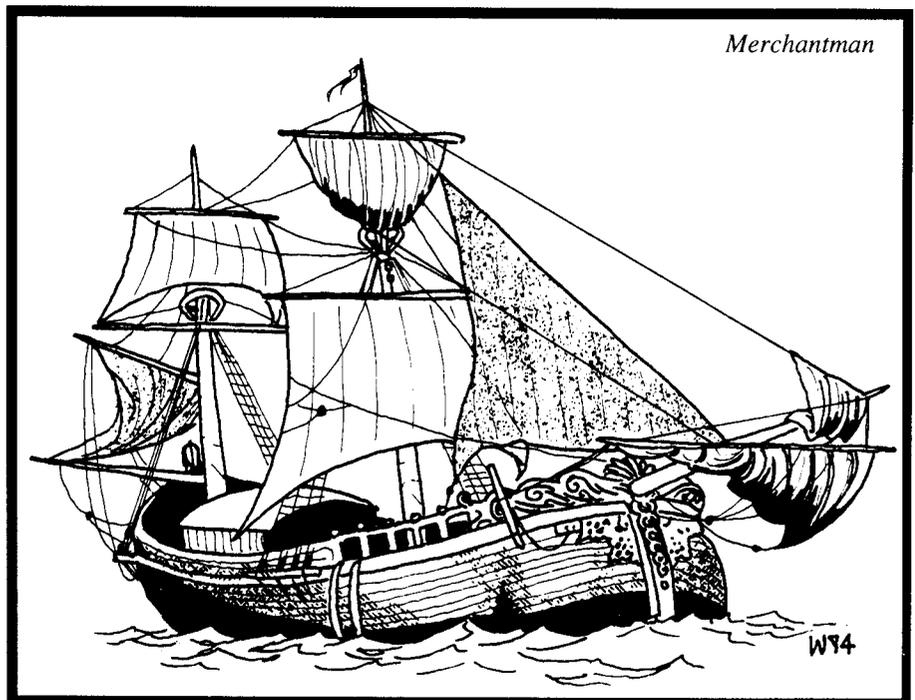
Merchiltals: Very similar to a caravel, the merchiltal forms the backbone of most of Agyra's royal navies. It is also used by the merchant

houses as a major cargo vessel. Early models of merchiltals combined sail power with oars. GMs are safe to assume that the row/sail merchiltal is only used by the poorer or more land-oriented kingdoms.

Cog: This is the main warship of Agyra's poorer kingdoms.

Orts: A form of triemiolia used for light patrol work, this galley is common in both northern and southern waters around Agyra. In a pinch it is occasionally used as a merchant vessel.

Coron: A form of carrack, this is a common merchant vessel in Agyra. It is quite similar to the carrack of Kelestia.



PALIA (12.2.8)

For a number of reasons, Palia has become the major shipbuilding power in Kulthea. Blessed with abundant supplies of excellent lumber and other resources, the kingdoms of Palia have always looked to the sea for their power, both in trade and in war. While they have yet to produce anything quite the equal of the Annachon sloop (and they are working very hard on this project), the other warships and merchantmen of Palia are at least the equal of anything produced in Jaiman. Palia is a major supplier of lumber to Iyxia. Like Jaiman, galleys are rarely encountered in these waters. Instead there are tribal war canoes, some equal in size to longships of the north. This has led to the development of crack units of marines among the navies of Palia, especially in the Holtac Empire. The Holtac Empire's fleet is the best in Palia, and perhaps in all of Kulthea, and it will be examined in Part VI.

Frigates: Bearing little resemblance to its cousin in Jaiman, the Palian frigate is the most advanced warship on Kulthea. Carrying heavy mangonels and a sizable contingent of marines, the frigate is more than a match for anything smaller than an Emer galleon. It forms the backbone of all royal fleets in Palia. It is square-rigged and very fast for its size. It is, however, expensive to build. There are not many in the fleets of Palia, and the commissioning of a frigate is the cause for much rejoicing in its navy and much concern in the other navies.

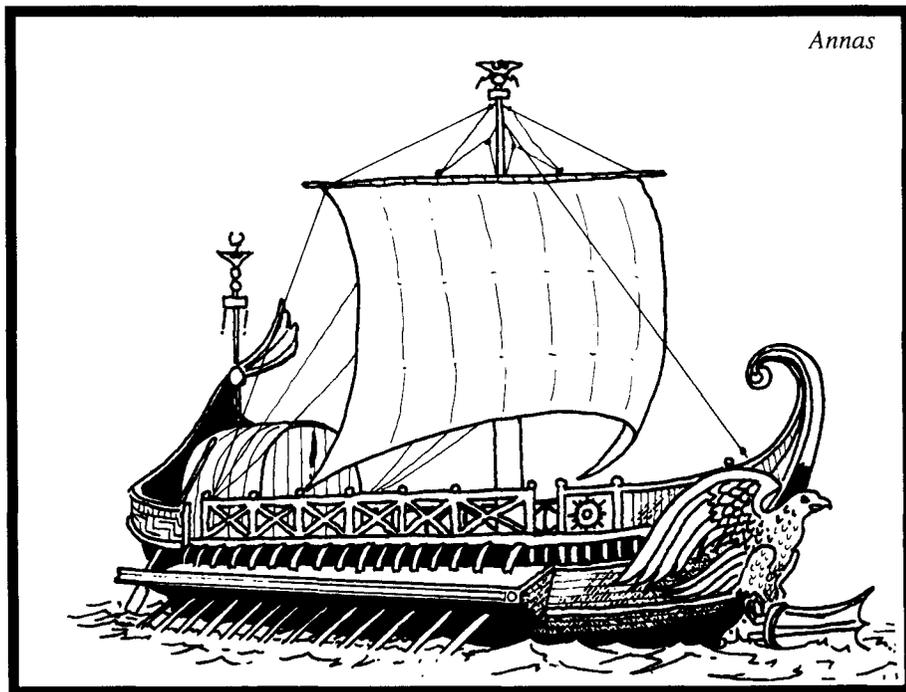
Sloops: These medium-sized warships are the eyes of Palia's fleets. They are used in all roles from scouting to actual fleet combat. They are slightly smaller and slower than those produced in Annachon, a cause of much regret amongst Palia's top naval architects.

Merchantmen: Forming the backbone of the fleets of Palia's merchant houses, these large ships are used to transport everything from grain to troops in time of war. Most are square rigged, and have enough strength to make long oceanic voyages. All are armed with ballistas, and some of the more important carry marines for protection. Merchantmen owned by the crown often carry mangonels, and are used to transport especially vital cargo.

Brigantine: This is the actual combat unit of Palia's navies. Smaller than a frigate and bigger than a sloop, this warship forms the main strength of most navies. It is armed with mangonels and marines. Brigantines are occasionally outfitted by the crown to carry out voyages of exploration. These exploration missions are commanded by navy officers, and carry great rewards. They are some of the most popular assignments in Palia.

Lighter: Similar to other lighters found on Kulthea, this is a popular pirate ship. Since the merchant ships in Palia are often armed, lighters built here usually carry either heavy ballistas or light mangonels. Lighters are also used by the navies as anti-pirate patrol craft and by the merchant houses as convoy escorts.

Ba'Is & Fa'Is: The Ba'Is is a large outrigger war canoe used by the tribes that inhabit Palia's rain forests. Powered by a combination of sails and oars, the Ba'Is is roughly the size of a large longship, and can carry up to 100 warriors. A smaller version, the Fa'Is, is also used. Both ships are used to raid merchant vessels straying too near the coastline or those anchored at night.



THUUL (12.2.9)

Shipbuilding in Thuul is quite like that of Agyra. The proximity of these two continents means that a certain amount of technological overlap has occurred. However, there are certain differences. Galleons are common in the waters around Thuul, and some kingdoms, especially in the south, are in the process of developing sloops and other advanced ship designs. In the north, though, the level of shipbuilding is similar to that in Agyra.

Annas: The annas is a galley quite like a trireme. Both aphract and cataphract versions exist, the former being mainly used as a merchant vessel while the latter is designed for war (the war annas). Annases are commonly encountered in the northern areas of Thuul, and in the confined waters of the Throk Tesea.

Navra: The navra is the Thuulian version of the caravel, and is the most common ship in both northern and southern waters. Usually lateen rigged and armed with ballistas, navras serve as both merchantmen and warships. Being fairly seaworthy, navras are also used as exploration vessels.

Garracks: This version of the galleon is the main warship and long-haul merchant vessel of Thuul's southern kingdoms. It is similar to the galleons of Emer, except that it is armed with medium mangonels.

Sloop: Much more primitive than its Jaiman cousin, the Thuul sloop is that continent's most advanced ship. Armed with ballistas, sloops are used by most southern navies as scout ships. They are slower than sloops from Annachon or Palia, but are still faster than anything commonly found in the waters around Thuul.

Cog: The primary merchant vessel of Thuul, the cog is encountered in all waters. Since they are not very seaworthy, cogs usually stick to the inshore trade and rarely venture out of sight of land.

FALIAS (12.2.10)

Shipbuilding on Falias lies somewhere between the low-level technology of Agyra and the dynamic shipyards of Palia and Jaiman. Vessels ranging from galleys to sloops and frigates can be found in the waters surrounding this continent. More common are galleons, though, and the merchant fleets of Falias mainly use carracks and related designs. If Falias' shipyards are noted for anything it is the sturdy nature of ships they build; some of the caravels encountered off Falias are over 50 years old!

Caravel: While not quite the workhorse it is in the navies of Thuul, the caravel is used extensively as a scout and exploration ship by the navies of Falias. While there are newer ships that can do some things better, the caravel is both cheap and plentiful.

Crager: The crager is a close relative of the carrack, and is commonly used as a merchant ship by the trade houses of Falias. It is too cumbersome to be used as a warship, and has limited seaworthiness. These large floating holds are often seen close to shore, lumbering along with their cargos of grain, wood, and iron.

Battleship: The battleship is a Falias development of the galleon. Carrying more mangonels than a normal galleon, and thus sacrificing some marines, the battleship is the main combat vessel of the royal fleets. Due to its size and cargo capacity, battleships are occasionally sent on voyages of discovery.

Cutter: Slightly smaller than a normal sloop, this vessel represents the peak of Falias' design capability. It is a military ship, used by all fleets as a scout ship and convoy escort. Battleships sent on long voyages are usually accompanied by one or two cutters.

Galleys: All types of galleys are encountered in the waters off Falias. The most common is the gastrar, which is very similar to the annas of Thuul. These ships are used for both trade and war, but only by the poorer kingdoms. None of them would dare take on a battleship unless they were carrying a lot of marines and the battleship was becalmed.

GOVON (12.2.11)

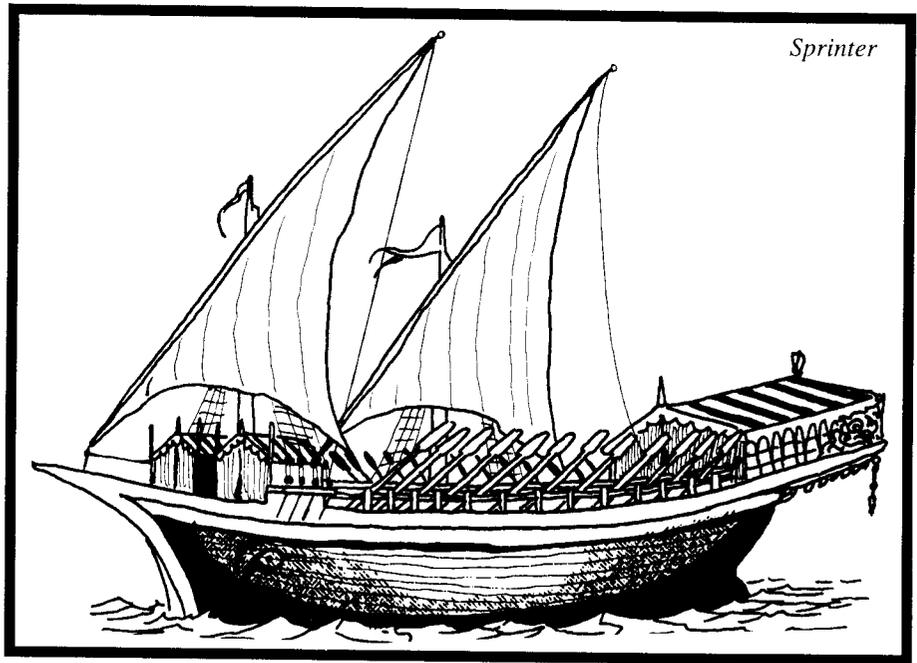
Due to their proximity, ship development on Govon has paralleled that on Falias. Aside from the differences noted below, all major ship classes are assumed to be similar on both continents.

Most of the other ships common to Govon bear the same names and details as those of Falias. GMs should feel free to intermix ships from both continents as he or she sees fit.

Carnas: The carnas is a shallow-draft cargo ship intended mainly for the grain trade. It is little more than a floating hold, and is not intended to travel out of sight of the coast. The carnas can operate on rivers or at sea with no modifications.

Corsicar: The corsicar is the local version of the sloop. It is roughly the same size as a Palian sloop, but is less agile and slightly slower. The rigging is fairly primitive, and it is armed with ballistas. Corsicars are often sent on voyages of discovery and long-range trade.

Destroyer: This is the Govon version of the Falias battleship. It is more like an Emer galleon, except it carries fewer mangonels and more marines. The main tactic of Govonian fleets is boarding, a leftover from their not-so-distant galley days.



FOLENN (12.2.12)

Cut off from the rest of Kulthea by the rugged waters of the Tairken Usuiv, shipbuilding on Foleenn has followed a different track. Having skipped the two middle stages, ships built on Foleenn are either galleys, for coastal trade and war, or sloops and brigantines, for long-range trade and war. Ships of any other design are not common in these waters, and galleons are unheard of.

Trimeres: As one might expect from the name, this is a trireme galley design that is commonly used by the navies of Foleenn for close shore patrols. It comes in both decked and non-decked versions, with some of the larger ones carrying catapults.

Piratar: Again, as one might guess from the name, this is the local version of the hemiolia. Used exclusively by local pirates, it is easy to build and fairly fast. It is commonly armed with ballistas, although the pirates seem to favor boarding actions over prolonged ship-to-ship combat.

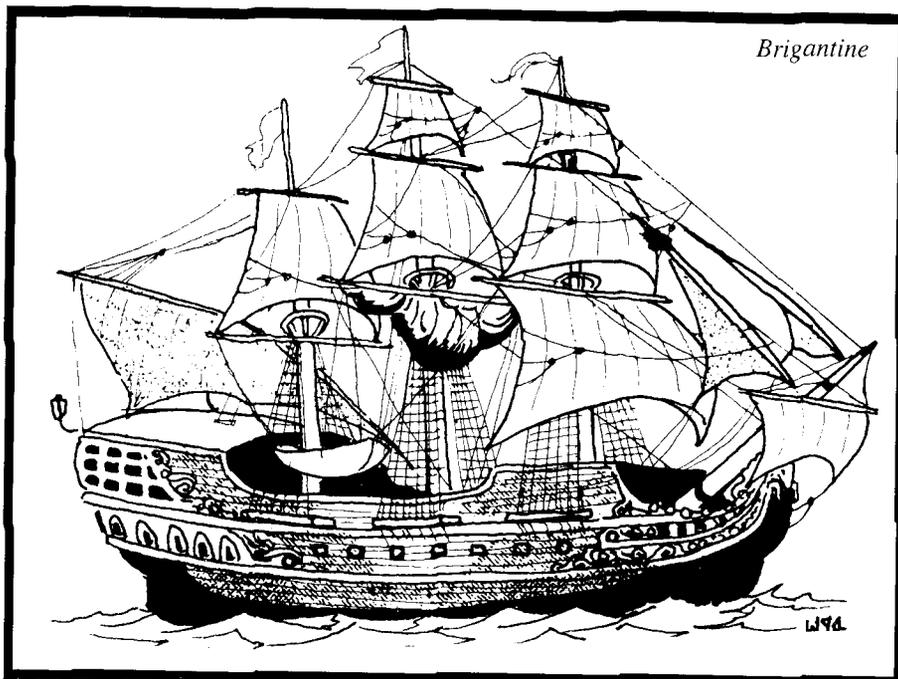
Sprinter: A galley design unique to Foleenn, this swift warship is designed for hunting down piratars. It is a variant of the triemiolia that carries more weapons and sacrifices oars to add an additional mast. Sprinters occasionally act as convoy escorts, but they are most often encountered on anti-piracy patrols.

Merchantils: The main merchant vessel of Foleenn, these lumbering tubs are designed to carry the maximum amount of cargo possible with the minimum amount of crew necessary. They are not especially seaworthy, but this was not a factor in their design.

Lighters: In spite of the name, these ships are closer to sloops than anything else. They are used for trade purposes, and have good seakeeping abilities. Lighters are often sent as supply ships with sloops and brigantines on long-range missions.

Sloops: The primary sailing craft of Foleenn, these sleek vessels are quite like those built in other parts of Kulthea. They are designed for maximum endurance.

Brigantines: Again, these large sailing ships are designed for endurance. Found mainly in royal fleets, brigantines are the backbone of the sailing portion of Foleenn battle fleets. Paired with sloops and lighters they are often sent on missions of trade and exploration to other parts of Kulthea. Rumor has it that a fleet of such ships once ventured to the East. This has never been confirmed or denied by the kingdoms of Foleenn, and the Loremasters remain silent on the subject.



Brigantine

MURLIS (12.2.13)

Located in the southern corner of Kulthea's western hemisphere, this is the final great seafaring continent. The shipwrights of Murlis are equalled only by those on Palia and Jaiman, and surpassed by no one. While the other powers have placed their efforts on warships, Murlis is known for its excellent merchant ships, vessels designed to carry cargo over extended distances with a minimum of fuss and effort. They are also known for their outstanding brigantines. Like Palia, galleys are not found in the waters surrounding Murlis, and primitive sailing ships are also fairly rare. Galleons have managed to survive, mainly due to their size and stability.

Halars: The halar is the best ship to be designed by the naval architects of Murlis. It is a merchant vessel which is capable of transporting upwards of 90 tons of cargo to almost any point on Kulthea. It is one of Murlis' major exports, and can be found in the fleets of most large (and wealthy) merchant houses throughout the world. All halars are armed with ballistas, and those used by the fleets of Murlis have been known to carry mangonels.

Merchants: These ships are smaller than the halars, and form the backbone of most of Murlis' merchant fleets. The merchant is designed to function in any sea and operate over any distance.

Scout: The scout is a variant of the lighter than is designed for extended patrols. It has higher cargo capacity than normal to carry extra provisions.

Brigs: These medium-sized warships form the scouting/patrol arm of most of Murlis' royal fleets. It carries mangonels, and is both fast and maneuverable. Brigs are commonly used as escorts for important convoys. Unlike other continents, Murlis builds few sloops, relying instead on brigs.

Destroyers: The destroyer is the Murlis version of the frigate. It is slightly better armed than normal, but gives up some speed and maneuverability in the trade. These ships are the main striking force of Murlis' royal fleets, and usually are encountered in pairs. All are armed with mangonels, and some carry marines for boarding actions.

Ketch: The ketch is the Murlis version of the sloop. It is similar to those built by Palia. Very few exist in the waters of Murlis, as most kingdoms prefer to use the brig in its place. Most of those encountered belong either to private owners or pirates, and it is often hard to tell the difference.

MYTHENIS (12.2.14)

Shipbuilding in Mythenis is on par with that found in Thuul. Most of the ships used by kingdoms on Mythenis bear more than a little resemblance to those found to the north. GMs should feel free to intermix a good portion of ship types from Thuul and Falias to the small number of native types detailed below.

Caravels: Yirs & Caravars: Much like its northern cousin, the caravel is the workhorse of the merchant and war fleets of Mythenis. Two types are commonly encountered: the Yir, a deep-draft merchant ship; and the Caravar, a ship built mainly for war. Caravars are also outfitted for the few voyages of exploration undertaken by the Mythenisian kingdoms; most of them are far too continental in their outlook to bother with such things.

Longships: Found mainly among the tribes and chieftainships of the southern coast, longships are used for war and trade. They are similar to the ships found in the north, especially those used in Emer (the nars). Mythenisian longships

have a variety of names, but they are all of the same basic type.

Berch: Similar to the Jaiman corvar, this is the main merchantman of Mythenis. It is occasionally used as an exploration vessel.

SMALLER SHIPS (12.2.15)

There are certain ship designs that are common throughout Kulthea (and any fantasy setting, for that matter). These include simple outrigger canoes, ship's boats, small fishing boats, river boats, and the like. These ships should be taken from the Historical Ship Table T-4.6 or improvised as needed. GMs should assume that they can be found in almost any area the PCs might happen to visit (unless, of course, they are in the middle of the desert or someplace like that!).

MODIFICATIONS FOR USE OUTSIDE KULTHEA (12.2.16)

For GMs using their own campaign environment, most of the above information and Tables T-4.6 and T-4.7 can be used with a few modifications. The data unique to ships of the Shadow World may also be used, if the GM is willing to convert some of the ship type names to titles suited to his world. The information given on the basic shipbuilding level of the continents may be applied to a GM's own world as a general guidelines. There is very little that cannot be modified to work in any campaign setting.

When converting this information, certain basic considerations should be kept in mind. First, a continent or kingdom with a great deal of inshore water, coastal trade, or inland seas is more likely to develop galleys and fairly primitive sailing ships than the more advanced designs. In contrast, an island kingdom or a state very dependent on outside trade will usually develop advanced sailing ships and spend little time with galleys and other such designs. Second, the amount of timber available (either in the kingdom or available by trade) will help determine the level of development. Kingdoms with great expanses of lumber will often build large fleets (if needed) while those with less wood will concentrate on more advanced designs or avoid navies completely. These factors have been reflected in the development of ships for Kulthea, and should play a part in any such work done by a GM.

PART VI

SEA CREATURES

Now that we've looked at the Mannish constructions found on the oceans of Kulthea (or any fantasy world, for that matter), it's time to turn our attention to the other inhabitants of any good fantasy ocean; the monsters, both natural and not-so-natural, that live in the dark depths.

In addition to the assortment of sea-going monsters found in *C&T* and *C&TII*, some new monsters unique to Kulthean seas have been created for this supplement. Due to the growing influence of the Unlife on the Shadow World, many of these monsters are Undead beings which have been created by dark forces to terrorize the sea-lanes. Other monsters, such as certain types of game fish and the like, have been added to make the oceans of Kulthea unique. Also included here is a list of the monsters from *C&T* and *C&TII* that are commonly found on Kulthea.

This section also contains guidelines for: designing aquatic cultures, converting monster movement rates to the Sea Law movement/combat system, and some general notes on the behavior of the creatures of the deep.

SEL CREATURE MOVEMENT

All movement rates in *C&T* and *C&TII* are given in feet per round as a base movement, with modifiers applied for pace and possibly a maneuver roll. While this format works well for the normal *Rolemaster* combat round, it is inadequate for the combat rounds used in this supplement. All monsters introduced in this supplement have two base movement rates; one for the normal *Rolemaster* combat round and one for the tactical round introduced in these rules. GMs using monsters from *C&T* and *C&TII* or monsters of their own creation will wish to convert the movement rates using the following formula:

Tactical Movement Rate = *C&T* Base Rate x 12

Movement Points (MPs) = Tactical Movement Rate ÷ 200

or **Movement Points (MPs)** = *C&T* Base Rate x .06

Round down any fractions. Using these formulas, a large shark (base movement 100) would have a Tactical Movement Rate of 1200' and 6 MPs (6 = 1200 ÷ 200). As with normal RM movement, these base MPs may be increased by using a higher movement pace (e.g., using a Run pace rather than a Walk pace). While these rates might seem excessive, it is worth remembering that this is the distance such a creature can cover in two minutes, and that sailing ships (when compared to powered ships of today) were quite slow.

All sea monsters are assumed to use a special form of movement (swimming, etc.), and are exempt from the effects of wind direction and sea states unless otherwise noted. This means that their movement rate is constant, unlike that of ships. Due to their speed,

sea monsters are usually assumed to have initiative during both movement and combat. This also means that they do not have any specific Movement Profile, being able to expend their total movement points in any fashion they desire.

SOME CAMPAIGN NOTES

When placing sea monsters in a campaign (or determining that a particular ocean is home to any number of the beasts), a GM should consider why those monsters are there. Is there enough food (fish, people, etc.) in the area to support the number of monsters that live there? Is the climate appropriate? What brought the monsters there in the first place?

While this is not a plea for excessive realism in a game form that by its very nature precludes most such considerations, it is important that a campaign maintains some sort of continuity, at least within itself. It wouldn't make sense for herds of Kraken to be found in a sea that has no way of supporting such a population (unless the monsters were fed and kept in place by some sort of powerful magic). Keep the food chain reasonably intact, and give the monsters a reason for being where they are. It makes for a more enjoyable game.

TYPE

This is the generally accepted name for the given type of creature. If the movement statistics given for it are not for land movement, the type of movement is sometimes given in parentheses (e.g., fly, swim, burrow, etc.).

For some types of creatures, the generic sub-classifications given (small, medium, large) are not the creature's size relative to other creatures, but instead they are the creature's size relative to other creatures of its own type.

LEVEL

Lvl: The number given here is the level of an average creature of the given type; it is primarily used for determining the creature's hits, attacks, experience points and Resistance Rolls. If the Gamemaster wishes, he may use the Level Chart given below to vary the exact level of the creature; just roll (open-ended) and cross-index with the letter (Level Code) given in the statistics. The result is added to the average level to give the creature's actual level. If a negative level is obtained, just use level 0. Creatures with lower levels than average can be considered to be the "young" of their type, while those with higher than average levels can be the "leaders" or "venerable adults."

LEVEL CHART								
Roll	Level Code from the Statistic Tables							H
	A	B	C	D	E	F	G	
<01	Young helpless creature (e.g., baby)							-3
01-10	-1	-2	-3	-4	-5	-6	-10	-2
11-15	0	-1	-2	-3	-4	-5	-8	-2
16-20	0	0	-1	-2	-3	-4	-6	-1
21-25	0	0	0	-1	-2	-3	-4	-1
26-35	0	0	0	0	-1	-2	-2	-1
36-45	0	0	0	0	0	-1	-1	0
46-55	0	0	0	0	0	0	0	0
56-65	0	0	0	0	0	+1	+1	0
66-75	0	0	0	0	+1	+2	+2	+1
76-80	0	0	0	+1	+2	+3	+4	+1
81-85	0	0	+1	+2	+3	+4	+6	+1
86-90	0	+1	+1	+3	+4	+5	+8	+2
91-100	+1	+1	+2	+4	+5	+6	+10	+2
101-140	+1	+1	+2	+5	+6	+7	+11	+3
141-170	+1	+2	+3	+6	+7	+8	+12	+3
171-190	+1	+2	+4	+7	+8	+9	+13	+3
191-200	+2	+3	+5	+8	+9	+10	+14	+3
201-250	+2	+4	+6	+9	+10	+11	+15	+3
251-300	+3	+5	+7	+10	+11	+12	+16	+4
>300	+4	+6	+8	+11	+12	+13	+17	+4

MOVEMENT STATS

These movement statistics assume average Quickness and encumbrance for the particular creature, and may be adjusted as necessary for special cases.

A creature's actual movement rate is determined by its Base Rate as modified by its *pace* (up to its Max Pace) and possibly a maneuver roll using its Movement and Maneuver Bonus (MM Bonus). To determine a creature's movement rate for a given round, the Gamemaster should first decide on the creature's pace (up to the maximum allowed) and then the base movement rate can be multiplied by the movement rate multiplier given in the Pace Chart below.

A creature's pace also determines how many exhaustion points it uses each round. A creature's exhaustion points is dependent upon its Constitution; the process for determining exhaustion points is given in the Combat Stats section when Constitution is discussed.

PACE CHART				
Code	Pace	Movement Rate/Pace Multiplier	Normal Maneuver Difficulty	Exhaustion Pt. Cost
Walk	Walk	1x	None	1/30 rnd
Jog	Fast Walk / Jog	1.5x	Routine	1/6 md
Run	Run	2x	Easy	1/2 md
Spt	Sprint / Fast Run	3x	Light	5/rnd
FSpt	Fast Sprint	4x	Medium	25/rnd
Dash	Dash	5x	Hard	40/rnd
Var	Varies due to armor	—	—	—

Base Rate: A creature's base movement rate is the distance which the creature may normally move each round at a "walking" pace. Base Rates less than 1' are given as 1' (usually Tiny creatures).

Max Pace: The pace given in the statistics is the maximum allowed pace for the given animal.

MM Bonus: The MM Bonus is used if the Gamemaster requires a maneuver roll to move at paces greater than a walk. The GM should first total the maneuver roll and the MM Bonus; and then he should obtain a result from the Moving Maneuver Table provided in *Character Law* by cross-indexing this total and the normal maneuver difficulty for the given pace (see Pace Chart above for suggested difficulties). The result is the percentage of the creature's movement rate which is actually covered.

Distance Moved =

$$\text{Base Rate} \times \text{Pace Multiplier} \times (\text{Maneuver Roll Result} / 100)$$

Speed (MS/AQ): A creature's speed is given in terms of "Movement Speed / Attack Quickness". Movement Speed helps determine a creature's "Base Defensive Bonus," while Attack Quickness determines a creature's "first strike points." Both factors can be used to determine a creature's Defensive Bonus (DB) in various tactical situations. The DBs given in this product already include the base DB, but they do not include any modifications for Charge/Lunge or Flee/Evade maneuvers.

SPEED CHART					
Code	Rate	Defensive Bonus Modifications			
		(MS) Base DB	(MS) Flee/Evade	(AQ) Charge/Lunge	(AQ) First Strike Pts
IN	Inching	-25	0	0	5
CR	Creeping	-20	0	0	10
VS	Very Slow	-10	0	0	20
SL	Slow	0	0	0	50
MD	Medium	10	5	-5	85
MF	Moderately Fast	20	10	-10	97
FA	Fast	30	15	-15	101
VF	Very Fast	40	20	-20	110
BF	Blindingly Fast	50	25	-20	120

COMBAT STATS

Size: This is the size of the given type of creature: "T"=Tiny, "S"=Small, "M"=Medium, "L"=Large, and "H"=Huge. This is merely an approximation of the creature's size with Medium being approximately man-sized.

Crit: This statistic indicates how critical strikes inflicted on the given type of creature are resolved. In some cases more than one of these codes apply—consult the Critical Codes Chart.

CRITICAL CODES CHART	
Critical Code	Code Effect
—	Use normal critical procedure.
I	Decrease critical severity by one ('A' is modified by -20, 'B' becomes an 'A', 'C' becomes a 'B', etc.).
II	Decrease critical severity by two ('A' is modified by -50, 'B' is modified by -20 on the 'A' column, 'C' becomes an 'A', etc.).
LA	Use Large Creature Criticals.
SL	Use Super Large Creature Criticals.
@	Stun results do not affect creature.
#	Stun results and hits/rnd do not affect creature.

Base Hits: A creature's Base Hits is the number of concussion hits which an average creature of the given type can absorb before becoming unconscious. If the Gamemaster wishes he may use the Constitution Bonus Chart given below to vary the exact number of hits that the creature can take. Just roll on the column indicated by the letter given under "Base Hits" in the creature's statistics (record this roll, it can be used as the creature's Constitution stat). The resulting Constitution Bonus (Con Bonus) is given at the left of the chart; this bonus is added to the creature's Base Hits to obtain the total hits which that specific creature can take. A resulting hit total of less than one is treated as one. If no letter accompanies the Base Hits stat there is no variation in hits (common for constructs, etc.).

CONSTITUTION BONUS CHART								
Con Bonus	Base Hits Code from the Statistic Tables							
	A	B	C	D	E	F	G	H
-25	—	—	01	01	01	01	01	01
-20	—	01	02-03	02	02	02	02	02
-15	01	02-04	04-08	03-04	03-04	03	03	03
-10	02-09	05-11	09-23	05-09	05-09	04-05	04	04
-5	10-25	12-31	24-74	10-24	10-24	06-10	05-06	05
0	26-74	32-69	75-89	25-74	25-72	11-25	07-11	06-07
+5	75-91	70-89	90-94	75-89	73-87	26-72	12-26	08-12
+10	92-99	90-96	95-97	90-94	88-92	73-87	27-71	13-27
+15	100	97-99	98-99	95-97	93-95	88-92	72-86	28-72
+20	—	100	100	98-99	96-97	93-95	87-91	73-88
+25	—	—	—	100	98	96-97	92-94	89-93
+30	—	—	—	—	99	98	95-96	94-96
+35	—	—	—	—	100	99	97-98	97-98
+45	—	—	—	—	—	100	99	99
+60	—	—	—	—	—	—	100	100
Hits per Level Difference								
	1	2	3	5	8	10	12	15
Bonus Exhaustion Points								
	0	0	0	0	+50	+100	+150	+200

Varying Hits due to Level Differences: In addition, a creature's hits can vary if its level differs from the given average level. If a specimen is of a higher level than the norm, it will have more hits. If its level is below the norm for the creature type, then it will have fewer hit points. Just multiply the "Hits per Level Difference" given in the Constitution Bonus Chart by the difference between the actual level of the creature and the average level for its type. This product is then added to (or subtracted from) the previous hit total to obtain the creature's new hit total.

$$\text{Total Hits} = \text{Base Hits} + \text{Con Bonus} +/-(\text{Level Diff.}) \times (\text{Hits/Level Diff.})$$

Exhaustion Points: To determine the number of exhaustion points initially available to an creature, again use the Constitution Bonus Chart. Use the creature's Base Hits code (the letter given after its Base Hits) and a 1-100 roll to determine the creature's Constitution Bonus. The creature's available exhaustion points are obtained by adding the creature's Constitution (equal to the 1-100 roll just made), its Constitution Bonus, and its Bonus Exhaustion Points based upon its Base Hits code—also available at the bottom of the Constitution Bonus Chart.

$$\text{Exhaustion Points} = \text{Constitution} + \text{Con Bonus} + \text{Bonus Exhaustion Points}$$

AT(DB): The first number in this entry is the creature's *Rolemaster* armor type:

1 = Skin/Cloth	11 = Half-Hide Plate
2 = Robes	12 = Full-Hide Plate
3 = Light Hide	13 = Chain Shirt
4 = Heavy Hide	14 = Chain Shirt & Greaves
5 = Leather Jerkin	15 = Full Chain
6 = Leather Coat	16 = Chain Hauberk
7 = Reinforced Leather Coat	17 = Metal Breastplate
8 = Rein. Full-Length Leather Coat	18 = Metal Breastplate & Greaves
9 = Rigid Leather Breastplate	19 = Half Plate
10 = R Lthr Breastplate & Greaves	20 = Full Plate

The number in parenthesis under this entry title is the creature's Defensive Bonus. It is given for that creature's average quickness and may need to be adjusted in exceptional cases. This defensive bonus does not include any shield bonuses, but certain creatures may be capable of using a shield or the equivalent of a shield. If a shield is normally used, an "s" is included after the creature's Defensive Bonus entry.

Attacks: These statistics indicate how a creature attacks using the Rolemaster tables. Usually, a number of attacks are given for each creature separated by slashes ("/"). Each creature usually initiates combat using one of these attacks as indicated. During later rounds, the same or other attacks may be used depending upon the situation or success of earlier attacks.

Each attack is usually described by the following statistics:

- 1) *Offensive Bonus:* The first number is the Offensive Bonus for that attack.
- 2) *Attack Type:* The letter codes which follow the first number indicate the attack type.

For most non-weapon weaponry attacks, the first letter indicates the size of the attack:

S = Small M = Medium L = Large H = Huge

The next two (or three) letters indicate the type of non-weapon weaponry attack:

Ba = Bash/Ram/Butt/Knock Down/Slug	Cr = Crush/Fall
Bi = Bite	Pi = Pincer/Beak
Cl = Claw/Talon	St = Stinger
Gr = Grapple/Grasp/Envelop/Swallow	Ti = Tiny
Ho = Horn/Tusk	Ts = Trample/Stomp
Msw = Martial Arts Sweeps & Throws (no size, normally rank 4)	
Mst = Martial Arts Striking (no size, normally rank 4)	

Some attacks are treated as weapon attacks using the following code without an attack size prefix:

We = General weapon used based upon situation and availability.		
ba = battle axe	ja = javelin	sc = scimitar
bs = broadsword	lb = long bow	sl = sling
bo = bola	lcb = light cross bow	sp = spear
cl = club	ma = mace	ss = short sword
cp = composite bow	ml = mounted lance	th = two hand sword
da = dagger	pa = pole arm	ts = throwing star
fa = falchion	qs = quarter staff	wh = war hammer
ha = hand axe	ro = rock (Large Crush)	wm = war mattock
hb = halbard	sb = short bow	w = whip
hcb = heavy cross bow		

Some attacks, such as dragon breath, are treated as elemental spell attacks and use the following code without an attack size prefix:

FBolt = Fire Bolt	CBall = Cold Ball
IBolt = Ice Bolt	FBall = Fire Ball
LBolt = Lightning Bolt	CCone = Cold Cone
SBolt = Shock Bolt	FCone = Fire Cone
WBolt = Water Bolt	
GCone = Poison Gas Cone (varying effects)	

Unless stated otherwise, “Cones” are breath weapons (using the appropriate “Ball” table), each of which covers a cone shaped area which originates from the creature’s mouth and extends for a length and base dimension specified in the creature’s description. Cones from flying beasts can be treated as “Balls” against targets on the ground.

Fire Breath (‘FBr’), Shock Breath (‘SBr’), and Lightning Breath (‘LBr’) indicate a “Bolt” attack of the given type, or a cone attack with half of the given OB. Ice Breath (‘IBr’) and Water Breath (‘WBr’) may usually only be used as bolts, unless specified otherwise. Gas Breath (‘GBr’) and Cold Breath (‘CBr’) may usually only be used as cones.

A GM should feel free to alter critical severity level for special elemental attack types. For instance, a Lightning Ball, which would use the Fire Ball attack table with electricity crits, could have all criticals increased by one severity level when resolved against metal armor types.

Other “Bolt,” “Ball” and “Cone” attacks are common, being variations on the themes presented here. For instance, Earth Balls would use the Cold Ball table with impact criticals, Lightning Cones would use the Fire Ball table with electricity criticals, etc.

3) *Additional Information:* Finally, the last element in the attack code gives additional information concerning the attack pattern, number of attacks, damage, etc. Codes in parentheses or brackets indicate special attributes of that particular attack, while the other codes indicate the creature’s overall attack pattern. What follows is a summary of these suffix codes.

Nothing—If no code outside parentheses or brackets is given after the attack type, that attack is one of the options available for the creature to use if it is appropriate for the situation (as determined by the Gamemaster).

Number—This number is the percentage chance of this particular attack being used. All of these numbers for a creature’s attacks will add up to 100, so that one roll can be made to determine which attack is used.

◀—If the attack given on the left has obtained a non-Tiny critical, this attack occurs in the same round of combat as the attack which obtained that critical.

√—If the attack given on the left has obtained a non-Tiny critical, this attack will occur in the next round of combat as the attack which obtained that critical.

(#)—If this number, #, of creatures attack as a group, this attack may be used. For example, (10) indicates that if 10 of these creatures attack as a group they may use the given attack.

(#x)—This number, #, indicated how many times this attack may be made in a given round. That is, (2x) is two attacks per round, (3x) is three attacks per round, etc. Usually no more than two of these attacks may be used against any one foe, but a successful maneuver roll may allow the creature to use more.

(#D)—This number, #, indicates by how much to increase the concussion hit damage normally delivered by this attack. Just multiply the normal hits given by the number, #. That is, (2D) is double damage, (3D) is triple damage, etc.

(Critical)—If this attack inflicts a critical, the given critical type is used instead of the normal critical. The critical codes are:

S = Slash	ST = Martial Arts Strikes
P = Puncture	SW = Martial Arts Sweeps & Throws
K = Krush	LP = Large Creature (Physical)
U = Unbalance	SLP = Super Large Creature (Physical)
G = Grappling	LS = Large Creature (Spells)
T = Tiny Animals	SLS = Super Large Creature (Spells)
H = Heat	E = Electricity
C = Cold	I = Impact

[Critical]—If the attack inflicts a critical, the given critical type is used in addition to the normal critical. The critical codes are as given above.

“All” or “Both” attacks indicate that all of the other listed attacks may be made in the same round.

“Poison” indicates that the attack involves the injection/insinuation of a toxin into the target, as detailed in the creature’s descriptive text.

“Special” attacks are usually detailed in the Combat Section of the text for that particular type of creature.

“Spell” indicates that the attack involves a spell or spell effect, as detailed in the creature’s descriptive text.

Varying Offensive Bonuses due to Level Differences: A creature’s Offensive Bonuses can vary if its level differs from the creature type’s average level. Just multiply the difference between the actual level of the creature and the average level for its type by three. This product is then added to (or subtracted from) the creature’s Offensive Bonuses to obtain the creature’s true Offensive Bonuses.

$$\text{Actual Offensive Bonus} = \text{Offensive Bonus} \pm (\text{Lvl Difference} \times 3)$$



BONUS KILL POINT CHART

Level of Character Getting the EPs	Bonus EP Code from the Statistic Tables											
	A	B	C	D	E	F	G	H	I	J	K	L
1—2	50	75	100	200	400	800	1200	1600	2000	3000	4000	5000
3—4	40	60	95	190	380	760	1140	1520	1900	2850	3800	4750
5—6	30	50	90	180	360	720	1080	1440	1800	2700	3600	4500
7—8	20	40	85	170	340	680	1020	1360	1700	2550	3400	4250
9—10	10	30	80	160	320	640	960	1280	1600	2400	3200	4000
11—12	—	20	75	150	300	600	900	1200	1500	2250	3000	3750
13—14	—	10	70	140	280	560	840	1120	1400	2100	2800	3500
15—16	—	—	65	130	260	520	780	1040	1300	1950	2600	3250
17—18	—	—	60	120	240	480	720	960	1200	1800	2400	3000
19—20	—	—	55	110	220	440	660	880	1100	1650	2200	2750
> 20	—	—	50	100	210	400	600	800	1000	1500	2000	2500

ENCOUNTER STATS

#Enc: This is the size range of a typical pack of the creatures when encountered in or near their lair. A pack will often contain a wide range of levels/ages (including some young). Often, only a patrol comprised of fewer members will be encountered away from the lair. A GM should vary the number encountered based upon the game situation and location of the encounter. If no range is given, one such creature is normally encountered, or the Gamemaster must determine the number based upon the situation in his game.

Treasure: These codes indicate the type and how much treasure each group of these creatures will normally have. Each letter code indicates the richness of “part” of the creature’s treasure, as specified in the Treasure Code Chart (see Section 14.2 of *C&T II* for using these ratings). A treasure may consist of several “parts,” each specified by a separate letter. Often all of a creature’s (or group’s) treasure will not be with it, since all or part of the treasure remains in the creature’s lair. These codes should only be used if a Gamemaster wishes to randomly generate a creature’s treasure.

Bonus EP: The letter given here determines the bonus “kill points” received for killing or knocking out a creature of the given type. This letter indicates which column is used on the Bonus Kill Point Chart. These points are in addition to the normal experience points given for hit points and crit points.

Outlook: This code is meant to be a general measure of the creature’s outlook, attitude, demeanor, and/or reaction/behavior pattern. If no code is given, such creatures exhibit a variety of behaviors. What follows is a listing of the various outlook codes.

- Aggres. = Aggressive and will attack if provoked or hungry.
- Aloof = Ignores other creatures unless interfered with, or attacked.
- Altru. = Altruistic, has an unselfish regard for the interests of others, often to the extent of risking his own safety.
- Bellig. = Belligerent, often attacks without provocation.
- Berserk = Attacks closest living creature until it is destroyed.
- Carefree = Does not believe that danger or misfortune exists for it.
- Cruel = Not only hostile, but delights in death, pain, and suffering.
- Domin. = Desires power, attempts to control or dominate other creatures.
- Good = Opposed to “evil” (e.g., those who are cruel, hostile, belligerent, etc.); supportive of those who are also good.
- Greedy = Will attack or attempt to steal from other creatures if the risk does not seem too high.

TREASURE CODE CHART

Code	Relative Richness	
	Items	Wealth
a	Very Poor	Very Poor
b	Very Poor	Poor
c	Very Poor	Normal
d	Very Poor	Rich
e	Very Poor	Very Rich
f	Poor	Very Poor
g	Poor	Poor
h	Poor	Normal
i	Poor	Rich
j	Poor	Very Rich
k	Normal	Very Poor
l	Normal	Poor
m	Normal	Normal
n	Normal	Rich
o	Normal	Very Rich
p	Rich	Very Poor
q	Rich	Poor
r	Rich	Normal
s	Rich	Rich
t	Rich	Very Rich
u	Very Rich	Very Poor
v	Very Rich	Poor
w	Very Rich	Normal
x	Very Rich	Rich
y	Very Rich	Very Rich
z	Special	Special

- Hostile = Normally attacks other creatures on sight.
- Hungry = If hungry, will attack anything edible; otherwise Normal.
- Inquis. = Inquisitive and curious; will approach and examine unusual situations.
- Jumpy = Normally bolts at any sign of other creatures.
- Normal = Watches and is wary of other creatures; will sometimes attack if hungry.
- Passive = Ignores the presence of other creatures unless threatened.
- Playful = Mischievous, but playful; will attempt to play with or play pranks on other creatures.
- Protect = Protective of a thing, place, other creature, etc.
- Timid = Skittish around other creatures, runs at the slightest hint of danger.

These descriptions are merely guidelines which the Gamemaster should modify based upon the situation, the actions of player characters, and the GM’s reaction rolls.

IQ: This is a measure of the monster's reasoning and memory ability. The statistic is not normally given for animals since their actions are often based upon instinct, or very low order intelligence. The IQ codes are given in general categories which approximate human equivalents. To convert from the coded categories to an equivalent Reasoning and/or Memory stat score, use the following Intelligence Chart.

INTELLIGENCE CHART			
IQ Code	Reasoning/ Memory Stat	IQ Code	Reasoning/ Memory Stat
NO = none	Animal Instincts	AV = average	35-65
VL = very low	1-5	AA = above avg	50-77
LO = low	3-12	SU = superior	60-86
LI = little	7-25	HI = high	80-98
IN = inferior	13-40	VH = very high	94-99
MD = mediocre	23-50	EX = exceptional	100-102

GENERAL DESCRIPTIONS

Along with the tables containing detailed system information on the various creatures, each creature has a description. These descriptions contain information on the beast's sizes, habitats, behavior, and unusual properties. Often, the statistics given for a particular animal are also applicable to a number of similar species. The descriptions are broken down into sections: Description, Lifestyle, Combat, Background, and (occasionally) Observations.

Climate: These codes give the Gamemaster an idea of where and how often these creatures are normally encountered. First, the codes give one or more small letters for the climate(s) in which the creature normally resides. Next, 4 groups of codes (capital letters or special symbols) separated by commas, give details on the environments in which the creature might be encountered. The 4 groups are Special Features, Water Sources, Terrain, and Vegetation. The third code component indicates the frequency with which the creature may be encountered.

If either the climate or the environment codes are given in parentheses, the creature in question can be found in all of the climates/environments available, except those given in the parentheses. If no codes appear, or a "(—)" is given for a group of climate and/or environment codes, then the creature could be found anywhere, as it has no preferred primary environ.

A frequency factor is included which indicates the chances of such a creature being found in the proper climate/environment. These codes can be used in conjunction with the tables in Section 13.2 to generate random encounters.

A Gamemaster should keep in mind that the climate/environment codes give the primary area locations for the creatures. These are the types of areas in which the creatures are most likely to live and thrive on a fantasy world. Creatures will sometimes be found outside these "primary" areas if the climate and environment are not too radically different, or if the GM decides to change a creature's preferences.



CLIMATE CODES CHART				
Equivalent Codes from Other Products				
Code	Climate	MERP & RM Herb Tables	Campaign Law Temp.	Humidity/ Precip.
h =	Hot/Humid	hot and humid	hot	rainy, humid
n =	Hot/Average	hot and humid	hot	temperate
a =	Hot/Dry	arid	hot	dry, arid
w =	Warm/Humid	mild temperate	warm, temperate	rainy, humid
m =	Warm/Average	mild temperate	warm, temperate	temperate
s =	Warm/Dry	semi-arid	warm, temperate	dry, arid
k =	Cool/Average	cool temperate	cool	temperate
t =	Cool/Dry	cool temperate	cool	dry, arid
c =	Cold/Dry	cold	cold	dry, arid
f =	frigid	everlasting cold	cold	arid

ENVIRONMENT CODES CHART	
Special Features:	
E =	Enchanted/magical places
K =	Cross-over points between dimensions
N =	Near villages/towns/cities/castles
V =	Volcanic areas
X =	Cavern complexes
Y =	Battlefields/shipwrecks
† =	Rural inhabited/cultivated areas
@ =	Cave entrances/overhangs/lairs
§ =	Burial areas
# =	Ruins
Water Sources:	
B =	Breaks/wadis
F =	Freshwater coasts & banks
G =	Glacier/snowfield
I =	tropical Islet/reef/atoll
L =	Lake/river
M =	Marsh/swamp
O =	Ocean
Q =	Oasis/isolated water sources
S =	Saltwater shores/shallows
Z =	Desert
Terrain:	
A =	Alpine/high altitude/mountainous
R =	Rough/Rugged/Rocky hills
U =	Underground
W =	Waste/barren
Vegetation:	
C =	Coniferous forest/taiga
D =	Deciduous/coniferous/mixed forest
H =	Heath/scrub/moor
J =	Jungle/rain forest
P =	Plains/grassland
T =	Tundra

FREQUENCY CODES CHART		
Code	= Frequency	Encounter Modifier
1	= Routine	+30
2	= Easy	+20
3	= Light	+10
4	= Medium	+0
5	= Hard	-10
6	= Very Hard	-20
7	= Extremely Hard	-30
8	= Sheer Folly	-50
9	= Absurd	-70

13.0 OLD FAVORITES

This section includes sea creatures common to almost all fantasy (as well as real-life) oceans. Things like sharks, game fish, and whales can be found here. Please note that for game purposes most non-harmful fish (like tuna and other game fish) have been condensed into one category and split up by size.

For more complete listings of these creatures, please refer to *Creatures and Treasures*.

Note: For specific creature stats refer to the *Creatures Stat Table T-4.5*.

☞ FISH ☞

Small — 1-11" long

Medium — 12"-3' long

Large — 3-50' long

Habitat: Common to all deep-water and coastal regions. GMs should create types for each coastal basin.

This catch-all category includes species such as tuna, gar, pike, and most other game fish. These fish form the basis of most fishing-based economies in any fantasy setting.

☞ EELS ☞

Conger — 9' long.

Electric — 8' long.

Freshwater — 19"-40" long.

Moray — 4.5' long.

Habitat: Both the freshwater and electric eels live in freshwater, while the conger and moray both live in shallow coastal waters. All reproduce by laying eggs. They are encountered in any climates except Cool and Frigid.

Only four types of the eel family will be considered in these rules. The freshwater eels spawn and die in saltwater, but live in freshwater. They feed mainly on small fish. Electric eels live in freshwater, and use their electrical attack to stun their prey. Conger and moray eels live in coastal waters and live on both fish and squid.

☞ OCTOPUSES/SQUIDS ☞

Small — 6-24" body; 12-48" tentacles; ink cloud obscures vision in radius 4x body size.

Medium — 2'-5' body; 4'-12' tentacles; ink cloud.

Large — (squid only) 8'-30' body; 9'-30' tentacles; ink cloud.

Habitat: Both squids and octopuses are often found in the shallows of the coast of most of the continents of Kulthea. Squid use a variety of natural water jet propulsion, and have two long tentacles that they use to grasp their prey. Body sizes for squid are double those given above in the Medium and Small sizes.

Octopuses are often encountered in shallow sea waters lurking under an outcropping on the ocean floor waiting to snare a passing fish with a sucker-coated tentacle. Squid, while belonging to the same family of invertebrates, are much larger than their cousins and are often found farther away from shore. Both are fairly calm animals, rarely bothering adventurers.

☞ RAYS ☞

Electric — 6' long.

Manta — 17' long, 22' wide.

Stingray — 5' wide.

Habitat: All rays live in the shallow salt waters off major continents and island groups. They commonly live on or near the seafloor. The most common way for an adventurer to encounter a ray is to step on one.

Kulthea is home to three major types of rays: manta rays; stingrays; and electric rays. All three types live in the shallow coastal waters and are fairly peaceful; not going out of their way to attack adventurers.

Electric rays attack in the same way electric eels do; with a Shock Bolt attack which is usable once every minute with an effective radius of 5'. The stingray delivers a second level nerve poison through a stinger on its long, thin tail. All rays eat mainly plankton and other small marine creatures.

☞ SHARKS ☞

Small — 4"-4' long.

Large — 4'-60' long.

Habitat: All sharks are encountered mainly in coastal surface water looking for something to eat. They are all aggressive, especially the larger ones, and would not be above carving off a side of adventurer (PC or NPC) for a midmorning snack.

While there are many different varieties of sharks, for game purposes they are grouped into two main categories; small and large. The former includes such species as the dwarf and common saw shark, while the latter includes the white, basking and whale sharks.



☞ WHALES ☞

Baleen — 25-105' long.

Beaked — 16-39' long.

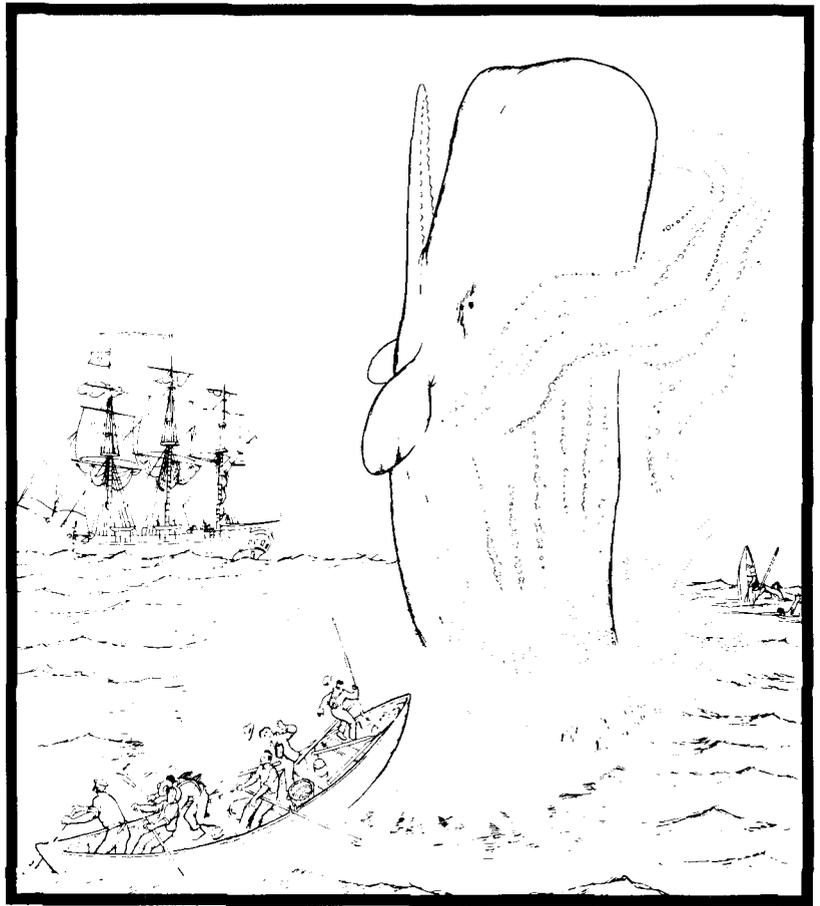
Narwhale — 13-20' long; tusk/horn up to 9'.

Toothed, Small — 8-20' long.

Toothed, Large — 20-66' long.

Habitat: Unlike whales of our world, whales on Kulthea have different living patterns. Only the narwhale and small toothed varieties are commonly found in the cold northern and southern waters. The largest of the baleen (the blue whale) lives almost exclusively in the waters close to the Equator; roaming either north or south in search of food. The Krach, a species of beaked whale, is the only aggressive whale known. It will readily attack any ship that ventures into its territory, especially if any young are present (30% chance).

These are the largest common sea creatures found in Kulthean waters. They come in a number of varieties, from the large baleen to the small (for a whale) toothed. All are commonly found in deep salt water, and are often hunted by the Mannish races for food. Some cultures on Kulthea, especially in the north, worship the Narwhale, and its horn is considered a great religious totem. Whales will rarely, if ever, attack a member of the Mannish races. Most feed on fish and occasionally squid.



☞ DOLPHINS/PORPOISES ☞

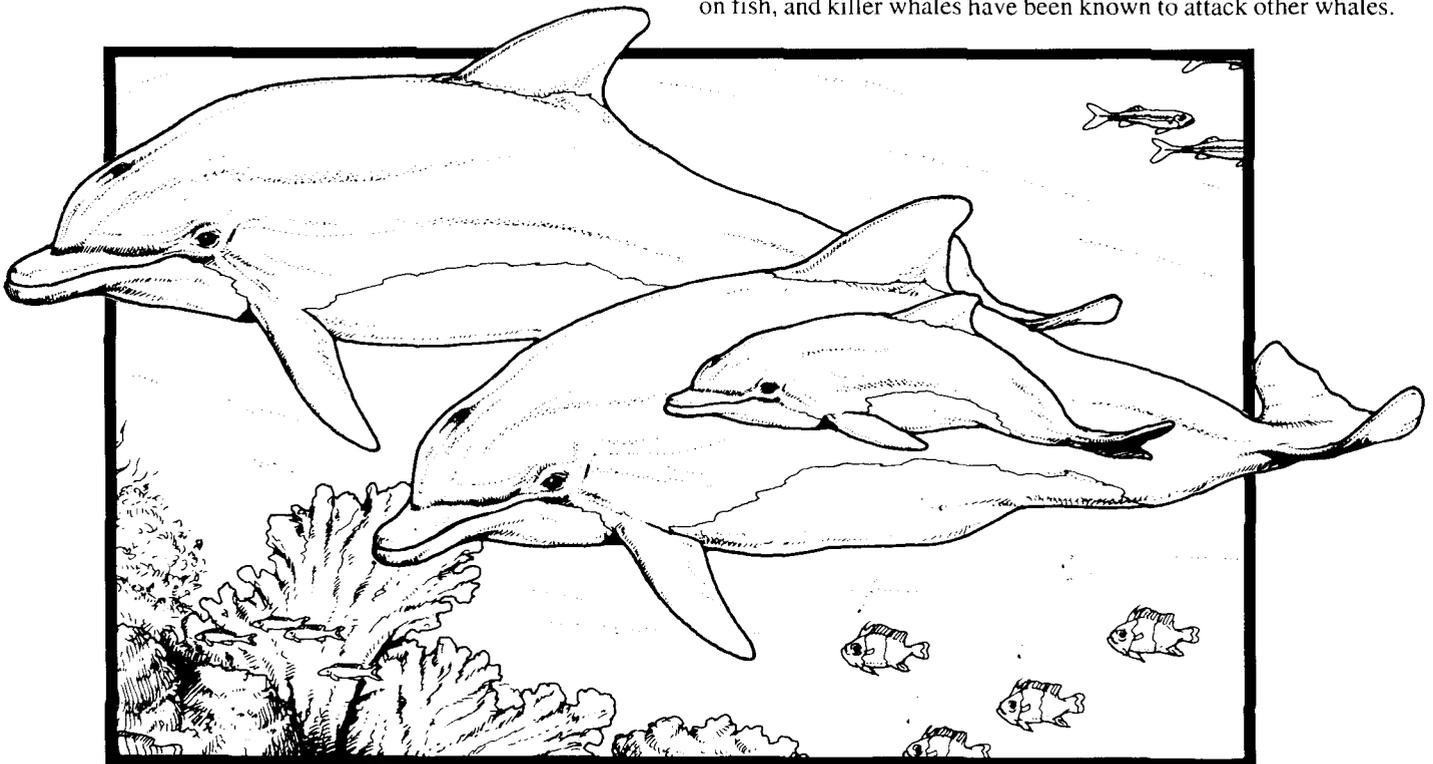
Porpoises — 4-7.5' long.

Dolphins — 6-10' long.

Killer Whales — 23-32' long.

Habitat: Dolphins live commonly in coastal waters, with porpoises equally at home in either coastal or deep water. Killer whales spend most of their time in the depths. All whales produce one young.

These creatures are broken down into three groups for these rules: dolphins; killer whales; and porpoises. All are encountered commonly in any fantasy ocean setting. All are good swimmers, with streamlined bodies and prominent foreheads. Both porpoises and killer whales are beakless, while dolphins have beaks. All feed on fish, and killer whales have been known to attack other whales.



14.0 NEW SEA CREATURES

Kulthea has given birth to a number of unique ocean life forms. Some of these are the creations of the Unlife, and as such are quite hostile to any intrusion into their domain. Others are the Undead remains of past explorers—who died at sea and are looking for others to join them in their watery graves.

These new creatures will be broken down into several categories:

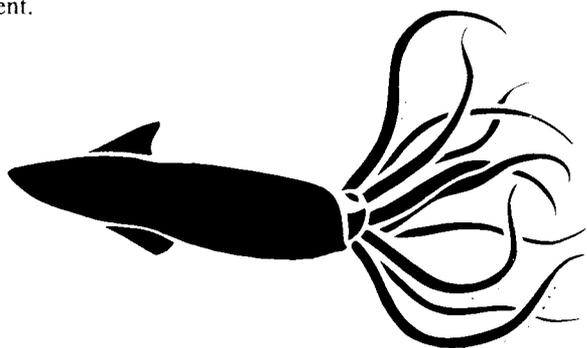
- Animals
- Sea Drakes
- Undead
- Sea Monsters (both natural and created by the Unlife)
- Races and underwater/aquatic cultures (such as mermen and other beings)

Note: For specific creature stats refer to the *Creatures Stat Table T-4.5*.

14.1 ANIMALS

⌘ GRONSHAR ⌘

The gronshar is a huge beast; resembling a giant squid in certain respects but being far more dangerous. Often encountered floating just beneath the surface sunning its thick black hide, the gronshar is usually mistaken for a small island by the uninitiated sailor as the beast is over 75' long. Unless something drastic occurs, like a party attempting to beach a boat on its back, the gronshar will usually ignore Mannish beings clambering around on its back. If aroused, or hungry, the true might of the gronshar will quickly become apparent.

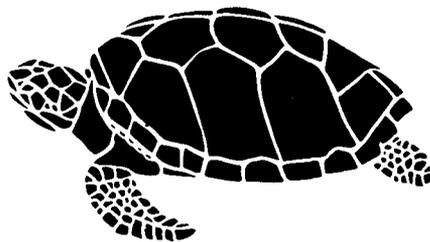


Gronshar, as mentioned above, are usually about 75 feet long, not counting their six tentacles, and have a tough black hide that looks like wet rocks. Moving through the seas like a squid, the gronshar uses its 80' tentacles to ensnare whales, giant squid, and offending ships. Anything trapped by these tentacles is either crushed or stuffed into the gronshar's terrible jaws, located at the root of the tentacles. Gronshar are creatures of the depths and do not usually stray within sight of land. Like whales they are air-breathers, and can sometimes be seen blowing water out their inconspicuous blowhole. Gronshar are known for their foul tempers, and during the two week mating season this becomes even worse. Males are very territorial, and will attack anything, apart from a female gronshar, that strays into his territory. Young are born live, with two being the common number.

⌘ GIANT SEA TURTLE ⌘

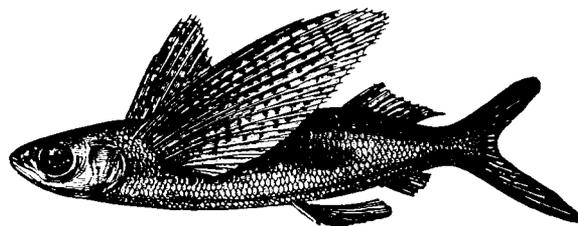
Found mainly in the cool northern waters of Kulthea, the giant sea turtle is one of the more passive sea creatures an adventurer could encounter. Living with their mate and one or two offspring, the giant sea turtle lives on small fish and any offal that happens to float his way.

Growing to a circumference of 40 feet, the shell of a giant sea turtle is often a bluish-green, with light brown speckles designed to conceal its occupant from any predators. Given its size, and fearsome jaws if angered, this coloration seems rather unnecessary, giving rise to the tale that the giant turtles were created by a magician long ago. These giants are seldom seen at the surface, preferring to spend their days in the cool depths near underwater caverns. Unlike their land cousins, these sea turtles are not air breathers. Giant sea turtles mate for life. Their shells and flesh are highly prized by the northern cultures.



⌘ FA'LONS ⌘

The fa'lon is a variety of flying fish that lives on meat. It is similar to the small fish listed above except for the differences noted on the chart below. Using its 'wings' to fling itself out of the water and ride the air currents, fa'lons travel in groups of ten to twenty. They will attack anything man-sized or smaller if they are hungry, using their sharp teeth to rip chunks of flesh from their victim. Fa'lons are common to most oceans of Kulthea, and do not have any treasure or society as we understand them.



14.2 SEA MONSTERS

Creatures in this section are not true products of Nature, but the outcome of foul experiments and the influence of the Unlife. Many of them appear as normal animals, but all have magical and deadly powers.

☞ DEMON RAY ☞

Looking much like a large Manta Ray, the Demon Ray is the result of a genetic experiment gone terribly wrong. A cross between a normal ray and a Demon of the Second Pale, the Demon Ray is a tormented creature, looking to take out its suffering on all normal beings. It has the ability to transform at will between either its ray form or that of the demon, using attacks native to each form depending on its current guise. Its tail contains a stinger and poison similar to that of a sting ray, and three times per day it can attack as an electric ray (see monster listings above for details on these attack forms). As a demon it can only use its natural demonic attack forms (see below).

Pitiful, dangerous creatures that are always encountered alone, the Demon Ray is one of the more dangerous creatures found in the waters of Kulthea.

☞ ZLORS ☞

The Zlor is a oceanic form of Unlife, existing only to destroy anything it encounters. Appearing as a simple patch of thick green seaweed about 20' in circumference, the Zlor is able to form itself into a shambling green mass, equally at home in water on or land. Its only form of physical attack is grappling, but the real threat of a Zlor is its spells.

Zlors can cast **all** Evil Cleric Base Lists (Open and Closed) up to 25th level. They have 5 PPs per level, and will use magic in preference to physical attacks until they have exhausted 50% of their PPs. In combat a Zlor will usually seek out the "Good" member of a party (or a Cleric if one is present) and make him the target of its attacks. The good news is that Zlors can be harmed by normal weapons (half concussion hit damage and reduce Crits by two levels of severity, e.g., a 'C' becomes an 'A'), but they are immune to the effects of fire-based spells and attacks.

Zlors never travel in groups, and are quite rare in Kulthea. They are among the most feared monsters in the coastal regions, where they are often considered to be the messengers of death sent by the gods to punish wrongs.

☞ WA'SIRS ☞

The Wa'sir is a beautiful creature of the Elements that assumes the form of a multi-hued waterspout. Unlike many of the other magical monsters in this section, the Wa'sir is quite peaceful. It spends its days cavorting through the waves, either alone or in small groups, enjoying its bonds with the Ocean. If aroused, though, the Wa'sir is a deadly enemy. It uses Elemental spells (see the *Elemental Companion* for more details) as a 10th level High Elementalist (base spells only, element can vary) in addition to its normal attacks (if the *Elemental Companion* is unavailable, treat the Wa'sir as a 15th level Magician). All Wa'sirs have 3 PPs per level, and will exhaust them before entering 'physical' combat.

The origin of the Wa'sirs is shrouded in mystery, even to the Loremasters. It is said that they were created in the First Era by one of the Lords of Orhan to entertain his spouse, and that over the eons they have continued to thrive in the seas of Kulthea. A Wa'sir cannot exist out of contact with water, and while there they have the regenerative powers listed below. A Wa'sir will never attack another being, using its powers only in self-defense.



☞ DARK REEFS ☞

The Dark Reef is one of Kulthea's strangest inhabitants. Looking like a normal offshore coral reef except for its strange dark coloration, the Dark Reef is in fact a sentient being that is quite evil. The mutated descendants of a race that ruled the depths of Kulthea's oceans in the distant past, Dark Reefs (their own name for their race is unpronounceable by Mannish tongues) harbor a deep hatred for the new races and their intrusions into the depths. Mutated through contact with the Unlife and other sources of dark magics, Dark Reefs are bitter, twisted creatures.

Lurking in the shallows off more isolated island groups, Dark Reefs spend much of their time in meditation. They dislike intruders, and will take strong steps to protect 'their' home from any visitors. In spite of their appearance, Dark Reefs are slightly mobile, although it takes them years to move from one island group to another. Their main defense, aside from their natural armor, is magic. All Dark Reefs know the Evil Magician spell lists to 10th level (with 2 PPs per level). They will use their spells either for attack or defense, and have a strong preference for striking at intruders from ambush (who would ever suspect a coral reef of being dangerous?).

The breeding habits of these beings remains somewhat of a mystery. It is known that an immature version of these reefs does exist (treat as a 5th level Evil Magician with 10 PPs), but it is unclear if this is just a weaker version of the mature reef or a separate branch of the same evil tree.

14.3 UNDEAD

The deadly nature of Kulthea's oceans, combined with the foul effects of the Unlife, has given rise to a whole new class of sea life; the Undead. These range from the Undead forms of normal ocean-dwellers to the haunted remains of ancient seafarers. Some are quite deadly and all strike terror into the Mannish races that ply the seas of the Shadow World.

☞ GHOST SHIPS ☞

The Ghost Ship is a particularly feared form of Undead unique to the seas of Kulthea. Found in areas where many ships perished either by storm or battle, Ghost Ships are the reminders of these deaths.

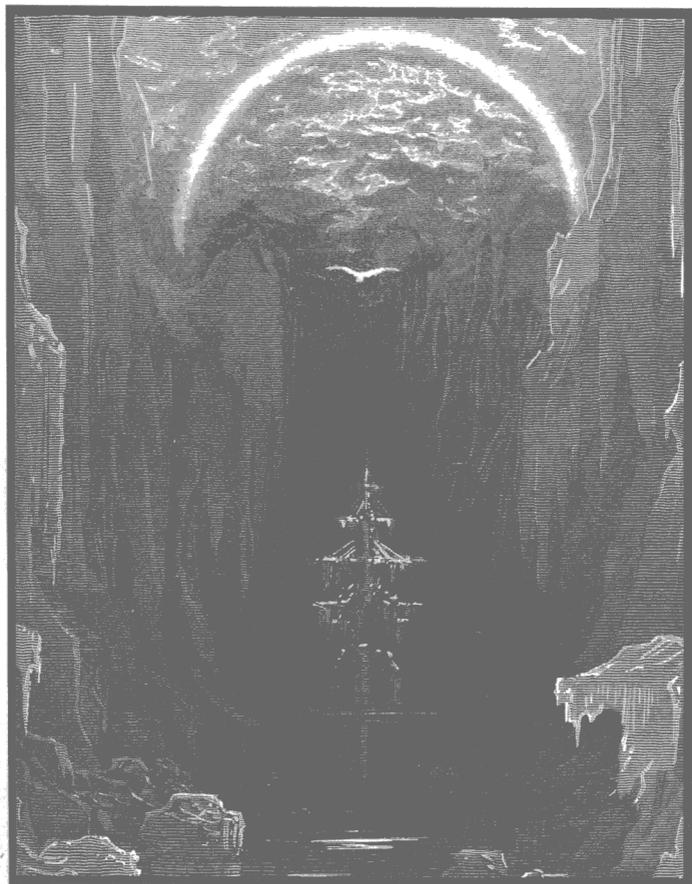
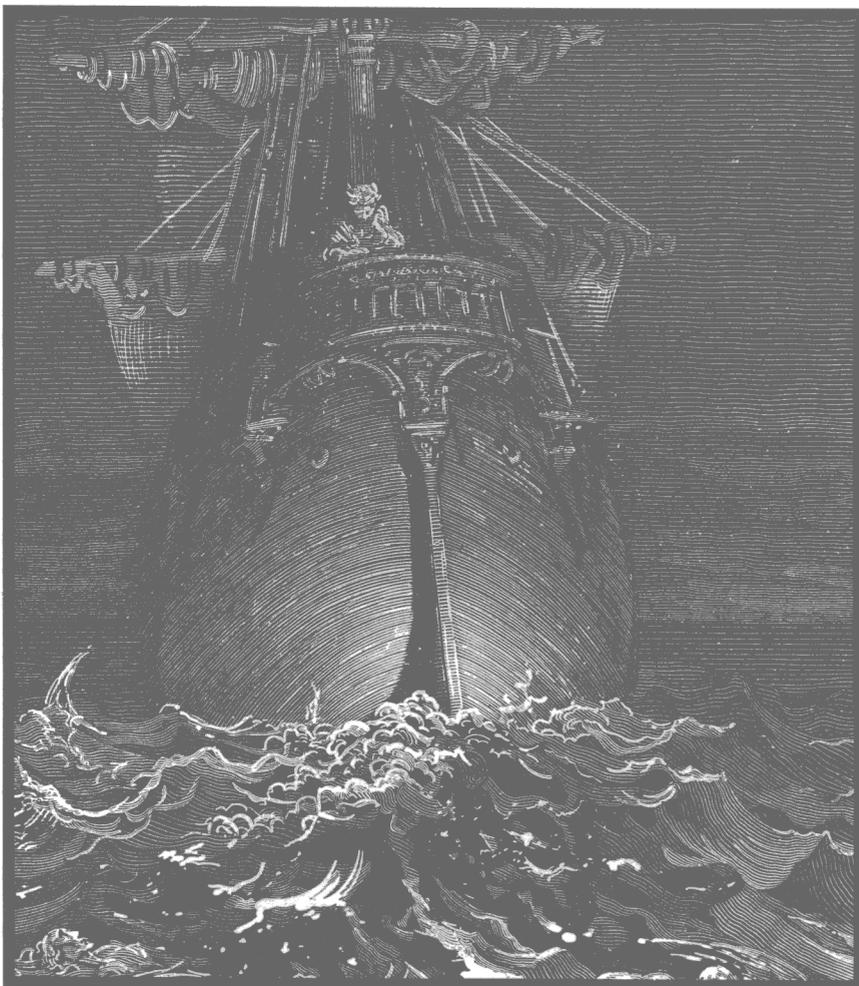
Ghost Ships are spectral vessels crewed by ghosts of varying power. Due to Essence fluctuations and other netherworldly events the ships survived with their crews to become a form of 'Undead' in their own right. Such Ghost Ships are similar to their material counterparts except for their armor type and mode of attack. All Ghost Ships are considered "AT: S2" and cannot attack normally. Due to their existence in two planes at the same time they are (regardless of class and tonnage) considered to have a DB of 20 and 150 HPs. They attack using the Ram Attack table, with a successful attack indicating that the Ghost Ship has grappled with its corporeal opponent, allowing its ghostly crew to board and attack. All Ghost Ships have an OB of 10 for purposes of this special attack. Attacks against a Ghost Ship with normal weapons does 50% damage, and all criticals are reduced by two levels of severity.



The Ghost Ship is often a small ship (caravel or sloop) which is much older than anything a group of adventurers has ever seen. These ships are often reminders of the great sea battles that occurred during the Second Era, and are commonly encountered near these areas. Any damage taken by the ship before it sank will be retained by the Ghost Ship (i.e., a mangonel hole below the waterline, shattered masts, etc.), but the ship will continue to “float,” much to the horror of the PCs encountering it. Unlike normal ghosts, the Ghost Ship is an image of itself as it sank, not as it was in ‘life.’ Transparent seaweed often dangles from its yardarms, mangonel ports, and figurehead as a final, ghastly touch to mark its place in the realm of the dead.

Ghost Ships have a constant MP number, much like sea animals and monsters, and can move against the wind with no penalty. Their rotted sails never billow with the wind, instead they hang limply from the yards and masts. Once a Ghost Ship has “sighted” its prey it will close at a constant rate, going to its maximum MPs if the victim attempts to flee.

The crew of a Ghost Ship is roughly 50% of that normal for a ship its size (e.g., a ghost sloop would have a crew of 4 Greater Ghosts and 18 Lesser Ghosts). Occasionally (if the GM sees fit) another type of Undead, perhaps a powerful passenger, can be encountered on a Ghost Ship. Suggestions include a Lich, Specter, or Wraith, if the GM is in a particularly vicious mood. For purposes of dispelling ghosts, the ship itself is considered the focus. It should be noted that Ghost Ships only take 50% damage from normal weapons and spells and are immune to fire. Luckily for adventurers, Ghost Ships are fairly rare.



☞ BLACK SHIPS ☞

Even more feared than the Ghost Ships are the Black Ships of the Unlife. Swifter than the best sloop of Annachon, the Black Ships carry their crews of Chaos Warriors throughout Kulthea spreading death and destruction wherever their sails appear on the horizon.

The name Black Ship is somewhat of a misnomer, as only the hull is black. The sails are blood red—red from the blood of their victims. Created in the Second Era by a master mage of the Unlife, the Black Ships have existed on the seas of Kulthea for over 300 years. Even the Loremasters are uncertain as to their origin or their exact purpose. All that is known about them is that wherever the red sails appear death is not far behind.

The crew of a Black Ship is composed of Chaos Warriors (see *RMCI*) with one Chaos Commander (also in *RMCI*) in overall command (if *RMCI* is not available, use Lesser Constructs and Greater Constructs from *C&T*). The Ship itself is roughly sloop size, with the same statistics as an Annachon sloop (1.5x normal hull and rigging points). Due to its magical nature its AT is S2, its OB is +30, its available MPs are increased by one in each wind facing, it has a crack crew, and it is the only ship in Kulthea (aside from a Ghost Ship) that can sail directly into the wind. Black Ships are armed with 24 heavy mangonels (12 in each broadside).

All treasure found on a Black Ship are goods that have been plundered from other vessels over the course of centuries. Some of these are powerful magic items that have been lost for ages. According to the Loremasters there are only 13 Black Ships in all of Kulthea, and none of them have ever been destroyed. Each is old almost beyond memory and evil beyond mortality.

☞ AQUATIC SKELETONS ☞

Aquatic Skeletons are considered similar to their land-locked cousins except that they are created from the bones of dead sea creatures. Their attacks and other statistics are similar to those of the normal land skeleton.

☞ AQUATIC ZOMBIES ☞

These foul, bloated creatures are the pitiful remains of sailors washed overboard and consigned to the mercy of the sea. They are like their land-locked cousins except for their bloated, rotting appearance and foul odor. All Aquatic Zombies can exist in either water or on land, and move through water and air with equal ease.

Using their fists and foul touch as weapons, Aquatic Zombies swim silently up to anchored ships and use their distantly remembered sailor skills to scale the ropes and get on deck. Once there they attack anyone they see. Aquatic Zombies are occasionally found on drifting hulks, the horrible remnants of that unfortunate ship's crew. Only zombies encountered on a hulk will have any treasure, and then only if the ship they are "guarding" was carrying a valuable cargo.

A more unique form of Aquatic Zombie are those encountered on the bottom, still guarding their ship long after it plunged into the depths. These hideous creatures will usually be found guarding lost treasure ships and other valuable wrecks. Their faces eaten away by salt water and small fish, what is left of these horrors is truly terrible to behold, and accounts for their special 'Fear' attack, as listed below. This attack is only native to the Underwater Guardian Zombie, however.

14.4 SEA DRAKES

One of the most powerful, and feared, inhabitants of Kulthea's oceans is the Sea Drake. Solitary creatures, Sea Drakes spend much of their time living in underwater caverns of unsurpassed beauty guarding their hordes of treasure. These caverns always have air, since Sea Drakes have no gills, and rely on their massive lungs to store air (up to 2 minutes' worth per level) for their underwater excursions. Only 2% of Sea Drakes have wings, and those that don't have modified fins that allow them to move swiftly underwater. All drakes are capable of a lunging attack from underwater that can cover 300 feet (or 75 vertical feet). All Sea Drakes have the common drake spell abilities as well as the *Water Law* spell list (Essence, "Base Magician").

More information can be found in the *Shadow World Master Atlas Inhabitants Guide* on pages 24-28. GMs that do not have access to this volume should instead consult pages 24-27 of *C&T*.

Sea Drakes prey on both other sea beasts and any ships that happen to stray into their territory. Certain tribal cultures that live near drake lairs worship the great beast as a god, offering it sacrifices of virgins and gold from their villages. The drake usually accepts these offerings, often deciding to destroy the village if the gold (or the virgin) does not meet its expectations.

14.5 RACES

Just as there are land-dwelling cultures and races, so, too, are there great civilizations that make their homes beneath the waves. General backgrounds on some of these races are given here, with the specifics left to individual GMs to decide.

☞ MERMEN ☞

The society of Mermen on Kulthea is, on the whole, ignored by land dwellers, but is fully the equal of the finest kingdoms of Emer. Living in underwater cities in sites selected both for their natural beauty and isolation (underwater grottos and the like), Mermen have their own tribes/kingdoms and conduct affairs similar to their land counterparts.

An average Mermen community consists of some 50-100 Mermen and Mermaids. Organized along clan/tribal lines, these cities often form alliances with friendly clans (as they are often related) and elect an overlord to conduct alliance business. This ruler has no authority over internal clan affairs (except, of course, for those of his own clan), but exists to conduct relations with other Mermen clans and other groups outside the alliance.

Mermen are solely water-breathing creatures, and cannot exist outside of water. Females are called Mermaids, and are like their male counterparts in most respects. Mermen society is fully equal, with both females and males holding positions of power and wealth. Mermen mate for life, raising a family of from one to ten children.



Mermen society on the whole is not especially warlike. Most clans feel that war between their own kind is detrimental to the race as a whole, and prefer to achieve their ends through economic means (such as securing good fishing grounds or a wealthy underwater mine). There are warlike clans, though, and these are both powerful and feared by other clans. They exist mainly on the edges of Mermen territory. Aside from the Shallock (see below), these are the only enemies the average Mermen clan has.

Mermen use weapons fashioned from coral and stone. They have also developed the ability to work metal underwater, and some of the more advanced clans have iron weapons. These weapons are usually made by magical means, although they do not have any magical bonuses. Missile weapons, and most forms of magic combat, are unknown to Mermen society. Another favored Mermen weapon is the net. Made from tough seaweed, the Mermen net is thrown over a victim to ensure that he cannot fight or run away.

Statistics are given in the chart for a typical merman. Females are considered the same for game purposes, and the young are shown in parentheses. Mermen look much like the Mannish races except for their green, scaled skin and prominent blue gills. They have no hair. Females have long blond hair.

MERMEN RACIAL MODIFIERS

Stat Bonuses: Ap: -5;
 St: +5; Qu: +0; Pr: +0; In: +0; Em: +0;
 Co: +5; Ag: -5; SD: +0; Me: +0; Re: +0;

RR Mods: Ess [+0] Chan [+0] Ment [+0] Poi [+5] Dis [+10]

Soul Departure: 5 rounds **Stat Deterioration:** 0

Recovery Rate: 1x **Hit Die Type:** D8

Maximum Hits: 120 **Starting Languages:** 2

Background Options: 5

≡ SHALLOCKS ≡

Living near the Mermen, and occasionally at war with them, the Shallocks are an evil race of underwater dwellers that are distantly related to Trolls. They are much smaller than their cousins, but have the same disdain for all living things. Shallock look much like trolls, but are shorter (about 5'8") and have bright red gills.

Much less advanced than the Mermen, Shallocks succeed through sheer numbers and brute force. They live in loose tribes of 60 or more, led by the strongest male. Females in Shallock society are considered breeders and nothing more. Their weapons are as primitive as their social outlook, but they make up for it with their great strength and natural cunning.

Shallock prefer to strike from ambush, using their numbers to overcome a more advanced foe. Like Mermen they are restricted to breathing water and are never encountered above the surface. Shallock spend almost as much time fighting each other as they do the Mermen, which is one factor that has contributed to the continuing survival of the Mermen.

The warlike Mermen clans and the Shallock consider each other worthy opponents, and battles conducted on these clan/tribe borders are both bloody and common.



Two sets of statistics are given in the stat chart; one for the male Shallock and one for the female. Typical Shallock weapons are clubs and stones, with Mermen weapons being used as soon as they are captured.

Shallock culture is primitive, and their concept of treasure doesn't get much past the "bright, shiny object" phase. A typical Shallock horde would consist mainly of bright rocks and gems, with the occasional gold item thrown in. Magic items other than weapons (wands, etc.) are usually discarded, and weapons are used as normal. Likewise potions are rarely kept, as the Shallock have no idea of what they could do, and rarely see the point of keeping a liquid (such as that they live in) in a bottle.

SHALLOCK RACIAL MODIFIERS

Stat Bonuses: Ap: -15;
 St: +10; Qu: +0; Pr: -5; In: -5; Em: -5;
 Co: +10; Ag: -5; SD: +5; Me: +0; Re: -5;

RR Mods: Ess [+0] Chan [+0] Ment [+0] Poi [+10] Dis [+20]

Soul Departure: 8 rounds **Stat Deterioration:** 0

Recovery Rate: .9x **Hit Die Type:** D10

Maximum Hits: 130 **Starting Languages:** 2

Background Options: 3

PART VII

SEA LAW CAMPAIGNS

This part of *Sea Law* is concerned with campaign considerations which involve the *Sea Law* rules. This includes such areas as outfitting a ship, reasons for exploration, some guidelines for nautical adventures, and an examination of both naval tactics and the composition of one of the powerful navies of Kulthea. It begins

with a brief overview of the reasons for taking your campaign to sea and then zooms in on such campaign considerations as outfitting a new ship and provisioning it for a long voyage of discovery. Finally, an entire section has been devoted to an overview of naval tactics and the basics of naval strategy.

15.0 WHY GO TO SEA?

The title of this section addresses one of the most common questions heard during the design of this supplement. The answer is fairly easy, but requires a great deal of historical background. As much as possible this background will be linked to Kulthea. However, those requiring historical facts from our own world should examine the expansion of Spain and Portugal both before and after the voyage of Columbus (1492).

Mannish races have been taking to Kulthea's seas for ages. The need for food drives many of them to the waves—the search for good fishing grounds caused many tribal wars in the early days and continues to do so to this day. Kings and tribal chieftains looking to expand their holdings have sent ships across the seas to find treasure and new lands to conquer. Powerful merchant clans send ships looking for profitable trade routes and for new products and sources of raw materials. Rich nobles occasionally send expeditions to find new lands. Then there are pirates who prey on the lucrative trade lanes between major kingdoms and continents—even in an age of magic, sea transport is still an economical way to move heavy cargos.

PCs have a number of reasons for going to sea. Many of these tie into the reasons touched upon above, while others are quite personal. A PC could be driven to sea by troubles ashore; he could be the heir to a large merchant fleet; or any other number of other reasons. What follows is a reasonably detailed look at the main reasons why kings and their subjects (such as the PCs) go to sea.

15.1 OCEAN TRADE

Trade is often far and away the biggest motivation for sea trade routes. Kingdoms need new markets for their goods and, more often than not, new suppliers of necessary resources. All those castles add up, and soon the royal treasure might find itself in need of another gold transfusion. These urges often add to an expansionist trade policy on the high seas.

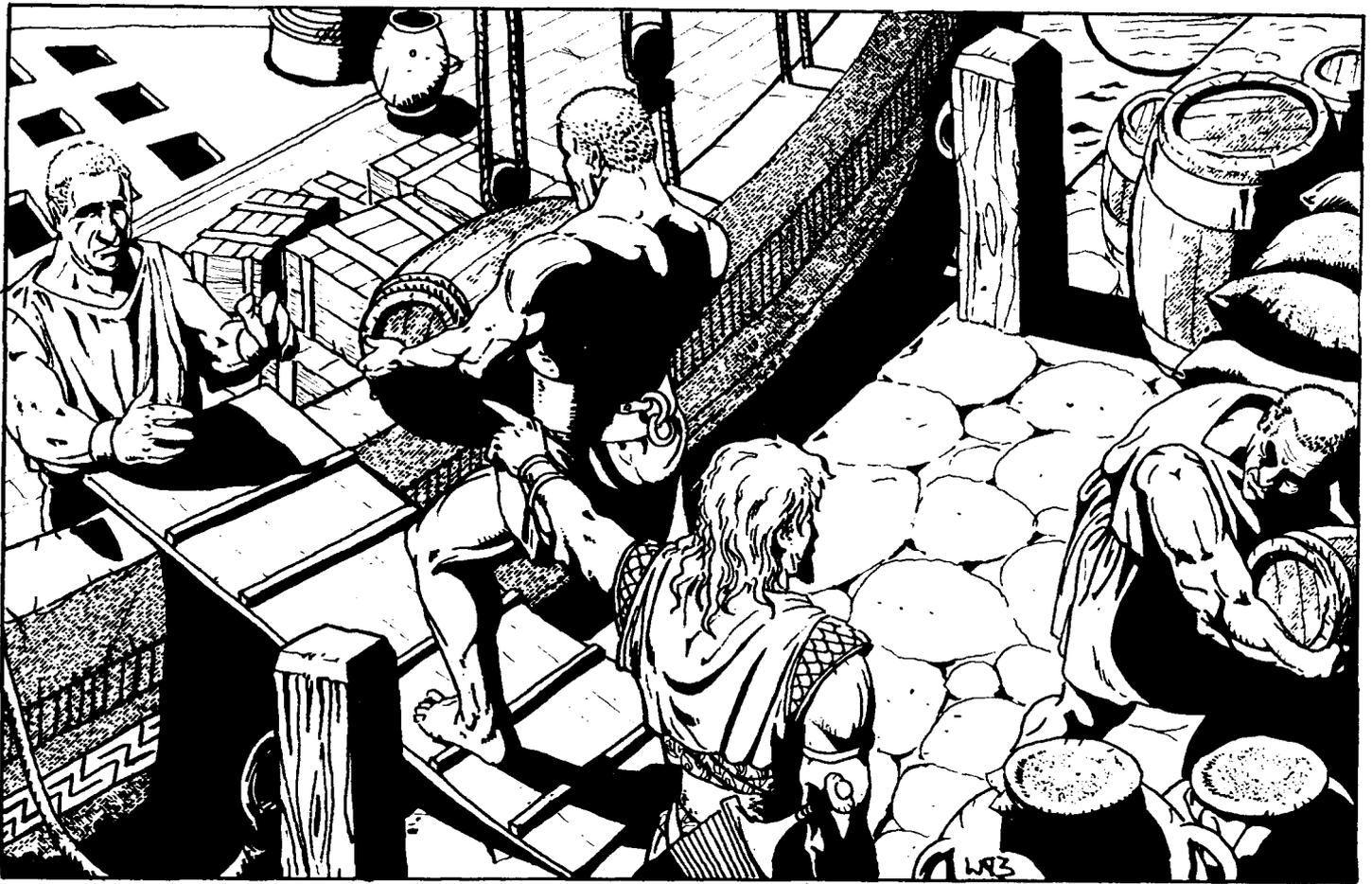
What sort of cargo is transported in this way? Almost anything, but grain is common along the coastal routes. A large capacity transport is capable of carrying a larger amount of grain than any land-based transport of this time, and can do it for less. On the high seas both precious metals and small, high value cargos (such as exotic spices and textiles) are often carried. Luxury items are in high demand among the nobles of any self-respecting kingdom, and these goods usually come from overseas.

All this is in the realm of supply and demand economics, which is a subject that often bores players to tears. Their motives should be much more basic. A ship loaded with spices can easily make ten times its own worth with one trip, since the people who provide the spices often consider them to be little more than common herbs. Given this fact, it is easy to see why piracy was common and wars often started over such trade routes. The profits to be made are often enormous, and this should be reflected in any world you design. Trade routes don't just grow out of nowhere; there should be a valuable commodity on one end and a demand on the other.

15.2 EXPLORATION AND EXPANSION

These two subjects are one of the most common reasons for kings to send ships to sea once their trade needs are taken care of. Kingdoms are always looking for colonies to sell their goods to, in addition to new sources of raw materials, precious metals, and other necessary goods such as shipbuilding lumber. Exploration for its own sake is rare at the head-of-state level in Kulthean society. Private individuals will occasionally launch such an expedition, but these are rare.

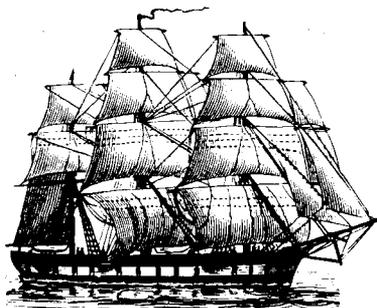
Kings will occasionally commission an explorer (such as a party of PCs) to take a ship (sometimes provided by the Crown for this purpose) and seek out new riches and lands for the kingdom to rule. Such expeditions are usually underwritten by the Crown with the understanding that the explorers will receive from 15-20% of any



riches brought back from the new lands. In return the explorer takes all the risks and is expected to claim the lands discovered in the name of the ruler who commissioned him. This often includes fighting the natives, who might resist becoming subjects of an outside power.

Another motive, less common in a polytheistic society such as Kulthea's, is religion. Many religions seek new converts, and kings of that faith will often send out explorers to both find new lands and new converts for his religion. Some of the more fanatical religious orders might send out expeditions on their own for such purposes, but this should be rare. On the whole the motives of an adventurer on such a mission would commonly be, to paraphrase the motives of the Spanish Conquistadors of our own history, "Glory, God, and Gold, not necessarily in that order."

Population constraints, such as overcrowding in the homeland, will also trigger a surge of exploration. Lack of growing land also has this effect. Such exploration efforts will be less profitable than the previous expeditions, but have a much more urgent air. Explorers will occasionally find themselves saddled with a ship or two full of complaining colonists in addition to their own problems. In a world such as Kulthea these missions should be rare.



15.3 PRIVATE VENTURES

Political motives aside, there are many other reasons PCs could go to sea, many of them profitable. These tend to break down into three main groups: piracy and privateering; searches for lost cities and great treasures; or the flight from the long arm of royal law. Each will discussed in turn.

PIRACY

Piracy, and its royally sponsored step-brother privateering, exist wherever there are profitable trade routes and, in the case of privateering, two warring kingdoms near these routes. There is little real difference between piracy and privateering, but a privateer has a license (Letter of Marque) to raid the shipping of a kingdom's enemies. The catch is that the captain has to give the kingdom that issued the Letter a 10-15% cut of the profits. A Letter of Marque guarantees, however, that a captain will always have a safe port to put into to repair damages and sell his plunder. Pirates often do not have this luxury.

Pirates prey on the shipping of any kingdom. They have a reputation, somewhat undeserved, for bloody raids and wanton killing wherever they go. Most of this is created by the pirates themselves, as they know that many will surrender to them on the basis of this reputation. After all, those who fight the pirates often end up dead, or so they would have you think. A pirate will try to capture a ship intact, shooting at the hull only as a last resort. The captain of a pirate ship is usually elected from the crew, and all treasure is divided equally, with more shares going to the captain and officers (typically 5 shares for the captain and 3 to the officers). GMs and players desiring more information on pirates and piracy should investigate ICE's *Pirates* supplement from the Campaign Classics series.

Royal Responses to Piracy — As might be expected, most kingdoms take a dim view of piracy, especially when it's directed against them and their interests. There are many common responses to this problem, each of which is discussed below.

Convoys — This system is much like the Spanish Plate Fleet of our own history. Ships move in a group of ten or more, escorted by up to five warships. The size of the warships depends on the cargo, but sloops or schooners are common escorts. The convoy system is usually employed for valuable cargos, and then mainly for royal merchant companies. Their poorer relatives are often left to fend for themselves.

Navy Patrols — This is another common method of combating piracy. Ships from the King's Navy are sent out with the express mission of slaughtering any pirates they come across. These patrols are commonly composed of heavy sloops or brigs, and will have from three to five ships assigned to them. These patrols will attempt to sweep any known anchorages in their patrol area, and show no mercy when pirates are found.

Pirate Hunters — This final method is a form of private enterprise. Pirate hunters are captains commissioned by the crown to seek out and destroy pirates. Many of them are ex-pirates themselves, and they are very effective in finding their old comrades. This is a good job for a group of PCs with the proper connections. Pirate hunters get a privateer's commission and can keep most of the treasure they recover (the Crown gets 30%). Most famous pirates have sizable bounties on their heads, and pirate hunting can be a very lucrative career.

VOYAGES OF PRIVATE PROFIT

Voyages after lost cities, civilizations, and mines are the stuff of adventure fiction, and as such have a place in Kulthea and most other fantasy worlds. Most of these voyages will be commissioned either by rich PCs or some NPC with an interest in the subject. If bankrolled by an NPC, this person will provide much financial support, but must be convinced that the object of the search does in fact exist and will demand a large share (up to 50%) of any treasure found.

Aside from searches for treasure, private voyages give PCs a chance to carve out kingdoms, perhaps even empires, of their own. Consider the fact that the Spanish, using cruel methods, to be sure, managed to dominate most of Central and South America in a fairly short period of time. Finding a previously unknown island, or even a continent, gives your character the chance to claim it for himself and create his own kingdom. If there are any resources there you can begin trading with other powers, consolidate your holdings and wealth, and come out with your own title and land. And all this at a fairly low level, if you play your cards right. Where else can you do that but at sea, and through voyages of private discovery?

Often rumors of lost civilizations, vanished treasure ships, or other such tales will spark a private voyage. The PCs could be hired by an NPC Scholar who has heard such tales and needs some professionals to guide him to the location he wishes to search. Or it could come as a legacy, such as a tattered map left to one of the PCs by his father or mother. This map could show a single island, or the route of a ship, with notations indicating much gold and, perhaps, great danger along the way. The search for Atlantis, or another trade route to the Far East, motivated many explorers in our own history. A good fantasy equivalent could be a lost realm of Sea Elves, a kingdom dating back to Kulthea's Second Era, or a vanished colony of particularly adventurous Dwarves. Something

as simple as a fisherman who was blown far off course returning with many wounds and some amount of treasure can easily spark such a voyage. And it is possible that the PCs may have to defend their discoveries from other, more aggressive explorers bent on taking what the PCs have found!

FLIGHT FROM PROSECUTION

The Flight from Prosecution is perhaps the easiest way to get players involved in a nautical-oriented campaign. It can lead into almost any of the options detailed above, although it does tend to force things on the players more than any other nautical orientation.

Simply put, the players are accused, rightly or wrongly, of breaking the law or other legal/social code in a seaside kingdom. Left with no other route of escape (either because the gates have been locked or someone stole their horses) the party flees to the docks and hijacks the first ship bound anyplace but where they are at the moment. Thus the players find themselves at sea, and must find new ways to make their living and perhaps clear their names.

A second method for handling this is to have honest (or relatively so) PCs who are already operating ships be suddenly accused of piracy or smuggling. They will be forced to flee their current home port, hopefully swearing to clear their names and return with proof of their innocence. This can be a good lead-in for any number of plots, especially if the party has managed to make a few enemies during their adventures both on and off land. These enemies, or even commercial rivals, would be eager to "prove" that the PCs were in fact villains of the deepest dye. It is, of course, up to the party to clear their own names and find their fortunes in the process. What starts out as a flight from false accusation can end as a triumphant return, with the PCs defeating all their foes and maybe finding their own kingdom somewhere out there past the horizon.



15.4 FUNDING FOR EXPLORATION

Where does the needed gold come from to pay for all your PCs' ships, crews, and goods and provisions? There are any number of sources, each of which will be examined in turn. They range from the simple expedient of the party paying for their own needs (an event which will—hopefully—be rare in a well-balanced campaign) to complicated deals with royal sponsors and merchants.

The odds are against a party being able to afford one or more large ships, their crews, and the cost of fitting out the ships as would be needed for exploration. It takes a sizable amount of funds to do this, which is why governments and groupings of merchants (such as the Guilds) are often in the business of exploration. GMs should take these considerations in mind when planning any nautical campaign.

PARTY FUNDING

This method of funding exploration should be fairly rare (unless a party just managed to knock over a dragon's horde or a royal treasury!), as the amount of cash needed to finance a voyage of exploration is immense. Ships need to be bought, crewed, and fitted out, maps and navigation tools need to be purchased, and so on. It should also be noted that this form of funding can also attract certain unwelcome attention to the PCs.

It is very difficult, especially in a low-technology society, to purchase ships or hire crews without attracting attention. All this activity will soon alert royal bodies or Guilds of merchants, and these persons will be very interested in finding out just what a group of rather disreputable adventurers is doing fitting out their own ships. They might settle for planting a spy or two among the crews, or they may choose to take a more active approach and have the ships seized and the PCs held for questioning. They may be suspected of being pirates or persons planning on smuggling or otherwise breaking the law. It may, in fact, require the lining of certain pockets with ample amounts of gold to ensure that the authorities turn a blind eye towards all this activity!

All this will certainly drain the funds of the party, but if they wish to take the solitary funding route, by all means let them do it! You may wish to inform them of the risks they are taking beforehand. Repairs will certainly be more expensive, as the Guilds will be anxious to 'soak' non-members for as much as possible when renting dry-docks and the like. In a similar vein, taxes on goods brought back from the new lands will certainly be high if the Crown was not cut in beforehand.

MERCHANT FUNDING

The next financial route the PCs may wish to explore is that of the various Merchants' Guilds that will most likely exist in any fantasy campaign. In our own history, private companies such as the Dutch and British East India Companies were active in backing exploration, as were merchant houses of Fifteenth Century Italy. The Guilds will be trying to get the best of the deal, of course, but their support can prove crucial to PCs while they are planning their voyage.

When getting financial support in this fashion, the PCs will be required to sign either a contract or agreement with the Guild listing exactly what will be provided by the Guild and what they will get in return. It is safe to assume that, if the prospects are good, a Guild will furnish a ship (often in mediocre condition) and a portion of the crew. Depending on the Guild, they may also kick in some of the needed provisions and goods for the voyage.

In return, the Guild will usually require the PCs to give them anywhere from 10 to 25% of the profits of the voyage, as well as payment for any damage to the ship and Guild property. All trade

goods brought back by PCs working with a Guild will be exempted from taxes and tariffs which might normally apply to such goods. Any land claimed by the PCs will become partially owned by the Guild, or they may require special trade status and/or exemptions with any realm the PCs may create.

On the whole working with the Guilds to finance a voyage is no picnic. They will be more interested in what they can get out of the PCs than in "fair dealing," and ships provided by the Guild will be in poor condition in many cases. Guild crews will also be of low quality and contain many Guild spies. But for a group lacking the proper "connections" and funds, a partnership with a Guild might be the only way they can get to sea.

ROYAL AND/OR STATE FUNDING

This final choice for funds was used most successfully in our history by Christopher Columbus, along with many other Spanish and Portuguese Captains during the Age of Discovery. Royal funding is perhaps the most generous of the three, but it is also the hardest to get.

Before thinking about getting Royal backing, the PCs must have access to the Throne. This may come through social status, prior accomplishments of the party, or an NPC who has both connections and an interest in the party. Once an audience has been gained (and this could in itself cost a pretty gold piece!), the PCs will still have to convince the powers that be to back their quest.

This should be no easy task. To gain Royal backing the PCs must have a fixed goal in mind (such as finding a lost empire, city, or rich mine) and be able to show that they have some chance of success. There must also be a tangible benefit to the crown, such as gold or new lands, before such aid will be extended. The process of persuasion will be extended, and could well involve some palace intrigue. Court favorites might become envious of the PCs and attempt to hinder their progress, a noble might denounce their plan as madness and sheer folly, or affairs of state might push their scheme into the background for a time. Before the Royal hand will be extended, the PCs must show that they are worthy of the aid and that there will be a corresponding gain to the crown.

Should Royal aid be forthcoming it will be generous. The PCs will be provided with a ship or two, complete with crews and provisions. Any reasonable needs or requests (such as for weapons or trade goods) will be granted, and the PCs will be sent along with best wishes. There are, however, some catches.

Any Royal voyage will be commanded by the PCs, but "advisors" will be sent along by the crown, and these persons are often jealous of the PCs. It is their duty to ensure that the crown gets its share of the spoils and perhaps cause the PCs to have an "accident" after they have found their goal. In addition to advisors, the Crown will want at least 25% of all goods and riches found, and land claimed must be claimed in the King's (or Queen's) name. The PCs will often be granted holdings within the new territories, but they will still be colonies of the parent kingdom. Of course, if the PCs come to grief or enter into combat with rivals, the crown will deny all knowledge of their activities and perhaps brand them as pirates and renegades! Such are the hazards of working for the crown.

Royal sponsorship is, of course, highly desired. The kingdom provides the ships, crews, and provisions, and a smart party can come away with much. But the down side must be stressed. Royal "advisors" can soon become major annoyances, and their intrigues against the PCs can lead to danger and even failure. The sheer difficulty of getting such backing will turn away many parties, but those that succeed will still have to face the consequences. If they fail, they had best consider defecting or moving on to new climes.

16.0 CAMPAIGN CONSIDERATIONS

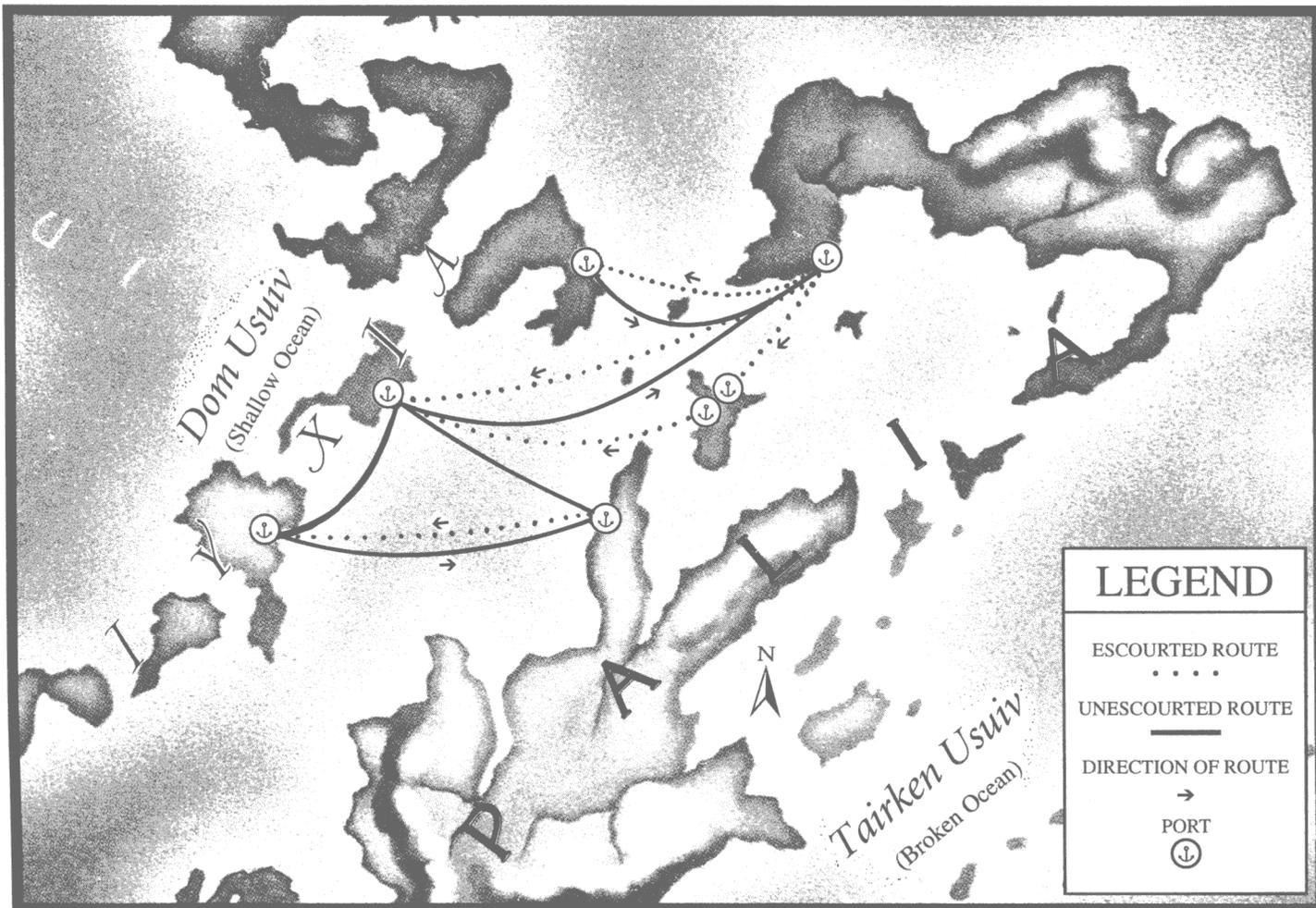
What does all this mean when you're designing a naval-oriented campaign? Mainly that as much thought as possible should go into designing the ocean trade in your world. Where are the main trade routes? What goods are carried on them? Where do they come from and where are they going? Do they run through another, hostile, kingdom's waters? Would pirates be interested in the goods that are common to these routes? How often is the trade route patrolled? Are convoys common here? Are there any lost cities or sunken islands/treasures that PCs could find? The considerations go on and on.

Aside from considerations such as trade routes and commerce, a GM must consider just **what** is out there for the players to find as they sail the seas looking for adventure. One of the basic reasons for setting sail in the first place was usually to find new markets for goods and/or new lands to dominate. A GM preparing a nautical campaign must have such lands ready for his players to find and explore. By its nature a nautical campaign cannot be completely divorced from its land-locked cousin. A sea voyage, especially in troubled times, is not an undertaking which is planned or executed lightly. You should have rumors, dockside gossip, and fragments of other explorers' log books, for example, ready for players to "find" and stir them into seeing if the rumors and other tales are true. Some of them should be simply "grog tales," but there will always be those few big pay-offs that send the PCs back out onto the waves looking for more...

A well-executed nautical campaign requires at least as much preparation as a land-locked adventure, if not more. This section will do much to help you prepare to run such adventures, but it cannot do everything. GMs should take the time before running a nautical campaign to ask some basic questions. What is this trade route doing here? Why are all these sea monsters hanging around this particular island? Does anyone live on this little island out in the middle of a main trade route? Is there in fact anything over the horizon, just waiting to be discovered? Would anyone else be interested in the island my party has just discovered, and, if so, what would they do to get it? Finally, what do the natives of this island think about their "discoverers" and potential overlords? These are some of the basic questions that you should try to answer as well as possible before running your adventure.

16.1 A TRADE ROUTE EXAMPLE

To help a GM get started, the following example of a trade route that answers most, if not all, of the above questions follows this paragraph. The trade route being discussed is located on Kulthea, and exists as illustrated on the map below.



This route is fairly heavily traveled, and runs between the upper end of the continent of Palia and the central islands of Iyxia. The route was established during the Second Era, and still endures.

A variety of goods are shipped via this route. Cargoes headed for Iyxia usually include lumber and manufactured goods. In return exotic spices and hard currency make their way to Palia, along with shipments of food. Iyxia has a weak manufacturing base and little to offer in the way of goods, so she must trade with hard currency. Bulk cargos such as grain are common in both directions. The more profitable cargos are those outbound from Iyxia, and this is where most of the piracy occurs.

Palia's navy is one of the best on Kulthea, and they actively patrol this shipping route. The more important cargos are shipped in convoy with a heavy escort, and routine patrols of three sloops are common in this area. Iyxia's navy, on the other hand, is divided by royal power struggles and is at best inefficient. Pirates thrive in close to the Iyxian island chain, with their effectiveness falling off sharply as they get closer to Palia.

Palia has a surplus of good shipbuilding timber and a strong manufacturing base, while Iyxia has an excess of spices and hard currency to buy needed timber and goods. Both continents trade grain as a matter of course, both to supplement their own crops and to make up for losses in times of drought and famine. Palia has a unified government, the Holtac Empire, and a strong navy, both of which help them hang onto their routes. Iyxia's navy is torn between three conflicting kingdoms, so its effectiveness is reduced.

When designing trade routes, the basic logic of supply and demand must be kept in mind. To use an example from our world's history, India and the Far East had a surplus of spices which Europe was willing to pay hard cash for, something they had a reasonable surplus of. In short, the countries included in the trade route should have a surplus of what they are exporting and a shortage of or demand for what they are importing. Luxury goods or items which take up little cargo space but have a large profit margin (such as herbs or spices) will be common items in trade routes, as will such mundane goods as grain and lumber for shipbuilding.

These considerations play a part in determining where pirates will focus the majority of their attention. A well-to-do pirate is not very likely to attack a trade route mainly concerned with grain, while a convoy carrying valuable herbs or precious metals is sure to attract his attention. Piracy is thus most common along the rich trade routes or in coastal areas, where surprise is almost guaranteed and escape simple. Pirates, at least those who plan to retire to an old age, often have spies in the offices of trade houses and Guilds, so they are often very aware of the cargo of some ships. In time of war privateers are more likely to attack grain ships than in peace, but they will still want to get their gold piece's worth when they attack a ship.

16.2 OUTFITTING A SHIP

This section deals with the cost of outfitting and provisioning a ship. Once PCs decide to buy, or are given, a ship, they should read this section closely. The GM should also be very familiar with its contents. In the Part V ("Ship Construction"), you learned how ships are built using the *Sea Law* guidelines. Now you're going to learn how much they cost.

When a character has a ship built, he gets an empty hull with sails and rigging. All weapons, supplies and crew must be purchased and hired before any voyages can take place. Prices for the basic ship (hull, sails, and rigging) are provided in the Suggested Ship Cost Chart on the next page. These prices assume that the wood used in construction is normally available in the area (GMs should decide this ahead of time). If the character wants his ship built out of a wood that must be imported, the cost is increased from 20-50%, depending on how hard the wood is to import. The exception to this is

Hadrock, which is only available in Jaiman, and will increase a ship's cost (if it is not built in a Jaiman shipyard) by 200%. Use of a non-native wood will also extend construction time (transport time, GM's discretion, usually two weeks to four months).

Once the ship has been built it must be equipped and armed. This is a fairly complicated process that will involve a great number of decisions on the PCs' part.

PURCHASING WEAPONS (16.2.1)

Tables T-4.6 and T-4.7 indicate the standard weapons for each type of ship. For each ship, the weapons indicated are considered to be the maximum number of weapons that can be efficiently mounted without adversely affecting the ship's operations. A GM can allow this mix of weapons to be varied as outlined below. The cost for all weapons (see the Weapon Cost/Weight Chart) is in addition to the hull/sails/rigging cost.

Each weapon has a fixed weight related to its size (see the Weapon Cost/Weight Chart). This weight should be totaled for each weapon purchased and mounted on a ship. The cargo capacity of each ship (see Tables T-4.6 and T-4.7) is already reduced by the weight of its standard weapons. So, if any of the standard weapons are removed, the cargo capacity will go up by the weight of those weapons. If any additional weapons are installed, the cargo capacity will go down by the weight of those weapons.

For every weapon in excess of the standard weapons, a ship should be given the following penalties:

- -2 to the ship's Offensive Bonus (Section 3.1.3)
- -2 to the crew maneuvers (Section 8.8)
- -5 to opportunity movement rolls (Section 8.3)
- -5 to opportunity fire rolls (Section 8.9)

Now comes the hard part; balancing the armament. Players should decide what sort of ship they want before buying the entire Royal Arsenal to cram into their sloop. A cargo ship, a good choice for PCs planning on trading, will not carry many weapons. A pirate ship, or a pirate hunter, will carry a good number of weapons, close to that ship type's maximum, in fact. Warships also run towards the weapon-heavy extreme, but tend to be better balanced, especially if they are being used for a voyage of exploration. Any ship being sent on a voyage of exploration will tend to carry more cargo than weapons, most of the extra cargo being provisions and water.

Weapons are normally mounted in broadsides, with the total being evenly split between the port and starboard (left and right) sides of the ship. Thus players should be encouraged to buy an even number of weapons. Occasionally a weapon or two is mounted in the front of the ship (called bow chasers), and in rare cases in the stern. This practice was more common in ships mounting cannon, but a ballista or mangonel could be placed there instead.

WEAPON COST/WEIGHT CHART

Weapon Name	Cost	Weight
Light Ballista	25 gp	25 lbs
Heavy Ballista	35 gp	40 lbs
Light Mangonel	35 gp	300 lbs
Medium Mangonel	55 gp	500 lbs
Heavy Mangonel	75 gp	750 lbs
Light Catapult	125 gp	700 lbs
Greek Fire Tube *	2000 gp	1000 lbs

*—Usable on Galleys only, includes storage unit and enough Greek Fire for ten shots.

Ammunition for these weapons is purchased at the cost of 1 Bronze Piece per ballista bolt or mangonel stone. For game purposes the ammunition is assumed to be weightless, but GMs should use common sense when allowing players to load up on ammo (for example, players shouldn't be allowed to sail around with 100,000 ballista bolts and a like number of mangonel stones!)—we suggest a limit of 100 pieces of ammo per weapon.

PROVISIONS AND WATER (16.2.2)

Ships in the age of sail have an endurance that is limited only by their supplies of food and fresh water. Galleys are not often found out of sight of land, due to the problems involved in carrying enough food for their large crews. Certain spells can be used to replenish water and food supplies, giving ships an almost unlimited endurance.

Each member of a ship's crew needs roughly 10 pounds of food and water (2 lbs of trail ration equivalency and 8 lbs. water) per day while at sea. There are 2000 pounds in a ton. Players should consider how long they expect to be at sea, and provision accordingly. Any space left over after getting provisions and weapons is cargo space, and can be occupied by anything the players desire to carry. The weight of the ship's normal crew and extra passenger allowance is not deducted from the total cargo tonnage of the ship. A good discussion of the type of food carried on a ship of this era, along with other facts about life at sea, can be found later in this chapter. Both GMs and players should refer to it while outfitting any ship.

A wise Captain will not seek to cut corners while provisioning his ship. Seaboard food is notoriously poor, and a Captain who feeds well will have a crew with high morale and good health. In fact, it is not a bad idea to over-estimate the amount of food needed. As will be seen below, storm and battle damage can often ruin portions of the stored food. A little extra food, and planning, can have great returns.

SHIPS AND CARGO CAPACITY

Players and GMs who have studied the pre-designed ships might have noticed that certain ships (such as warships) do not have a Cargo Capacity number. When fitting out these ships, assume that they have a cargo capacity for food, weapons, and general ships' stores equal to their Displacement minus 25 tons. This standard rule also applies to non-warships which are being fitted out in a warlike manner. Warships are not given a Cargo Capacity number due to the fact that they rarely carried commercial cargos.

Weapons, ammunition, and basic ships' stores do not count against cargo capacity in any case, no matter what type of ship is being fitted out. In addition, for each crew member (officers and the standard crew, see Tables T-4.6 and T-4.7), up to 50 pounds of food (25 days of trail rations) and 200 pounds of water (25 days) can be carried without decreasing the available cargo capacity.

HIRING A CAPTAIN (16.2.3)

In the event that the PC who purchased the boat does not feel like commanding it, he can hire an NPC captain to run things for him. This is expensive, roughly 30 gp per month and a 25% share of any treasure/loot taken. It also cuts the PCs out of much of the decision making process while at sea. If at all possible GMs should make sure that their players have enough nautical skills to command the voyage themselves. An NPC captain should be considered at least fifth level in a combat-based profession, preferably the Sailor.

SUGGESTED SHIP COST CHART			
Name	Suggested Base Cost in GP	Name	Suggested Base Cost in GP
Jaiman		Palia	
Sloop (Annachon)	1000	Frigate	900
Sloop (Var'Lis)	210	Sloop	250
Nor	100	Merchantman	
Aavar	220	Small	100
Frigar	900	Medium	250
Pent	720	Large	890
Lighter	95	Brigantine	300
Barch	300	Lighter	250
Corvar	225	Ba' IIs	90
		Fal' IIs	80
Emer		Thuul	
Galleon	1000	Annas, No deck	200
Kalk	210	Annas, With deck	250
Sloop	205	Navra	250
Frigar	900	Garrack	900
Coaster	95	Sloop	90
Lighter	90	Cog	200
Nar	750		
Galley	180	Falias	
Cor	210	Caravel	220
Caravel	230	Crager	750
		Battleship	900
Kelestia		Cutter	250
Vor	100	Galley	120
Illia	225		
Carrack	750	Govon	
Frigar	900	Carnas	90
Ra' Vir	250	Corsicar	200
Ketch	90	Destroyer	900
Mulira		Folenn	
Coaster	85	Trimere, No deck	200
Yar, Lesser	700	Trimere, With deck	250
Yar, Greater	750	Piritar	85
Aur	720	Sprinter	230
Veris	210	Merchantil	750
		Lighter	95
Gaalt		Sloop	210
Merchantile	200	Brigantine	250
Merchantila	220		
Ketch	80	Murlis	
Garron	900	Halar	250
Galley	180	Merchant	100
Garshiff	700	Scout	250
Devshiff	200	Brig	260
Caravel	250	Destroyer	900
		Ketch	250
Iyxia			
Merchantman	800	Mythenis	
Brigantine	250	Yir	210
Frigate	800	Caravar	200
Galleon	900	Longship	700
Corsair	95	Berch	230
Merchantile	210		
Coaster	210	General Vessels	
		Outrigger canoe	60
Agyra		Ship's Boat, Small (20')	40
Merchiltal, (Old Style)	200	Ship's Boat, Large (30')	50
(New Style)	220	Fishing Boat	80
Cog	210	River Boat	95
Ort	210		
Coron	750		

THE SHIP'S CREW (16.2.4)

Each ship needs a crew, the size of which is indicated in Tables T-4.6 and T-4.7. These crew numbers are the ideal, and not always the rule. A normal ship can carry an additional number of men equal to roughly one third of the ship's normal compliment. These extra men can be additional troops, passengers, etc. For a short time, a ship can function with as little as 10% of her normal crew, and this is referred to as its "skeleton crew." Table T-4.4 gives the suggested effects for having less crew than indicated in Tables T-4.6 and T-4.7.

For handling extra weapons, assume that each mangonel requires 4 crewmen and each ballista needs 2. Gunpowder weapons, if used, require 4-8 crewmen each.

Players and GMs should refer to the section concerning ship-board life when hiring crewmen. In addition to normal sailors, certain specialists such as navigators, master gunners, officers, and the like are needed to make sure that a ship runs smoothly. The following chart gives a quick rundown on the rates of payment for crew members:

Position Title	Cost per Month
First Lieutenant/First Mate	10 gp
Commissioned Officers	5 gp
Warrant Officers	3 gp
Pilot/Navigator	10 gp
Pilot's Mate	3 gp
Quartermaster	3 gp
Master-at-Arms	5 gp
Chief Gunner	4 gp
Surgeon/Healer	10 gp
Boatswain	3 gp
Sailmaster	3 gp
Carpenter	7 gp
Seaman	2 sp*
Marine	3 sp*
Oarsman (non-slave)	5 sp*

* This cost assumes that the PCs are hiring Regular-rated crew members. The cost goes down 5bp for each lower step in quality (i.e., a Reservist seaman would cost 1sp,5bp per month) or 1sp for each step up in quality (i.e., a Crack seaman would cost 6sp per month, as he is 3 steps above a Regular seaman). The one exception to this is a Slave, who will cost roughly 1-25gp (depending on health and location of purchase), but will never have to be paid again! Note that many states frown on slavery, and that a large number of Marines must be carried to prevent slave revolts. Also note that Marines can **never** be slaves!

The above-prices are examples only, and should not be carved in stone by the GM. In an area with a strong sea-going trade, such as a large port city, the rates should be raised slightly due to the increased demand, and in areas with less seafaring activity the rates should be lowered. Each ship will require a different number of the above crew members, but there are certain minimum guidelines. A ship will always need a first mate, a navigator and a healer of some kind (spell-using or not). The other positions, aside from sailors, are considered optional, but a well-run ship will have at least one of all of the above officers and mates. See the section concerning life at sea for details about each of the above positions. A qualified PC can be used in any of the above positions, thus saving the captain a good deal of gold.

In addition to their monthly wages, the NPC crew members will also expect a share of any treasure, plunder, etc., taken or found during the voyage. For officers the share is 5%, 1% for each mate (see below for the difference), and 5% to be divided amongst the rest of the crew. Note that this should be considered the minimum cut, and a captain desiring a loyal crew would do well to increase the cut to NPCs. The amount that is left goes to the PCs, and can be divided up using whatever system the party has used in the past. It goes without saying that a cut of the profits is never given to slaves, but PCs should be strongly discouraged from using such crew members in the first place (after all, they are supposed to be the good guys!).

COMMON PROFESSIONS FOR CREWMEN

The most common Profession for NPC crewmen will of course be that of the Sailor (see *RMCI* for details). Other common Professions will be Rogues (*ChL*), Scholars (serving as Navigators, perhaps, see *RMCI*), and Lay Healers (*ChL*) to see to the medical needs of the crew. Fighters will be encountered as Marines, and occasionally a Thief might be encountered hiding from his guild by working as a topman. Rangers might also be encountered, along with Clerics serving one of the sea gods of whatever world is being used.

On the whole the GM should use common sense when determining the Profession of an NPC. For those who wish to choose randomly, there is a basic 75% chance that any NPC will be a Sailor. The remaining 25% can be chosen from the list above, but it is recommended that the most common non-Sailor be the Rogue, followed by the Fighter.

Alternately a GM may decide that the whole crew be made up of the No Profession Profession (see *ChL* for more concerning this Profession). This is not highly recommended, as it does not reflect the true flavor of a ship's crew or allow for the GM to create some interesting sub-plots as to why the 10th level Thief decided to go to sea as an ordinary deckhand!

LEVELS OF NPC CREW MEMBERS

The level of NPCs aboard a ship commanded by PCs is left to the discretion of the GM. However, there are certain guidelines that should be followed.

- A sailor or marine should rarely be above second level, with the exception of any marine officer, who should be around 5th level.
- Navigators and other ship's officers should be between 4th and 6th level, with the mates slightly below them.
- These level guidelines do not include any special NPCs the GM may wish to include, such as the Thief mentioned above. Such persons will usually have their reasons for hiding at sea, and it can come as a shock to any party to learn that their deckboy is in reality a 7th level Bard hiding from the law in a despotic kingdom!

The actual professions of these NPCs is left to the GM (see above for guidelines), but keep in mind that in many worlds spell casters will rarely go to sea in the first place, unless they have a very good reason or are PCs. After all, a spell caster (such as a Sorcerer or Wizard) has better things to do than have his spell books ruined by salt water and eat bad food while searching for some lost island or another. Healers and Lay Healers are an exception to this guideline, but they are expensive to hire—Lay Healers are more commonly found at sea.

All these considerations, and more, should be kept in mind while the PCs are fitting out their ship. As GM, you should keep a close eye on the whole process, lending a discreet 'hand'—in the form of NPC advice—when needed.

Example: Ras l'Haj, a fairly well-known fighter (5th level) decides he needs to go to sea (the Royal Guards and the King's personal torturer want to question him concerning the condition of the Princess who was to wed the king of a neighboring state). He and the rest of his party manage to buy a sloop (in Palia) without any uncomfortable questions being asked, and they set about hiring a crew and fitting her out.

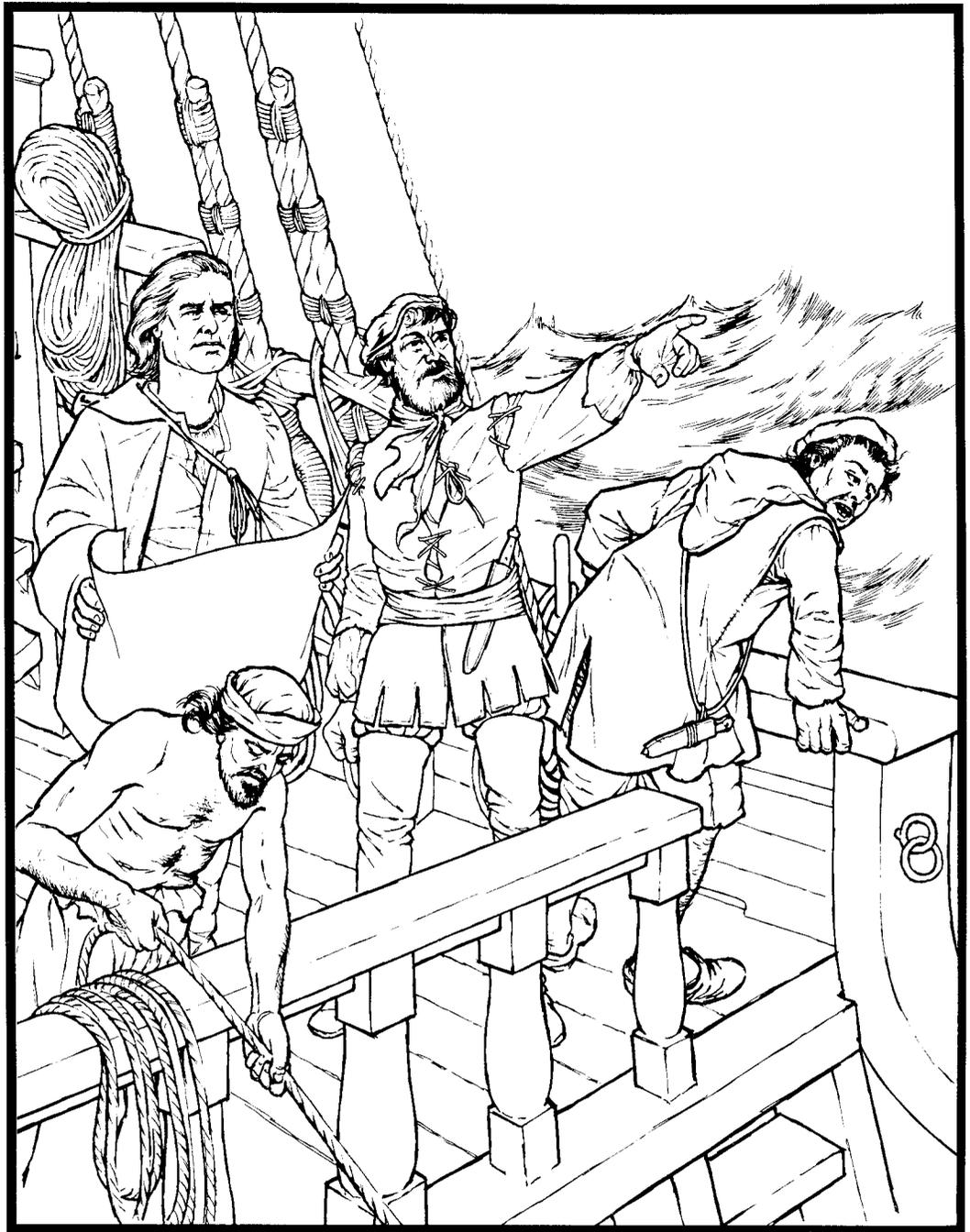
Ras started his nautical career with a warchest of some 50,000 gold, liberated from the Royal Treasury after his liaison with the Princess. His sloop set him back 250 gold, leaving him with a tidy sum to fit her out with.

Friend Ras has long dreamed of being a pirate, and now he's got his chance! As a result his sloop is going to be heavy on the weapons and short on almost everything else. His sloop is allowed to carry up to 6 heavy ballistae (6x35gp) and 10 light mangonels (10x35) without penalty, so Ras decides to buy all of them. This drains his chest of a further 560gp, leaving him with 49,190gp to buy supplies and hire a crew.

Ras, realizing that officers could be expensive, decides to hire his crew next. After posting notices and conducting interviews, Ras manages to attract a first mate, a navigator, and a gunner, along with an assortment of sailors (80 veterans to be exact). Since Ras is planning on being a pirate, his crew will be paid through plunder—but for the sake of this example we'll figure up how much it would cost him to hire the crew if he was doing something legal. The first mate and the navigator each cost 10gp per month, the gunner costs 4gp, and the rest of the crew is 3sp each. This comes to a total of 24gp and 240sp per month (48gp for readers who like prices in gp). Note also that they will receive 16% of any treasure found by the ship (more if Ras is feeling generous). Luckily Ras has some friends who are spell users, so he won't have to hire a healer. He has six friends who will also join up as officers for his crew.

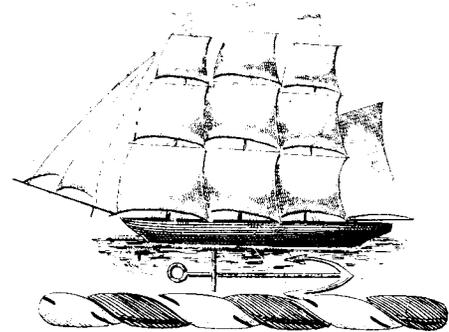
Now comes the serious task of buying provisions. Costs for food found in Character Law & Campaign Law are used here, and players should only buy those foods that can keep for a long time. Ras decides to buy 4 weeks supply of Greatbread (4 lbs per week for 90 men = 1,440 lbs and 1,800gp) and 4 weeks supply of trail rations (14 lbs per week for 90 men = 5,040 lbs and 720bp). He'll carry 8 weeks of fresh water (8 lbs per day for 90 men = 40,320 lbs; see Section 16.2.2).

Ras can carry 50 lbs of food and 200 lbs of water for each crew member without reducing his ship's cargo capacity (see Section



16.2.2). So, his ship's cargo capacity is reduced from 150 tons to 138.57 tons (22,860 lbs = 45,360 lbs food & water – 22,500 lbs without penalty).

Ras is now ready to set sail. He has 47,382gp 8sp left in his warchest.



RANK ABOARD SHIP (16.2.5)

This section contains definitions of all the NPC types discussed in the previous sections. It also defines the role of these people aboard ship, and lists qualifications for the position. Should PCs wish to occupy these slots, they should meet the necessary qualifications. For example, a carpenter without the proper skills is as useless as a sword hilt without the blade!

OFFICERS

This section concerns the officers of a ship. All profession types can be officers, but note that pure, semi, and hybrid spell users are less likely to be found here than other professions. In the ship charts the heading Officers refers to the classifications in this section. The number following the title is the number of these officers (or crewmen) found aboard a typical ship.

Captain (1)—The captain runs the entire show while the ship is at sea. He doesn't necessarily own the ship, but it is his responsibility to make sure that it runs smoothly. All major decisions are his, including (where possible) the destination, course, actions, and other activities of the ship. His word, in short, is law while the ship is at sea.

A captain should have most of the necessary nautical skills discussed in previous chapters. When at all possible the captain should be a PC.

First Mate (1)—The First Mate is the captain's assistant, and is in command when the captain is away. It is the first mate's responsibility to tend to the everyday running of the ship and make sure that the proper amount of training and drill (especially on military ships) is carried out. The first mate is second in command of the ship, and takes over when the captain is away.

First Mates should have most of the skills the captain does, but at slightly lower levels. They also might have a few more social or interactive skills than the captain. The first mate may be a PC if one with the proper skills is available.

Quartermaster (1)—On pirate ships this officer is second only to the captain. On other ships his is less important, but has many of the same duties. Quartermasters are in charge of the helm, instruments, and signals. On pirate ships they distribute the booty and take the place of the Master-at-Arms.

There are no special qualifications for this position.

Navigator (1)—This is the officer who makes sure the ship gets where it is going. A very important position.

Navigation and Piloting are must have skills for this position. Mapping is also very useful.

Navigator's Mate (1)—See above, except he is slightly less important. He will often fill in for the Navigator while the ship is within sight of land.

Warrant Officers (Varies)—This heading includes such officers as the Second and Third Lieutenants on warships and other mid-level officers. They have more rank than petty officers, but are under the Navigator and other commissioned officers. They are not found on pirate ships.

The qualifications for this designation are up to the GM and the captain of the ship in question to decide. The number of Warrant Officers is also governed by this decision. Such officers are usually placed in charge of the ship's stores, repairs, boats, and other such mundane considerations. A translator (vital on any world which does not have a 'Common' language) might belong here.

Surgeon (1)—This is the ship's healer.

As might be expected, it is quite useful if the person holding this position is a Lay Healer or the like.

Sailmaster (1)—This is a petty officer responsible for sailing the vessel and, occasionally, navigation. A good Sailing skill is helpful. The Navigator and Sailmaster often work in close cooperation to determine the course and speed of the ship.

Boatswain (Varies)—This is the petty officer in charge of maintaining the hull and the ship's boats. Skills similar to those of the Carpenter are useful in this position.

Carpenter (1 or more)—This petty officer is in charge of general repairs and maintenance of the ship. Many are also skilled smiths.

Master-at-Arms (1)—This position does not exist on pirate ships. This petty officer is responsible for boarding actions that do not involve the Marines (if any are carried) and maintaining discipline aboard ship.

Chief Gunner (1)—This officer is responsible for maintenance and firing of all weapons on board. Note that different Chief Gunners could be carried on a ship that had different types of weapons. Some ships, especially warships, may wish to carry 2 Chief Gunners; one for each Broadside.

Skills relating to Siege Weapons are useful here.

Marine Officer (1)—On warships (and some others) this officer is in charge of the marines. The position only exists if the ship carries marines. The Marine Officer is not usually part of the navy, but comes from the kingdom's land forces. Such a posting is often considered a form of exile, unless that nation's marines are known for their fighting prowess, in which case it is a high honor.

Usually there will be a number of officers and Sergeants under the Marine Officer to oversee the actions of the enlisted marines. The exact number of these troops is left to the GM and the players to decide, but the guidelines concerning unit composition and command found in *War Law* could prove useful here.

CREW MEMBERS

This heading covers the common sailors and such that are found aboard ship. It is not recommended that PCs fill these rolls.

Marines (varies)—Marines are carried by warships to fight boarding actions and the like. They are fighters trained to do battle at sea. Most do not wear anything heavier than leather armor. Often they are used to defend a ship while the sailors do the actual boarding. Marines are of varying quality, depending on their status within a kingdom. In nautical kingdoms they will be the best fighters available, while in more land-oriented realms they will be of low quality.

For gamers interested in detailing the composition of the marine units aboard various ships, the rules found in *War Law* are quite useful. Remember to use the hiring costs found above for paying marines, and not the rules found in *WL*. On the whole, marine units will be smaller than their *WL* counterparts, but will be better trained and led.

Seamen (varies)—These men make the ships work. They are skilled at sailhandling and other such tasks. Gunners also come from this category, and the two types are considered interchangeable. It is this interchangeability that lead to the development of Battle Sails, which require fewer men to handle and allow more to work the guns. The less-experienced hands are usually called on to man the guns, while the skilled sail-handlers are left aloft to control the ship.

Oarsmen (varies)—These are freemen paid to work the oars on galleys. They often double as marines. Slave galleys do not have oarsmen, but they do have a very strong marine unit on board to guard against any uprisings.

16.3 FOOD AND CONDITIONS AT SEA

Ships of this time frame and technological period were not comfortable. They tended to be cramped, especially the early sailing vessels, leaky, and disease-ridden. Magic can do wonders to quell the disease problem, but there is little that can be done about the other two. Officers have their own cabins; in fact, the captain's is usually quite large and comfortable by shipboard standards. In most ships it will take up the entire aft section, being divided into two rooms. Cabins belonging to the other officers are located forward of the captain's cabin, if other cabins do exist. On caravels and other such early sailing ships there will only be a captain's cabin.

All the cabins have removable walls and weapons (if the ship has broadside weaponry) mounted in them. The walls are taken down when the ship goes into action. The crew sleeps in the fore of the ship from hammocks strung between the hull beams. All this takes place on the main deck. Below them is usually the hold, and below that the bilges. Cooking is done in either a stone fireplace or a sand-filled firebox on the foredeck, and the fire is doused each night. Light is provided by lanterns, each one carefully anchored to the hull and carefully watched and tended by all aboard.

Food at sea in this period tended to be either bad or worse, but much depended on the captain. If he was careful to buy only good food that would keep and a plentiful supply of fruit to ward off disease (see below), things would be as comfortable as could be expected. Poor food is far too common, though, since in this time it is hard to preserve food. Magic can be useful here, and magic items containing spells that purify food and water are especially desired by sailors. Hard bread is a favorite, followed by smoked or jerked meat and salted fish. Some ships carry livestock to slaughter as they are needed, but this is common only in the most advanced nautical cultures. Officers and men eat the same food, unlike land armies, and a good captain always makes sure that the food is palatable.

Both water and food were often stored in treated casks and barrels, and in most cases kept in the hold. Special bread lockers and other such storage areas (often called bunkers) were features of later, more advanced designs. Some cooking could be done at sea, but the emphasis was on prepared foods, as fires are a great hazard at sea. Standard *Rolemaster* trail rations (which keep for up to one month) can be used as shipboard rations, although most food used at sea kept for a longer time. When food goes bad there is a chance that characters will get food poisoning. The base chance is equal to 1%, and increases by 5% for each additional week that the food is kept and eaten.

Example: *A ship loads trail rations on board and plans to eat them for three months. There is no danger of food poisoning for the first month. After that there is a 1% chance during the first week of the second month, a 6% chance during the second week, 11% the third week, and so on. Water is also liable to "go bad" in shipboard conditions, although it will not make characters sick. GMs who wish to stress this point may decide to place characters who drink bad water at a -5 to all actions until fresh water is obtained.*

16.4 DISEASE

Even in a magic rich environment, disease can kill more men at sea than combat. Most diseases are caused by a lack of fresh food and especially fresh fruit. The Rot, a disease similar to scurvy, is most common. In game terms, the Rot is contracted when a character has been at sea for six weeks without a fresh source of vitamin C. The Rot requires a Resistance Roll (attack level 5) once per week. Once a character has contracted the disease (i.e., failed a RR), he is at -5 per day until a fresh source of produce is located and the character can regain lost vitamins. This -5 is cumulative for each day, so after 10 days a PC would be at -50. This process continues until the character is completely immobilized. The Rot can be cured with magic.

While at sea, if the ship is not kept clean, there is a basic 10% chance (roll once per week) that the PCs will come down with some kind of disease. While this may seem high, keep in mind that almost all of Magellan's men in his circumnavigation of our own Earth in the early 1500s started with 5 ships and ended with only fifteen men and one ship still intact (Magellan himself died in the Philippines)! While many of his men were lost to conflict and, in one case, desertion, disease still took a heavy toll. Use the rules found in *ChL&CaL* to determine what diseases the PCs get, and their chances for recovery.

Disease is always a problem at sea, especially in a time frame when the actual causes of sickness and the relation of dirt and vermin to disease is, at best, barely understood. GMs should emphasize this as much as possible, keeping in mind that the game should still be playable. Entire crews should not be wiped out by an outbreak of fever, but people (NPCs and PCs) should get sick on occasion, especially if their ship is filthy and poorly maintained. Force your players to learn the value of providing fresh food and keeping the ship clean!

16.5 MAINTENANCE AND REPAIRS

Keeping a ship in good repair is an ongoing process. Most ships carried enough spares (both sails and spare wood) to re-rig if necessary. This is why the carpenter is so important. In many cases these individuals were capable of building an entire ship if necessary. Painting, cleaning, and repairing general wear is the business of the entire crew, and it is a process that goes on each day the ship is at sea. Bilges need to be pumped, seams need to be treated with pine tar, sails need to be mended, and so on. Players should not be bogged down with these tasks, but they should make sure that a portion of the crew is always carrying them out.

Most ships fitted out during this time in our own history were able to maintain themselves, with shipyards needed only for major repairs and overhauls. This should be maintained in game terms as well. Spare anchors were carried, along with enough iron so that a Ship's Carpenter (who often had smith training) could make spares for most simple iron fittings aboard ship. On the whole sailing ships, when properly crewed and outfitted, could stay at sea as long as the crew had food and water.

These repairs and maintenance also hold true for water casks and food storage areas. Casks were routinely re-caulked and boiled to get rid of bad flavors and any growths. Food bunkers were scoured before being re-filled, and livestock areas were flushed out along with the bilges. Any ship that does not do this should have its basic risk of disease (see above) increased by 5%.

16.6 STORM DAMAGE

No matter what preparations a ship makes, there is always a certain amount of damage that will occur during a storm. The GM should gauge the level of damage based on the intensity of the storm and the measures the players take before it hits. A ship that lowers sail and rides out a storm will, as a general rule, take less damage than one that leaves all sails rigged and tries to run with it.

Storm damage usually takes the shape of broken spars, blown-out sails, and some damage to the mast. In extreme cases, such as a hurricane, the ship could be swamped. This is most likely with a small ship. After such a storm, the GM should roll d100 (d100+50 in the case of an unprepared ship) and apply it to the Hull Points as storm damage. This damage is repairable at a rate of 10 points per day, 20 if the ship halts all movement and concentrates on repairs. The sailmaster is generally responsible for all sail repairs, and the boatswain is responsible for hull repair. The captain should oversee all work.

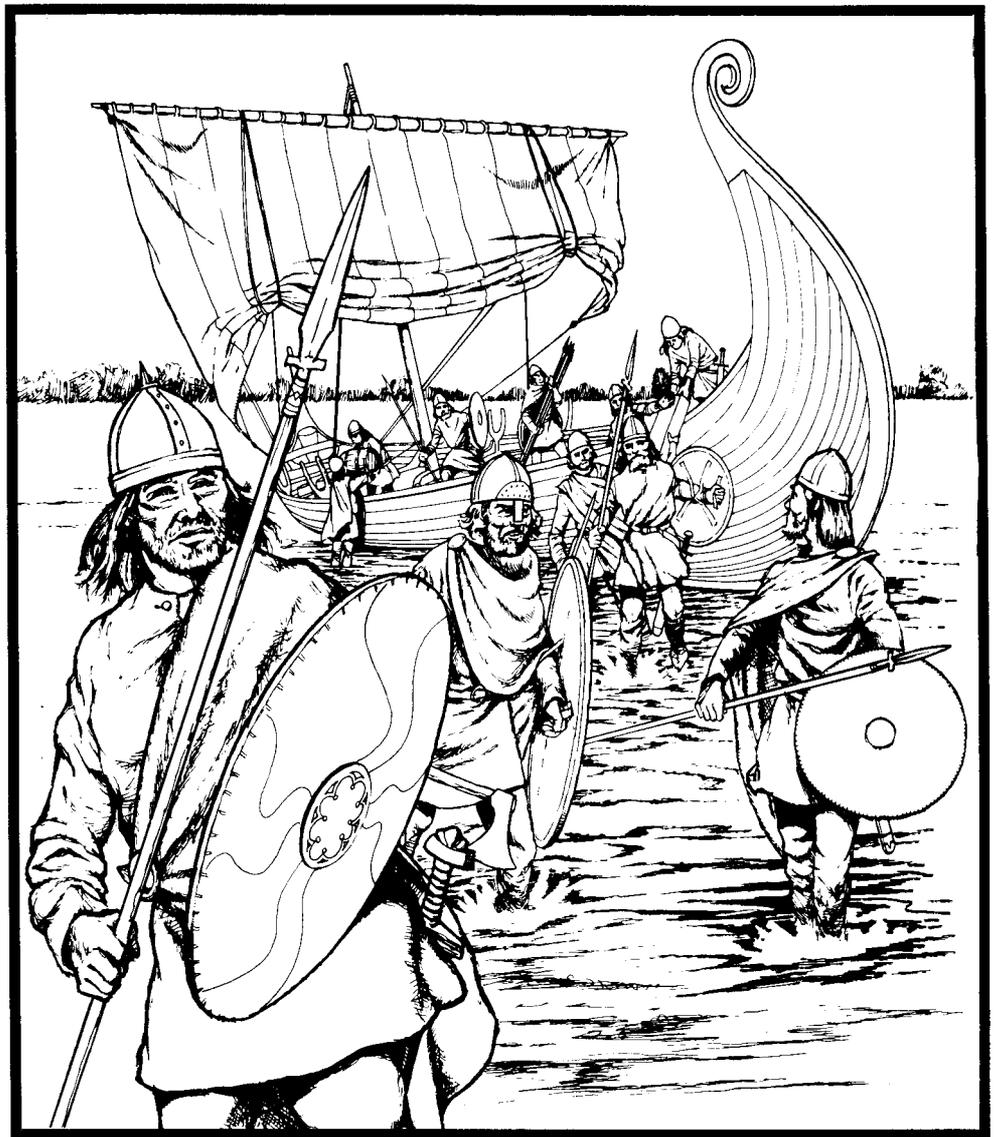
There is also a chance that a storm will ruin a portion of the food and water supply. If the damage roll mentioned above is more than 60, assume that 5% of the stores (including cargo) were damaged by seawater and debris. For every increment of 10 above 60, assume that another 5% was damaged. There is also a chance that crew members and/or passengers would be lost at sea. For every 20 points of storm damage, one crew member is lost at sea.

16.7 CAREENING

In the days prior to the coating of hulls below the waterline with copper plates, the buildup of water mollusks such as barnacles was a great problem on wooden hulled sailing vessels. Barnacles and weeds would attach themselves to the hull of a ship, slowing her speed greatly. This problem was especially grave in warmer waters, where the weeds and mollusks thrived. Building a ship out of woods such as teak and, on Kulthea, Hadrock slows the growth of these creatures, but does not halt it.

Ships should be careened in port, as the process involves dragging the ship out of the water and scraping the accumulated sealife off the hull, treating it with a mixture of sulfur, tallow, white lead, and crushed glass. This is not always possible, especially for pirates and explorers, so they must find another way.

If a friendly port is not available, a secluded inlet or deserted island should be located. Then the ship is hauled out on the beach, all weapons and the main-mast is dismasted. Once this is accomplished the ship is tied down on one side, exposing part of the hull for scraping and coating. Once one side is done the process is repeated on the other side. All this takes one month, and most captains set up small forts near the entrance of their careening sight with shipboard weapons mounted there for protection. This is also a good time to make any necessary repairs to the hull.



If a ship is allowed to go without careening for 3 months, its speed is reduced by 25% in all Movement Profiles (round up). After 4 months the reduction becomes 35%, and after 5 months 50%. The time span is increased by 25% for ships built of teak, and doubled for ships made of Hadrock. If a ship goes for a year or more without being careened, there is a very good chance (call it 70%; +5% for each additional year) that teredo worms will have bored holes through the hull and that the ship will sink, usually without warning.

GALLEYS AND CAREENING

Galleys do not normally remain at sea long enough to have a problem with teredo worm and weed growth on the hull. Ships in Northern waters (both galleys and sailing ships) will have fewer problems due to the fact that such underwater growth is heavily restricted in cold waters.

Should a galley remain at sea long enough, it will suffer the same effects as sailing vessels. However, due to the methods used to construct galleys, the bottoms will fall out after one year, regardless of the type of wood used in construction, if the ship is not careened as often as necessary. Galleys were designed to operate close to land and for fairly limited periods of time, and as a result they tended to be built out of weaker woods. In addition to this, their large crews were hard to feed and water, limiting them to operations close to land and points of supply.

17.0 NAVAL TACTICS

Before discussing a fairly complete naval campaign setting, a few words regarding the tactics of naval warfare are in order. There are two basic tactical schools on Kulthea: one for warfare involving galleys; and one concerned with war using sailing ships. Magic has had an effect on both schools, but the scarcity of spell-casters on the high seas has made this effect fairly local, and thus outside this discussion. Players should be encouraged to read this section so that they will have a basic understanding of how naval engagements are fought in the age of oars and sail.

17.1 GALLEY TACTICS

Galleys are dependent on oars rather than the wind for their motive power, and the tactics designed for them reflect this. The primary weapon of the galley is the ram, a device mounted on its prow below the waterline designed to punch holes in an opponent's hull, and most tactics are centered around effective use of this weapon.

In most cases the ram is used to do one of two things: strike the target ship in the side, punching a hole through its hull and either damaging or sinking it; or raking the side of the target, snapping off all the oars on that side. Once a ship is rammed successfully, the ramming vessel can backrow (so that the ram doesn't snap off) and then attempt to grapple. Most galley battles end with a large number of boarding action battles—the side that captures the most ships wins.

Formations in navies that are mostly galleys tend to be rather like loose packs, with all ships trying to keep their rams toward the enemy. They will then approach each other at battle speed and attempt to ram. Galleys without rams will either attempt to board, or, if they have artillery, they will attempt to stand off and bombard opposing ships. Galleys with Greek Fire tubes will usually lead the charge, attempting to burn the most dangerous ships and ram the rest. A Greek Fire ship will attempt to avoid grappling until its supply of Greek Fire is exhausted.

Note that oarsmen, even slaves, tire, and a galley fleet action will seldom last long. Also, most galley actions tend to take place in shallow waters off a coastline or in a sheltered bay of some kind. These ships were not intended to take to the high seas, and they will do little fighting there. Galleys also tend to beach at night, so there are few night galley actions.

Longships are the one exception to galley tactics. They are not, in most cases, designed as ships of war, and will avoid most battles. When forced to, they will attempt to board and use any weapons they might have mounted, but a longship will never attempt to ram. Often it will simply hoist its square sail and attempt outrun such attackers.

Certain societies that used galleys, such as the Romans, depended more on the value of their troops in a boarding action than on their rams. When using these tactics, galleys attempt to close as soon as possible and use grappling hooks and other devices to grapple their opponents' ships and board. These galleys tend to have large marine or army compliments. In the end, the side that won a galley action was often the side that boarded first or most effectively.

17.2 SAILING SHIP TACTICS

The age of sail made tactics much more complex. This section will deal with two major types of tactics; the tactics of navies and the tactics of pirates. The first variety will be examined first.

TACTICS OF NAVIES

Unlike the galleys, sailing ships have most of their firepower along their sides, with little in either the forward or rear arcs. This fundamental fact in many ways limits the tactical options of a sailing warship. To do damage to an opponent, a sailing ship must turn broadside to its target. If a ship is able to fire a broadside down the length of its opponent (in other words pass across either the bow or stern of the target vessel) it is referred to as a rake. This is a very effective form of attack, and is much sought after by sailing captains. In fact, much of the body of sailing tactics was designed with an eye towards raking an opponent. The rake was favored for the simple reason that it allowed a ship to attack using maximum firepower without the danger of being attacked in return (or perhaps face weak return fire from bow chasers).

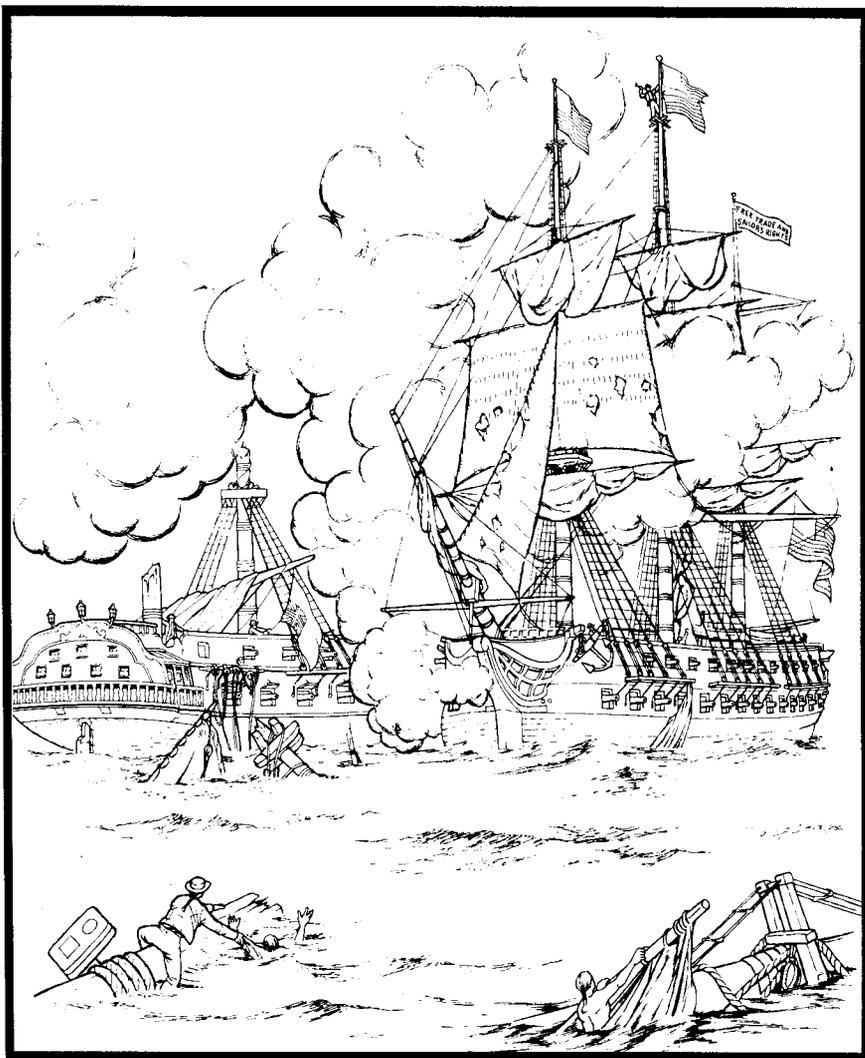
Fleet tactics developed along these same lines. Ships usually travel and fight in columns, or lines, with each ship following the one in front in single file. Fleets approach each other in this way, with both trying to gain the weather gauge, which would force its opponent to sail against the wind to join combat. If a line manages to rake the other line, this is known as 'crossing the T', and most maneuvering in a fleet action is aimed towards either crossing the opponent's T or gaining the weather gauge.

Ships were originally formed into lines for ease of command, especially once the use of signal flags became common. After a time this reason became lost, and the 'cult of the Line' took on a life of its own. Line tactics were rigid and in some ways ineffective. The benefits and drawbacks of the Line will be examined below.

Once combat has started, there are a number of ways to go about defeating your opponent. You can aim for the hull and batter your enemy into submission, accepting the fact that your fleet or ship will be heavily damaged in the bargain, or you can aim for the rigging and slow your opponent down, thus making your job easier and allowing more of your fleet to come into action. As a third option, you can target your opponent's crew. Once your opponent is weakened, closing, and boarding is generally the order of the day. Most navies award prize money for captures, and this is a good way to supplement your income.

The line of battle is not without faults, however. It tends to limit captains' initiative and, due to its rigid structure and the need to parallel the enemy's course, can cause heavy damage in your own fleet. One option to this is breaking the enemy's line. This involves closing with your foe, and then turning towards him, accepting the fact that you will most likely be raked in the process. Breaking the line isolates portions of the enemy's fleet, and is a valid course if your gunners are better and you have good boarding parties.

Fighting in line also limits the actions of ships, and makes decisive battles rare. Often only a portion of the line is engaged, with the other ships waiting for the wind to allow them to enter battle. It also has the effect of limiting the size of battle fleets, as a line loses its effectiveness if there are too many ships in it. As all ships must follow the lead of the flagship the line requires no little skill in shiphandling. As might be expected, the line-of-battle is most common among the advanced seafaring cultures of Kulthea.



TACTICS OF PIRATES

Pirates tend to approach tactics in a much different manner. They will almost never use the line, preferring to act alone and attack merchant ships. A pirate vessel will usually shoot for the rigging, slowing its victim enough to catch it and board. Pirate boarding actions are usually short and fierce. If a pirate ship is damaged seriously in the attack it will be abandoned and the prize used as the new pirate vessel.

Pirates make a great effort to build a fierce reputation, as they like merchant crews to surrender to them without a fight. A pirate captain will usually try to recruit some new crew members from the prisoners, and this activity is hindered if the pirate has a reputation for killing all the crews he captures. In most cases a pirate will only kill the crews of opposing ships if they happen to be members of a state the pirate hates or if they put up a long a bitter fight before surrendering. If this is the case, the pirate will usually let a few crew members live, setting them adrift near traveled sea lanes to spread tales of what happens to crews who resist the mighty Red Eye (or whatever the pirate calls himself!).

On the whole, pirate tactics are more along the lines of hit-and-run than facing opponents in a broadside to broadside slugging match. Most pirate ships carry a larger crew than normal, thus giving them an advantage when it comes to boarding actions. This allows them to shoot to disable an opponent's rigging and then close to where their superior numbers will give them an advantage. Some pirates, and many privateers, will even fly the flags of different nations to allow them to close with their prey before opening fire or attempting to board. Deception and trickery are the order of the

day, especially if the prize is a juicy one.

Other sailing tactics follow the pattern of galley warfare. Cultures that stress boarding will attempt to close as soon as possible, regardless of potential rakes, and grapple with their foes. Sloops and other small ships do not use line tactics. Instead they tend to wheel around the bigger ships, hitting when they can and staying out of reach of the bigger ship's weapons. A tactic favored by sloops is to continually cut across the bow or stern of a larger, slower ship, raking as often as possible and staying out of harm's way.

Ship-to-ship duels, when both ships are more-or-less evenly matched, soon turn into contests for the wind. Each ship attempts to gain the "weather gauge," that is, to be in a position where their foe is forced to tack against the wind and they have a favorable wind position. One ship will usually attempt to dismast or otherwise batter the other into a weaker position and then attempt to board. Boarding actions are a common and vital part of naval warfare in the Age of Sail. Even when two fleets in Line-of-Battle are facing each other, both getting the "weather gauge" and skill in boarding are important.

Sailing tactics depend on a good system of signals, and most of the first-rank navies on Kulthea have such a system. A signal system uses a variety of flags to send coded messages, with the key located in the signal book carried by all naval and some merchant ships. The merchant version carries only routine signals such as 'I need water' or 'request pilot.' The military versions are much more detailed, and have weighted covers so they will sink if thrown overboard. If a ship is about to be captured, the signal books is one of the first things to go over the side.

Pirates prize their sanctuaries dearly, and a state that turns a blind eye towards pirate ships being repaired and ill-gotten gains sold can often count on their ships passing unmolested. This is more of a "gentlemen's agreement" than an organized alliance, and pirates who cause trouble or become an embarrassment to their host state can count on meeting with some sort of accident.

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17.3 CONCLUSION

This section on tactics has been brief, but it should give you an idea of how naval combat takes place. One brief note on boarding actions; most navies will place bowmen (crossbows or otherwise) in position where they can shoot at the officers of the opposing vessel. Ships with marines will often use them as a defensive force (unless they carry a great number), using sailors to form boarding parties. Some navies use their marines as boarders without exception (such as those of Annachon and Palia), and these crack marines are the most highly-trained fighting men on the face of Kulthea.

18.0 A CAMPAIGN EXAMPLE

The following is an example of a naval culture on Kulthea. A brief history of the country is included, along with a description of the navy and merchant marine, trade routes and practices, attitudes towards discovery, and a brief discussion of their enemies. It can serve as either a setting for a GM's naval adventure or as suggestions for starting a unique naval campaign.

LOCATION AND HISTORY

The location of this naval power is the large northern island in the Palia continent. The oceans surrounding it are fairly calm to the south, but become rough to the north and east. Most of the island is covered with low mountains and trees, so there is a good supply of shipbuilding timber. The waters around it are good fishing grounds, a major factor in the inhabitants' sea-going history. There is a lack of good growing land, thus providing a reason for both trade and expansion. So much for the backdrop.

During the Second Era of Kulthea's history the scattered tribal clans on Vir'Raz, the local name of the upper island, began building small canoes for fishing. These peoples had been living on the island for centuries, and until now had been able to feed themselves without recourse to the waters. But three crop failures in a row (the natives had developed primitive farming techniques) had forced them to turn outwards for food. The birthrate was also increasing, and more of the babies were living to adulthood. Food problems became more acute, and soon the clans began fighting each other for the choice fishing grounds. The sweeping events of the Second Era went by unnoticed in their struggle to survive.

One of the clans, living in the upper northern corner of the island, managed to recover a wreck washed ashore from one of the great sea battles that were a feature of the Wars of Dominion. Much of the ship was ruined by both battle and storm damage, but the headman of the Holtac clan realized that there was something to be learned from it. One of the small ship's boats had survived intact, and he ordered his shipwrights to copy it detail for detail. From there it was a small step to rigging a primitive mast and sail. Soon the Holtacs were ranging out from the coastline in search of fish.

It didn't take long for the word to spread throughout Vir'Raz, and within three years the rest of the clans were using boats much like those of Holtac and his clan. Most of the conflicts tapered off as the clans began finding new fisheries. It would remain calm on Vir'Raz for another three hundred years, with only occasional clan skirmishes to break the peace. Then came the push from outside.

BLACK DAYS AND THE RISE OF CLAN HOLTAC

Early in the Third Era of Kulthea, visitors came to Vir'Raz. They arrived in primitive sailing ships resembling caravels, and they came to do harm to the clans of Vir'Raz. It was a slaving expedition from one of the petty kingdoms that dotted the coastline of mainland Palia at that time, and their leader was a cut-throat named Jak. Jak had captured one of clan Imar's fishing cutters after it had been blown to the Palian coast by a storm, and he had tortured the location of their home out of them before throwing the survivors to the sharks.

Jak first landed on the southern shore of Vir'Raz with a party of fifteen warriors. Following the directions he'd tortured out of the fishing boat's master, Jak fell on the coastal village of clan Imar and burned it, taking the women and children back to his waiting ships. Then he returned to the Palian port city of Ulyar, sold his cargo, and gathered more men for a return voyage.

On Vir'Raz the clans were in a state of shock. No one knew what had happened to clan Imar, only that their village was burned and all the men had been killed. Word traveled slowly through the interior, and it took almost three months before all the clans knew what had happened. By then Jak had made two more voyages, and the power of clan Ge'Nas, the strongest of the southern clans, was forever broken. Only their inland village survived.

After three voyages against this new island Jak was becoming very sure of himself. So far the natives had barely been able to fight back, and he'd only lost 15 or 20 warriors. Weapons on southern Vir'Raz tended to be simple clubs and bows, with swords common only in the north. Jak planned his fourth voyage carefully; he intended to circle the island and burn every village he came across.

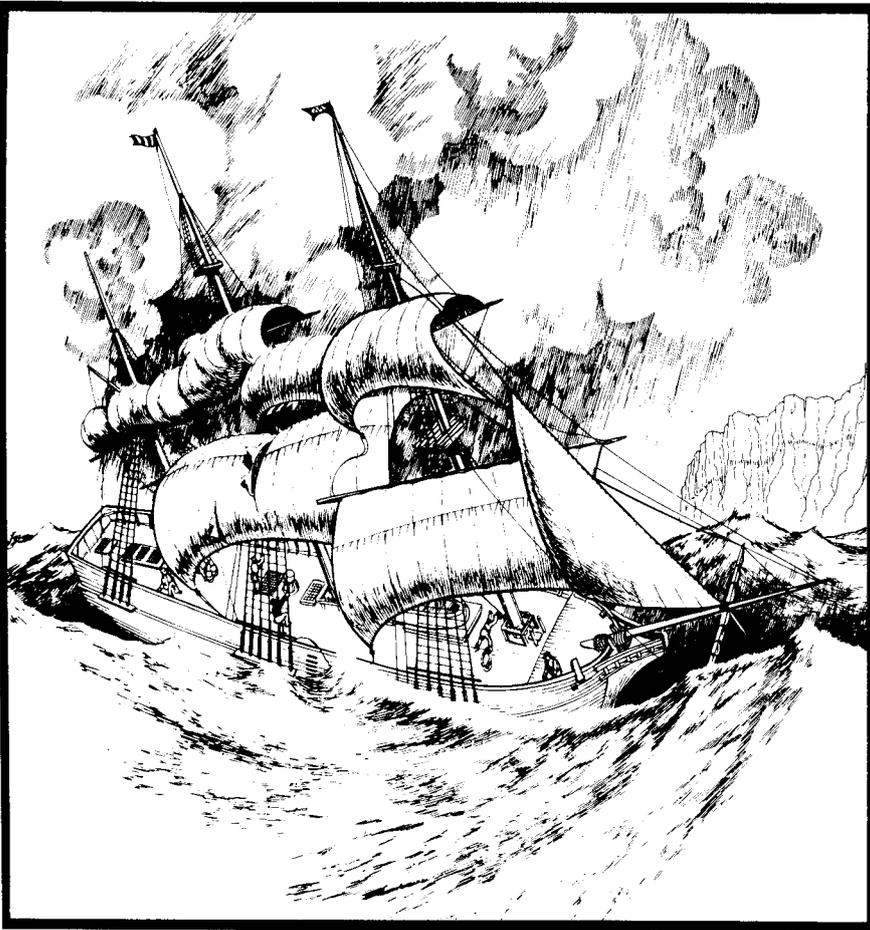
By now most of the clans were in a state of panic. Some of the west shore clans thought that the dark ships were sent by the gods to punish them for overfishing. Others, especially those in the east, thought that sea monsters were smashing coastal villages and disguising themselves as men to fool the unwary. Only clan Holtac, headed by Braz Holtac, realized that these were men, most likely from the same place the wreck had come from, and that they had to be stopped. Braz planned carefully, using his fishing boats to track the bloody progress of Jak's caravels as they rounded the island, leaving a trail of burning villages in their wake. When they got to Holtacraz there would be a surprise waiting for them.

Jak sailed into the protected harbor of Holtacraz suspecting nothing out of the ordinary. The small village looked like all the others he'd burned, and there was no reason for him to think that these people would fight back. When one of the small fishing boats approached he thought little of it. The natives usually came out to greet him when he arrived. They thought they could buy their freedom with salted fish and beads! Jak was still laughing when he saw the crew jump into the sea and the fishing boat burst into flame. He was about to scream when the little cutter slammed into the side of his flagship and flames began licking along the hull. Within minutes it was sinking, flames racing up the masts and igniting the sails.

Jak's remaining caravel was about to run when it found itself surrounded by a small fleet of the little cutters. Determined men, a far cry from the southern hunting and western farming villagers they'd been killing, swarmed up the sides with swords of bronze and iron in their hands. The fight was short and bloody, and when it was over Barz Holtac had Vir'Raz's only intact caravel and fifteen prisoners to teach him how to sail.

CONSOLIDATION

Braz had no intention of sharing his newfound knowledge with the other clans of Vir'Raz. None of them had stood against Jak and his slavers, and Braz decided that this was a sign from the gods that clan Holtac's time had come. Within ten years he had built a force of ten caravels and began a campaign of conquest against his fellow clans. It took another one hundred years, and three more Holtac chieftains, but by 3,000 TE all of Vir'Raz was firmly in the hands of Rax Holtac I, the new Emperor of the Holtac Empire. Another two hundred years passed while the Holtac Empire strengthened its hold and built up its navy, now equipped with a mix of caravels, carracks, and some primitive sloops.



EARLY STAGES OF CONQUEST

Empress Lissia Holtac was the first ruler of the Holtac Empire to turn her eyes south. It was becoming more and more difficult to feed her growing Empire, and peaceful trade with the lower kingdoms was straining the treasury. Most of the kingdoms and city-states on the northern end of mainland Palia were declining in importance and strength, and Lissia I decided that the time was right to strike. In 4,500 TE the first invasion of mainland Palia by her northern sister took place, ironically at the same kingdom that had bought most of Jak's slaves. The decaying Black Fist Kingdom fell in a few weeks, and Lissia I had a foothold on the continent.

Five years would pass before the next petty kingdom fell. After that the rest of northern Palia fell under Holtac control rapidly, like falling dominoes. By the end of Lissia's reign the entire upper portion of Palia (to the base of the V) had been annexed into the Empire. She left her son, Raxis IV, with a growing empire and a strong army and navy.

RAXIS'S FOLLY AND INVASION FROM THE SOUTH

Raxis IV was not as patient or as skilled a ruler as his mother, and he pressed his attack without waiting for his army to build back to strength. The next fifty years were to see constant warfare, with Holtac troops being pushed back on all fronts. At sea the navy managed to keep the supply routes open, but due to Raxis's neglect they were losing ships faster than new ones were being built.

The final shock came in 4,595 TE, when forces of the Consortium of Kingdoms that opposed the Holtac Empire captured the old Black Fist Kingdom and forced Raxis to retreat back to Vir'Raz. The wheel had come the full circle, and in less than fifty years Raxis

had undone all that his mother had left him. He returned to Holtacraz in disgrace, and was killed in a duel with his son, Pilip the Wise. Pilip spent most of his reign rebuilding the Empire's navy and trying to feed his people. It would be left to his successor to retake the Palian continent.

CONQUEST AND DOMINATION

In fact it would be over 500 years before another Holtac army set foot on the Palian continent. A famine and three plagues weakened the now-tiny Empire seriously, and there was much rebuilding to be done. The naval architects had not been idle, however, and soon the Imperial Navy had Kulthea's only operational Galleon commissioned. By 5,200 TE the rebuilt Holtac Empire, under Lissia XI, was ready to try again.

Lissia XI, and her husband Iver II, were wise and skillful rulers. Iver was a military genius, and he commanded the troops while Lissia remained in Holtacraz to direct the economy. The invasion of the Black Fist Kingdom was successful, and Iver pressed his advantage. He used his navy to land troops in the rear of his opponent's forces, thus surrounding them and cutting off their supplies. Lissia, through skillful trading and selective use of naval force, kept the trade routes open with Iyxia, which supplied valuable metals and some needed grain. By 5,250 TE most of northern Palia had been overrun by the Holtac Empire. All that remained to be cleared were the towering mountain ranges that split the continent and the southern portion of Palia proper.

Lissia and Iver left their Empire in a very powerful position. Now they had enough growing lands to feed their people, and the constant warfare had honed their fleet and army to a fine edge. The fleet in particular had been very busy during the Wars of Unification, both keeping trade routes open and fending off sorties by the Consortium's fleets attempting to attack the Holtac homeland. The next era of Holtac history would be one of peace.

Sver Holtac, the successor to his parents, was of a different mold than any previous Holtac Emperor. Determined to hold on to what his parents had built, Sver garrisoned the border with southern Palia strongly and used his considerable naval might to crush all traces of piracy in the waters near Vir'Raz. During the Wars of Unification pirates had ranged almost unchecked through the basin between Palia and Vir'Raz, and Sver would no longer tolerate such behavior. In five years the level of piracy dropped off to almost nothing, and Sver was free to direct his energies elsewhere.

EXPLORATION AND TRADE

Sver now showed his differences from his illustrious ancestors. Using the considerable funds plundered during the Wars, Sver launched an ambitious design and building program, determined to make his navy second to none on Kulthea. His ships soon ranged throughout the known world, gathering information and goods for their sovereign. It was not unusual during this period to find Holtac ships as far west as Thuul, their alert captains taking notes about the state of shipbuilding and any valuable trade goods. These voyages were expensive, and drained the war surplus considerably, but Sver continued with his program.

THE EMPIRE TODAY

By the dawn of 6,000 TE the Holtac Empire had trade routes extending throughout its corner of Kulthea. The Imperial Navy is one of the most respected and admired fighting forces on the known seas. While they have yet to conquer the lower half of Palia, the Holtac Empire's grip on its northern provinces is sure and lasting. The current ruler is Emperor Jak XIV, a powerful man with a name that has lasting implications for his people. Jak is more expansionist than Sver, and it is expected that he will move against the rest of the continent within twenty years.

THE IMPERIAL NAVY

The navy of the Holtac Empire is a model force, and many kingdoms send their officers to study under its captains. The product of a seafaring culture and perfected during years of war, the Imperial Navy is an important tool of the Crown both in war and for the protection of trade. A secondary, although very important mission of the navy is exploration. New markets for the Empire's expanding production base and sources of both wealth and more land are always welcome.

STRUCTURE OF THE NAVY

The Holtac navy is organized along combat-tested lines. It numbers some 400 ships, with 50 being Frigates, 100 Brigantines and the rest being sloops and smaller. The frigates and brigantines form the backbone of the Imperial Navy's line-of-battle, with the sloops serving as the eyes of the fleet. Brigantines and sloops are often used on government-sponsored exploration missions, and such assignments are quite popular within the navy.

The Imperial Marines exist within the navy, and are the most elite troops in the Empire. Trained to fight both on land and at sea, these fighters are among the best on Kulthea, and a contingent of them is assigned to each warship. Marine officers are trained apart from the regular navy officers, and have no right of command aboard ship, except with their own men.

Within the navy itself there exists a Coastal Fleet, composed of crack sloops with heavy marine units. These squadrons form the backbone of the Empire's anti-piracy forces, and they have been very successful since their creation some 30 years ago. An assignment to the Coastal Fleet is almost as desirable as an exploration mission, as the prize money and status of a successful pirate hunter are great.

There are three basic tactical units within the Imperial Fleet: the Wing, composed of one or two ships and usually used for scouting and anti-piracy patrols; the Squadron, containing anywhere from three to 7 ships, some of which must be Frigates; and the Fleet, a large force of sail comprising many Squadrons and Wings. The largest concentrations of Frigates in the navy are found in the fleets.

Rank within the navy is also fairly clear-cut. Above Captain there are four ranks: Squadron Commander, Fleet Commander, and Admiral. No non-Palian has ever been promoted past Captain, although it is likely that a skilled officer would be rewarded if his service to the Empire was great enough. Women, although very active in Holtac politics and the land forces, are not allowed in the navy. The reasons for this remain obscure, but it has something to do with a tradition lingering from the days of clan Holtac that a ship commanded by a woman will be cursed by the god of the sea.

CONVOYS

Warships from the Imperial Navy often are used as escorts for valuable merchant convoys. Typically an escort force will exist of from two to three sloops per ten merchantmen, with perhaps a brigantine if the cargo is particularly valuable. The escorts tend to prowl on the edges of the convoy, running down any unfamiliar sails and driving off pirates. Once within sight of shore, the convoy is usually turned over to sloops from the Coastal Fleet, and the escorts return to their normal duties.

While in convoy, the merchant ships come under the command of the Captain commanding the escorts. His word is law, and disobedience can be punished by death, or at the very least the revoking of the offending captain's trading permit with the Holtac Empire.

TRANSPORT

The Holtac Imperial Navy retains a small number of merchant ships to supply their fleets in time of war and to act as transports for both the Imperial Army and their own marines. A small transport is occasionally sent with an exploration party if their voyage is to be of great length.

MERCHANT MARINE

Most merchant shipping in the Holtac Empire is in the hands of the great trade houses. The Empire is not heavy with taxes, but all merchants are required to purchase a trade permit from the Empire at a rate of 100gp per year per 200 tons of shipping being registered. In addition to this there is a flat 5% tax on all non-Imperial goods brought into any Palian port under control of the Holtac Empire.

The merchant ships of Palia are highly developed, and are very active in the waters surrounding the Empire. Complex trade routes exist between Palia and Iyxia, and some even run to Gaalt and Folenn. The latter route is much smaller, however, and deals mainly in high-value luxury goods and precious metals. A further discussion of this is contained in the section below discussing trade routes.

TRADE ROUTES AND GOODS

A series of trade routes link the island of Vir'Raz with the isolated kingdoms that make up the Iyxian island-continent chain. Regular trade is conducted with the three upper islands closest to Gaalt, and a more irregular trade continues with the lower chain. Goods typically exported include simple tools, weapons, and some grain and shipbuilding lumber. In return Iyxia ships precious metals, ores, spices, and grain when necessary. A convoy leaves for Iyxia about once every three weeks, and one returns at about the same interval.

Trade with Gaalt is mainly concerned with tall trees needed for masts and some luxury goods. In return Palia ships surplus grain, some gold, and many tools to Gaalt. This trade is fairly irregular, with ships going back and forth about once every five to seven weeks. Convoys are rarely used here, as neither the bulk nor value of the cargoes carried warrant such protection.

Trade with Folenn is even more random. A ship or two will journey through the reef barrier about once every two to three months carrying tools and weapons, returning two months later with gold and some spices. This trip is usually profitable, but the risks involved (beating against the wind for much of the trip and running the Barrier) put a damper on any regular trade.

EXPLORATION

As indicated above, the Holtac Empire tends to underwrite expeditions, provided they are going someplace that the Empire is interested in. Sometimes they even send their own warships on such voyages, traveling as far as the city state of Annachon in Jaiman and the Kingdom of Red Hand on the west coast of Agyra. Currently the Empire is interested in any explorers with plans to travel East.

There is still a good deal of unexplored water and land near Agyra, Thuul, and Falias, however, and the Empire would be interested in any expeditions going to those places.

Royal support tends to consist of any provisions needed and ship repairs. The Crown will also provide some crew members and a party of marines, if requested. Sometimes, if the voyage could prove especially profitable, they will even send along a sloop and perhaps a supply ship. In return a 10% cut of all profits, including land, is expected.

So far the Holtac Empire has not developed an extensive system of colonies outside the Palian continent. They would be willing to do so if there were enough benefits in the enterprise to repay any expenses.

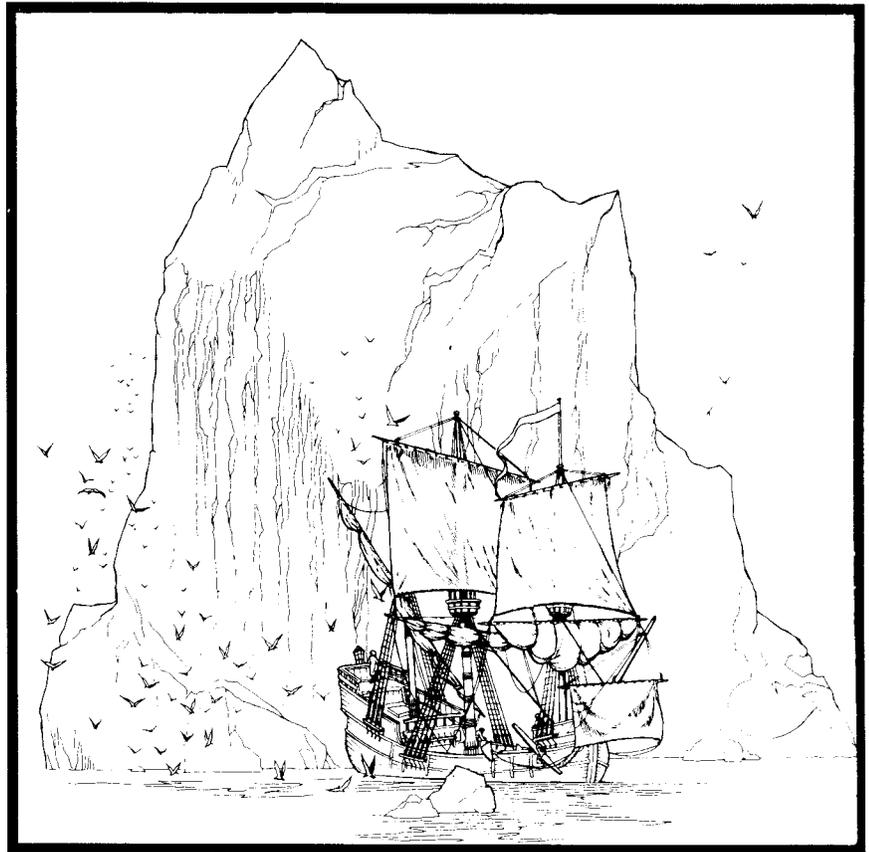
ENEMIES

As might be expected, the Holtac Empire has a fair number of enemies. The Kingdom of Grovar, one of the few remaining strongholds on southern Palia, is their most implacable enemy. Grovar's navy is not equal to that of the Holtacs, its most advanced ship being the galleon, with a few captured frigates in service. Grovar's navy tends to content itself with hit-and-run actions; striking where resistance is weak and then falling back to protected anchorages before the frigates can catch them. Currently the Imperial Navy is planning a campaign to sweep the lower Palian seas clean of Grovarian ships.

The city-state of Ras'Dal, one of the petty states in the Iyxian chain, is also one of the Holtac Empire's main foes. The dispute started some years ago over a trade route, one which the Holtacs took by force. Before their exclusion from the trade arena, Ras'Dal was one of the largest shippers of Iyxian spice in the eastern portion of the known world. Now their importance is declining, and they are preparing to strike back at the Holtac ships that drove their merchants from their traditional markets.

Ras'Dal's navy is almost the equal of the Imperial Navy, and their ships are of the same general types (see the chapter concerning Ship Construction for more on Iyxian ship types). Ras'Dal frigates, while not quite as powerful as those of the Holtacs, give a good account of themselves in a sea battle, and actions in this part of the world tend to be very bloody, with no quarter given or asked. Currently Ras'Dal is trying to build up their forces for a major push against Holtac shipping, and the Imperial Navy is fighting a holding action, waiting for the word to go to war.

Pirates, while much less unified than a royal enemy, are one of the Holtac Empire's worst foes. Most of the piracy takes place either near Iyxia or in southern Palia waters, due to the efficiency of the Coastal Fleet in keeping the home waters clear. Pirates prey on the rich trade routes, using sloops and occasionally brigantines to run down and board their prey. They will rarely attack convoys, having learned from harsh experience the dangers in engaging Imperial warships.



CAMPAIGN CONSIDERATIONS

What does all this information have to do with a campaign? Obviously a great deal, if the campaign is to be successful. An undertaking of this type needs, perhaps more than its land-locked equivalent, a detailed background to function. Before your PCs take to the waves you should have an idea of what powers sail those same seas and what use they might have for the PCs. All the information above is intended to give you such a backdrop.

In the above example there are several opportunities for PCs with sailing ambitions. If they have a more mercenary bent, the PCs could go to sea as pirates; preying off the disorganized commerce of Iyxia and southern Palia, or risking a bold attack on one of the rich convoys of the Holtac Empire. There is a lack of friendly ports in the area, so PCs would have to conduct most of their repairs at isolated islands. Letters of Marque would be available from the southern kingdoms for attacks against the Holtac Empire.

PCs desiring to make their fortune through trade (fairly dull, but safe) would also have many chances. For a small fee they could be licensed by the Holtac Empire and exploit the trade between that powerful body and the less organized city-states and kingdoms of Iyxia. Smuggling between the two locations is also possible, as are runs between Holtac land in north Palia and the less-organized kingdoms of the south.

For those desiring adventure, there are likewise many options. With the number of sea battles that have taken place in these waters there are many lost ships and wrecks that can be found and looted. The island continent of Iyxia is only partially explored, leaving openings for PCs with explorer urges in their blood. Needless to say, the Holtac Empire would be greatly pleased to have a colony or two in Iyxia, both for trade purposes and future expansion! There is still much to be found in these waters, including traces of the Second Era and artifacts from the past. All that is needed is a daring group of PCs and a ship for them to steer!

19.0 MAGIC ITEMS

Running a *Sea Law* campaign requires a whole new variety of magic items and treasures. Most of the items in *C&T* and *C&T II* will not have the proper atmosphere for a truly nautical campaign. Items used to detect weather changes, increase movement rates of ships, and perhaps detect sunken wrecks and treasure all have to be added to the treasure system to make it fully compatible with *Sea Law*. A number of new items have been created especially for this supplement, and are detailed below.

Like the items found in *C&T* and *C&T II*, the items in *Sea Law* have been grouped according to relative power. Unlike those in *C&T II*, no random generation system has been provided. GMs are encouraged to place the items according to the requirements of their particular worlds. It should also be noted that some items may not be appropriate to a particular world or setting. GMs should also use the items here as guidelines for designing their own unique items. All the magic items included here are intended for a nautical campaign, and may not work in a game where such adventures are rare at best.

GMs and players designing scenarios for the *Sea Law* combat rules may wish to include some of these items, particularly those affecting movement and combat, in their scenarios to add some spice to the basic game. They may also be useful in "what if" scenarios and those involving action against sea monsters and the like.

19.1 TREASURE CLASSIFICATIONS

Only certain types of treasure are described in this section.

Magic Weapons: These are items that have a magical bonus when used against beings and creatures common to a nautical campaign environment. They can also be shipboard weapons with special bonuses or capabilities.

Magic Armor: This is armor which has been enchanted to have special abilities that are of significance in a nautical campaign.

Items with Non-Magic Bonuses: These are items of value in a nautical campaign that have special bonuses assigned to them. For example, a special rutter could be given a +10 bonus for Navigation rolls in a particular area.

Items with Magic Bonuses: These items have been enchanted so as to have a magical bonus. They are treated as the above items, except their bonus is magical and may be applied in any area/region.

Special Items: These are items that do not fit into normal *RM* magical groupings. Examples include magical weapon sights, crystals that predict the weather, rods that can detect or control sea monsters, and the like. Magical sails and oars also fall into this grouping.

Artifacts: These are items from the above groupings which are very powerful and contain multiple powers and abilities. These items always have a history and cultural significance, and should be placed by the GM with great care.

19.2 MAGIC ITEMS GEARED TO SEA LAW

The following items have been created specifically for a *Sea Law* campaign setting. There are many additional possibilities (such as Potions of Water-Breathing and the like) which have been left to the initiative of individual GMs. Only the more powerful and unique items found in such a campaign have been detailed below.

As mentioned above, there are no random placement tables for the items in this section. GMs should take special care when placing these magical items, remembering that each should have a special background and value to the group that created it. This is especially important when placing the Artifacts.

MAGIC WEAPONS (19.2.1)

Harpoon of the Waves: This weapon is +10 versus aquatic creatures, +20 against those that are hit on the Large or Super Large critical tables. Against any form of sea monster it strikes on the Mithril column, and does double damage (Concussion Hits x2). It is a normal-looking harpoon with runes carved on both sides of the shaft. Three times per day it has the ability to return to the thrower from any distance (once thrown). **Potent**

Sword of the Water God: These swords are all +5 (magical bonus) and are made of a sea green-colored metal alloy. Once per day they can shoot a Water Bolt (+25) at any target within range. They have no other abilities. **Potent**

Mangonel of Gar'Ser: Gar'Ser was one of the finest ship captains to ever sail the waves, and part of his success was due to these weapons. Twenty are known to exist, although their locations are unknown. A Mangonel of Gar'Ser is like any normal mangonel, except it has a +15 to hit and attacks as one level higher (e.g., Medium Mangonels attack as Heavy Mangonels). Against sea monsters they strike as Magic weapons. In addition, the nature of these weapons allows them to ignore any OB modifications based on weather conditions. **Most Potent**

Ram of the Titans: Left from one of the many clashes of the giant races, the Ram of the Titans can be mounted on any galley-type ship. The Ram is made of an unknown black alloy which gives it a +10 to all ramming and sheering attacks. **Potent**

MAGIC ARMOR (19.2.2)

Plate of the Seven Seas: This is normal-looking Plate Armor (AT 20), but its powers rapidly become obvious. Plate of the Seven Seas encumbers as AT 2, and allows its wearer to both breathe and see normally while under water! This ability lasts for three hours, and can be used three times per day (for a total of nine hours underwater). Plate of the Seven Seas is considered +10, and protects as normal AT 20. There are only seven suits of this armor known to exist, and only AT 20 has been found. It is normal in appearance except for its dark sea green color. Armor of the Seven Seas is made of an unknown alloy which alchemists have so far been unable to duplicate. **Most Potent**

Leather of the Barracuda: Appearing to be normal AT 6, this enchanted garb allows the wearer to take the form of a large barracuda for up to one hour, three times a day. These hours cannot be used in succession, and when the effect wears off, the wearer returns to human form **at once**, regardless of location. The armor has no other effects or bonuses. **Modest**



ITEMS WITH NON-MAGICAL BONUSSES (19.2.3)

Rutters of Jeffrisal Orrican: One of the greatest navigators of all time, Jeffrisal Orrican left his detailed maps and charts of most of Kulthea's coastline for the enrichment of future generations of seafarers. They have been scattered to the winds now, and are sometimes found in isolated libraries and hordes. A Rutter of Jeffrisal gives a +10 to any Navigation rolls made in the region covered by that Rutter (for example, a Rutter for Palia would allow +10s to rolls made near Palia **only**). Rutters exist for each continent and sea of Kulthea. **Modest**

High Elven Sextant: The High Elves are noted for the quality of their sextants, which allow a +5 to all Navigation rolls made with one. They are rare, and are very expensive. **Modest**

Rutters of the Loremasters: This is a general title for any number of high-quality rutters that allow a +5 to Navigation rolls in the area they cover. **Modest**

Tome of the Seas: These massive tomes (one for each major Sea of Kulthea) were commissioned by a scholar some years ago. They allow the reader to have a +5 to recognize any sea creature/monster native to the sea in question. **Modest**

ITEMS WITH MAGICAL BONUSSES (19.2.4)

Sextant of True Sight: This item allows a +15 to all Navigation rolls, regardless of area. It also allows rolls on overcast days and nights, but with no bonus other than the skill of the user.

Telescope of the Eagles: These telescopes allow sighting checks to be made at ranges three times greater than those listed in Section 10.0. In addition, they allow spotting at night with the same ranges and chances of success as during the day. Any character attempting to identify a ship or monster has a +30 to his roll, due to the magical nature of the Telescope. **Potent**

Rutter of the Waves: This special tome is composed of but three sheets of a thin, vaguely translucent metal. When held and concentrated on for one Tactical Turn, the Rutter will display an accurate chart of the area within two hundred miles of the bearer. This only works while the bearer is at sea. If desired, the Rutter can also show where the ship/bearer has been, displaying the chart track in red. Maps and charts displayed by the Rutter are always accurate, and show reefs and other navigational hazards. Such maps do not, however, show any detail of cities or other inland creations. **Potent**

Everpure Casks: Created long ago for a famous explorer/captain, the Casks appear to be normal oak barrels until food or water is placed inside them. Anything contained in Everpure Cask is immune to spoilage. There are said to be some one hundred of these Casks scattered throughout Kulthea, many in shipwrecks. It is worth noting that the Casks are immune to rot themselves, and can only be broken by magical weapons. **Modest**

SPECIAL ITEMS (19.2.5)

Crystal of the Skies: A small, red object shaped like a ping-pong ball, the Crystal of the Skies allows its bearer to predict with unflinching accuracy the weather for the next 48 hours. It is not known how many of these Crystals exist, or who made them. **Potent**

Sails of Good Winds: These Sails appear to be of normal make, except for their odd blue color. When bent on a ship's yards, the Sails come to life and provide an increase of 1 in all movement profiles. The Full Sail Bonus of ships that have one is increased to 4, with a failure chance of but 3%. In addition, the Sails cannot be damaged by storms or other natural events. **Potent**

Oars of Power: Existing in one set (enough to equip a trireme), the Oars allow oarsmen on galleys to increase their speed by 1 in all aspects (including Battle Speed). The Oars also allow oarsmen to row longer than usual (decrease endurance). **Potent**

Rod of Beasts: This plain oak staff allows the bearer to detect all sea monsters within one mile of the ship in question. It can identify these creatures, but can not communicate with them or otherwise influence their actions. A variant is thought to exist that is capable of controlling the actions of one monster for a number of Tactical Turns equal to the level of the bearer, but these are quite rare. **Potent**

ARTIFACTS (19.2.6)

Trident of the Mighty Sea: Created ages ago, the Trident of the Waves is one the most potent battle artifacts in the world. Forged through the will of the Goddess of the Waves, the Trident exists to protect the seas from those who are evil. The Trident is made of pure Mithril, and has numerous runes carved along its shaft and three-pronged head. It is a +50 Magic Weapon—Mithril criticals against normal creatures, and Holy criticals against evil sea monsters and those who would harm the oceans (GM's discretion). It does Triple concussion damage against the latter foes, and Double concussion damage normally. It will return to its owner an unlimited number of times per day when thrown and has 75 PP to use on the Weather Ways (Open Channeling), Water Law (Magician Base List), and Nature's Protection (Animist Base List—all animals and plants used **must** be aquatic!) spell lists. It knows these lists to 25th Level.

Ship of the Gods: Perhaps the most potent artifact known to the Mannish races, the Ship of the Gods is older than even the most ancient tome of the Loremasters. Built in the shape of a Palian frigate, the Ship is much stronger than the mightiest Emer galleon. Its current location is unknown, but any of the ocean powers of Kulthea would launch a war to secure the Ship should it reappear.

The Ship uses the Movement and Combat profiles of the Palian Frigate, with some major exceptions. The AT is S2, all speeds are increased by 1 in all wind facings, and the Full Sail bonus is +4, with a failure chance of but 2%. In combat, the Ship has an OB of +20,

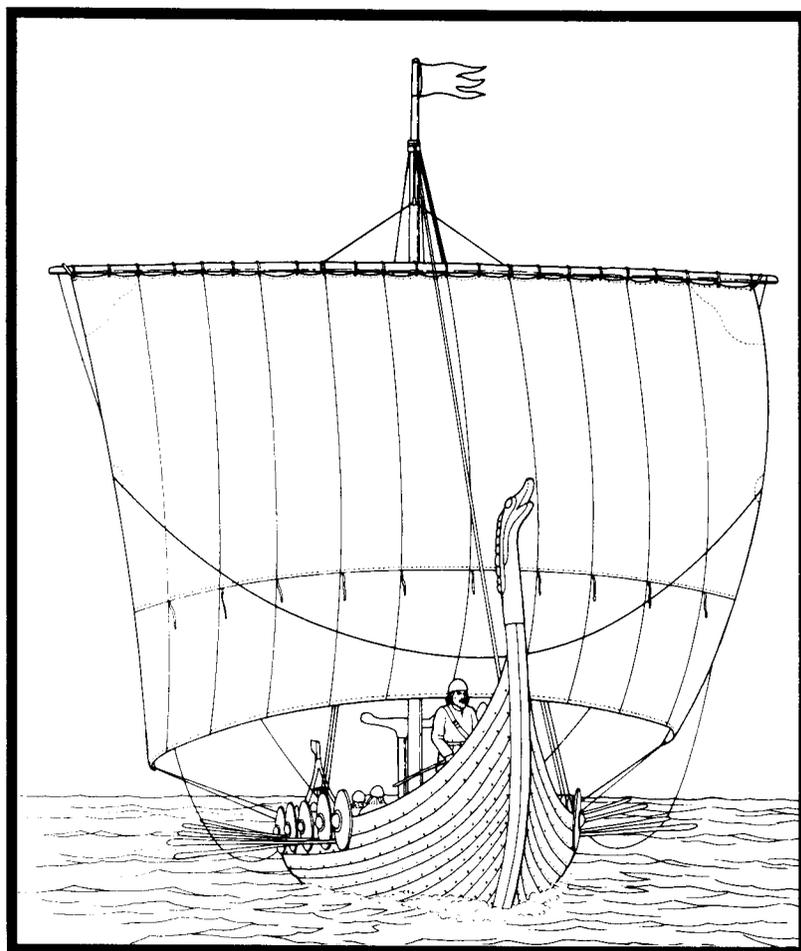
a DB of -10, and the following weapons: 16 HvB, 40 HvM (which attack as Culverins on the Attack Tables), and 10 Fire Ball Launchers. These last weapons can fire one Fireball (as the Magician spell) per launcher per combat turn, with no limit on the number of times per day they can be used. All weapons are mounted in broadsides. The Ship is immune to all effects of Teredo worms and the like, so it never needs to be careened. In addition, it can produce enough food and water to feed its entire crew once per day, so that rations need never be carried.

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PART VIII

TABLES & FORMS

WEAPON ATTACK STAT CHART

Weapon	Allowed Target Choices	Range Mod based on # of Hexes												Max Result		
		1	2 *	3	4	5	6 **	7	8-9	10-12 ***	13-16	17-22	23-30		31-45	
Small Arms Fire ‡																
1 Marine Point	C	-100	na	na	na	na	na	na	30							
2 Marine Points	C	-70	na	na	na	na	na	na	60							
Ballista																
Light (LtBa)	C	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	na	30
Medium (MdBa)	H,R,C	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Heavy (HvBa)	H,R,C	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	na	90
Mangonel																
Light (LtMa)	H,R,C	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Medium (MdMa)	H,R,C	-30	-50	-70	-100	-200	-300	na	na	na	na	na	na	na	na	90
Heavy (HvMa)	H,R,C	-20	-30	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	105
Catapult																
Light (LtCa)	I	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Medium (MdCa)	I	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	na	90
Heavy (HvCa)	I	na	0	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	105
Trebuchet																
Light (LtTr)	I	na	-50	-100	-300	na	na	na	na	na	na	na	na	na	na	120
Medium (MdTr)	I	na	-35	-75	-100	-300	na	na	na	na	na	na	na	na	na	135
Heavy (HvTr)	I	na	-25	-50	-100	-200	-300	na	na	na	na	na	na	na	na	150
Greek Fire Tube §	C	-50	-75	na	na	na	na	na	na	60						
Swivel Gun (SG)	C,R	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	na	30
Saker (Sa)	C,R,H	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Demi-Culverin (dCu)	C,R,H	-20	-30	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	105
Culverin (Cu)	C,R,H	0	-10	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	na	na	120
Demi-Cannon (dCa)	C,R,H	+10	+0	-10	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	na	135
Cannon (Ca)	C,R,H	+20	+10	+0	-20	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	150

* – Max range for Crew/Weapon target choice & for grape ammo. ** – Max range for chain ammo. *** – Max range for Hull target choice.

§ — Use the Grape vs. Crew/Weapons Ship Attack Table T-1.5, but all criticals are fire criticals.

‡ — Use Attack Table T-1.5, but ignore all hull and rigging damage and treat all criticals as an additional “†” crew damage.

TARGETING & AMMO CHART

Indirect Attack (I) — Non-indirect fire weapons that fire from a higher elevation (≈100') must use the Indirect Attack Table.

Rigging Attack (R) — No restrictions.

Hull Attack (H) — 1-12 hex range only

Crew/Wp Attack (C) — 1-2 hex range only

Grape Ammo — Maximum range is 2 hexes. Grape ammo is an ammo load that consists of numerous small projectile designed to damage crew and weapons (e.g., small stones, bundle of arrows, cannister of bullets).

Ball Ammo — No special range limit. Ball ammo is any single projectile (e.g., boulder, bolt, cannonball).

Chain Ammo — Maximum range is 6 hexes. Chain ammo is an ammo load that consists of small chunks of material linked together; it is designed to damage sails (e.g., links of chain).

Ram Attack (R) — Special; 1 hex range.

Sheer Attack (S) — Special; 1 hex range. If a target has no oarsmen/oars, ignore the damage.

T-1.1 • BALL VS. HULL SHIP ATTACK TABLE (Crew•Hull•Rigging•SevType)

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-09	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0x-09
10-12	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	10-12
13-15	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	†•0•0	13-15
16-18	0•0•0	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	0•†•0	16-18
19-21	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•†•0	19-21
22-24	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	0•†•0	0•†•0	22-24
25-27	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	25-27
28-30	†•0•0	†•0•0	†•0•0	†•†•0	†•†•0	†•1•0	†•1•0•TH	28-30
-----Max for Swivel Guns & Lt. Ballistae-----								
31-33	0•†•0	0•†•0	0•†•0	0•†•0	0•†•0	0•1•0•TH	0•1•0•AH	31-33
34-36	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•†•0•TW	1•1•0•TW	34-36
37-39	0•†•0	0•†•0	0•†•0	0•1•0	0•1•0•TH	0•1•0•AH	0•1•0•AH	37-39
40-42	0•0•1•TR	40-42						
43-45	0•†•0	0•†•0	0•1•0	0•1•0•TH	0•1•0•AH	0•1•0•AH	0•1•0•AH	43-45
46-48	0•†•0	0•1•0	0•1•0•TH	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•2•0•AH	46-48
49-51	†•0•0	†•0•0	†•0•0	†•0•0•TW	†•†•0•TW	1•1•0•AW	1•2•0•AW	49-51
52-54	0•†•0	0•1•0•TH	0•1•0•AH	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•3•0•AH	52-54
55-57	0•0•1•AR	55-57						
58-60	†•1•0•TH	†•1•0•AH	†•1•0•AH	†•2•0•AH	†•3•0•AH	†•3•0•AH	†•4•0•BH	58-60
-----Max for Sakers & Md. Ballistae & Lt. Mangonels-----								
61-63	0•1•0•AH	0•1•0•AH	0•1•0•AH	0•3•0•AH	0•3•0•AH	0•4•0•BH	0•4•0•BH	61-63
64-66	†•0•0	†•0•0•TW	†•0•0•TW	†•†•0•AW	1•1•0•AW	1•2•0•BW	1•3•0•BW	64-66
67-69	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•3•0•AH	0•3•0•AH	0•4•0•BH	†•5•0•BH	67-69
70-72	0•0•2•AR	70-72						
73-75	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•4•0•AH	0•4•0•BH	0•4•0•BH	†•5•0•BH	73-75
76-78	0•1•0•AH	0•2•0•AH	0•2•0•BH	0•4•0•AH	0•4•0•BH	†•5•0•BH	†•6•0•BH	76-78
79-81	†•†•0•TW	†•†•0•AW	†•†•0•AW	1•1•0•BW	1•2•0•BW	1•3•0•CW	1•4•0•CW	79-81
82-84	0•1•0•AH	0•2•0•AH	0•2•0•BH	0•4•0•BH	0•4•0•BH	†•5•0•BH	†•6•0•BH	82-84
85-87	0•0•3•BR	85-87						
88-90	†•1•0•AH	†•2•0•AH	†•2•0•BH	†•4•0•BH	†•5•0•BH	†•6•0•CH	†•7•0•CH	88-90
-----Max for Hv. Ballistae & Md. Mangonels-----								
91-93	0•1•0•AH	0•2•0•AH	0•2•0•BW	0•4•0•BH	0•5•0•BH	†•6•0•CH	†•7•0•CH	91-93
94-96	†•0•0•AW	†•†•0•BW	1•1•0•BW	1•2•0•CW	1•3•0•CW	2•4•0•DW	2•5•0•DW	94-96
97-99	0•1•0•AH	0•2•0•AH	0•2•0•BH	0•5•0•BH	†•6•0•BH	†•7•0•CH	†•8•0•CH	97-99
100-102	0•0•4•CR	100-102						
103-105	†•1•0•AH	†•2•0•BH	†•3•0•CH	†•5•0•CH	†•6•0•CH	†•7•0•DH	†•9•0•DH	103-105
-----Max for Demi-Culverin & Hv. Mangonels-----								
106-108	0•1•0•BH	0•2•0•BH	†•3•0•CH	†•5•0•CH	†•6•0•CH	†•7•0•DH	1•9•0•DH	106-108
109-111	1•†•0•BW	1•1•0•CW	1•2•0•CW	1•3•0•DW	1•4•0•DW	2•5•0•EW	2•6•0•EW	109-111
112-114	0•1•0•CH	†•2•0•CH	†•3•0•CH	†•6•0•CH	†•7•0•DH	1•9•0•EH	1•11•0•EH	112-114
115-117	†•0•6•DR	115-117						
118-120	†•2•0•CH	†•3•0•CH	†•4•0•DH	†•6•0•DH	†•7•0•DH	†•9•0•EH	1•11•0•EH	118-120
-----Max for Culverin-----								
121-123	†•2•0•CH	†•3•0•CH	†•5•0•DH	1•6•0•DH	1•8•0•DH	†•10•0•EH	1•12•0•EH	121-123
124-126	1•1•0•CW	1•2•0•DW	1•3•0•DW	2•4•0•EW	2•5•0•EW	2•6•0•FW	3•7•0•FW	124-126
127-129	†•3•0•DH	†•4•0•DH	†•7•0•EH	†•8•0•EH	†•10•0•EH	1•12•0•EH	1•14•0•FH	127-129
130-132	†•0•8•ER	130-132						
133-135	†•3•0•DH	†•5•0•DH	†•9•0•EH	†•10•0•EH	1•12•0•EH	1•14•0•FH	1•16•0•FH	133-135
-----Max for Demi-Cannon-----								
136-138	†•4•0•EH	†•6•0•EH	1•10•0•EH	1•12•0•EH	1•14•0•FH	1•16•0•FH	2•20•0•GH	136-138
139-141	2•3•0•DW	2•4•0•EW	2•5•0•EW	2•6•0•EW	3•7•0•EW	3•9•0•EW	3•10•0•EW	139-141
142-144	†•6•0•EH	1•8•0•EH	1•12•0•EH	1•18•0•FH	1•20•0•FH	2•24•0•GH	2•28•0•GH	142-144
145-147	1•0•10•FR	145-147						
148-150	1•8•0•EH	1•12•0•EH	1•16•0•EH	1•26•0•FH	2•28•0•FH	2•32•0•GH	2•36•0•GH	148-150
-----Max for Cannon-----								

† = slash in one box (i.e., half a point of damage).

F = 'E' Critical + 'A' Critical

G = 'E' Critical + 'B' Critical

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119)

T-1.2 • BALL VS. RIGGING SHIP ATTACK TABLE (Crew•Hull•Rigging•SevType)

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-09	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0x-09
10-12	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	10-12
13-15	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	†•0•0	13-15
16-18	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	16-18
19-21	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	19-21
22-24	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	22-24
25-27	†•0•0	†•0•0	†•0•0	0•†•0	0•†•0	0•1•0	0•1•0	25-27
28-30	†•0•1•TR	28-30						
-----Max for Swivel Guns & Lt. Ballistae-----								
31-33	0•0•1•TR	31-33						
34-36	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†•TW	1•0•†•TW	34-36
37-39	0•0•1•AR	37-39						
40-42	0•†•0	0•†•0	0•1•0	0•1•0	0•1•0•TH	0•2•0•TH	0•2•0•TH	40-42
43-45	0•0•1•AR	43-45						
46-48	0•0•2•AR	46-48						
49-51	†•0•1	†•0•1	†•0•1	†•0•1•TW	†•0•1•TW	1•0•1•AW	1•0•1•AW	49-51
52-54	0•0•2•AR	52-54						
55-57	†•†•0	†•†•0	†•1•0	†•1•0•TH	†•1•0•AH	†•2•0•AH	†•2•0•BH	55-57
58-60	†•0•3•AR	58-60						
-----Max for Sakers & Md. Ballistae & Lt. Mangonels-----								
61-63	0•0•3•AR	61-63						
64-66	†•0•2	†•0•2•TW	†•0•2•TW	†•0•2•AW	1•0•2•AW	1•0•2•BW	1•0•2•BW	64-66
67-69	0•0•4•BR	67-69						
70-72	†•1•0	†•1•0•TH	†•1•0•TH	†•1•0•AH	†•2•0•BH	†•2•0•BH	†•2•0•BH	70-72
73-75	0•0•4•BR	73-75						
76-78	0•0•4•BR	76-78						
79-81	†•0•0•TW	†•0•3•AW	†•0•3•AW	1•0•3•BW	1•0•3•BW	1•0•3•CW	1•0•3•CW	79-81
82-84	0•0•4•BR	82-84						
85-87	†•1•0•TH	†•1•0•AH	†•2•0•AH	†•2•0•BH	†•3•0•BH	†•3•0•CH	†•4•0•CH	85-87
88-90	0•0•5•BR	88-90						
-----Max for Hv. Ballistae & Md. Mangonels-----								
91-93	0•0•5•BR	91-93						
94-96	†•0•3•AW	†•0•3•BW	1•0•3•BW	1•0•3•CW	1•0•3•CW	2•0•3•DW	3•0•3•DW	94-96
97-99	0•0•5•BR	97-99						
100-102	†•1•0•AH	†•2•0•BH	†•2•0•BH	†•3•0•CH	†•3•0•CH	†•4•0•DH	†•5•0•DH	100-102
103-105	0•0•6•CR	103-105						
-----Max for Demi-Culverin & Hv. Mangonels-----								
106-108	0•0•6•CR	106-108						
109-111	1•0•4•BW	1•0•4•CW	1•0•4•CW	1•0•4•DW	1•0•4•DW	2•0•4•EW	2•0•4•EW	109-111
112-114	†•0•6•DR	112-114						
115-117	0•1•0•BH	†•2•0•CH	†•2•0•CH	†•3•0•DH	1•4•0•DH	1•5•0•EH	2•6•0•EH	115-117
118-120	†•0•7•DR	118-120						
-----Max for Culverin-----								
121-123	†•0•8•DR	121-123						
124-126	1•0•6•CW	1•0•6•DW	1•0•6•DW	2•0•6•EW	2•0•6•EW	2•0•6•EW	3•0•6•EW	124-126
127-129	†•0•10•ER	127-129						
130-132	†•2•0•DH	†•3•0•DH	1•4•0•EH	1•5•0•EH	1•6•0•EH	2•7•0•FH	2•8•0•FH	130-132
133-135	†•0•12•ER	133-135						
-----Max for Demi-Cannon-----								
136-138	†•0•14•ER	136-138						
139-141	2•0•10•DW	2•0•10•EW	2•0•10•EW	2•0•10•EW	3•0•10•EW	3•0•10•EW	3•0•10•EW	139-141
142-144	1•0•20•FR	142-144						
145-147	1•4•0•EH	1•6•0•EH	1•8•0•EH	1•13•0•FH	2•14•0•FH	2•16•0•GH	2•18•0•GH	145-147
148-150	1•0•26•GR	148-150						
-----Max for Cannon-----								

† = slash in one box (i.e., half a point of damage).

F = 'E' Critical + 'A' Critical

G = 'E' Critical + 'B' Critical

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119)

T-1.3 • BALL VS. CREW/WEAPONS SHIP ATTACK TABLE (Crew•Hull•Rigging•SevType)

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-09	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0x-09
10-12	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	10-12
13-15	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	†•0•0	13-15
16-18	0•0•0	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	0•†•0	16-18
19-21	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•†•0•TW	19-21
22-24	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	22-24
25-27	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	0•†•0	0•†•0•TH	25-27
28-30	†•0•0	†•0•0	†•0•0	†•†•0	†•†•0	†•†•0•TW	1•†•0•AW	28-30
-----Max for Swivel Guns & Lt. Ballistae-----								
31-33	0•†•0	0•†•0	0•†•0	0•†•0	0•†•0	0•1•0•TH	0•1•0•AH	31-33
34-36	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0•TW	†•†•0•AW	1•1•0•AW	34-36
37-39	0•0•1	0•0•1	0•0•1	0•0•1	0•0•1	0•0•1	0•0•1	37-39
40-42	0•†•0	0•†•0	0•†•0	0•1•0•TH	0•1•0•TH	0•1•0•AH	0•1•0•AH	40-42
43-45	†•0•0	†•0•0	†•0•0	†•†•0•TW	†•†•0•AW	1•1•0•AW	1•1•0•AW	43-45
46-48	0•†•0	0•1•0	0•1•0•TH	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•2•0•AH	46-48
49-51	†•0•0•TW	†•0•0•TW	†•0•0•TW	†•†•0•AW	†•†•0•AW	1•1•0•AW	1•2•0•AW	49-51
52-54	0•0•1•TR	52-54						
55-57	0•†•0•TH	0•1•0•TH	0•1•0•AH	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•3•0•AH	55-57
58-60	†•†•0•AW	†•†•0•AW	†•†•0•AW	†•†•0•AW	1•1•0•AW	1•2•0•AW	1•3•0•BW	58-60
-----Max for Sakers & Md. Ballistae & Lt. Mangonels-----								
61-63	0•1•0•AH	0•1•0•AH	0•1•0•AH	0•3•0•AH	0•3•0•AH	0•4•0•BH	†•4•0•BH	61-63
64-66	†•0•0•AW	†•0•0•AW	†•0•0•AW	†•†•0•AW	1•1•0•AW	1•2•0•BW	1•3•0•BW	64-66
67-69	0•0•2•AR	67-69						
70-72	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•3•0•AH	0•4•0•AH	†•4•0•BH	†•5•0•BH	70-72
73-75	†•†•0•AW	†•†•0•AW	†•†•0•AW	1•1•0•AW	1•2•0•BW	1•2•0•BW	1•3•0•BW	73-75
76-78	0•1•0•AH	0•2•0•AH	0•2•0•BH	0•4•0•AH	†•4•0•BH	†•5•0•BH	†•6•0•BH	76-78
79-81	†•†•0	†•†•0•AW	†•†•0•AW	1•1•0•BW	1•2•0•BW	1•3•0•CW	1•4•0•CW	79-81
82-84	0•0•3•BR	82-84						
85-87	0•1•0•AH	0•2•0•AH	0•2•0•BH	0•4•0•BH	†•4•0•BH	†•5•0•BH	†•6•0•BH	85-87
88-90	†•†•0•AW	†•1•0•AW	†•1•0•BW	1•2•0•BW	1•3•0•BW	1•3•0•CW	1•4•0•CW	88-90
-----Max for Hv. Ballistae & Md. Mangonels-----								
91-93	0•1•0•AH	0•2•0•AH	0•2•0•BW	†•4•0•BH	†•5•0•BH	†•6•0•CH	†•7•0•CH	91-93
94-96	†•0•0•AW	†•†•0•BW	1•1•0•BW	1•2•0•CW	1•3•0•CW	2•4•0•DW	2•5•0•DW	94-96
97-99	†•0•4•CR	97-99						
100-102	0•1•0•AH	0•2•0•AH	†•2•0•BH	†•5•0•BH	†•6•0•BH	†•7•0•CH	†•8•0•CH	100-102
103-105	†•†•0•AW	†•1•0•BW	†•2•0•CW	1•3•0•CW	1•3•0•CW	2•4•0•DW	2•5•0•DW	103-105
-----Max for Demi-Culverin & Hv. Mangonels-----								
106-108	0•1•0•BH	†•2•0•BH	†•3•0•CH	†•5•0•CH	†•6•0•CH	†•7•0•DH	1•9•0•DH	106-108
109-111	1•†•0•BW	1•1•0•CW	1•2•0•CW	1•3•0•DW	1•4•0•DW	2•5•0•EW	2•6•0•EW	109-111
112-114	†•0•6•DR	112-114						
115-117	0•1•0•CH	†•2•0•CH	†•3•0•CH	†•6•0•DH	†•7•0•DH	1•9•0•EH	1•11•0•EH	115-117
118-120	1•1•0•CW	1•2•0•CW	1•2•0•DW	2•3•0•DW	2•4•0•DW	2•5•0•EW	2•6•0•EW	118-120
-----Max for Culverin-----								
121-123	†•2•0•CH	†•3•0•CH	†•5•0•DH	1•6•0•DH	1•8•0•DH	1•10•0•EH	1•12•0•EH	121-123
124-126	1•1•0•CW	1•2•0•DW	1•3•0•DW	2•4•0•EW	2•5•0•EW	2•6•0•FW	3•7•0•FW	124-126
127-129	†•0•8•ER	127-129						
130-132	†•3•0•DH	†•4•0•DH	†•7•0•EH	1•8•0•EH	1•10•0•EH	1•12•0•EH	1•14•0•FH	130-132
133-135	1•2•0•DW	1•3•0•DW	1•4•0•DW	2•5•0•EW	2•6•0•EW	3•7•0•FW	3•8•0•FW	133-135
-----Max for Demi-Cannon-----								
136-138	1•4•0•EH	1•6•0•EH	1•10•0•EH	1•12•0•EH	2•14•0•FH	2•16•0•FH	2•20•0•GH	136-138
139-141	2•3•0•DW	2•4•0•EW	2•5•0•EW	2•6•0•EW	3•7•0•EW	3•9•0•EW	3•10•0•EW	139-141
142-144	1•0•10•FR	142-144						
145-147	1•6•0•EH	1•8•0•EH	1•12•0•EH	1•18•0•FH	1•20•0•FH	1•24•0•GH	2•28•0•GH	145-147
148-150	2•4•0•EW	2•6•0•EW	2•8•0•EW	3•12•0•EW	3•14•0•EW	4•16•0•EW	4•18•0•EW	148-150
-----Max for Cannon-----								

† = slash in one box (i.e., half a point of damage).

F = 'E' Critical + 'A' Critical

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119)

T-1.4 • CHAIN VS. RIGGING SHIP ATTACK TABLE (Crew•Hull•Rigging•SevType)

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-09	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0x-09
10-12	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	10-12
13-15	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	†•0•0	13-15
16-18	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	0•0•†	16-18
19-21	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	19-21
22-24	0•0•1	0•0•1	0•0•1	0•0•1	0•0•1	0•0•1	0•0•1	22-24
25-27	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	25-27
28-30	†•0•2•TR	28-30						
Max for Swivel Guns & Lt. Ballistae								
31-33	0•0•2•TR	31-33						
34-36	†•0•1	†•0•1	†•0•1	†•0•1	†•0•1	†•0•1•TW	†•0•1•TW	34-36
37-39	0•0•3•AR	37-39						
40-42	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•1•0	0•1•0•TH	40-42
43-45	0•0•4•AR	43-45						
46-48	0•0•4•AR	46-48						
49-51	†•0•3	†•0•3	†•0•3	†•0•3•TW	†•0•3•TW	†•0•3•AW	†•0•3•AW	49-51
52-54	0•0•5•AR	52-54						
55-57	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0•TH	0•1•0•TH	0•1•0•AH	55-57
58-60	†•0•6•AR	58-60						
Max for Sakers & Md. Ballistae & Lt. Mangonels								
61-63	0•0•6•AR	61-63						
64-66	†•0•0	†•0•0•TW	†•0•0•TW	†•0•5•AW	†•0•5•AW	1•0•5•AW	1•0•5•AW	64-66
67-69	0•0•7•BR	67-69						
70-72	0•0•0	0•0•0	0•†•0•TH	0•†•0•TH	0•1•0•AH	0•1•0•AH	0•1•0•AH	70-72
73-75	0•0•8•BR	73-75						
76-78	0•0•8•BR	76-78						
79-81	†•0•0•TW	†•0•6•AW	†•0•6•AW	†•0•6•AW	1•0•6•AW	1•0•6•BW	1•0•6•BW	79-81
82-84	0•0•9•BR	82-84						
85-87	0•0•0	0•0•0•TH	0•1•0•AH	0•1•0•AH	0•2•0•AH	0•2•0•AH	0•2•0•AH	85-87
88-90	0•0•10•BR	88-90						
Max for Hv. Ballistae & Md. Mangonels								
91-93	0•0•11•BR	91-93						
94-96	†•0•8•AW	†•0•8•AW	†•0•8•AW	1•0•8•BW	1•0•8•BW	2•0•8•BW	2•0•8•BW	94-96
97-99	0•0•12•BR	97-99						
100-102	0•†•0•TH	0•1•0•AH	0•1•0•AH	†•2•0•AH	†•2•0•AH	†•2•0•BH	†•3•0•BH	100-102
103-105	0•0•13•CR	103-105						
Max for Demi-Culverin & Hv. Mangonels								
106-108	0•0•14•CR	106-108						
109-111	†•0•10•AW	†•0•10•BW	1•0•10•BW	1•0•10•BW	1•0•10•BW	2•0•10•CW	2•0•10•CW	109-111
112-114	†•0•15•DR	112-114						
115-117	0•†•0•AH	0•1•0•AH	†•1•0•BH	†•2•0•BH	†•2•0•BH	†•3•0•BH	1•3•0•BH	115-117
118-120	†•0•16•DR	118-120						
Max for Culverin								
121-123	†•0•18•DR	121-123						
124-126	1•0•15•BW	1•0•15•BW	1•0•15•BW	1•0•15•CW	1•0•15•CW	2•0•15•CW	2•0•15•CW	124-126
127-129	†•0•20•ER	127-129						
130-132	†•1•0•BH	†•2•0•BH	†•2•0•BH	1•3•0•BH	1•3•0•BH	1•4•0•DH	1•4•0•DH	130-132
133-135	†•0•25•ER	133-135						
Max for Demi-Cannon								
136-138	†•0•30•ER	136-138						
139-141	1•0•20•BW	1•0•20•CW	1•0•20•CW	2•0•20•CW	2•0•20•CW	2•0•20•DW	2•0•20•DW	139-141
142-144	1•0•40•FR	142-144						
145-147	†•2•0•BH	†•3•0•BH	†•4•0•BH	†•6•0•CH	1•7•0•CH	1•8•0•CH	1•9•0•CH	145-147
148-150	1•0•45•GR	148-150						
Max for Cannon								

† = slash in one box (i.e., half a point of damage).

F = 'E' Critical + 'A' Critical

G = 'E' Critical + 'B' Critical

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119)

T-1.5 • GRAPE VS. CREW/WEAPONS SHIP ATTACK TABLE (Crew•Hull•Rigging•SevTyp)

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-09	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0x-09
10-12	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	10-12
13-15	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	†•0•0	†•0•0	13-15
16-18	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0	†•†•0•TW	16-18
19-21	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†•TW	†•0•†•TW	19-21
22-24	†•0•0	†•0•0	†•0•0	†•0•0	†•0•0•TW	†•0•0•TW	†•†•0•AW	22-24
25-27	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•†•0	25-27
28-30	†•0•0	†•0•0	†•0•0	†•†•0•TW	†•†•0•TW	†•†•0•AW	1•†•0•AW	28-30
-----Max for Swivel Guns & Lt. Ballistae & Small Arms Fire (1 pt)-----								
31-33	†•0•0	†•0•0	†•0•0	†•0•0•TW	†•0•0•AW	†•†•0•AW	1•1•0•AW	31-33
34-36	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	†•0•†	34-36
37-39	†•0•0	†•0•0	†•0•0•TW	†•0•0•AW	†•0•0•AW	†•†•0•AW	1•1•0•AW	37-39
40-42	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	40-42
43-45	†•0•0	†•0•0•TW	†•0•0•TW	†•†•0•AW	†•†•0•AW	1•1•0•AW	1•1•0•BW	43-45
46-48	†•0•0•TW	†•0•0•TW	†•0•0•AW	†•†•0•AW	†•†•0•AW	1•1•0•AW	1•2•0•BW	46-48
49-51	†•0•1	†•0•1	†•0•1	†•0•1	†•0•1	†•0•1	†•0•1	49-51
52-54	†•0•0•TW	†•0•0•AW	†•0•0•AW	†•†•0•AW	†•†•0•AW	1•1•0•BW	1•2•0•BW	52-54
55-57	0•0•0	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	0•1•0	55-57
58-60	1•0•0•AW	1•0•0•AW	1•0•0•AW	1•0•0•AW	2•†•0•BW	2•1•0•BW	2•1•0•CW	58-60
-----Max for Sakers & Md. Ballistae & Lt. Mangonels & Greek Fire & Sm. Arms Fire (2 pt)-----								
61-63	1•0•0•AW	1•0•0•AW	1•0•0•AW	1•0•0•AW	2•†•0•BW	2•1•0•BW	2•1•0•CW	61-63
64-66	†•0•1•TR	64-66						
67-69	1•0•0•AW	1•0•0•AW	1•0•0•AW	1•0•0•AW	2•†•0•BW	2•1•0•BW	2•1•0•CW	67-69
70-72	0•0•0	0•0•0	0•0•0	0•†•0	0•†•0	†•1•0	†•2•0•TH	70-72
73-75	1•0•0•AW	1•0•0•AW	1•0•0•AW	2•0•0•AW	2•†•0•BW	2•1•0•BW	3•1•0•CW	73-75
76-78	1•0•0	1•0•0•AW	1•0•0•AW	2•†•0•BW	2•1•0•BW	2•1•0•CW	3•2•0•CW	76-78
79-81	1•0•2•AR	79-81						
82-84	1•0•0	1•0•0•AW	2•0•0•AW	2•†•0•BW	2•1•0•CW	3•1•0•CW	3•2•0•CW	82-84
85-87	0•0•0	0•0•0	0•†•0	0•†•0	†•1•0	†•2•0•TH	†•2•0•AH	85-87
88-90	1•0•0•AW	1•0•0•AW	2•†•0•BW	2•1•0•BW	2•1•0•CW	3•1•0•CW	3•2•0•DW	88-90
-----Max for Hv. Ballistae & Md. Mangonels & Large Grapples §-----								
91-93	1•0•0•AW	1•†•0•BW	2•†•0•BW	2•1•0•BW	2•1•0•CW	3•1•0•CW	3•2•0•DW	91-93
94-96	1•0•2•BR	94-96						
97-99	1•0•0•AW	1•†•0•BW	2•1•0•BW	2•1•0•CW	3•1•0•CW	3•1•0•DW	4•2•0•DW	97-99
100-102	0•0•0	0•†•0	†•†•0	†•1•0	†•2•0•TH	†•2•0•AH	†•3•0•AH	100-102
103-105	1•0•0•AW	1•†•0•BW	2•1•0•CW	2•1•0•CW	3•1•0•DW	3•1•0•DW	4•2•0•EW	103-105
-----Max for Demi-Culverin & Hv. Mangonels-----								
106-108	1•†•0•BW	1•†•0•CW	2•1•0•CW	2•1•0•CW	3•1•0•DW	3•1•0•DW	4•2•0•EW	106-108
109-111	1•0•3•BR	109-111						
112-114	1•†•0•BW	1•†•0•CW	2•1•0•CW	3•1•0•DW	3•1•0•DW	4•2•0•EW	5•2•0•EW	112-114
115-117	0•1•0	†•1•0	†•1•0	†•2•0•TH	†•2•0•AH	1•3•0•AH	1•4•0•BH	115-117
118-120	1•†•0•CW	1•†•0•CW	2•1•0•DW	3•1•0•DW	3•2•0•EW	4•2•0•EW	5•2•0•EW	118-120
-----Max for Culverin & Huge Grapples §-----								
121-123	1•1•0•CW	1•2•0•CW	2•3•0•DW	3•4•0•DW	3•5•0•EW	4•6•0•EW	5•7•0•FW	121-123
124-126	1•0•4•CR	124-126						
127-129	1•1•0•CW	1•2•0•DW	2•3•0•DW	3•4•0•EW	4•5•0•EW	5•6•0•FW	6•7•0•FW	127-129
130-132	1•1•0	1•2•0•TH	1•3•0•TH	2•3•0•AH	2•4•0•BH	2•4•0•BH	2•5•0•BH	130-132
133-135	1•†•0•DW	2•1•0•DW	3•2•0•DW	3•2•0•EW	4•2•0•FW	5•3•0•FW	6•3•0•FW	133-135
-----Max for Demi-Cannon-----								
136-138	1•1•0•DW	2•1•0•DW	3•2•0•EW	3•2•0•EW	4•3•0•FW	5•3•0•FW	6•3•0•GW	136-138
139-141	2•0•5•DR	139-141						
142-144	2•1•0•DW	3•2•0•EW	3•2•0•EW	4•3•0•FW	5•4•0•FW	6•4•0•GW	7•4•0•GW	142-144
145-147	1•2•0•TH	1•3•0•AH	1•4•0•AH	2•6•0•BH	2•7•0•BH	3•8•0•CH	3•9•0•CH	145-147
148-150	3•2•0•EW	3•2•0•EW	4•3•0•FW	4•4•0•FW	5•5•0•GW	6•5•0•GW	7•6•0•GW	148-150
-----Max for Cannon-----								

† = slash in one box (i.e., half a point of damage).

F = 'E' Critical + 'A' Critical

G = 'E' Critical + 'B' Critical

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119)

§ — Creature Grapple Attacks — Treat each ship as AT: W3 for the purposes of crew hits and rigging hits. Use the ship's normal AT for hull hits and critical severity. All criticals are resolved on the Creature Grapple Critical Table T-2.6.

T-1.6 • INDIRECT FIRE SHIP ATTACK TABLE (Crew•Hull•Rigging•SevType)

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-45	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0•0•0	0x-45
46-48	0•†•3•THR	0•1•3•THR	0•1•3•THR	0•1•3•THR	0•2•3•THR	0•2•3•THR	0•3•3•THR	46-48
49-51	†•0•†	†•0•†	†•0•†	†•0•†•TW	†•†•†•TW	1•1•†•AW	1•2•†•AW	49-51
52-54	0•1•0•TH	0•2•0•TH	0•3•0•TH	0•4•0•AH	0•5•0•AH	0•6•0•AH	0•8•0•AH	52-54
55-57	0•0•6•AR	55-57						
58-60	†•2•6•AHR	†•3•6•AHR	†•4•6•AHR	†•6•6•AHR	†•7•6•AHR	†•8•6•AHR	†•10•6•AHR	58-60
-----Max for Lt. Catapults (‡-Med. Ballistae, Med. Mangonels, Sakers)-----								
61-63	0•3•†•AH	0•4•†•AH	0•5•†•AH	0•7•†•BH	0•8•†•BH	0•9•†•BH	0•11•†•BH	61-63
64-66	0•1•7•AHR	0•2•7•AHR	0•3•7•AHR	0•5•7•AHR	0•6•7•AHR	0•7•7•AHR	†•9•7•AHR	64-66
67-69	†•0•1	†•0•1•TW	†•0•1•TW	†•†•1•AW	1•1•1•AW	1•2•1•BW	1•3•1•BW	67-69
70-72	0•0•10•BR	70-72						
73-75	0•3•8•BHR	0•4•8•BHR	0•5•8•BHR	0•7•8•BHR	0•8•8•BHR	0•10•8•BHR	†•12•8•BHR	73-75
76-78	0•4•1•BH	0•5•1•BH	0•6•1•BH	0•7•1•CH	0•9•1•CH	0•11•1•CH	0•13•1•CH	76-78
79-81	0•2•9•BHR	0•3•9•BHR	0•4•9•BHR	0•6•9•BHR	0•7•9•BHR	†•9•9•BHR	†•11•9•BHR	79-81
82-84	†•†•1•TW	†•†•1•AW	†•†•1•AW	1•1•1•BW	1•2•1•BW	1•3•1•CW	1•4•1•CW	82-84
85-87	0•1•12•CR	0•2•12•CR	0•3•12•CR	0•4•12•CR	0•5•12•CR	0•6•12•CR	0•7•12•CR	85-87
88-90	†•4•10•CHR	†•5•10•CHR	†•6•10•CHR	†•8•10•CHR	†•10•10•CHR	†•12•10•CHR	†•14•10•CHR	88-90
-----Max for Md. Catapults (‡-Hvy. Ballistae, Hvy. Mangonels, Demi-Culverin)-----								
91-93	0•4•2•CH	0•5•2•CH	0•6•2•CH	0•9•2•DH	0•11•2•DH	0•13•2•DH	0•15•2•DH	91-93
94-96	0•3•15•CHR	0•4•15•CHR	0•5•15•CHR	0•7•15•CHR	†•9•15•CHR	†•11•15•CHR	†•13•15•CHR	94-96
97-99	†•2•2•AW	†•†•2•BW	1•1•2•BW	1•2•2•CW	1•3•2•CW	2•4•2•DW	2•5•2•DW	97-99
100-102	0•2•14•DR	0•3•14•DR	0•4•14•DR	0•5•14•DR	0•6•14•DR	0•7•14•DR	0•8•14•DR	100-102
103-105	†•5•12•DHR	†•6•12•DHR	†•7•12•DHR	†•10•12•DHR	†•12•12•DHR	†•14•12•DHR	†•16•12•DHR	103-105
-----Max for Hvy. Catapults (‡-Culverin)-----								
106-108	†•5•4•DH	†•7•4•DH	†•9•4•DH	†•11•4•EH	†•13•4•EH	†•15•4•EH	†•17•4•EH	106-108
109-111	0•4•13•DHR	†•5•13•DHR	†•6•13•DHR	†•9•13•DHR	†•11•13•DHR	1•13•13•DHR	1•15•13•DHR	109-111
112-114	1•†•3•BW	1•1•3•CW	1•2•3•CW	1•3•3•DW	1•4•3•DW	2•5•3•EW	2•6•3•EW	112-114
115-117	†•3•18•ER	†•4•18•ER	†•5•18•ER	†•6•18•FR	†•7•18•FR	†•8•18•GR	†•9•18•GR	115-117
118-120	†•6•14•HH	†•8•14•HH	†•10•14•HH	†•12•14•HH	†•14•14•HH	†•16•14•HH	1•18•14•HH	118-120
-----Max for Lt. Trebuchets (‡-Demi-Cannon)-----								
121-123	†•7•6•FH	†•9•6•FH	†•11•6•FH	†•13•6•FH	†•16•6•FH	†•18•6•FH	†•21•6•FH	121-123
124-126	†•5•18•GH	†•7•18•GH	†•9•18•GH	†•10•18•GH	†•12•18•GH	†•15•18•GH	†•18•18•GH	124-126
127-129	1•1•4•CW	1•2•4•DW	1•3•4•DW	2•4•4•EW	2•5•4•EW	2•6•4•FW	3•7•4•FW	127-129
130-132	†•4•22•FR	†•5•22•FR	†•6•22•FR	†•7•22•GR	†•8•22•GR	†•9•22•HR	†•10•22•HR	130-132
133-135	†•8•18•IH	†•10•18•IH	†•12•18•IH	†•15•18•IH	†•18•18•IH	1•21•18•IH	1•24•18•IH	133-135
-----Max for Md. Trebuchets (‡-Cannon)-----								
136-138	†•10•8•GH	†•14•8•GH	†•18•8•GH	†•22•8•GH	†•26•8•GH	†•30•8•GH	†•35•8•GH	136-138
139-141	†•8•24•HH	†•10•24•HH	1•12•24•HH	1•18•24•HH	1•22•24•HH	1•25•24•HH	1•30•24•HH	139-141
142-144	2•3•6•EW	2•4•6•EW	2•5•6•EW	2•7•6•EW	3•8•6•EW	3•9•6•EW	3•10•6•EW	142-144
145-147	1•5•30•GR	1•6•30•GR	1•7•30•GR	1•9•30•HR	1•10•30•HR	1•11•30•IR	1•12•30•IR	145-147
148-150	1•12•40•EHR	1•18•40•EHR	1•24•40•EHR	1•30•26•EHR	1•35•40•EHR	1•40•40•EHR	1•45•40•EHR	148-150
-----Max for Hvy. Trebuchets-----								

Note: Some mortars will also use this table, correspond the weight of the mortar projectile to the weight the projectile fired from of one of the siege weapons given in Weapon Stat Chart.

Note: Use 1/2 normal OB for firer.

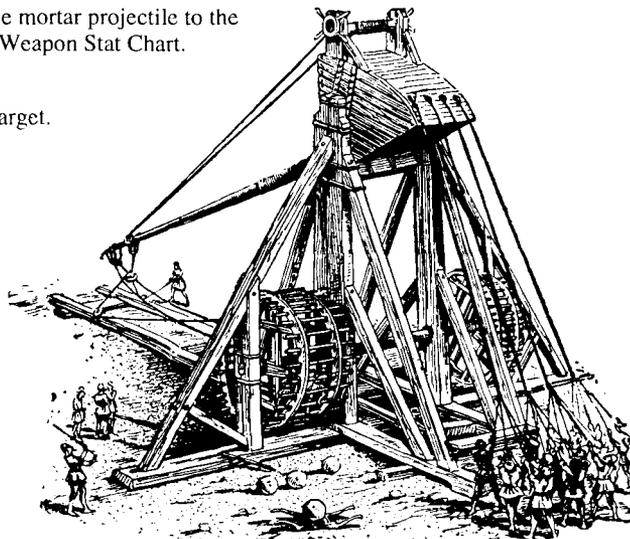
Note: Give a +5 bonus to OB for each consecutive shot at a stationary target.

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119).

‡ = Use this table if these weapons are using "plunging" fire (i.e., fire from a higher elevation, usually 100' or more).

† = slash in one box (i.e., half a point of damage).

THR = TH + TR	AHR = AH + AR
BHR = BH + BR	CHR = CH + CR
DHR = DH + DR	FH = EH + AR
GH = EH + BR	HH = EH + CR
IH = EH + DR	JH = EH + ER
FR = ER + AH	GR = ER + BH
HR = ER + CH	IR = ER + DH
JR = ER + EH	



T-1.7 • RAMMING SHIP ATTACK TABLE

Roll	S3	S2	S1	W4	W3	W2	W1	Roll
01-0x	F	F	F	F	F	F	F	01-0x
0x-26	0	0	0	0	0	0	0	0x-26
27-30	0	0	0	0	0	0	†	27-30
31-33	0	0	0	0	0	†	1	31-33
34-36	0	0	0	0	†	1	2	34-36
37-39	0	0	0	†	1	2	3	37-39
40-42	0	0	†	1	2	3	4	40-42
43-45	0	†	1	2	3	4	6	43-45
46-48	†	1	2	3	4	6	8	46-48
49-51	1	2	3	4	6	8	10T	49-51
52-54	2	3	4	6	8	10T	12T	52-54
55-57	3	4	6	8	10T	12T	14T	55-57
58-60	4	6	8	10T	12T	14T	16T	58-60
-----Max for a Type 1 Attack-----								
61-63	4	6	8	11T	13T	16T	18T	61-63
64-66	5	7	9	12T	14T	17T	20A	64-66
67-69	5	7	9	13T	15T	18A	22A	67-69
70-72	6	8	10	13T	15A	19A	23A	70-72
73-75	6	8	10	14A	16A	20A	24A	73-75
-----Max for a Type 2 Attack-----								
76-78	6	9	11T	14A	16A	21A	25A	76-78
79-81	7	9	11T	15A	17A	22A	26B	79-81
82-84	7	9T	12T	15A	18A	23B	27B	82-84
85-87	7	10T	12T	16A	19B	24B	28B	85-87
88-90	8T	10T	13T	16B	20B	25B	29B	88-90
-----Max for a Type 3 Attack-----								
91-93	8T	10T	13A	17B	21B	26B	30B	91-93
94-96	8T	11T	14A	17B	22B	27B	30C	94-96
97-99	9T	11A	14A	18B	23B	27C	31C	97-99
100-102	9T	12A	15A	19B	23C	28C	31C	100-102
103-105	10A	12A	15A	20C	24C	28C	32C	103-105
-----Max for a Type 4 Attack-----								
106-108	10A	13A	16B	21C	24C	29C	32C	106-108
109-111	11A	13A	17B	22C	25C	30C	33D	109-111
112-114	11A	14B	18B	23C	26C	31D	34D	112-114
115-117	12A	15B	19B	23C	27D	32C	35D	115-117
118-120	12B	16B	20B	24D	28D	33D	36D	118-120
-----Max for a Type 5 Attack-----								
121-123	13B	17B	21C	25D	29D	34D	38D	121-123
124-126	13B	18B	22C	26D	30D	36D	40E	124-126
127-129	14B	19C	23C	27D	32D	38E	42E	127-129
130-132	15B	20C	24C	28D	34E	40E	45E	130-132
133-135	16C	21C	25C	30E	36E	42E	48E	133-135
-----Max for a Type 6 Attack-----								
136-138	17C	24C	29D	36E	42E	49E	56E	136-138
139-141	18C	27C	33D	42E	49E	57E	64F	139-141
142-144	20C	30D	38D	48E	56E	65F	72F	142-144
145-147	22C	33D	43D	54E	63F	73F	80F	145-147
148-150	24D	36D	48D	60F	70F	80F	90F	148-150
-----Max for a Type 7 Attack-----								

† = slash in one box (i.e., half a point of damage). F = 'E' Crit + 'A' Crit **Note:** All Hits are Hull hits and all criticals are Ramming Criticals.
01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119)

TARGET SIZE	Attacker's Bow Type and Attack Size														
	-----Hulls §-----					-----Spurs-----					-----Rams-----				
	Tiny	Sm.	Med.	Large	Huge	Tiny	Sm.	Med.	Large	Huge	Tiny	Sm.	Med.	Large	Huge
Tiny	1/-40	2/-20	4/+5	5/+25	7/+50	2/-20	4/+5	6/+35	7/+60	7/+80	3/-5	5/+20	7/+50	7/+70	7/+90
Small	1‡/-50	2/-30	3/-5	5/+15	6/+40	2/-30	3/-5	5/+20	7/+50	7/+70	3/-15	4/+10	6/+35	7/+60	7/+80
Medium	1‡/-60	1/-40	3/-15	4/+10	6/+30	1/-40	3/-15	4/+10	6/+35	7/+60	2/-25	4/+0	5/+25	7/+50	7/+70
Large	1‡/-70	1‡/-50	2/-25	4/+0	5/+25	1‡/-50	2/-25	4/+0	5/+25	7/+50	1/-40	3/-10	5/+15	6/+40	7/+60
Huge	1‡/-80	1‡/-60	1/-40	3/-10	5/+15	1‡/-60	1/-40	3/-10	5/+15	6/+35	1‡/-50	2/-25	4/+5	6/+30	7/+50
Failure #	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

Note: This chart provides the attack type determining the maximum result **and** the base OB for the attack.

‡ – Hits indicated on the table are halved (round down). § – Attacker takes a ramming attack based on the size of the target minus one.

Note: These figures assume the attacker is using at "Ramming Speed." For "Battle Speed", decrease the attack type by 1 and the OB Mod by 15. For "Cruise Speed", decrease the attack type by 2 and the OB Mod by 30. Ignore resulting attack types of 0 or less.

Note: A creature using a ram attack has a "Hull" bow type, and the attack size is usually "Medium" for a huge creature and "Tiny" for a large creature (tiny, small, and medium sized creatures may not make ramming attacks).

T-1.8 • SHEERING SHIP ATTACK TABLE

Roll	Result	Roll
01-0x	F	01-0x
0x-30	0	0x-30
31-60	T	31-60
-----Max for a Type 1 Attack-----		
61-75	A	61-75
-----Max for a Type 2 Attack-----		
76-90	B	76-90
-----Max for a Type 3 Attack-----		
91-105	C	91-105
-----Max for a Type 4 Attack-----		
106-120	D	106-120
-----Max for a Type 5 Attack-----		
121-135	E	121-135
-----Max for a Type 6 Attack-----		
136-150	F	136-150
-----Max for a Type 7 Attack-----		

F = 'E' Critical + 'A' Critical

01-0x = Fumble, roll on the appropriate Fumble Table (consult the Weapon Stat Chart for the actual fumble range, p. 33 or 119).

Note: All criticals are Sheering Criticals.

Note: Defender makes a sheering attack on the attacker, but the Max Result is one less than normal and the OB Mod is modified by -30.

-----RESULT IS MAX RESULT & OB MOD-----
-----Attacker Size-----

TARGET SIZE	-----Spur-----				
	Tiny	Sm.	Med.	Large	Huge
Tiny	6/+35	7/+50	7/+60	7/+70	7/+80
Small	5/+20	6/+35	7/+50	7/+60	7/+70
Medium	4/+10	5/+20	6/+35	7/+50	7/+60
Large	3/-10	4/+10	5/+20	6/+35	7/+50
Huge	2/-25	3/-10	4/+10	5/+20	6/+35
Failure #	1	2	3	4	5

-----RESULT IS MAX RESULT & OB MOD-----
-----Attacker Size-----

TARGET SIZE	-----No Spur-----				
	Tiny	Sm.	Med.	Large	Huge
Tiny	4/+10	5/+20	6/+35	7/+50	7/+50
Small	3/-10	4/+10	5/+20	6/+35	7/+50
Medium	2/-25	3/-10	4/+10	5/+20	6/+35
Large	1/-40	2/-25	3/-10	4/+10	5/+20
Huge	1 $\frac{1}{2}$ /-50	1/-40	2/-25	3/-10	4/+10
Failure #	1	2	3	4	5

‡ = All damage from criticals is halved (round down).

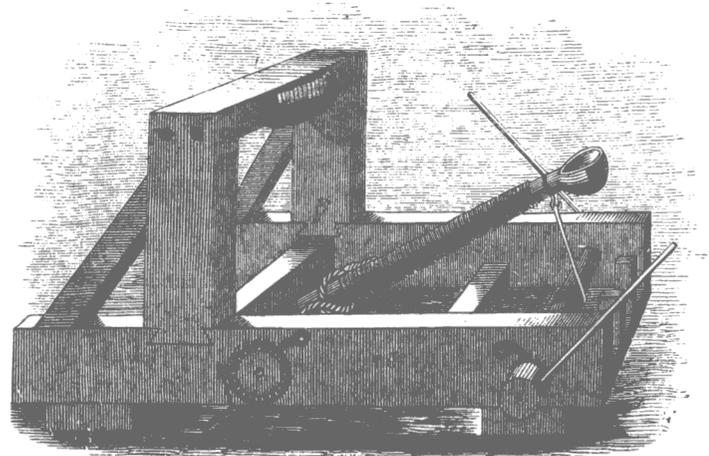
WEAPON STAT CHART

Weapon	Ammo lb	Ammo Types	Av. Crew	Fumble	Fire Rate §
Ballista, Light	15	G	4	3	2/0
Medium	25	B,G	8	4	3/0
Heavy	50	B,G	11	5	5/0
Mangonel, Light	10	B,G,C	5	4	5
Medium	20	B,G,C	9	5	7
Heavy	40	B,G,C	12	6	9
Catapult, Light	25	B	5	5	8
Medium	50	B	8	6	10
Heavy	75	B	12	7	13
Trebuchet, Light	100	B	10	2	13
Medium	200	B	15	3	15
Heavy	300	B	20	4	20
Greek Fire Tube	—	special	3	10	5
Swivel Gun	1	G	1	2	4
Saker	6	B,G	2	3	5
Demi-Culverin	9	B,G,C	3	4	8
Culverin	18	B,G,C	3	4	8
Demi-Cannon	24	B,G,C	5	4	8
Cannon	32	B,G,C	5	4	8

§ — This is the approximate reload time in rounds. Even though some weapons can reload and fire more than once in a SeL turn (2 minutes), each weapon can only make one attack each turn. (i.e., the multiple firings are considered to be one attack).

TARGET AND AMMO RESTRICTIONS CHART

Weapon	Allowed Targets	Allowed Ammo
Lt. Ballistae	Crew	Grape
Other Ballistae	Hull, Rigging, Crew	Ball, Grape
Mangonels	Hull, Rigging, Crew	All
Catapults	Indirect	Ball
Trebuchets	Indirect	Ball
Swivel Guns	Crew	Grape
Other Powder Weapons	Hull, Rigging, Crew	All



	T-2.1 • HULL CRITICAL STRIKE TABLE	T-2.2 • RIGGING CRITICAL STRIKE TABLE	T-2.3 • WEAPON / CREW CRITICAL STRIKE TABLE
-49 – 05	Nothing special; no extra damage.	Shot whistles through the rigging and disturbs the Captain.	Amazingly the shot passes 4 feet over the deck without hitting anything.
06 – 20	+1 hit. The shot rips off a rail.	Shot takes out some rigging. +1 hit.	Shot plows into the deck and splinters scatter the deck crew. Half a hit. (“‡”).
21 – 35	+2 hits. Shoot lower next time.	Clean shot severs several lines. +2 hits.	Strike hits the deck and then plows into one of the officers. Half a hit. (“‡”).
36 – 50	You punch a nice hole in the hull well above the waterline. +4 hits. +1 oar hit.	Good shot damages sails. +4 hits.	Shot tears through ratlines in the rigging. +1 hit.
51 – 65	The steering is damaged. +5 hits. Ship must maintain its present course for 1 turn.	Upper sail ripped by attack. +5 hits.	Shot scatters the crewmen manning a weapon and disables it for 1-2 turns.
66 – 79	Shot pierces hull and damages cargo and half of the fresh water. +6 hits. +2 oar hits.	Shot hits spar above Captain’s head. +6 hits.	A near miss stuns the crew at the helm. Ship will move on current course for 1 turn.
80	Ship’s steering is smashed. +10 hits. Ship must maintain its present course for 2 turns, then it may only “turn” once each turn.	Shot knocks out a spar. Mark off half of one section of rigging hits, round down (12%).	Strike near the helm. The Captain and one of his officers are part of the casualties. +1 hit.
81 – 86	A high shot tears through upper hull and destroys a ship’s boat. +8 hits. +2 oar hits. +1 hit per turn.	Fine strike to crucial sail. +8 hits.	Splinters from a shot to the hull disrupt the men manning a weapon and disables it for 1-5 turns.
87 – 89	A lucky shot hits combustible material. Roll an ‘A’ fire critical if applicable (*). +10 hits. +2 hits/turn.	Nice hit shreds part of mainsail. +10 hits.	Shot hits and destroy a ship’s boat and the flying splinters tear into the crew. +1 hit.
90	The shot rips through the hull just at the waterline. +50 hits. +2 oar hits. +5 hits/turn.	Blow takes out the top of the mainmast. Mark off one section of rigging hits (25%).	All crew at helm hit by splinters. Ship will move on current course for 1-2 turns.
91 – 96	Clean shot pierces hull at waterline. A ship’s anchor is lost. +15 hits. +2 oar hits. +3 hits/turn.	Shot imbeds itself in a mast. +10 hits.	Strike glances off a weapon and disables it for 1-10 turns.
97 – 99	Powerful strike to waterline. Severe damage to cargo. +25 hits. +3 oar hits. +5 hits/turn.	Heavy damage to mainsail. +15 hits.	+1 hit. Roll an ‘D’ fire vs. explosives critical if applicable (‡).
100	An excellent shot rips through the hull. +50 hits. +5 hits/turn. Roll an ‘E’ fire vs. explosives critical if applicable (‡).	Precision strike to mainmast; mast broken. Mark off two sections of rigging hits (50%).	Clean shot to helm area leaves both the Captain and helmsman as casualties. Ship will move on current course for 1 turn.
101 – 106	A nice shot penetrates the hull and strikes combustible material. Roll a ‘C’ fire critical if applicable (*). +20 hits. +3 oar hits. +5 hits/turn.	Crucial rigging is devastated. +12 hits.	Glancing shot disables a weapon and rips off a figurehead. 1-100 turns to repair.
107 – 109	Shot skims off the water and slams into the hull just below the waterline. +40 hits. +8 hits/turn.	Main spar severely damaged. +25 hits.	Wicked bouncing shot careens across deck. +2 hits.
110	Precise shot rips off the steering and a large chunk of the aft hull. +75 hits. 15% hits/turn. Ship must maintain its present course for 3 turns, then it may only “turn” once each turn.	Devastating strike to mainmast; mast is splintered. Mark off three sections of rigging hits (75%).	Shot crashes through the bulkhead and totally destroys one weapon. +1 hit.
111 – 116	Shot staves in a portion of the hull. +30 hits. +4 oar hits. +8 hits/turn.	Lucky shot manages to pass through each sail at least once. +20 hits.	Excellent shot yeilds a pretty hole, one weapon destroyed.
117 – 119	Massive hull damage. +60 hits. +10 hits/turn.	Shot smashes into a mast. +30 hits.	Vicious strike throws splinters everywhere. +2 hits.
120	Perfect shot makes a massive hole below the waterline. +100 hits. +20 hits/turn.	After taking a direct hit, mainmast falls and tears all other masts to deck. Mark off all rigging hits.	Lucky shot totally destroys two weapons. +1 hit.
	<p>Modifications:</p> <p>-50..... ‘T’ critical -20..... ‘A’ critical -10..... ‘B’ critical +0..... ‘C’ critical +10..... ‘D’ critical +20..... ‘E’ critical</p> <p>Note: Unless stated otherwise, all hits are hull hits.</p> <p>Note: If specific damage is not applicable, just ignore it. For example, oar hits, damage to ship’s boats, lost anchors, etc.</p> <p>* — If ship is using fire weapons or firearm-type missiles, or if there is a cooking fire aboard, etc.</p> <p>‡ — If ship has explosives on board (a magazine).</p>	<p>Modifications:</p> <p>-50..... ‘T’ critical -20..... ‘A’ critical -10..... ‘B’ critical +0..... ‘C’ critical +10..... ‘D’ critical +20..... ‘E’ critical</p> <p>Note: Unless stated otherwise, all hits are rigging hits.</p> <p>Note: If specific damage is not applicable, just ignore it (e.g., oar hits, damage to ship’s boats, lost anchors, etc.).</p>	<p>Modifications:</p> <p>-50..... ‘T’ critical -20..... ‘A’ critical -10..... ‘B’ critical +0..... ‘C’ critical +10..... ‘D’ critical +20..... ‘E’ critical</p> <p>Note: Unless stated otherwise, all hits are crew hits.</p> <p>Note: If specific damage is not applicable, just ignore it (e.g., oar hits, damage to ship’s boats, lost anchors, etc.).</p> <p>‡ — Explosion chance is 30% for an ‘E’ crit, 20% for a ‘D’ crit, 10% for a ‘C’ crit.</p>

	T-2.4 • RAMMING CRITICAL STRIKE TABLE	T-2.5 • SHEERING CRITICAL STRIKE TABLE	T-2.6 • HUGE CREATURE GRAPPLE CRITICAL TABLE
-49 – 05	Somehow there is no collision. +0 hits.	No damage at all.	A tentacle waved at the ship, but did no damage.
06 – 20	The ship just grazes the target. +2 hits.	Pretty weak, but you still clip some oars. +1 hit.	+† crew hit.
21 – 35	Weak attack only results in +3 hits.	Not bad. +2 hits.	+1 crew hit.
36 – 50	A glancing blow delivers +4 hits. +1 hit per turn.	25% of the oars on one side are destroyed. Mark off half a section of oar hits (12.5%). +1 oarsmen hits.	Mark off half of a rigging section (12.5%). +1 crew hit.
51 – 65	Minor structural damage. Mark off half of a section of hull hits (5%). +2 hits/turn.	25% of the oars on one side are destroyed. Mark off half a section of oar hits (12.5%). +2 oarsmen hits.	Nice job. Mark off half of a hull section (5%). +1 crew hit. +† hits/turn.
66 – 79	The force of the attack damages the rigging: mark off half of a section of rigging hits (12.5%). Mark off half a section of hull hits (5%). +3 hits/turn.	25% of the oars on one side are destroyed. Mark off half a section of oar hits (12.5%). +3 oarsmen hits.	Good solid strike. Mark off half of a rigging section (12.5%), and mark off half of a hull section (5%). +1 crew hit. +† hits/turn.
80	Water pours into the main hold and damages most of the cargo. Mark off three sections of hull hits (30%). +4 hits/turn.	All oars on one side are destroyed. Mark off two sections of oar hits (50%). Mark off one entire section of oarsmen hits.	A wet, slimy tentacle attacks. A spar falls: mark off one rigging section (25%). Mark off three hull sections (30%). +2 crew hits. +3 hits/rnd.
81 – 86	The force of the attack damages the rigging: mark off one section of rigging hits (25%). Mark off one section of hull hits (10%). +5 hits/turn.	Half of the oars on one side are destroyed. Mark off one section of oar hits (25%). Mark off half of a section of oarsmen hits.	Mark off one hull sections (10%). +2 crew hits. +1 hits/turn.
87 – 89	Collision leaves the target motionless for 1-2 turns. Mark off two sections of hull hits (20%). +6 hits/turn.	Most of the oars on one side are destroyed. Mark off 1.5 sections of oar hits (37.5%). Mark off one section of oarsmen hits.	Mark off two hull sections (20%). +2 crew hits. +2 hits/turn.
90	The target shudders as the main mast falls: mark off two sections of rigging hits (50%). Mark off four sections of hull hits (40%). +25 hits. +7 hits/turn.	All oars on one side are destroyed. Mark off two sections of oar hits (50%). Mark off one entire section of oarsmen hits.	The ship shudders and the mast falls: mark off two rigging sections (50%) and four hull sections (40%). +3 crew hit. +5 hits/turn.
91 – 96	The force of the attack damages the rigging: mark off one sections of rigging hits (25%). Mark off two sections of hull hits (20%). +8 hits/turn.	Half of the oars on one side are destroyed. Mark off one section of oar hits (25%). Mark off half of a section of oarsmen hits.	Mark off three hull sections (30%). +3 crew hits. +3 hits/turn.
97 – 99	Collision leaves the target motionless for 1-5 turns. Mark off three sections of hull hits (30%). +9 hits/turn.	Most of the oars on one side are destroyed. Mark off 1.5 sections of oar hits (37.5%). Mark off one section of oarsmen hits.	Mark off four hull sections (40%). +3 crew hits. +4 hits/turn.
100	Timbers splinter under the heavy blow. Mark off two sections of rigging hits (50%). Mark off five sections of hull hits (50%). +15 hits/turn.	All oars on one side are destroyed. Mark off two sections of oar hits (50%). Mark off one entire section of oarsmen hits.	Heavy strike leaves the ship motionless in the monster's clutches. A mast falls: mark off three rigging sections (75%). Mark off six hull sections (60%). +4 crew hit. +7 hits/turn.
101 – 106	The force of the attack damages the rigging: mark off two sections of rigging hits (50%). Mark off three sections of hull hits (30%). +11 hits/turn.	Half of the oars on one side are destroyed. Mark off one section of oar hits (25%). Mark off half of a section of oarsmen hits.	Mark off five hull sections (50%). +4 crew hits. +5 hits/turn.
107 – 109	Collision! The target motionless for 1-10 turns. Mark off four sections of hull hits (40%). +12 hits/turn.	Destroys most of one side's oars. Mark off 1.5 sections of oar hits (37.5%). 1 section of oarsmen hits.	Mark off six hull sections (60%). +4 crew hits. +6 hits/turn.
110	The target's intrinsic structure is destroyed. +175 hits. If it doesn't disintegrate immediately due to hits, it will still sink at the end of next turn.	All oars on one side are destroyed. Mark off two sections of oar hits (50%). Mark off one entire section of oarsmen hits.	The ship's timbers splinter under massive pressure. +100 hits. +5 crew hits. If it doesn't sink due to hits, it sinks in 5 turns.
111 – 116	The force of the attack damages the rigging: mark off three sections of rigging hits (75%). Mark off five sections of hull hits (50%). +13 hits/turn.	Half of the oars on one side are destroyed. Mark off one section of oar hits (25%). Mark off half of a section of oarsmen hits.	Mark off seven hull sections (70%). +5 crew hits. +7 hits/turn.
117 – 119	Collision leaves the target motionless for 1-20 turns. Mark off six sections of hull hits (60%). +14 hits/turn.	Most of the oars on one side are destroyed. Mark off 1.5 sections of oar hits (37.5%). Mark off one section of oarsmen hits.	Mark off eight hull sections (80%). +5 crew hits. +8 hits/turn.
120	The ship's back is broken. +200 hits. If it doesn't disintegrate immediately due to hits, it will still sink at the end of this turn.	All oars on one side are destroyed. Mark off two sections of oar hits (50%). Mark off one entire section of oarsmen hits.	The ship is broken in two by the monster. +200 hits. +6 crew hits. She sinks at the end of this turn.
	Modifications: -50 'T' critical -20 'A' critical -10 'B' critical +0 'C' critical +10 'D' critical +20 'E' critical Note: Unless stated otherwise, all hits are hull hits. Note: When a half of a section is taken as damage, round down. Note: If specific damage is not applicable, just ignore it. For example, oar hits, damage to ship's boats, lost anchors, etc.	Modifications: -50 'T' critical -20 'A' critical -10 'B' critical +0 'C' critical +10 'D' critical +20 'E' critical Note: Unless stated otherwise, all hits are oar hits. Note: When a half of a section is taken as damage, round down.	Modifications: -50 'T' critical -20 'A' critical -10 'B' critical +0 'C' critical +10 'D' critical +20 'E' critical Note: Unless stated otherwise, all hits are hull hits. Note: When a half of a section is taken as damage, round down. Note: If specific damage is not applicable, just ignore it. E.g., oar hits, damage to ship's boats, lost anchors, etc.

	T-2.7 • FIRE CRITICAL STRIKE TABLE		T-2.8 • FIRE VS. EXPLOSIVES CRITICAL STRIKE TABLE
-49 – 05	Fire singes a few ropes. That was close. +0 hits.	-49 – 05	The explosives hit are a dud. +0 hits.
06 – 20	Fire flickers up the ratlines before fizzling out. Burns through some lines, but doesn't catch. +(0•†•2) hits.	06 – 25	Pretty sparks, but no real damage. +(†•†•†) hits.
21 – 35	Flames begin licking at your dry sails. +(†•†•4) hits. Ship loses Full Sail capability until the fire is put out.	26 – 50	Some stray ammo explodes. +(1•1•1) hits. A fire starts that will do an additional (†•†•†) hits/turn until put out.
36 – 50	Flames lick around railings. +(†•2•1) hits. The fire will do an additional (0•1•†) hits/turn until put out.	51 – 79	The ammo for one weapon explodes and destroy it. +(1•10•3) hits. A fire starts that will do an additional (†•8•3) hits/turn until put out.
51 – 65	Fire starts in side railing. +(†•3•3) hits. All weapons must be abandoned until the flames are extinguished. The fire will do (0•1•1) hits/turn until put out.	80	Explosion on the main deck. Fire hits ammo being carried from the magazine to the weapons. +(4•25•10) hits. A fire starts that will do an additional (†•8•8) hits/turn until put out.
66 – 79	Much of the woodwork near the mast is now a pretty black. +(1•5•5) hits. The fire will do (†•2•2) hits/turn until put out.	81 – 89	The ammo for 1-2 weapons explode and destroy them. +(1•15•3) hits. A fire starts that will do an additional (†•8•3) hits/turn until put out.
80	Flames race down the companionways into the main hull. +(2•50•25) hits. The ship begins burning brightly, and will sink in 12 turns.	90	Bad news for the ammo runners. Fire hits ammo below decks being carried from the magazine to the weapons. +(5•50•0) hits. A fire starts that will do an additional (1•15•5) hits/turn until put out.
81 – 86	Sparks ignite in part of the main sail. +(†•2•8) hits.	91 – 99	The ammo for two weapons explode and destroy them. +(2•20•5) hits. A fire starts that will do an additional (†•8•3) hits/turn until put out.
87 – 89	Fire in the hold does +(1•8•0) hits. The fire will do an additional (†•5•0) hits/turn until put out.	100	The entire ship explodes. Every ship within 2 hexes takes a fire critical due to flying debris — grappled/fouled with ship: 'E'; in an adjacent hex: 'C'; at a 2 hex range: 'A'. At the end of next turn, nothing is left of the target but smouldering lumber.
90	A mighty blaze rages out of control through the rigging. +(3•25•100) hits. The ship is immobile, and will burn out and sink in 8 turns.	101 – 109	The ammo for 1-5 weapons explode and destroy them. +(3•25•8) hits. A fire starts that will do an additional (1•10•5) hits/turn until put out.
91 – 96	The flames lick at the target side railing before catching the sails. +(†•1•8) hits. No chance of lasting fire, but main sail is burned up.	110	The entire ship explodes. Every ship within 2 hexes takes a fire critical due to flying debris — grappled/fouled with ship: 'E'; in an adjacent hex: 'C'; at a 2 hex range: 'A'. At the end of next turn, nothing is left of the target but smouldering lumber.
97 – 99	Fire burns through the deck to the hold. +(1•15•1) hits. The fire will do (†•8•0) hits/turn until put out.	111 – 116	The ammo for 1-10 weapons explode and destroy them. +(5•50•10) hits. A fire starts that will do an additional (1•15•10) hits/turn until put out.
100	The hold and main deck go up in flames. +(4•75•25) hits. The ship will sink in 4 turns.	117 – 119	The ship explodes. Every ship within 2 hexes takes a fire crit — grappled/fouled with ship: 'E'; in an adjacent hex: 'C'; at a 2 hex range: 'A'.
101 – 106	Fire jumps from the deck to the hold. +(2•20•5) hits. The fire will do (1•10•1) hits/turn until put out.	120	The entire ship explodes. Every ship within 2 hexes takes a fire critical due to flying debris — grappled/fouled with ship: 'E'; in an adjacent hex: 'C'; at a 2 hex range: 'A'. At the end of next turn, nothing is left of the target but smouldering lumber.
107 – 109	In one shot all the sails are reduced to ashes. +(1•2•all hits). All weapon fire is at -20 due to smoke and falling ashes.		
110	At the end of next turn the ship will be little more than ashes as flames rage through the hull. +(5•100•50) hits.		
111 – 116	Flames and smoke pour from belowdecks as the fire starts in the hold. +(3•30•10) hits. All cargo in the hold is damaged. The fire will do (2•15•2) hits/turn until put out. Send buckets.		
117 – 119	Hot flames lick at the captain's feet as the deck bursts into flame. +(4•50•20) hits. The flames rage out of control. Ship will sink in 5 turns.		
120	In truly spectacular fashion the entire ship bursts into flame. At the end of the turn, nothing is left of the target but smouldering lumber. Every ship within 2 hexes takes a fire critical due to flying debris — grappled/fouled with ship: 'E'; in an adjacent hex: 'C'; at a 2 hex range: 'A'. At the end of next turn, nothing is left of the target but smouldering lumber.		
	Modifications: -50..... 'T' critical -20..... 'A' critical -10..... 'B' critical +0..... 'C' critical +10..... 'D' critical +20..... 'E' critical Note: If specific damage is not applicable, just ignore it. For example, oar hits, damage to ship's boats, lost anchors, etc.		Modifications: -50..... 'T' critical -20..... 'A' critical -10..... 'B' critical +0..... 'C' critical +10..... 'D' critical +20..... 'E' critical Note: If specific damage is not applicable, just ignore it. For example, oar hits, damage to ship's boats, lost anchors, etc.

	T-3.1 • FIREARM WEAPON FUMBLE TABLE	T-3.2 • BALLISTA & MANGONEL FUMBLE TABLE	T-3.3 • CATAPULT & TREBUCHET FUMBLE TABLE	T-3.4 • GREEK FIRE FUMBLE TABLE
01 – 25	The charge is a dud! The weapon fails to fire. It takes 1 turn to clear the weapon and get ready to reload.	The gun crew lose sight of the foe while watching a butterfly. No attack this turn.	The gun crew becomes confused about where their ship actually is. They lose their attack.	In a brief moment of panic the gun crew wonders if this is Greek Fire or a water cannon. They lose their attack.
26 – 30	A clumsy loader knocks over a pile of shot and throws the whole procedure into confusion. Weapon is out of action for 2 turns.	While loading the projectile, the gun crew stops to contemplate the meaning of life. They lose 1 turn while gathering their wits.	What is it catapults shoot, butterflies or stones? The gun crew forgets, and spends the next two turns trying to remember.	In a fuzzy moment the gun crew light their pipes with the Greek Fire. They spend the next two turns trying to put out their pipes and re-aim the tube.
31 – 40	Gun-crew breaks some powder bags. Weapon is out of action for 3 turns.	Given the choice between firing and looking at the pretty clouds, the gun crew chooses the latter and become confused. No shot this turn, and -10 on next turn's shot, if they get it together by then.	In a moment of utter confusion a gun crew member gets his foot stuck in the catapult's basket and must spend this turn untangling. No shot this turn, unless his mates wish to use him for ammo.	Now which end points towards the bad guys? The gun crew forgets, and must spend this turn and the next stumbling about the deck trying to remember.
41 – 50	Gun-crew loses coordination, the gun runs into and over the loaders. +(1•0•0) hits. Weapon is out of action for 4 turns.	In a moment of over-excitement the gun crew drops the ammunition and must spend this turn recovering it. Next turn must be spent loading the weapon again. Butterfingers!	That tricky stone slips and rolls away. The gun crew chases it down this turn and carry it back next turn.	That last blast of Greek Fire was rather much for the gun crew's nervous system. They spend this turn reminding themselves that it won't bite and spend the turn after that at -10.
51 – 60	The weapon fires prematurely and hits gun-crew and bulkhead. +(1•2•0) hits. Weapon is out of action for 5 turns.	While loading, the gun crew trips and embarrass itself. It spends this turn recovering and next turn at -10.	This time the rock and a gun crew member trade places. He must spend this turn clambering out of the basket and next turn recovering that tricky stone.	Is flint and steel needed to use Greek Fire? The gun crew thinks so, and spends this turn looking for some. Next turn the gun crew will be at -10 and very red once an officer tells them to put their tinder box away.
61 – 70	Some stray ammo explodes. +(1•1•1) hits. A fire starts that will do an additional (1•1•1) hits/turn until put out. Weapon is out of action for 6 turns.	While in the act of aiming the gun crew stops to admire their opponent's beautiful figurehead. This shot will miss by a mile, and they spend next turn recovering their cool.	While loading that cursed rock it attacks the gun crew and throws itself at their toes. In a frenzy the gun crew throws it overboard, and spend next turn explaining their actions to an irate officer.	The gun crew slips and falls while trying to aim the launching tube. It will take them two turns to get back up.
71 – 80	Some mislaid ammo explodes. +(1•4•1) hits. A fire starts that will do an additional (1•3•1) hits/turn until put out. Weapon is out of action for 8 turns.	That figurehead gets the gun crew again, except this time they think it is the Queen! They take two turns to realize it isn't, and another turn to try and explain themselves to the captain.	Once again that sneaky rock gets the better of the gun crew and rolls down into the hold. The gun crew chases it, and spends three turns in darkness tracking it down.	A sudden attack of hunger sends the gun crew to the galley for a skewer and slab of salt pork. They spend the next two turns explaining to an officer why they want to roast their meat over a Greek Fire tube.
81 – 85	The ammo for a weapon explodes and destroy it. +(1•8•2) hits. A fire starts that will do an additional (1•5•2) hits/turn until put out.	All that loading has left the gun crew winded! Lose all action for two turns, and they're at -10 for two more.	The rock gets the better of the gun crew! In a dying frenzy it injures several gun crew members. They lose all action for two turns, and stay at -15 for two days.	A gun crew member burns himself on the tube. The shot goes wild, luckily missing his ship; the gun crew lose all actions for three turns while an officer chases them with a cutlass.
86 – 90	The ammo for a weapon explodes and destroy it. +(1•10•3) hits. A fire starts that will do an additional (1•8•3) hits/turn until put out.	A minor mishap with the loading leaves the weapon disabled for two turns. The gun crew cannot act until it is fixed, and it will fire at -10 until repaired after the battle.	The gun crew has a minor phobia regarding catapult stones. They wedge one in the locking gear, disabling the weapon for three turns. The commanding officer almost has a stroke.	The gun crew jams their tube, disabling it for two turns. Better get busy.
91 – 95	The ammo for a weapon explodes and destroys it and any weapons next to it. +(2•15•5) hits. A fire starts that will do an additional (1•10•5) hits/turn until put out.	The shock of handling so much ammunition leaves the gun crew stunned for three turns. They will work it out, if they survive.	In a minor fit the gun crew refuses to touch any more blasted catapult rocks! They spend three turns calming down and hope the officers are forgiving.	The gun crew spends four turns convincing itself that their Greek Fire tube doesn't harbor evil fire demons.
96 – 99	Explosion on the main deck. Fire hits ammo being carried from the magazine to the weapons. +(4•25•10) hits. A fire starts that will do an additional 1•8•8 hits/turn until put out.	The gun crew didn't get out of the way before the weapon was fired. They are at -25 for three turns.	The catapult is out to get you. In the excitement of firing, it twists and injures several gun crew members, leaving the gun crew at -25 for four turns and with several members with limps for three days.	The tube has decided it doesn't like it gun crew, and singes all their hair off with a minor spark show. No damage, but the gun crew is at -30 for five turns.
100	The ammo explodes and a chain reaction carries back to the magazine. The entire ship explodes. Every ship within 2 hexes takes a fire critical due to flying debris — grappled/fouled with ship: 'E'; in an adjacent hex: 'C'; at a 2 hex range: 'A'. At the end of next turn, nothing is left of the target but smouldering lumber.	Due to a horrible mishap involving a falling ammunition and a bit of burned salt pork, the gun crew fires the weapon directly into its own ship. Their ship takes a 'D' crit, roll on Table T-1.1, T-1.4, or T-1.5 (depends on ammo) and pray to the gods.	The catapult misfires, the gun crew's ship takes a 'D' crit, roll on Table T-1.1, T-1.4, or T-1.5 (depends on ammo). Start praying.	This nasty old tube doesn't like its gun crew one little bit! As its revenge, it misfires and does a 'D' Fire critical to their ship (use Table T-2.7). Get the buckets and pray. There is a 10% chance that the flames will race into the holding tank for the ship's Greek Fire, and if it does the tank explodes (the ship takes an 'E' critical on Table T-2.8)!

T-4.1 • WEATHER TABLE

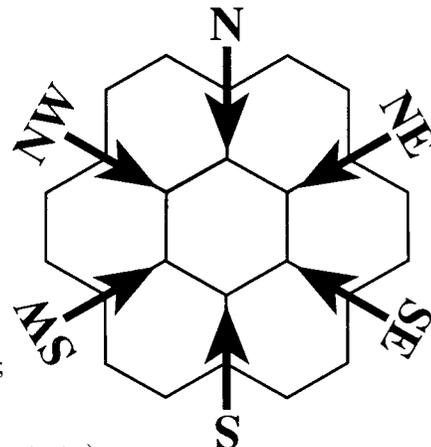
Roll	Result	Wind Velocity	Wind Condition	Mod to Next Roll	Mod to Sea State Roll	Special Effects
99-100	Calm	0-1 mph	None	+10	+30	Becalmed; No sail movement
86-98	Clear, Light Breeze	1-10 mph	Light	+10	+20	None
76-85	Some Clouds, Light Winds	11-15 mph	Light	+0	+10	None
66-75	Some Clouds, Good Breeze	16-20 mph	Moderate	+0	+0	None
46-65	Cloudy, 30% Chance of light rain	21-30 mph	Moderate	-10	-5	None
31-45	Heavy Overcast, 50% Chance of Rain	31-35 mph	Moderate	-15	-10	None
21-30	75% Chance of Light Rain Squall	36-40 mph	Strong	-15	-15	None
16-20	Medium Rains, Winds Picking Up	41-45 mph	Strong	-20	-20	None
11-15	Moderate Gale, Heavy Rains	46-50 mph	Strong	-10	-30	-1 MP for all ships
06-10	Fresh Gale, Seas Getting Rougher	51-65 mph	Strong	-10	-40	-2 MP for all ships
(-49)-05 *	Strong Gale, Lower Sails	66+ mph	Strong	-5	-50	-3 MP for all ships
(-75-50) *	Whole Gale, Could Build to a Hurricane	71+ mph	Strong	-5	-60	-4 MP for all ships
(-100-76) *	Tropical Storm, Find a Port	76+ mph	Strong	+0	-75	-5 MP for all ships
(-150-101) *	Hurricane, Pray to Your Gods	80+ mph	Strong	+0	-100	-6 MP for all ships

*—Once one of the negative results occurs (all rolls are open-ended down), weather is not re-rolled for 1-10 strategic turns.

†—Certain oceans carry the risk of encountering a whirlpool. The chance is 15% per strategic turn (not cumulative) a ship plies its waters. See Part VII for more concerning these whirlpools.

MODIFIERS:

Location	Modifier	Time of Year	Modifier
Malvin Tesea	+0	Summer	-0
Fárok Tesea †	-20	Fall	-5
Dom Usuív	+5	Winter	-20
Tairken Usuív †	-15	Spring	-5
Thrök Tesea †	+0		
Kemm Usuív	+10		
Hulkanen Arûs	-10		
Loorn Tesea	+5		
Kiskaa Arûs	+0		



WIND DIRECTION ROLL:

On the first of a series of strategic turns, Roll 1D6: 1=North; 2=Northeast; 3=Southeast; 4=South; 5=Southwest; 6=Northwest.

On each subsequent strategic turn, roll 1D6: 1-4 = no wind change;

5 = wind “shifts one” clockwise (i.e., from north to northeast, from northeast to southeast, etc.);

6 = wind “shifts one” counterclockwise (i.e., from north to northwest, from northwest to southwest, etc.).

T-4.2 • SEA STATE TABLE

Roll Range	Result
100-31	Smooth to fairly rough; no special modifications
30-21	Rough, some waves of 4-8 feet; galleys at 2/3 maximum speed
20-11	Getting rougher; Galleys at 1/2 maximum speed, sailing ships at 2/3
10(-49)	High waves and spray; Galleys at 1/3, sailing ships at 1/2
(-75-50)	Very high waves; Galleys capsize, sailing ships at 1/3
(-100-76)	Rolling, high waves (30-45'); sailing ships begin taking water.
(-150-101)	Almost 0 visibility, waves of over 45'; sailing ships have 25-60% (depending on size) of capsizing.

T-4.3 • MELEE COMBAT TABLE

Strength Pt Tot.	Roll (non-opened)					
	01-15	16-40	41-60	61-80	81-95	96-100
01-05	0	0	0	0	†	1
06-10	0	0	0	†	1	1
11-15	0	0	†	1	1	2
16-20	0	†	1	1	2	2
21-25	†	†	1	1	2	2
26-30	†	1	1	2	2	3
31-40	1	1	1	2	3	3
41-50	1	1	2	2	3	4
51-60	1	1	2	2	3	4
61-80	1	1	2	3	4	5
81-101	1	2	3	3	4	5
101-120	1	2	3	4	5	6
121+	1	2	4	5	6	8

MELEE STRENGTH POINT CHART

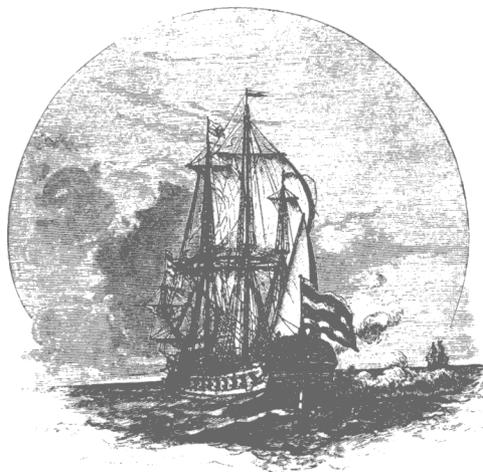
Crew Type	Quality							
	P	G	Re	R	V	E	C	
Marines	4	5	6	7	8	9	10	
Seamen	2	2	3	3	4	4	5	
Oarsmen	1	1	2	2	3	3	4	

Note: P=Poor/Slave; G=Green; Rv=Reservists; R= Regular; V=Veteran; E=Elite; C=Crack.

BOARDING CHART

# of Common Hexsides	Boarding Party Ship Size				
	Tiny	Sm.	Md.	La.	Huge
1, Bow/Stern to Bow/Stern (A)	1	1	2	2	3
1, Bow/Stern to Side (B)	1	2	2	3	4
1, Side to Side (C)	1	2	3	4	5
2, Side to Bow/Stern (D)	1	2	4	6	8
2, Side to Side (E)	1	3	6	8	10

Note: This chart gives the maximum initial boarding party size and the maximum reinforcement that may be added in each following turns. This number is doubled if the ships are side by side (i.e., both of the ships have two hexes adjacent).



T-4.4 • DAMAGE EFFECTS TABLE

* — All effects are cumulative (e.g., if 9 hull sections are marked off, the ship is taking 6 hull hits per turn, 50% of the stores are soaked, and its MPs have been reduced by two).

HULL DAMAGE

Sections

Marked Off Effect * (round up fractions)

1	5% of stores are soaked.
2	Ship takes 1 hull hit per turn.
3	15% of stores are soaked.
4	Ship takes 1 hull hit per turn.
5	-1 MP to sail and oared movement.
6	Ship takes 2 hull hit per turn.
7	30% of stores are soaked.
8	Ship takes 2 hull hit per turn.
9	-1 MP to sail and oared movement.
10	Ship sinks.

RIGGING DAMAGE

Sections

Marked Off Effect * (round up fractions)

1	Sail MPs reduced by 20%, no Full Sail Bonus.
2	Sail MPs reduced by 20%.
3	Sail MPs reduced by 20%, no Sails&Oars Bonus.
4	Sail MPs reduced by 20%.
5	No Sail Movement.

SEAMEN DAMAGE

Sections

Marked Off Effect * (round up fractions)

1	May only fire 75% of weapons.
2	May only fire 50% of weapons.
3	May not fire any weapons.
4	Ship surrenders.

OARSMEN DAMAGE

Sections

Marked Off Effect * (round up fractions)

1	Oared MPs reduced by 25%.
2	Oared MPs reduced by 25%.
3	Oared MPs reduced by 25%.
4	No Oared Movement.

OAR DAMAGE

Sections

Marked Off Effect * (round up fractions)

1	Oared MPs reduced by 25%.
2	Oared MPs reduced by 25%.
3	Oared MPs reduced by 25%.
4	No Oared Movement.

OARSMEN EXHAUSTION

Sections

Marked Off Effect *

1	No effect.
2	No effect.
3	Cannot use ramming speed.
4	Cannot use battle speed.
5	No Oared Movement.

T-4.5 CREATURES STAT TABLE

Type	Lvl	Base Rate	Max Pace/ MN Bonus	Speed MS/AQ	Size/ Crit	Hits	AT [DB]	Attacks	{Sea Law attack}	# Enc.	Trea- sure	Bon EP	Outlook (IQ)
Old Favorites													
Dolphins/Porpoises													
Porpoise	7E	80{4}	FSpt/35	VF/FA	L/-	85E	1(40)	60MBi	-	2-20	-	A	Normal
Dolphin	8F	80{4}	FSpt/40	VF/FA	L/-	80E	1(40)	50MBa/40MBi	-	20-100	-	B	Normal
Killer Whale	9F	100{6}	FSpt/25	VF/VF	H/LA	450H	8(20)W2	100LBa/110HBi/150HG ^r	{60Ra}	1-5	-	F	Bellig.
Eels													
Conger	4C	70{4}	FSpt/30	FA/FA	L/-	65E	3(30)	70LBi	-	1-2	-	C	Aggress.
Electric	2B	60{3}	Spt/20	MF/FA	L/-	60E	3(20)	80SBolt/40MBi/Both	-	1-2	-	D	Aggress.
Moray	3C	80{4}	FSpt/40	FA/VF	M/-	50D	3(40)	60MBi	-	1-2	-	B	Bellig.
Fish													
Small	0A	50{3}	Spt/40	FA/FA	S/-	8A	1(50)	0TPi/10SPi	-	1-100	-	-	Passive
Medium	1B	70{4}	Spt/30	FA/FA	M/-	20B	3(30)	30SPi/40MPi	-	1-20	-	-	Normal
Large	3C	90{5}	Spt/20	FA/FA	L/-	35D	4(20)	50MPi	-	1-5	-	-	Normal
Octopuses/Squids (* - Squids have 50% more MPs, round up)													
Small	1A	40{2}	Run/30	MF/MF	S/-	20B	1(50)	40SGr/30TPi«	-	1-2	-	-	Normal
Medium	3B	60{3}	Run/20	MF/MF	M/-	40D	1(30)	60MGr/40SPi«	-	1-2	-	A	Normal
Large	6D	80{4}	Run/10	MD/MF	L/II	70E	1(30)	80LGr/60MPi«	{40LGr/20TRa}	1-2	-	C	Normal
Rays													
Electric	3B	40{2}	Eun/10	SL/MD/6	L/-	50D	1(30)	60SBolt/50MBa/Both	-	1-2	-	C	Normal
Manta	3C	50{3}	Eun/20	MD/MD/6	M/-	40D	1(40)	40SBa	-	1-10	-	-	Normal
Stingray	3C	60{3}	Eun/20	MD/FA/7	M/-	45D	1(40)	80wp/60MSt«/Poison«	-	1-2	-	C	Normal
Sharks													
Small	2B	80{4}	FSpt/30	FA/VF/8	M/-	90E	4(40)	60MBi	-	1-20	-	A	Aggress.
Large	5E	100{6}	FSpt/20	FA/FA/9	L/-	180F	4(20)	100LBi	{20TRam}	1-10	-	C	Bellig.
Non-toothed Whales													
Baleen	10G	100{6}	Spt/10	MF/MF/9	H/SL	700H	8(50)W2	80HGr/80HBa	{60MRam}	2-10	-	F	Passive
Beaked	6E	90{5}	Spt/20	MF/MF/9	H/LA	400G	8(40)W2	85HPi/60LBa	{60MRam}	6-10	-	E	Aggress.
Narwhal	7E	90{5}	Spt/30	MF/FA/9	L/LA	300F	8(50)W2	80HHo/60LBi/50LBa	{40SRam}	2-10	-	E	Normal
Toothed Whales													
Small	7E	90{5}	Spt/30	MF/FA/9	L/LA	300F	8(50)W2	75LBi/60LBa	{30TRam}	2-10	-	D	Timid
Large	9F	110{6}	Spt/20	MF/MF/10	H/SL	550H	8(40)W2	80HBa/90HBi/70HG ^r	{50MRam}	2-10	-	F	Normal
New Sea Creatures													
Animals													
Gronshar	8E	120{7}	FSpt/20	MD/MF	H/LA	100E	1(30)	80HGr/70MPi	{60HGr/40MRam}	1	-	F	Aggr(no)
Giant Sea Turtle	7D	40{2}	Run/10	MD/MD	H/LA	120F	12(0)S1	60LPi/60MBa	{50MRam}	2-4	-	F	Pass(no)
Fa'Lon 🐠	1B	70{4}	Spt/30	FA/FA	M/-	25B	3(30)	50MBi/40SPi	-	10-20	-	A	Bellig(no)
Sea Monsters													
Demon Ray													
(Ray form)	4H	60{3}	Run/20	MD/FA	M/-	60F	1(40)	80We/60MSt/Poison/Special	-	1	-	E	Bers(in)
(Demon form)	4H	110{6}	Spt/10	FA/FA	M/II	60F	3(30)	50MClx2/40LBa/80LKr/70bs[2D]	-	1	-	E	Bers(in)
Zlor	15H	40{2}	Run/10	SL/SL	L/LA	150H	12(10)Ⓜ	40LGr/Spells	{Spells}	1	-	G	Bellig(no)
Wa'sir	15D	110{6}	Spt/10	FA/FA	M/II	160F	1(50)Ⓜ	40WBolt/Spells	{Spells}	1	f	E	Pass(su)
Dark Reef	20H	10{1}	Walk/0	CR/CR	L/LA	200H	15(0)S2	Spells	{Spells}	1	q	F	Aggr(vi)
Lesser Dark Reef	10H	10{1}	Walk/0	CR/CR	M/II#	100H	15(0)S2	Spells	{Spells}	1	n	D	Aggr(hi)

T-4.5 CREATURES STAT TABLE

Type	Lvl	Base Rate	Max Pace/ MN Bonus	Speed MS/AQ	Size/ Crit	Hits	AT [DB]	Attacks	{Sea Law attack}	# Enc.	Trea- sure	Bon EP	Outlook (IQ)
Aquatic Undead													
Skeleton (II)	3H	60	Spt/0	MD/MF	M/I#	55E	1(10)	40We/50MBa/special ②	-	1-10	c	B	Bers(no)
Zombie (III)	6C	40{2}	Run/0	SL/MD	M/I#	100F	1{NA}(20)	40MBa/Touch ③	-	2-20	④	⑤	Bers(no)
Ghost Ship (VI, at least) – Special, see note ⑧, the crew follows.													
Ls. Ghost (III)	7H	100	Spt/20	FA/FA	M/LA#	100A	1(30)⑥	60MBa/50We/Special ⑦	-	⑧	⑧	D	Bellig(av)
Gr. Ghost (V)	15H	130	FSpt/30	VF/VF	M/LA#	165A	1(50)⑥	10We/90LBA/Special ⑦	-	⑧	⑧	F	Bellig(av)
Black Ship – Special, see note ⑧, the crew follows.													
Warrior	7H	90	Dash/30	VF/FA	M/I#	135F	18(50)	130We/120We	-	70	y ⑨	F	Cruel(av)
Commander	20H	120	Dash/30	VF/VF	M/II#	400H	19(75)	175We/160We/150MSI/150MSw	-	1	y ⑨	H	Cruel(su)
Sea Drakes													
Young	10G	120{7}	Spt/30	FA/FA	H/LA	250G	12(50)W3	100HBi/60HCl/120HBa/ 40HHo/90WBr		1	yz	I	Var (av)
Mature	25G	100{6}	Spt/20	FA/MF	H/SL	350G	16(30)S2	110HBi/80HCl/150HBa/ 60HHo/120WBr	{60LRam}	1	ysz	J	Var (aa)
Old	40G	90{5}	Spt/10	MF/MF	H/SL	500G	16(50)S2	130HBi/90HCl/180HBa/ 80HHo/150WBr	{80LRam}	1	yysz	K	Var (su)
Races													
Mermen ③	5D	70{7}	Dash/15	MD/MD	M/-	60D	3(5)	45We	-	1-50	c	A	Norm(av)
Shallock													
Male	5D	60{7}	Dash/10	MD/MD	M/-	60C	3(5)	40We	-	1-40	c	A	Aggr(md)
Female	3B	60{7}	Dash/10	MD/MD	M/-	30A	3(5)	10We/10Gr	-	1-20	-	-	Pass(li)

Notes — See Part VI for the key to the standard C&T codes.

Base Rate — The first number is the base movement rate in feet/round; the number in {}'s is the creatures movement rate in *SeL* MPs/turn.

{Sea Law Attacks} —

Grapple Attacks: All Grapple attacks against a ship are resolved on Table T-1.5; treat each ship as AT: W3 for the purposes of crew hits and rigging hits. Use the ship's normal AT for hull hits and critical severity. All criticals are resolved on the Creature Grapple Critical Table T-2.6. "#LGr" is a Large Grapple attack with a maximum result of 90; "#HGr" is a Huge Grapple attack with a maximum result of 120;

Ramming Attacks: All Ramming attacks against a ship are resolved on Table T-1.7. For the purposes of determining the attack's maximum result and base OB, a creature using a ram attack has a "Hull" bow type, and the attack size is usually "Medium" for a huge creature and "Tiny" for a large creature (tiny, small, and medium sized creatures may not make ramming attacks). E.g., "#MRam" is a Medium sized ramming attack, "#TRam" is a Tiny sized ramming attack.

Artillery Attacks Against Creatures: Use the ship attack table, but the concussion hits delivered are equal 20 times to the total hits (crew, rigging, and hull) delivered ("+" hits count as half hits). All criticals are resolved using the AL critical table appropriate for the ammo (i.e., puncture for ballista bolts and Krush for balls) and the creature's size.

AT(DB) *SeL* AT — The creature's normal AT(DB) is followed by its *SeL* AT; if none is given, its *SeL* AT is W1.

Creature Specific Notes —

- ① — Can glide up to 100'.
- ② — Drains 1 Con pt/rnd after 3 rounds in 10'R.
- ③ — Touch causes nausea,-40 to all activity[RR-20]. Underwater Guardian Zombie causes Fear as Mentalist spell *Fear* [Base List Mind Control, level 6; treat as if cast by 15th level Mentalist for RR]
- ④ — "i" for Underwater Guardian Zombie, "c" for the rest.
- ⑤ — "E" for Underwater Guardian, "D" for rest.
- ⑥ — Only harmed by magical weapons.
- ⑦ — Lesser Ghost drains 4 Con pt/rnd, Greater Ghost drains 5 Con pt/rnd.
- ⑧ — A Ghost Ship's *SeL* basic ship stats are the same as its corporal counterpart (see Table T-4.7) except for the differences noted here (e.g., a Small Sloop Ghost Ship would have the same stats as a regular Small Sloop). All Ghost Ships, regardless of size and class, have AT-S2, DB20, OB10, 150 hull points, 0 rigging points, and a Ram. They have 14 MPs in all directions. A successful Ramming attack indicates that the Ghost Ship has Grappled with its victim, and the crew will begin to board. The crew of a Ghost Ship is equal to 50% of that normally found on that size vessel, with the officers being Greater Ghosts and the rest of the crew being Lesser Ghosts. All Ghost Ships carry treasure type 'w', 'x' if there are other Undead "Passengers" being carried. A Ghost Ship is worth 'HH' on the Bonus EP Table. Remember that Ghost Ships are immune to fire, and take 50% damage from normal weapons. All Crits against a Ghost Ship are reduced by two levels (i.e., a 'C' would become an 'A'). Due to their unique form of movement, Ghost Ships ignore Rigging Crits.
- ⑨ — A Black Ship's *SeL* basic ship stats are the same as those for an Annachon Sloop (see Table T-4.7) except for the differences noted here. Its AT is 'S2', its OB is 30, its crew is crack (see stats above), and its available MPs are increased by one in each wind facing. It has 1.5x the normal hull points and rigging points. It is the only ship in Kulteia (aside from a Ghost Ship) that is capable of sailing directly into the wind. Black Ships are armed with 24 heavy mangonels (12 in each broadside).
- ⑩ — Normal weapons do half damage, immune to fire.
- ⑪ — Regenerates 1-100 hits/rnd while in contact with water.
- ⑫ — For young Mermen, reduce level by 3 and hits by 30.

T-4.6 • HISTORICAL SHIPS STATS TABLE (Physical Stats)

Ship Class	Size	Dis- place- ment	Cargo Cap.	Len- gth	Beam	Draft	Free- board	Main Deck	Fore Deck	Aft Deck	# Masts/ Banks	Rig- ging	Steer- ing	Seamen / Oarsmen / Marines ¥
Egyptian (≈ 1500 – 600 B.C.)														
Merchantman	S	60	20	80	17	3	3	N	SP	SP	1 / 1	1Sq	2SO	25 / † / (25)
War Ship	S	50	–	75	14	3	4	N	SP	SP	1 / 1	1Sq	1SO	10 / 50 / 20
Phoenician (≈ 1500 – 300 B.C.)														
Merchantman	S	70	30	70	15	3.5	3	BD	Y	Y	1 / –	1Sq	1SO	25 / – / (50)
Bireme	S	35	–	75	10	3	3	LFD	N	SP	1 / 2	1Sq	2SO	10 / 60 / 15
Greek (≈ 1200 – 100 B.C.)														
Pentakonter	S	22	–	60	13	3	3	N	SP	SP	1 / 1	1Sq	2SO	50 / † / 20
Bireme	S	45	–	75	13	3	3	N	SP	Y	1 / 2	1Sq	2SO	10 / 90 / 20
Recon Boat	S	20	–	55	10	2	2	N	Y	Y	1 / 2	1Sq	2SO	50 / † / 5
Early Trieme	M	80	–	110	15	3	4.5	N	Y	Y	1 / 3	1Sq	2SO	15 / 120 / 30
Trieme	M	70	–	105	15	3	6	Y	–	–	1 / 3	1Sq	2SO	20 / 140 / 20
Pentere	M	150	–	100	22	4	8	Y	Y	–	1 / 1	1Sq	2SO	25 / 150 / 70
Quadrireme	L	220	–	150	25	5	9	Y	Y	–	1 / 1	1Sq	2SO	35 / 225 / 120
General Merchantmen (≈ 600 B.C. – 1200 A.D.)														
Small	S	40	18	60	15	4	4	Y	SP	–	1 / 1	1Sq	1SO	20 / † / –
Medium	M	140	80	80	20	5	6	Y	Y	–	1 / 1	1Sq	1SO	35 / † / –
Large	L	350	220	100	27	7	8	Y	Y	–	1 / 1	1Sq	1SO	45 / † / –
Fast	M	80	20	120	18	3	6	Y	Y	–	1 / 1	1Sq	1SO	30 / 80 / –
Carthaginian (≈ 600 B.C. – 100 B.C.)														
Bireme	S	65	–	100	15	3	7	BD	N	Y	1 / 2	1Sq	2SO	30 / 100 / 25
Pentere	M	110	–	100	18	4	5	BD	N	Y	1 / 1	1Sq	2SO	25 / 150 / 40
Roman (≈ 400 B.C. – 300 A.D.)														
Early Bireme	M	75	–	105	16	3	7	Y	–	Y	1 / 2	1Sq	2SO	30 / 110 / 60
Quinquereme	M	115	–	100	18	4	5	BD	N	Y	1 / 1	1Sq	2SO	25 / 150 / 75
Later Bireme	M	80	–	105	17	3	7	Y	–	Y	1 / 2	1Sq	2SO	30 / 110 / 80
Liburna	S	30	–	60	13	2.5	4	BD	SP	Y	1 / 2	1Sq	1SO	10 ‡ / 45 ‡ / 25
Large War Ship	L	220	–	150	22	5	9	Y	–	Y	2 / 2	2Sq	2SO	45 / 280 / 150
Byzantine (≈ 400 – 1200 A.D.)														
Early Galley	S	30	–	60	10	3	4	BD	SP	Y	1 / 1	1La	1SO	12 / 60 / 25
Small Domon	M	75	–	110	14	4	7	BD	Y	Y	2 / 2	2La	2SO	25 / 125 / 35
Large Domon	L	180	–	130	18	5	10	BD	Y	Y	2 / 2	2La	2SO	40 / 200 / 60
Mediterranean (≈ 1000 – 1700 A.D.)														
Recon Galley	S	55	–	80	14	3	5	BD	Y	Y	1 / 1	1La	Ru	25 / 60 / 25
Cargo Galley	L	700	400	125	35	6	6	BD	Y	Y	2 / 1	2La	Ru	45 / 150 / 60
Battle Galley	L	140	50	125	17	4	5	BD	Y	Y	1 / 1	1La	Ru	45 / 120 / 90
Later Battle Galley	L	175	–	130	18	4	5	BD	Y	Y	2 / 1	2La	Ru	45 / 150 / 60
Galleass	L	700	–	180	30	10	10	Y	Y	Y	3 / 1	3La	Ru	75 / 350 / 250
Merchant Galley	L	750	450	170	30	5	6	Y	Y	Y	2 / 1	2La	Ru	45 / 80 / 30
Merchantman	M	250	150	60	18	10	4	Y	N	Y	2 / –	2La	1SO	25 / – / –
Vikings (≈ 400 – 1200 A.D.)														
Sm. Merchantman	S	25	12	55	15	3	3	BD	N	N	1 / 1	1Sq	1SO	10 / 15 / ‡
La. Merchantman	M	70	35	90	18	4	4	Y	N	N	1 / 1	1Sq	1SO	15 / 25 / ‡
Warboat	S	30	–	70	15	3	3	BD	N	N	1 / 1	1Sq	1SO	70 / † / ‡
Long Ship	M	50	–	100	17	3	4	BD	N	N	1 / 1	1Sq	1SO	105 / † / ‡
Non-Viking Atlantic Ships (≈ 900 – 1600 A.D.)														
Small Cog	S	90	50 §	60	21	5	4	Y	SP	SP	1 / –	1Sq	1SO	20 / – / 25 §
Medium Cog	M	350	200 §	90	28	7	6	Y	SP	Y	1 / –	1Sq	Ru	60 / – / 50 §
Large Cog	L	1000	600 §	115	35	11	7	Y	Y	Y	1 / –	1Sq	Ru	110 / – / 90 §
Small Caravel	S	60	35 §	60	20	6	4	Y	N	Y	2 / –	1Sq, 1La	Ru	15 / – / 20 §
Large Caravel	S	100	50 §	75	25	10	4	Y	N	Y	3 / –	2Sq, 1La	Ru	30 / – / 35 §
Small Carrack	S	300	150 §	80	20	6	7	Y	Y	Y	3 / –	2SR, 1LR	Ru	65 / – / 75 §
Medium Carrack	M	650	400 §	90	25	8	7	Y	Y	Y	3 / –	2SR, 1LR	Ru	100 / – / 115 §
Large Carrack	L	1000	600 §	100	32	10	7	Y	Y	Y	3 / –	2SR, 1LR	Ru	135 / – / 150 §

T-4.6 • HISTORICAL SHIPS STATS TABLE (Physical Stats)

Ship Class	Size	Dis- place- ment	Cargo Cap.	Len- gth	Beam	Draft	Free- board	Main Deck	Fore Deck	Aft Deck	# Masts/ Banks	Rig- ging	Steer- ing	Seamen / Oarsmen / Marines ¥
Later Ships (≈ 1600 – 1800 A.D.)														
Cutter														
Small	S	60	35 §	60	14	8	5	Y	N	N	1 / -	FR	Ru	15 / - / (10)
Medium	S	170	100 §	80	19	9	5	Y	N	N	1 / -	FR	Ru	30 / - / (20)
Naval	M	275	150 §	100	22	6	5	Y	N	N	1 / -	FR	Ru	50 / - / (30)
Sloop/Schooner														
Small	S	150	75 §	70	16	6	4	Y	N	N	1-2 / -	FR	Ru	20 / - / (10)
Medium	M	300	150 §	100	23	9	6	Y	N	N	1-2 / -	FR	Ru	35 / - / (30)
Brig/Brigantine														
Flute	M	450	300 §	80	30	10	10	Y	Y	Y	3 / -	SR	Ru	50 / - / (50)
Frigate														
Slow	M	800	30	120	34	18	10	Y	Y	Y	3 / -	SR	Ru	100 / - / (100)
Fast	M	700	20	110	30	15	10	Y	Y	Y	3 / -	SR	Ru	90 / - / (75)
Ship-of-the-line														
Slow	L	1500	60	170	38	24	15	Y	Y	Y	3 / -	SR	Ru	250 / - / (200)
Fast	L	1000	40	150	35	20	15	Y	Y	Y	3 / -	SR	Ru	200 / - / (150)
Galleon	L	900	40	125	35	18	15	Y	Y	Y	3 / -	SR	Ru	250 / - / (200)
Galley	L	600	30	160	25	8	10	Y	Y	Y	3 / 1	LR	Ru	60 / 200 / (200)
Gunboat	S	90	-	50	15	3	2	Y	N	N	1 / 1	SR	Ru	40 / † / (10)
Merchantmen														
Small	S	350	200	80	30	10	10	Y	N	N	2 / -	SR	Ru	30 / - / (10)
Medium	M	800	450	100	35	15	15	Y	N	Y	3 / -	SR	Ru	45 / - / (20)
Large	L	1500	800	140	40	20	15	Y	Y	Y	3 / -	SR	Ru	60 / - / (30)
Very Large	L	2000	110	200	50	25	15	Y	Y	Y	3 / -	SR	Ru	90 / - / (50)

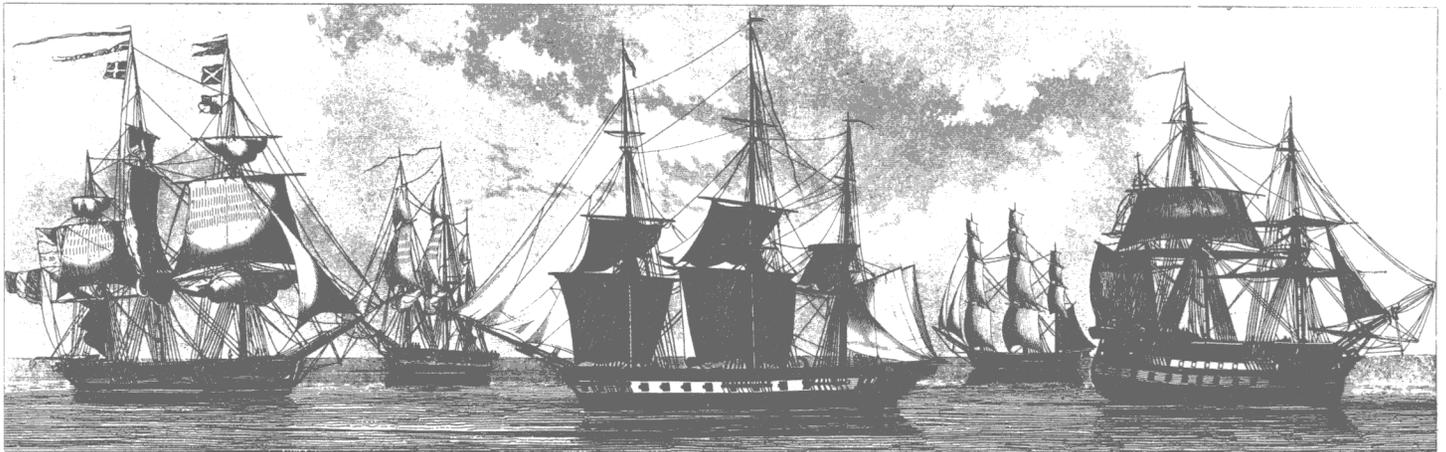
Notes:
Rigging: Sq = Square sail; La = Lateen sail; FR = Fore & Aft Rigged; LR = Lateen Rigged; SR = Square Rigged.
Steering: SO = Steering Oar; Ru = Rudder.
Deck: ND = No Deck; SP = Small Platform; BD = Bilges (and hold) Decked; LFD = Light Fighting Deck.

¥ — This is the total number of marines and additional passengers that may be carried.

† — Seamen serve as oarsmen when necessary.

‡ — Entire crew is armed and will fight in boarding actions.

§ — These ships can be used as military war ships, military transports, or merchant ships. If used as a military war ship, all stats are as given except the cargo capacity is 10% of the figure given. If used as a military transport, ignore all stats marked with a § and the ship may carry a number of troop equal to 2.5x the stat given for the number of marines carried (1 horse = 5 troops). If used as a merchant ship, ignore all stats marked with a § except the cargo capacity.



T-4.6 • HISTORICAL SHIPS STATS TABLE (Movement Stats)

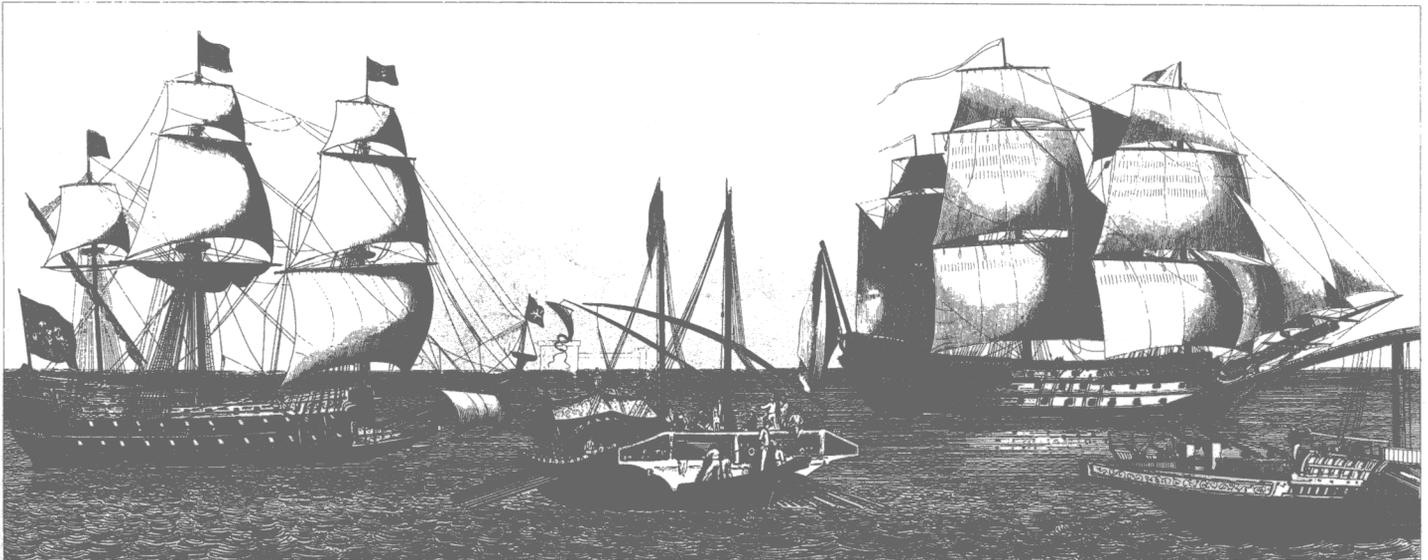
Ship Class	Light Winds Move. Pts.			Moderate Winds Move. Pts.			Strong Winds Move. Pts.			Full Sail Bonus/ Failure	Sail Turn Limit	Oared Movement Pts			HTC
	A	B	C	A	B	C	A	B	C			Cruise	Battle	Ram	
Egyptian (≈ 1500 – 600 B.C.)															
Merchant	2	1	0	3	2	0	6	3	0	-	2	2	3	4	G
War Ship	2	1	0	4	2	0	7	4	0	-	2	3	4	5	G
Phoenician (≈ 1500 – 300 B.C.)															
Merchant	2	1	0	4	2	0	7	4	0	-	2	-	-	-	P
Bireme	3	1	0	5	3	0	7	4	0	-	2	3	4	6	G
Greek (≈ 1200 – 100 B.C.)															
Pentakonter	3	1	0	5	3	0	7	4	0	-	2	3	5	6	G
Bireme	3	1	0	5	3	0	7	4	0	-	2	3	5	6	G
Recon Boat	4	1	0	6	4	0	8	5	0	-	2	3	6	7	G
Early Trieme	3	1	0	5	3	0	8	4	0	-	2	4	5	7	G
Trieme	3	1	0	6	3	0	8	4	0	-	2	3	5	8	G
Pentere	2	1	0	5	2	0	7	3	0	-	1	3	4	6	G
Quadrيرهme	2	1	0	5	2	0	7	3	0	-	1	3	4	6	G
General Merchantmen (≈ 600 B.C. – 1200 A.D.)															
Small	2	1	0	4	2	0	6	3	0	-	2	2	3	4	G
Medium	2	1	0	4	2	0	6	3	0	-	1	1	2	2	G
Large	2	1	0	4	2	0	6	3	0	-	1	1	2	2	G
Fast	3	1	0	6	3	0	8	4	0	-	2	3	4	5	G
Carthaginian (≈ 600 B.C. – 100 B.C.)															
Bireme	3	1	0	6	3	0	7	4	0	-	2	4	5	7	G
Pentere	3	1	0	5	2	0	7	3	0	-	2	3	4	6	G
Roman (≈ 400 B.C. – 300 A.D.)															
Early Bireme	3	1	0	6	3	0	8	4	0	-	2	4	5	7	G
Quinquereme	3	1	0	5	2	0	7	3	0	-	2	3	4	6	G
Later Bireme	3	1	0	6	4	0	8	5	0	-	2	4	5	7	G
Liburna	3	2	0	5	3	0	7	4	0	-	2	3	4	6	G
Large War Ship	2	1	0	5	2	0	7	3	0	-	1	3	4	6	G
Byzantine (≈ 400 – 1200 A.D.)															
Early Galley	4	5	1	6	7	2	8	9	2	-	2	3	5	7	G
Small Domon	3	4	1	6	7	2	8	9	2	-	2	4	5	7	G
Large Domon	2	3	1	5	6	1	7	8	1	-	1	3	4	6	G
Mediterranean (≈ 1000 – 1700 A.D.)															
Recon Galley	3	4	1	6	7	2	9	10	3	-	2	4	5	6	G
Cargo Galley	2	3	1	3	4	1	6	7	2	-	1	2	3	4	G
Battle Galley	3	4	1	5	6	2	8	9	2	-	1	3	4	6	G
Later Battle Galley	3	4	1	6	7	2	9	10	3	-	1	3	4	6	G
Galleass	2	3	1	4	5	1	7	8	2	-	1	2	3	5	G
Merchant Galley	2	3	1	4	5	1	8	9	2	-	1	2	3	4	G
Merchantman	2	3	1	3	4	1	6	7	2	-	1	-	-	-	P
Vikings (≈ 400 – 1200 A.D.)															
Sm. Merchantman	3	2	2	5	4	3	7	4	3	-	2	1	2	3	G
La. Merchantman	3	2	1	5	3	2	7	4	3	-	2	1	2	3	G
Warboat	4	3	2	6	4	3	8	5	4	-	2	4	6	7	G
Long Ship	4	3	2	6	4	3	9	6	4	-	2	4	6	7	G
Non-Viking Atlantic Ships (≈ 900 – 1600 A.D.)															
Small Cog	2	2	1	5	3	2	7	6	2	-	2	-	-	-	P
Medium Cog	2	2	1	4	2	1	7	5	2	-	1	-	-	-	P
Large Cog	2	1	1	4	2	1	7	4	2	-	1	-	-	-	P
Small Caravel	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Large Caravel	4	3	1	6	5	2	8	9	3	-	2	-	-	-	P
Small Carrack	3	3	1	7	6	3	9	8	4	-	2	-	-	-	P
Medium Carrack	3	3	1	7	6	2	9	7	4	-	2	-	-	-	P
Large Carrack	3	3	1	7	5	2	9	6	3	-	2	-	-	-	P

T-4.6 • HISTORICAL SHIPS STATS TABLE (MOVEMENT STATS)

Ship Class	Light Winds Move. Pts.			Moderate Winds Move. Pts.			Strong Winds Move. Pts.			Full Sail Bonus/ Failure	Sail Turn Limit	Oared Movement Pts			HTC
	A	B	C	A	B	C	A	B	C			Cruise	Battle	Ram	
Later Ships (≈ 1600 – 1800 A.D.)															
Cutter															
Small	10	10	6	12	12	7	14	14	8	+2 / 6	3	–	–	–	A
Medium	10	9	5	12	11	6	14	13	7	+2 / 6	3	–	–	–	A
Naval	10	8	4	12	10	5	14	12	6	+2 / 6	3	–	–	–	A
Sloop/Schooner															
Small	10	9	5	12	11	6	14	13	7	+2 / 6	3	–	–	–	A
Medium	9	8	4	12	10	5	14	12	6	+2 / 6	3	–	–	–	A
Brig/Brigantine	9	7	3	12	10	4	14	12	5	+2 / 6	2	–	–	–	A
Flute	5	3	2	8	4	2	10	6	3	+1 / 4	2	–	–	–	A
Frigate															
Slow	7	5	3	10	7	4	12	9	5	+2 / 6	3	–	–	–	A
Fast	9	6	4	12	9	5	14	11	5	+2 / 6	3	–	–	–	A
Ship-of-the-line															
Slow	4	3	1	7	4	2	9	6	3	+1 / 4	2	–	–	–	A
Fast	5	4	2	8	5	3	10	7	4	+1 / 4	2	–	–	–	A
Galleon	3	2	1	6	3	2	8	5	2	+1 / 5	1	–	–	–	Ga
Galley	3	2	1	5	3	2	7	4	2	+1 / 6	1	2	5	7	A
Gunboat	3	1	0	4	2	1	6	3	2	+1 / 6	1	2	4	6	A
Merchantmen															
Small	9	7	3	12	10	4	14	12	5	+1 / 4	2	–	–	–	A
Medium	7	5	2	10	7	3	12	9	4	+1 / 4	2	–	–	–	A
Large	6	4	2	9	6	3	11	8	3	+1 / 5	1	–	–	–	A
Very Large	5	3	1	8	5	2	10	7	2	+1 / 6	1	–	–	–	A

Notes:

HTC: G = Galley (no Battle Sails); P = Primitive Sailing Ship (+1 turn to change to Battle Sails);
 Ga = Galleon (cost 3 MPs to turn); A = Advanced Design (no restrictions).



T-4.6 • HISTORICAL SHIPS STATS TABLE (Combat Stats)

Ship Class	OB	DB	AT	Ram Type	Hull Pts	Rigging Pts	Oar Pts	Seamen/Oarsmen/ Marine Points	Historical Equipment & Armament
Egyptian (≈ 1500 – 600 B.C.)									
Merchantman	-12	10	W1	none	15	5	2	5 / † / (5)	none
War Ship	-2	10	W1	spur	15	5	6	2 / 10 / 4	none
Phoenician (≈ 1500 – 300 B.C.)									
Merchantman	-10	8	W1	none	30	9	-	5 / - / (10)	none
Bireme	-2	10	W1	ram	20	6	6	2 / 12 / 3	none
Greek (≈ 1200 – 100 B.C.)									
Pentakonter	-2	10	W1	none	15	5	4	10 / † / 4	none
Bireme	-2	10	W1	ram	20	6	10	2 / 18 / 4	none
Recon Boat	-2	10	W1	ram	15	5	4	10 / † / 1	none
Early Trieme	3	0	W2	ram	70	14	12	3 / 24 / 6	none
Trieme	3	0	W2	ram	80	16	14	4 / 28 / 4	none
Pentere	3	0	W2	ram	90	18	16	5 / 30 / 14	2-3 ballistae
Quadrireme	8	-5	W2	ram	100	20	24	7 / 45 / 24	2-5 ballistae
General Merchantmen (≈ 600 B.C. – 1200 A.D.)									
Small	-12	10	W1	none	15	5	2	4 / † / -	none
Medium	-7	0	W2	none	30	6	4	7 / † / -	none
Large	-2	-5	W2	none	40	8	4	9 / † / -	none
Fast	-7	0	W2	none	50	10	8	6 / 16 / -	none
Carthaginian (≈ 600 B.C. – 100 B.C.)									
Bireme	-2	10	W2	ram	50	10	10	6 / 20 / 5	none
Pentere	3	0	W2	ram	65	13	16	5 / 30 / 8	none
Roman (≈ 400 B.C. – 300 A.D.)									
Early Bireme	3	0	W2	ram	90	18	12	6 / 22 / 12	Corvus or Ballistae
Quinguereme	3	0	W2	ram	110	22	16	5 / 30 / 15	Corvus
Later Bireme	3	0	W3	ram	130	20	12	6 / 22 / 16	2 Towers, 4 Ballistae
Liburna	-2	10	W2	ram	35	7	6	2 ‡ / 9 ‡ / 5	(Corvus)
Large War Ship	8	-5	W2	none	256	80	28	9 / 56 / 30	2 Towers, 2 Corvi, 6-8 Ballistae
Byzantine (≈ 400 – 1200 A.D.)									
Early Galley	-2	10	W1	ram	15	5	6	2 ‡ / 12 ‡ / 5	none
Small Domon	3	0	W2	spur	70	21	12	5 ‡ / 25 ‡ / 7	(1 Catapult)
Large Domon	8	-5	W2	ram	180	55	20	8 ‡ / 40 ‡ / 12	3 Towers, 1-2 Catapults, (Greek Fire)
Mediterranean (≈ 1000 – 1700 A.D.)									
Recon Galley	-2	14	W2	spur or ram	40	9	30	5 / 60 / 5	none
Cargo Galley	8	-1	W3	spur or ram	290	85	16	9 / 30 / 12	none
Battle Galley	8	-1	W2	spur or ram	165	35	12	9 / 24 / 18	none
Later Battle Galley	8	-1	W3	spur or ram	220	65	16	9 / 30 / 60	5 bow guns
Galleass	8	-1	W3	spur or ram	520	200	36	15 / 70 / 50	5 bow guns, 25 light guns
Merchant Galley	8	-1	W2	(spur)	320	95	8	9 / 16 / 6	none
Merchantman	-7	-2	W2	none	75	23	-	5 / - / -	none
Vikings (≈ 400 – 1200 A.D.)									
Sm. Merchantman	-12	10	W2	none	35	7	2	2 / 3 / ‡	none
La. Merchantman	-7	0	W3	none	75	15	4	3 / 5 / ‡	none
Warboat	-2	10	W3	none	45	9	6	14 / † / ‡	none
Long Ship	3	0	W3	none	70	14	10	21 / † / ‡	none
Non-Viking Atlantic Ships (≈ 900 – 1600 A.D.)									
Small Cog	-5	8	W2	none	55	10	-	5 / - / 5 §	varies §
Medium Cog	0	2	W3	none	175	35	-	12 / - / 10 §	varies §
Large Cog	5	-3	W3	none	300	60	-	22 / - / 18 §	varies §
Small Caravel	-5	12	W2	none	45	15	-	3 / - / 4 §	varies §
Large Caravel	-5	12	W2	none	75	30	-	6 / - / 7 §	varies §
Small Carrack	-5	12	W3	none	120	60	-	13 / - / 15 §	varies §
Medium Carrack	0	2	W3	none	190	95	-	20 / - / 23 §	varies §
Large Carrack	5	-3	W3	none	260	130	-	27 / - / 30 §	varies §

T-4.6 • HISTORICAL SHIPS STATS TABLE (COMBAT STATS)

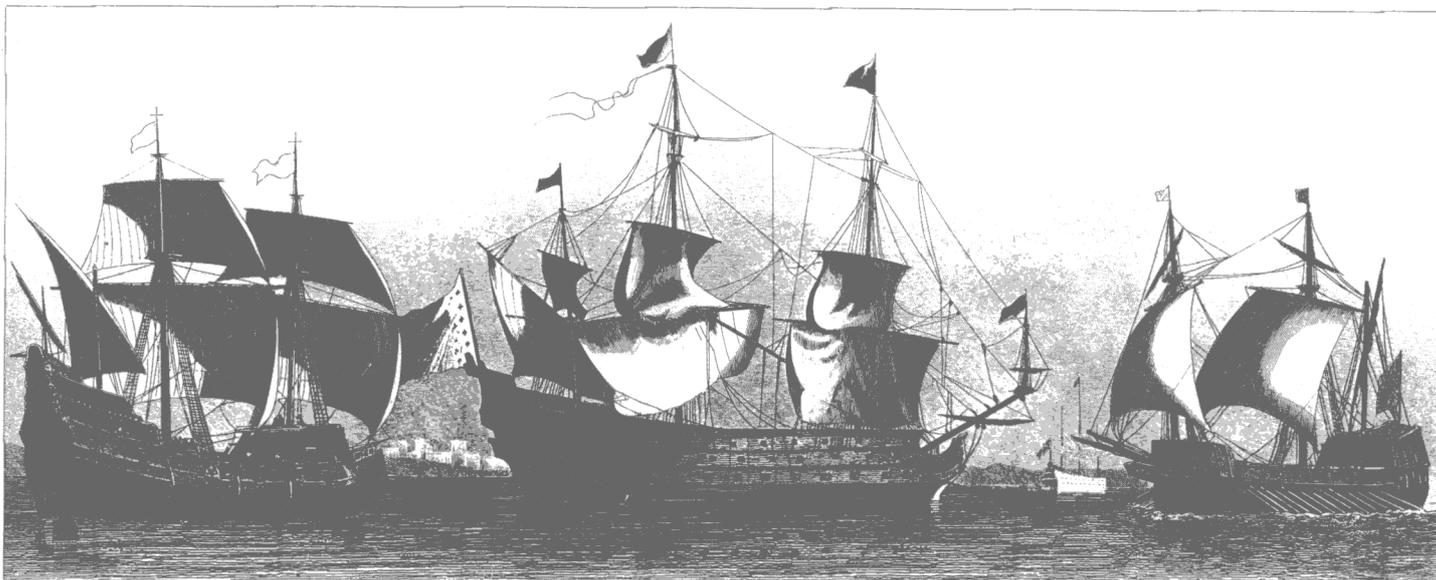
Ship Class	OB	DB	AT	Ram Type	Hull Pts	Rigging Pts	Oar Pts	Seamen/Oarsmen/ Marine Points	Historical Equipment & Armament
Later Ships (≈ 1600 – 1800 A.D.)									
Cutter									
Small	-5	12	W2	none	50	15	-	3 / - / (2) §	Maximum of 0-4 guns, plus small guns §
Medium	-5	12	W2	none	100	30	-	6 / - / (4) §	Maximum of 0-8 guns, plus small guns §
Naval	5	2	W2	none	150	45	-	10 / - / (6)	1-10 guns, plus small guns
Sloop/Schooner									
Small	-5	12	W2	none	125	40-50	-	4 / - / (2) §	Maximum of 15 guns, plus small guns §
Medium	0	2	W2	none	200	60-80	-	7 / - / (6) §	Maximum of 20 guns, plus small guns §
Brig/Brigantine									
Flute	0	2	W3	none	270	105-135	-	14 / - / (12) §	Maximum of 25 guns, plus small guns §
Flute	0	2	W2	none	250	125	-	10 / - / (10) §	Maximum of 15 guns, plus small guns §
Frigate									
Slow	5	2	W3	none	450	225	-	20 / - / (20)	32-50 guns, plus numerous small guns
Fast	5	2	W3	none	400	200	-	18 / - / (15)	32-44 guns, plus numerous small guns
Ship-of-the-line									
Slow	10	-3	W3	none	850	425	-	50 / - / (40)	80-120 guns, plus numerous small guns
Fast	10	-3	W3	none	700	350	-	40 / - / (30)	50-90 guns, plus numerous small guns
Galleon	10	-8	W3	none	650	325	-	50 / - / (40)	120 guns, plus numerous small guns
Galley	8	-1	W3	none	500	250	20	12 / 40 / (40)	120 guns, plus numerous small guns
Gunboat	0	12	W1	none	100	45	4	8 / † / (2)	1-2 guns, plus small guns
Merchantmen									
Small	-10	12	W2	none	50	20	-	6 / - / (2)	(0-5 guns)
Medium	-5	2	W3	none	150	75	-	9 / - / (3)	(0-10 guns)
Large	0	-3	W3	none	250	125	-	12 / - / (6)	(0-20 guns)
Very Large	0	-3	W3	none	350	175	-	18 / - / (10)	(10-40 guns)

Notes:

† — Seamen serve as oarsmen when necessary.

‡ — Entire crew is armed and will fight in boarding actions.

§ — These ships can be used as military war ships, military transports, or merchant ships. If used as a military war ship, all stats are as given except the cargo capacity is 10% of the figure given. If used as a military transport, ignore all stats marked with a § and the ship may carry a number of troop equal to 2.5x the stat given for the number of marines carried (1 horse = 5 troops). If used as a merchant ship, ignore all stats marked with a § except the cargo capacity.



T-4.7 • KULTHEAN SHIPS STATS TABLE (Physical Stats)

Ship Class	Size	Dis- place- ment	Cargo Cap.	Len- gth	Beam	Draft	Free- board	Main Deck	Fore Deck	Aft Deck	# Masts/ Banks	Rig- ging	Steer- ing	Seamen / Oarsmen / Marines ¥
Jaiman														
Sloop (Annachon)	M	400	200 §	100	25	10	6	Y	N	N	1-2/-	FR	Ru	72/-/60
Sloop (Var'Lis)	M	350	150 §	100	25	10	6	Y	N	N	1-2/-	FR	Ru	72/-/50
Nor	S	350	200	105	30	10	10	Y	N	N	2/-	SR	Ru	30/-/10
Aavar	M	800	480	110	35	15	15	Y	N	Y	3/-	SR	Ru	45/-/20
Frigar	M	750	-	120	34	15	15	Y	Y	Y	3/-	SR	Ru	120/-/100
Pent	M	120	60	100	25	8	3	N	N	N	1/1	SQ	1 SO	4/50/10
Lighter	S	50	30 §	60	14	9	5	Y	N	N	1/-	FR	Ru	20/-/10
Barch	M	375	210 §	100	30	10	6	Y	N	Y	2-3/-	SR,FR	Ru	70/-/65
Corvar	M	700	500	120	35	15	15	Y	N	Y	3/-	SR	Ru	45/-/20
Emer														
Galleon	L	1050	400 §	135	35	17	15	Y	Y	Y	3/-	SR	Ru	240/-/200
Kalk	M	450	250	100	30	10	15	Y	N	Y	3/-	SR	Ru	50/-/20
Sloop	M	350	150 §	100	25	10	6	Y	N	N	1-2/-	FR	Ru	72/-/50
Frigar	M	750	-	120	34	15	15	Y	Y	Y	3/-	SR	Ru	120/-/100
Coaster	S	500	400	100	30	10	10	Y	N	N	2/-	FR	Ru	40/-/20
Lighter	S	50	30 §	60	14	9	5	Y	N	N	1/-	FR	Ru	20/-/10
Nar	M	75	-	100	17	3	4	BD	N	N	1/1	1Sq	1SO	70/†/‡
Galleys	<i>Select from the Greek galleys in the Historical Ships Stats Table T-4.6</i>													
Cor	M	300	150	85	20	10	6	Y	SP	Y	1/-	1Sq	Ru	50/-/50 §
Caravel	S	80	40	85	20	7	4	Y	N	Y	2/-	1Sq,1La	Ru	25/-/50 §
Kelestia														
Vor	M	700	500	100	30	15	15	Y	N	Y	3/-	SR	Ru	50/-/20
Illia	S	110	40	90	30	7	5	Y	N	Y	3/-	1Sq,1La	Ru	25/-/50 §
Carrack	L	1000	700	110	30	11	7	Y	Y	Y	3/-	2SR,1LR	Ru	124/-/150 §
Frigar	M	750	-	120	34	15	15	Y	Y	Y	3/-	SR	Ru	120/-/100
Ra'Vir	M	100	40	100	17	3	4	BD	N	N	1/1	1Sq	1SO	70/†/‡
Ketch	S	50	30 §	60	14	9	5	Y	N	N	1/-	FR	Ru	20/-/10
Mulira														
Coaster	S	50	30 §	60	14	9	5	Y	N	N	1/-	FR	Ru	20/-/10
Yar, Lesser	M	50	-	100	17	3	4	BD	N	N	1/1	1Sq	1SO	100/†/‡
Yar, Greater	M	75	15	110	25	4	5	BD	N	N	1/1	1Sq	1SO	125/†/‡
Aur	M	665	400	90	20	11	7	Y	Y	Y	3/-	2SR,1LR	Ru	110/-/115 §
Veris	M	100	40	85	20	7	4	Y	N	Y	2/-	1Sq,1La	Ru	41/-/35 §
Gaalt														
Merchantile	M	100	60	75	20	7	4	Y	N	Y	3/-	2Sq,1La	Ru	41/-/35 §
Merchantila	S	85	45	65	15	7	4	Y	N	Y	3/-	2Sq,1La	Ru	30/-/25 §
Ketch	S	50	30 §	60	14	9	5	Y	N	N	1/-	FR	Ru	20/-/10
Garron	L	1150	500	140	40	19	15	Y	Y	Y	3/-	SR	Ru	225/-/200
Galleys	<i>Select from the Greek galleys in the Historical Ships Stats Table T-4.6</i>													
Garshiff	M	50	-	100	17	3	4	BD	N	N	1/1	1Sq	1SO	100/†/‡
Devshiff	M	75	15	110	25	4	5	BD	N	N	1/1	1Sq	1SO	125†/‡
Caravel	S	85	40	85	20	7	4	Y	N	Y	2/-	1Sq,1La	Ru	35/-/25 §
Iyxia														
Merchantman	L	1325	1000	150	45	15	15	Y	Y	Y	3/-	SR	Ru	65/-/(30)
Brigantine	M	300	175	110	25	10	8	Y	N	Y	2/-	SR,FR	Ru	72/-/60
Frigate	M	750	-	120	34	15	15	Y	Y	Y	3/-	SR	Ru	120/-/100
Galleon	L	1050	400 §	135	35	17	15	Y	Y	Y	3/-	SR	Ru	240/-/200
Corsair	S	100	50	60	16	6	4	Y	N	N	1/-	FR	Ru	25/-/(20)
Merchantile	M	100	60	75	20	7	4	Y	N	Y	3/-	2Sq,1La	Ru	41/-/35 §
Coaster	S	390	300	100	30	10	4	Y	N	Y	2/-	SR	Ru	45/-/(20)
Agyra														
Merchiltal	<i>(Old Style)</i>													
(Old Style)	M	90	45	75	20	5	4	Y	N	Y	2/1	1Sq, 1La	1SO	20/50/(20)
(New Style)	M	100	55	75	20	7	4	Y	N	Y	2/-	1Sq,1La	Ru	25/-/(25)
Cog	M	300	150	100	28	10	6	Y	SP	Y	1/-	1Sq	Ru	55/-/70 §
Ort	<i>Use stats for Greek Trireme from Historical Stats Table T-4.6</i>													
Coron	L	1000	700	110	30	11	7	Y	Y	Y	3/-	2SR, 1LR	Ru	124/-/150 §

T-4.7 • KULTHEAN SHIPS STATS TABLE (Physical Stats)

Ship Class	Size	Dis- placement	Cargo Cap.	Len- gth	Beam	Draft	Free- board	Main Deck	Fore Deck	Aft Deck	# Masts/ Banks	Rig- ging	Steer- ing	Seamen / Oarsmen / Marines ¥
Palia														
Frigate	M	650	—	130	39	20	15	Y	Y	Y	3 / -	SR	Ru	110 / - / 100
Sloop	M	350	150 §	100	25	10	6	Y	N	N	1-2 / -	FR	Ru	72 / - / 50
Merchantman														
Small	S	350	200	80	30	10	10	Y	N	N	2 / -	SR	Ru	30 / - / (10)
Medium	M	800	500	100	35	15	15	Y	N	Y	3 / -	SR	Ru	45 / - / (20)
Large	L	1500	1000	140	40	20	15	Y	Y	Y	3 / -	SR	Ru	60 / - / (35)
Brigantine	M	375	200	100	25	10	8	Y	N	Y	3 / -	SR,FR	Ru	70 / - / 80 §
Lighter	S	50	30 §	60	14	9	5	Y	N	N	1 / -	FR	Ru	20 / - / 10
Ba' IIs	S	10	1	20	8	3	3	N	N	N	1 / 1	1Sq	1SO	3 / 40 / (10)
Fa' IIs	S	10	—	10	5	3	2	N	N	N	1 / 1	1Sq	1SO	2 / 20 / (10)
Thuul														
Annas, No deck	M	80	—	110	15	3	4.5	N	Y	Y	1 / 3	1Sq	2SO	15 / 120 / 30
Annas, With deck	M	70	—	105	15	3	6	Y	Y	Y	1 / 3	1Sq	2SO	20 / 140 / 20
Navra	S	100	50	75	20	7	4	Y	N	Y	3 / -	2Sq, 1La	Ru	33 / - / 45 §
Garrack	L	900	250	125	35	18	15	Y	Y	Y	3 / -	SR	Ru	250 / - / (200)
Sloop	M	300	55	100	23	9	6	Y	N	N	1-2 / -	FR	Ru	35 / - / (30)
Cog	M	350	200 §	90	28	7	6	Y	SP	Y	1 / -	1Sq	Ru	60 / - / 50 §
Falias														
Caravel	S	60	35 §	60	20	6	4	Y	N	Y	2 / -	1Sq, 1La	Ru	15 / - / 20 §
Crager	M	650	400	90	25	8	7	Y	Y	Y	3 / -	2SR, 1LR	Ru	100 / - / 115 §
Battleship	L	900	40	125	35	18	15	Y	Y	Y	3 / -	SR	Ru	250 / - / (200)
Cutter	M	275	75 §	100	22	6	5	Y	N	N	1 / -	FR	Ru	50 / - / (30)
Galleys	<i>Use the Early Bireme and Later Bireme from the Roman section of the Historical Ships Stats Table T-4.6</i>													
Govon														
Carnas	S	390	250	100	30	10	4	Y	Y	Y	2 / -	SR	Ru	42 / - / (25)
Corsicar	M	300	15	100	23	9	6	Y	N	N	1-2 / -	FR	Ru	35 / - / (30)
Destroyer	L	900	50	125	35	18	15	Y	Y	Y	3 / -	SR	Ru	250 / - / (200)
Folenn														
Trireme, No Deck	<i>Use the Early Trireme from the Greek section of the Historical Ships Stats Table T-4.6</i>													
Trireme, With Deck	<i>Use the Trireme from the Greek section of the Historical Ships Stats Table T-4.6</i>													
Piritar	S	60	—	80	15	3	5	Y	N	-	1 / 2	1Sq	2SO	15 / 120 / 40
Sprinter	M	80	—	100	15	3	6	Y	N	-	1 / 2	1Sq	2SO	20 / 120 / 30
Merchantil	L	685	530	100	20	11	15	Y	Y	Y	3 / -	SR	Ru	100 / - / (75)
Lighter	S	100	45	70	16	10	6	Y	N	N	1 / -	FR	Ru	35 / - / (40)
Sloop	M	195	55	100	23	10	6	Y	N	N	2 / -	FR	Ru	40 / - / (50)
Brigantine	M	300	150	100	25	10	8	Y	N	Y	3 / -	SR,FR	Ru	70 / - / (60)
Murlis														
Halar	M	675	450	120	35	15	15	Y	Y	Y	3 / -	SR	Ru	50 / - / (20)
Merchant	S	390	200	100	30	15	15	Y	Y	Y	3 / -	SR	Ru	40 / - / (20)
Scout	S	100	30	80	22	10	6	Y	N	N	1 / -	FR	Ru	40 / - / 25
Brig	M	300	150	100	25	10	8	Y	N	Y	3 / -	SR,FR	Ru	65 / - / 40
Destroyer	M	750	—	120	34	15	10	Y	Y	Y	3 / -	SR	Ru	100 / - / 60
Ketch	M	300	150	100	22	6	6	Y	N	N	2 / -	FR	Ru	45 / - / (35)
Mythenis														
Yir	S	100	50	85	20	7	4	Y	N	Y	2 / -	1Sq, 1La	Ru	20 / - / 20 §
Caravar	M	100	50	85	20	7	4	Y	N	Y	3 / -	2Sq, 1La	Ru	25 / - / 30
Longship	M	50	—	90	17	3	4	BD	N	N	1 / 1	1Sq	1SO	105 / † / ‡
Berch	M	700	500	120	35	15	15	Y	Y	Y	3 / -	SR	Ru	50 / - / (45)

Notes:

Rigging: Sq = Square sail; La = Lateen sail; FR = Fore & Aft Rigged; LR = Lateen Rigged; SR = Square Rigged.

Steering: SO = Steering Oar; Ru = Rudder.

Deck: ND = No Deck; SP = Small Platform; BD = Bilges (and hold) Decked; LFD = Light Fighting Deck.

¥ — This is the total number of marines and additional passengers that may be carried.

† — Seamen serve as oarsmen when necessary.

‡ — Entire crew is armed and will fight in boarding actions.

§ — These ships can be used as military war ships, military transports, or merchant ships. If used as a military war ship, all stats are as given except the cargo capacity is 10% of the figure given. If used as a military transport, ignore all stats marked with a § and the ship may carry a number of troop equal to 2.5x the stat given for the number of marines carried (1 horse = 5 troops). If used as a merchant ship, ignore all stats marked with a § except the cargo capacity.

T-4.7 • KULTHEAN SHIPS STATS TABLE (Movement Stats)

Ship Class	Light Winds Move. Pts.			Moderate Winds Move. Pts.			Strong Winds Move. Pts.			Full Sail Bonus/ Failure	Sail Turn Limit	Oared Movement Pts			HTC
	A	B	C	A	B	C	A	B	C			Cruise	Battle	Ram	
Jaiman															
Sloop (Annachon)	11	10	6	12	12	7	14	14	8	+2/5	3	-	-	-	A
Sloop (Var'Lis)	10	8	4	12	10	5	14	13	6	+2/6	3	-	-	-	A
Nor	5	3	2	7	4	2	9	6	3	+1/4	1	-	-	-	A
Aavar	7	5	2	10	7	3	12	9	4	+1/4	2	-	-	-	A
Frigar	8	5	3	11	7	4	13	9	5	+2/6	3	-	-	-	A
Pent	2	1	0	3	2	0	6	3	0	-	2	2	3	4	G
Lighter	10	10	6	12	12	7	14	14	8	+2/6	3	-	-	-	A
Barch	9	7	3	12	10	4	14	12	5	+2/6	2	-	-	-	A
Corvar	8	5	2	11	7	3	13	9	4	+1/5	2	-	-	-	A
Emer															
Galleon	3	2	1	6	3	2	8	5	2	+2/5	1	-	-	-	Ga
Kalk	2	2	1	4	2	1	7	5	2	-	1	-	-	-	A
Sloop	10	8	4	12	10	5	14	13	6	+2/6	3	-	-	-	A
Frigar	8	5	3	11	7	4	13	9	5	+2/6	3	-	-	-	A
Coaster	4	3	2	7	4	2	9	6	3	+1/4	1	-	-	-	A
Lighter	10	10	6	12	12	7	14	14	8	+2/6	3	-	-	-	A
Nar	4	3	2	6	4	3	8	6	4	-	2	4	6	7	G
Galleys	<i>Use Greek galleys from the Historical Ships Stats Table T-4.6, but delete any Full Sail Bonuses</i>														
Cor	2	2	1	4	2	1	7	5	2	-	1	-	-	-	P
Caravel	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Kelestia															
Vor	9	7	3	12	10	4	14	12	5	+1/4	2	-	-	-	A
Illia	4	3	1	6	5	2	8	9	3	-	2	-	-	-	P
Carrack	3	3	1	7	5	2	9	6	3	-	2	-	-	-	P
Frigar	8	5	3	11	7	4	13	9	5	+2/6	3	-	-	-	A
Ra'Vir	4	3	2	6	4	3	8	6	4	-	2	4	6	7	G
Ketch	10	10	6	12	12	7	14	14	8	+2/6	3	-	-	-	A
Mulira															
Coaster	10	10	6	12	12	7	14	14	8	+2/6	3	-	-	-	A
Yar, Lesser	4	3	2	6	4	3	8	6	4	-	2	4	6	7	G
Yar, Greater	4	2	1	6	3	2	8	5	3	-	2	5	6	7	G
Aur	3	3	1	7	6	2	9	7	4	-	2	-	-	-	P
Veris	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Gaalt															
Merchantile	4	3	1	6	5	2	8	9	1	-	2	-	-	-	P
Merchantila	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Ketch	10	10	6	12	12	7	14	14	8	+2/6	3	-	-	-	A
Garron	3	2	1	6	4	2	8	6	2	+2/6	1	-	-	-	Ga
Galleys	<i>Use selected Greek Galleys from Historical Ships Stats Table T-4.6, but with no Full Sail Bonuses</i>														
Garshiff	4	2	1	6	3	2	8	5	3	-	2	5	6	7	G
Devshiff	4	3	2	6	4	3	8	6	4	-	2	4	6	7	G
Caravel	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Iyxia															
Merchantman	4	3	2	7	4	2	9	6	3	+1/4	1	-	-	-	A
Brigantine	9	7	3	11	10	4	13	12	5	+2/6	2	-	-	-	A
Frigate	6	5	3	9	7	4	11	9	5	+1/6	3	-	-	-	A
Galleon	3	2	1	6	3	2	8	5	2	+2/5	1	-	-	-	Ga
Corsair	10	9	5	12	11	6	14	13	7	+2/6	3	-	-	-	A
Merchantile	4	3	1	6	5	2	8	9	1	-	2	-	-	-	P
Coaster	3	3	2	6	3	2	7	5	3	-	1	-	-	-	P
Agyra															
Merchiltal															
(Old Style)	4	3	1	6	5	2	8	9	3	-	2	2	5	6	G
(New Style)	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Cog	2	2	1	4	2	1	7	5	2	-	1	-	-	-	P
Ort	<i>Use selected Greek Trireme from Historical Ships Stats Table T-4.6, but with no Full Sail Bonuses</i>														
Coron	3	3	1	7	6	2	9	7	4	-	2	-	-	-	P

T-4.7 • KULTHEAN SHIPS STATS TABLE (MOVEMENT STATS)

Ship Class	Light Winds Move. Pts.			Moderate Winds Move. Pts.			Strong Winds Move. Pts.			Full Sail Bonus/ Failure	Sail Turn Limit	Oared Movement Pts			HTC
	A	B	C	A	B	C	A	B	C			Cruise	Battle	Ram	
Palia															
Frigate	9	6	4	12	9	5	14	11	5	+3 / 6	3	-	-	-	A
Sloop	9	8	4	12	10	5	14	12	6	+2 / 6	3	-	-	-	A
Merchantman															
Small	9	7	3	12	10	4	14	12	5	+1 / 4	2	-	-	-	A
Medium	7	5	2	10	7	3	12	9	4	+1 / 4	2	-	-	-	A
Large	6	4	2	9	6	3	11	8	3	+1 / 5	1	-	-	-	A
Brigantine	9	7	3	12	10	4	14	12	5	+2 / 6	2	-	-	-	A
Lighter	10	9	5	12	11	6	14	13	7	+2 / 6	3	-	-	-	A
Ba' Ills	2	1	0	4	2	0	7	4	0	-	2	3	4	5	G
Fal' Ills	2	1	0	3	2	0	6	3	0	-	2	2	3	4	G
Thuul															
Annas, No Deck	3	1	0	5	3	0	8	4	0	-	2	4	5	7	G
Annas, w/Deck	3	1	0	6	3	0	8	4	0	-	2	3	5	8	G
Navra	4	4	1	6	6	2	8	10	3	-	2	-	-	-	P
Garrack	3	2	1	6	3	2	8	5	2	+1 / 6	1	-	-	-	Ga
Sloop	9	8	4	11	9	5	13	11	6	+1 / 6	3	-	-	-	A
Cog	2	2	1	4	2	1	7	5	2	-	1	-	-	-	P
Falias															
Caravel	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Crager	3	3	1	7	6	2	9	7	4	-	2	-	-	-	P
Battleship	3	2	1	6	3	2	8	5	2	+1 / 6	1	-	-	-	Ga
Cutter	10	8	4	12	10	5	14	12	6	+1 / 6	3	-	-	-	A
Galleys	<i>Use the Early Bireme and Later Bireme from the Roman section of the Historical Ships Stats Table T-4.6</i>														
Govon															
Carnas	4	3	2	7	4	2	9	6	3	+1 / 6	1	-	-	-	A
Corsicar	8	8	4	10	10	5	13	12	6	+1 / 6	3	-	-	-	A
Destroyer	3	2	1	6	3	2	8	5	2	+1 / 6	1	-	-	-	Ga
Folenn															
Trimere, No Deck	<i>Use the Early Trireme from the Greek section of the Historical Ships Stats Table T-4.6</i>														
Trimere, w/Deck	<i>Use the Trireme from the Greek section of the Historical Ships Stats Table T-4.6</i>														
Piritar	3	1	0	5	3	0	7	4	0	-	2	3	5	6	G
Sprinter	4	1	0	6	4	0	9	5	0	-	2	3	6	7	G
Merchantil	5	3	2	7	4	2	9	6	3	+1 / 7	1	-	-	-	A
Lighter	10	9	5	12	11	6	14	13	7	+2 / 8	3	-	-	-	A
Sloop	9	8	4	12	10	5	14	12	6	+2 / 6	3	-	-	-	A
Brigantine	8	7	3	11	10	4	13	12	5	+2 / 8	2	-	-	-	A
Murlis															
Halar	7	5	2	9	7	3	11	9	4	+1 / 4	2	-	-	-	A
Merchant	8	7	3	11	10	4	13	12	5	+1 / 5	2	-	-	-	A
Scout	10	8	4	12	10	5	14	12	6	+2 / 7	3	-	-	-	A
Brig	9	7	3	12	10	4	14	12	5	+2 / 6	2	-	-	-	A
Destroyer	6	5	3	9	7	4	11	9	5	+2 / 8	3	-	-	-	A
Ketch	9	8	4	11	10	5	13	12	6	+2 / 8	3	-	-	-	A
Mythenis															
Yir	4	3	1	6	5	2	8	9	3	-	2	-	-	-	P
Caravar	4	4	2	6	6	3	9	10	4	-	2	-	-	-	P
Longship	3	3	2	5	4	3	8	5	4	-	2	4	6	7	G
Berch	8	5	2	11	7	3	13	9	4	+1 / 5	2	-	-	-	A
Notes:															
<i>HTC:</i> G = Galley (no Battle Sails); P = Primitive Sailing Ship (+1 turn to change to Battle Sails); Ga = Galleon (cost 3 MPs to turn); A = Advanced Design (no restrictions).															

T-4.7 • KULTHEAN SHIPS STATS TABLE (Combat Stats)

Ship Class	OB	DB	AT	Ram Type	Hull Pts	Rigging Pts	Oar Pts	Seamen/Oarsmen/Marine Points	Special & Maximum Efficient Artillery
Jaiman									
Sloop (Annachon)	0	2	S1	None	400	60-80	-	7 / - / (6)	12 HvB, 16 LtM, 12 MdM
Sloop (Var'Lis)	0	2	W4	None	300	60-80	-	7 / - / (6)	12 HvB, 16 LtM, 12 MdM
Nor	-5	12	W3	None	250	100	-	14 / - / (10)	6 LtB
Aavar	-5	2	W3	None	150	75	-	9 / - / (3)	6 LtB, 2 LtM
Frigar	5	2	W4	None	600	200	-	18 / - / 15	16 HvB, 20 LtM, 6 HvM
Pent	-2	0	W2	None	25	5	10	2 / 20 / 4	Occasionally 3 LtB
Lighter	-5	12	W2	None	100	30	-	6 / - / (4)	2 LtB
Barch	5	2	W3	None	250	100-125	-	14 / - / 12	10 HvB, 16 LtM, 12 MdM
Corvar	-5	2	W2	None	170	85	-	9 / - / (2)	8 HvB
Emer									
Galleon	10	-8	W3	None	670	335	-	50 / - / 40	12 HvB, 12 LtM, 12 MdM, 12 HvM
Kalk	-5	2	W2	None	100	50	-	6 / - / (5)	8 HvB
Sloop	0	2	W4	None	300	60-80	-	7 / - / (6)	6 HvB
Frigar	5	2	W4	None	600	200	-	18 / - / 15	16 HvB, 20 LtM, 6 HvM
Coaster	-10	12	W1	None	40	20	-	6 / - / -	6 HvB
Lighter	-5	12	W2	None	100	30	-	6 / - / (4)	2 LtB
Nar	+3	0	W1	None	60	20	8	21 / † / ‡	4 LtB
Galleys	<i>Select from the Greek galleys in the Historical Ships Stats Table T-4.6, but Greek Fire tubes more common</i>								
Cor	0	2	W2	None	175	35	-	12 / - / (10)	4 HvB
Caravel	-5	12	W2	None	50	15	-	4 / - / (5)	8 HvB
Kelestia									
Vor	-5	2	W2	None	60	30	-	9 / - / (3)	6 HvB
Illia	-5	12	W3	None	70	30	-	6 / - / 7	8 HvB
Carrack	5	-3	W3	None	190	95	-	27 / - / (30)	15 HvB
Frigar	5	2	W4	None	600	200	-	18 / - / 15	16 HvB, 20 LtM, 6 HvM
Ra'Vir	-7	0	W1	None	60	20	8	21 / † / ‡	4 LtB
Ketch	-5	12	W2	None	100	30	-	6 / - / (4)	2 LtB
Mulira									
Coaster	-5	12	W2	None	100	30	-	6 / - / (4)	2 LtB
Yar, Lesser	3	0	W1	None	60	20	8	23 / † / ‡	Occasionally 2 LtB
Yar, Greater	3	0	W2	None	85	25	10	26 / † / ‡	6 HvB
Aur	0	2	W3	None	190	95	-	20 / - / (23)	None
Veris	5	2	W3	None	80	25	-	10 / - / 11	6 HvB, 2 LtM
Gaalt									
Merchantile	-5	2	W2	None	75	30	-	7 / - / (5)	4 HvB
Merchantila	-10	12	W2	None	50	20	-	6 / - / (4)	4 LtB
Ketch	-5	12	W2	None	100	30	-	6 / - / (4)	2 LtB
Garron	10	-8	W4	None	700	230	-	50 / - / 40	12 HvB, 12 LtM, 12 MdM, 8 HvM
Galleys	<i>Select from the Greek galleys in the Historical Ships Stats Table T-4.6, but Greek Fire tubes more common</i>								
Garshiff	3	0	W2	None	85	20	10	26 / † / ‡	4 HvB
Devshiff	3	0	W1	None	60	20	8	23 / † / ‡	4 LtB
Caravel	0	12	W3	None	80	25	-	10 / - / 11	6 HvB, 2 LtM
Iyxia									
Merchantman	0	-3	W3	None	250	125	-	10 / - / 6	10 HvB, 6 LtM
Brigantine	5	2	W3	None	250	100	-	14 / - / 12	12 HvB, 16 LtM, 12 MdM
Frigate	5	2	W4	None	600	200	-	18 / - / 15	16 HvB, 20 LtM, 6 HvM
Galleon	10	-8	W3	None	670	335	-	50 / - / 40	12 HvB, 12 LtM, 12 MdM, 8 HvM
Corsair	0	12	W3	None	150	45	-	7 / - / 6	4LtB (or 4 LtM—see Text)
Merchantile	-5	2	W2	None	75	30	-	7 / - / (5)	4 HvB
Coaster	-10	12	W2	None	50	20	-	6 / - / -	2 HvB
Agyra									
Merchital (Old Style)	-7	0	W2	None	45	15	2	3 / 2 / (4)	6 LtB
(New Style)	-5	2	W2	None	45	15	-	3 / - / (4)	6 LtB
Cog	0	2	W3	None	175	35	-	12 / - / (10)	4 HvB
Ort	3	0	W2	Ram	80	16	14	4 / 28 / 4	4 LtB, 4 HvB in a Fleet Setting
Coron	5	-3	W3	None	190	95	-	20 / - / (23)	8 HvB (plus 4 LtM in Royal Fleets)

T-4.7 • KULTHEAN SHIPS STATS TABLE (Combat Stats)

Ship Class	OB	DB	AT	Ram Type	Hull Pts	Rigging Pts	Oar Pts	Seamen/Oarsmen/Marine Points	Special & Maximum Efficient Artillery
Palia									
Frigate	5	2	W4	None	675	225	-	20 / - / 20	16 HvB, 20 LtM, 6 HvM
Sloop	5	2	W3	None	200	60-80	-	7 / - / 6	6 HvB, 10 LtM
Merchantman									
Small	-10	12	W2	None	50	20	-	6 / - / (2)	Up to 6 HvB, Sometimes 2 LtM
Medium	-5	2	W2	None	150	75	-	9 / - / (3)	4 LtM, 8 HvB more common
Large	0	-3	W3	None	250	125	-	12 / - / (6)	10 HvB, 6 LtM
Brigantine	5	2	W3	None	250	125	-	14 / - / 12	12 HvB, 16 LtM, 14 MdM
Lighter	-5	12	W2	None	75	25	-	4 / - / 3	6 HvB, 2 LtM
Ba' Ills	-7	10	W1	None	30	10	6	14 / † / ‡	None (Occasionally 4 LtB)
Fa' Ills	-7	10	W1	None	20	8	4	10 / † / ‡	None
Thuul									
Annas, No Deck	-2	0	W1	Ram	70	20	12	3 / 24 / (3)	Up to 6 HvB, plus the ram
Annas, w/Deck	3	0	W1	Ram	80	25	14	4 / 28 / 5	6 HvB (Occasionally 1 LtC) & the ram
Navra	-5	12	W2	None	60	25	-	4 / - / (6)	8 HvB
Garrack	10	-8	W3	None	650	325	-	50 / - / 40	12 HvB, 12 LtM, 20 MdM
Sloop	-5	2	W2	None	150	45-60	-	4 / - / 2	4 LtB
Cog	-5	2	W3	None	175	35	-	12 / - / -	4 HvB
Falias									
Caravel	-5	12	W2	None	50	15	-	3 / - / 4	4 HvB
Crager	-5	2	W3	None	200	100	-	20 / - / (23)	8 HvB, 4 LtM
Battleship	10	-8	W3	None	650	325	-	50 / - / 40	12 HvB, 12 LtM, 12 MdM, 15 HvM
Cutter	5	2	W2	None	100	30	-	6 / - / 5	6 HvB, 2 LtM
<i>Galleys Use the Early Bireme and Later Bireme from the Roman section of the Historical Ships Stats Table T-4.6, but with Greek Fire</i>									
Govon									
Carnas	-10	12	W2	None	120	50	-	10 / - / -	Up to 8 HvB
Corsicar	0	2	W2	None	200	60-80	-	7 / - / (6)	4 HvB
Destroyer	10	-8	W3	None	650	325	-	50 / - / 50	12 HvB, 12 LtM, 15 MdM
Folenn									
Trimere, No Deck	3	0	W2	Ram	70	14	12	3 / 24 / 6	Up to 8 HvB; Some may use LtCs
Trimere, w/Deck	3	0	W2	Ram	80	16	14	6 / 28 / 4	Up to 8 HvB; Some may use LtCs
Piritar	-7	10	W1	Ram	20	4	4	10 / † / 1	4 LtB
Sprinter	-2	0	W1	Ram	30	6	4	10 / † / 2	4 LtB
Merchantil	0	-3	W3	None	250	125	-	12 / - / (3)	12 HvB
Lighter	-5	12	W2	None	110	35	-	6 / - / (4)	4 LtB
Sloop	0	2	W2	None	130	50	-	5 / - / (3)	6 HvB
Brigantine	5	2	W3	None	250	125	-	14 / - / 12	12 HvB, 16 LtM, 12 MdM
Murlis									
Halar	-5	2	W3	None	150	75	-	9 / - / (3)	4 LtM, 10 HvB more common
Merchant	-10	12	W2	None	50	25	-	6 / - / (2)	Up to 8 HvB, occasionally 2 LtM
Scout	0	12	W2	None	150	45	-	10 / - / 6	6 HvB, 2 LtM
Brig	5	2	W3	None	250	125	-	14 / - / 12	12 HvB, 16 LtM, 12 MdM
Destroyer	5	2	W3	None	450	225	-	20 / - / 20	16 HvB, 20 LtM, 10 HvM
Ketch	0	2	W2	None	200	80	-	7 / - / (6)	6 HvB, 10 LtM
Mythenis									
Yir	-10	12	W2	None	45	15	-	3 / - / (4)	6 LtB
Caravar	5	2	W3	None	80	30	-	6 / - / 7	8 HvB
Longship	3	0	W1	None	60	20	10	21 / † / ‡	4 LtB
Berch	0	2	W2	None	175	85	-	9 / - / (2)	10 HvB

Notes:

† — Seamen serve as oarsmen when necessary.

‡ — Entire crew is armed and will fight in boarding actions.

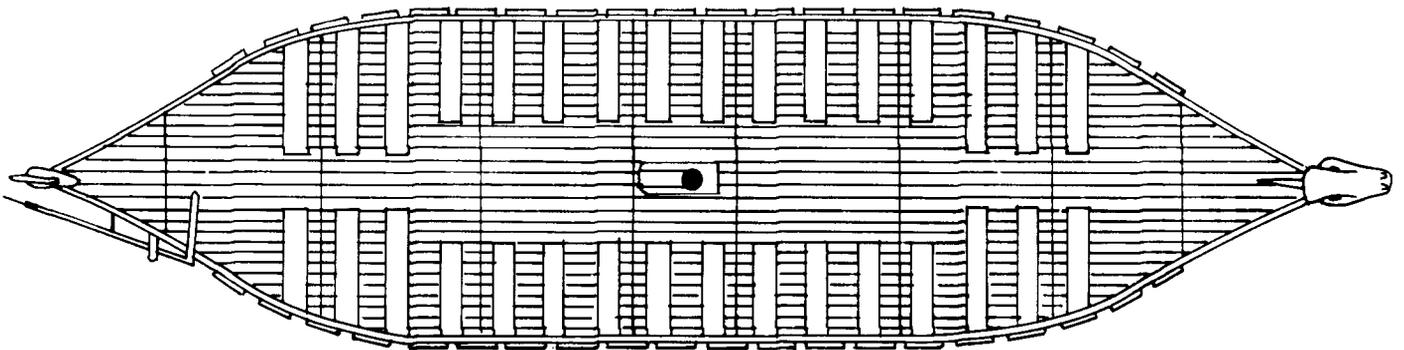
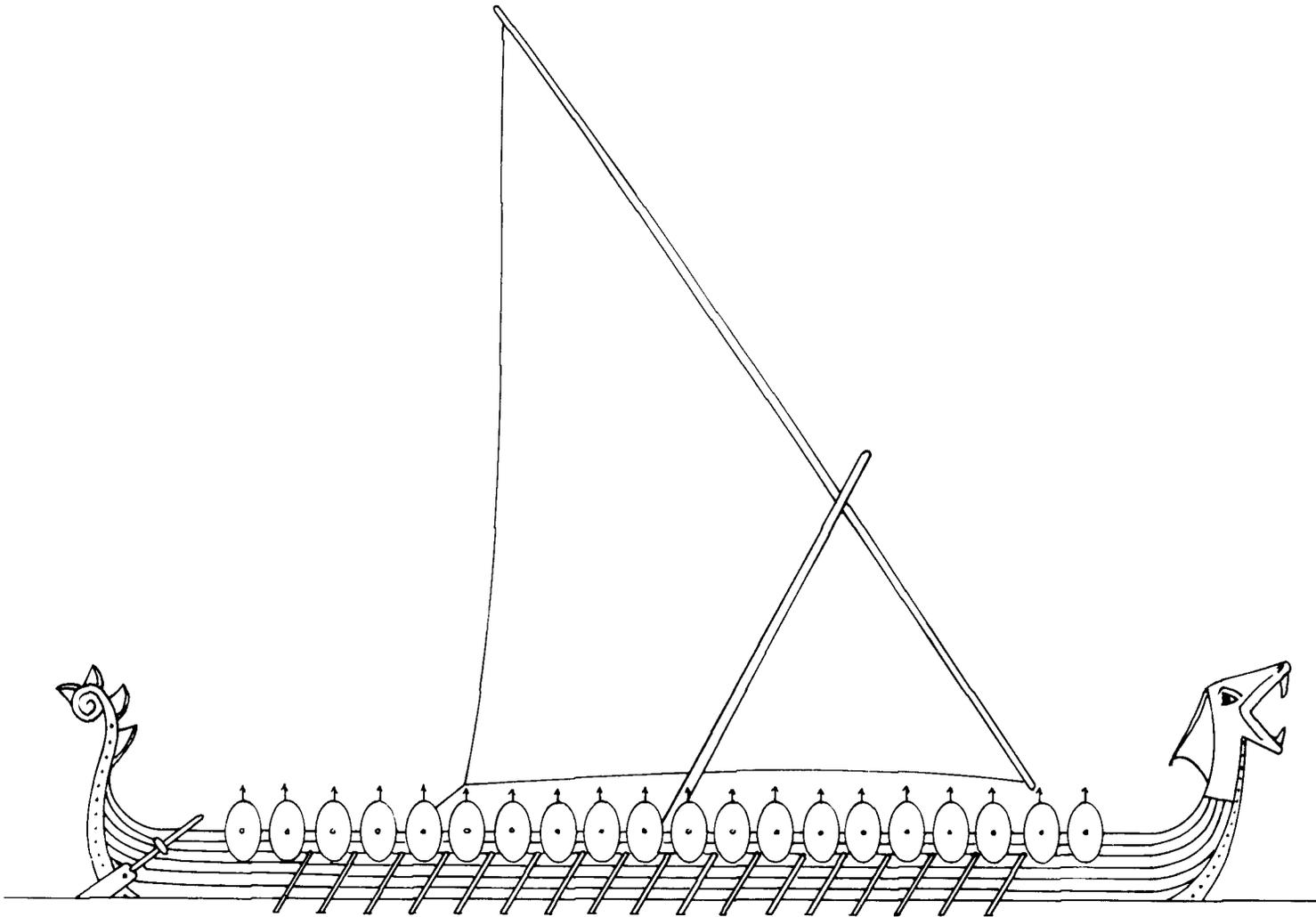
§ — These ships can be used as military war ships, military transports, or merchant ships. If used as a military war ship, all stats are as given except the cargo capacity is 10% of the figure given. If used as a military transport, ignore all stats marked with a § and the ship may carry a number of troop equal to 2.5x the stat given for the number of marines carried (1 horse = 5 troops). If used as a merchant ship, ignore all stats marked with a § except the cargo capacity.

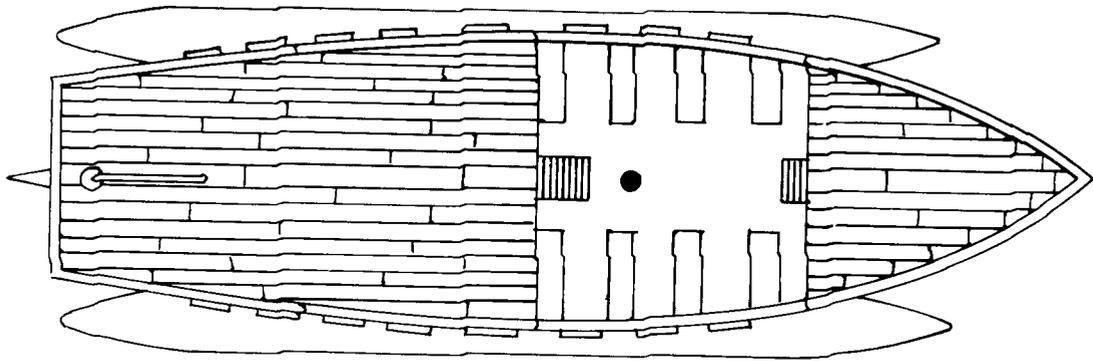
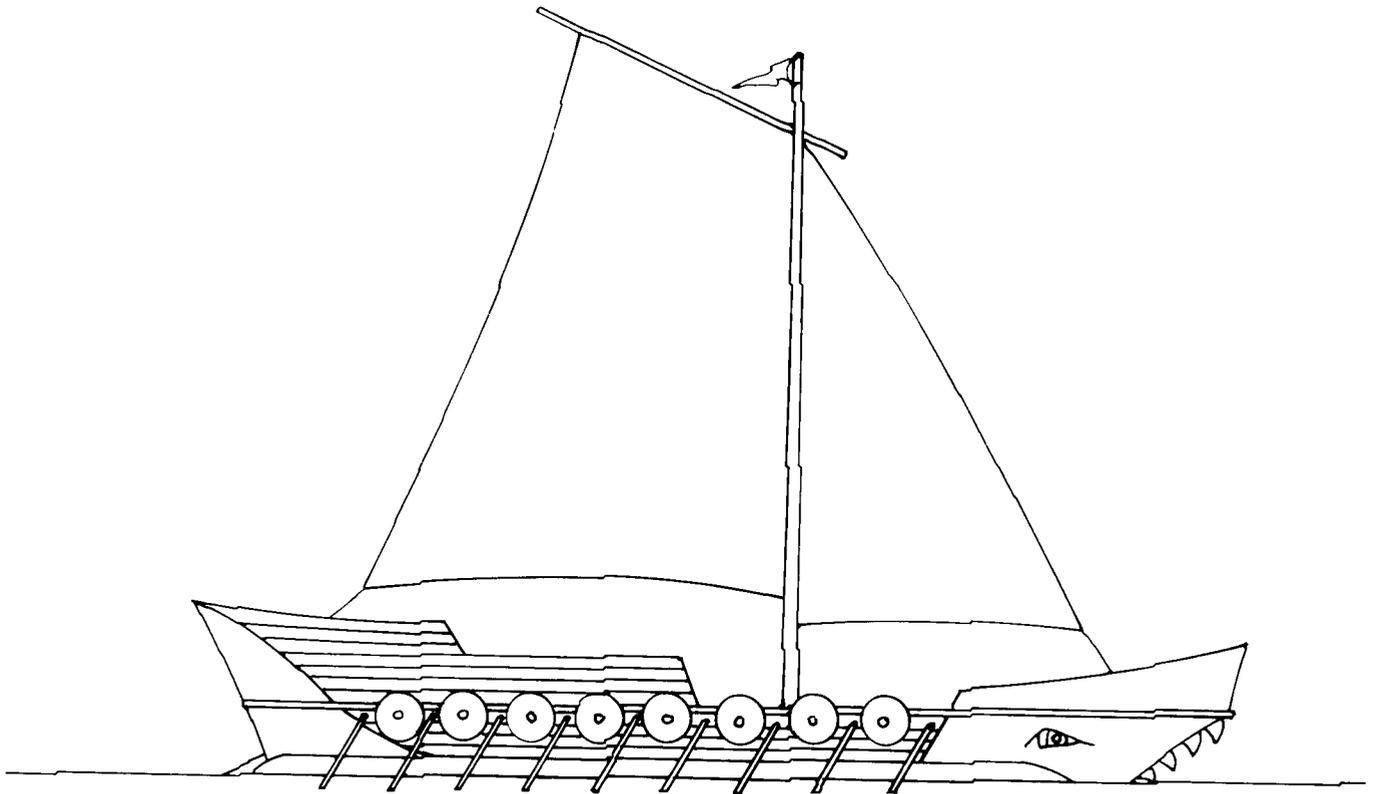
Special & Maximum Efficient Artillery — The practical, maximum military weapons load for the ship in question. Not all ships encountered will be as well armed, especially if they are in private hands. These weapons are assumed to be mounted in broadsides; e.g., a ship with eight HvB would have four HvB mounted on one side and four HvB mounted on the other. This does include bow or stern chasers such as catapults, greek fire tubes, other ballistae, etc.

Artillery — LtB = Light Ballista; MdB = Medium Ballista; HvB = Heavy Ballista; LtM = Light Mangonel; MdM = Medium Mangonel; HvM = Heavy Mangonel; LtC = Catapult (Light).

APPENDIX — DECK PLANS

Pages 142-152 present a sampling of fantasy ships—the closest historical ship type is given. For *Rolemaster* scale tactical combat, the *War Law* plastic hex-sheets can be used (1 hex \approx 10').

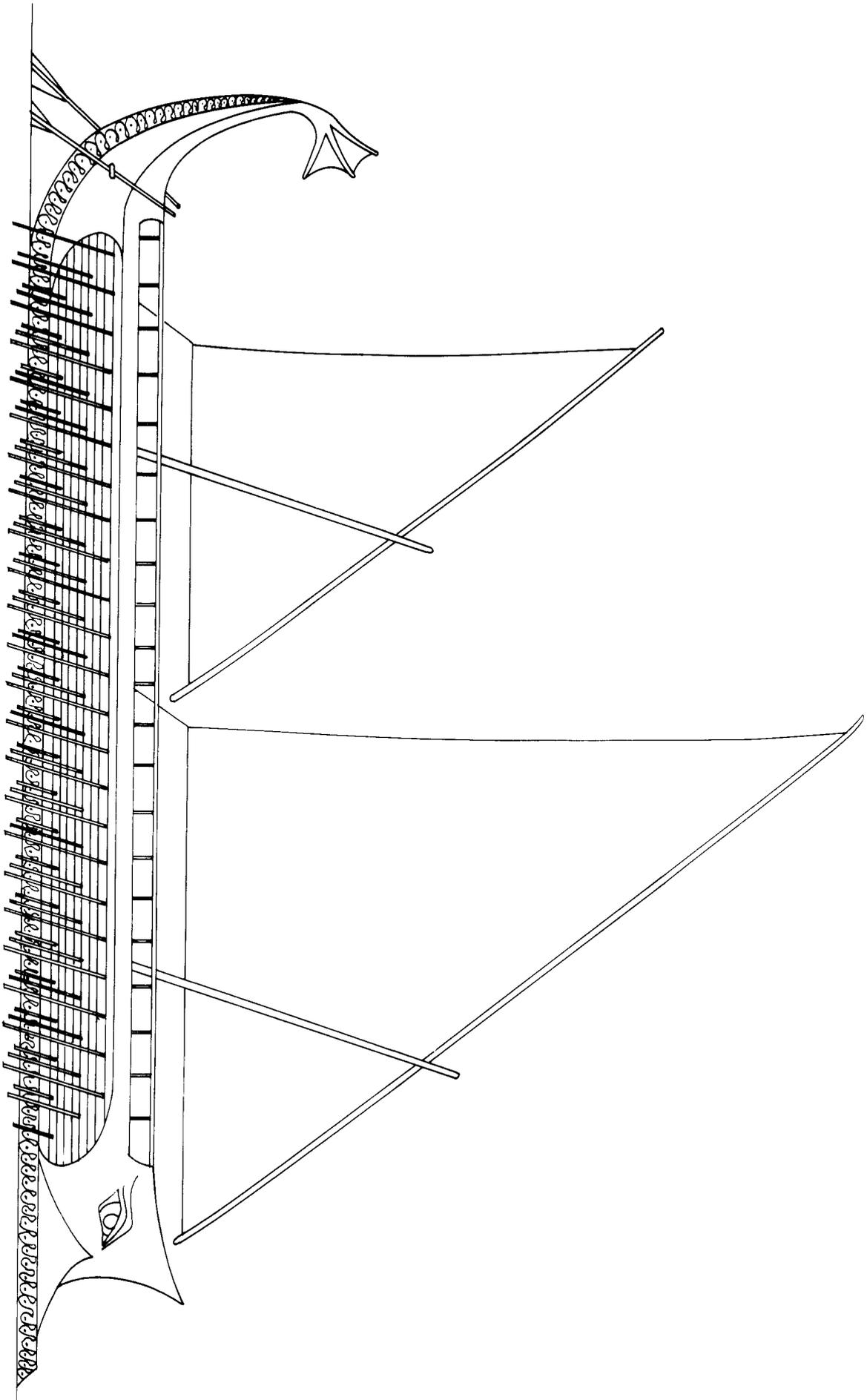
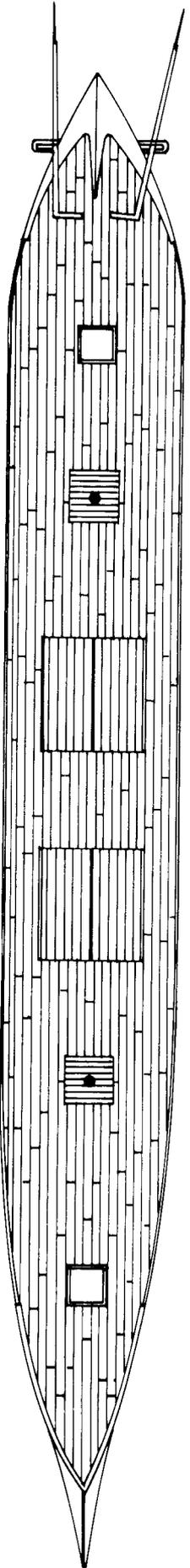


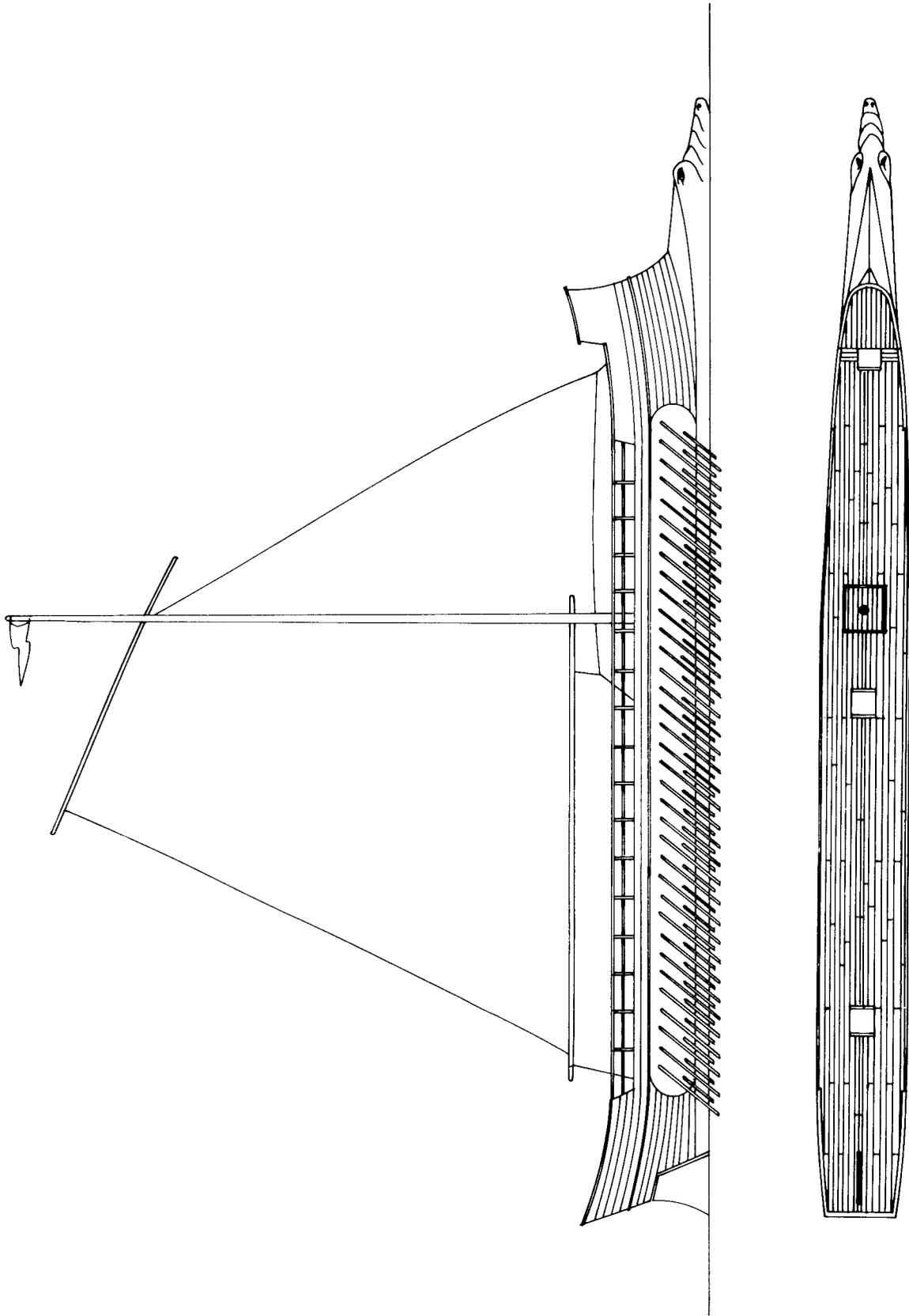


0' 5' 10' 15'

WAR CATAMARAN

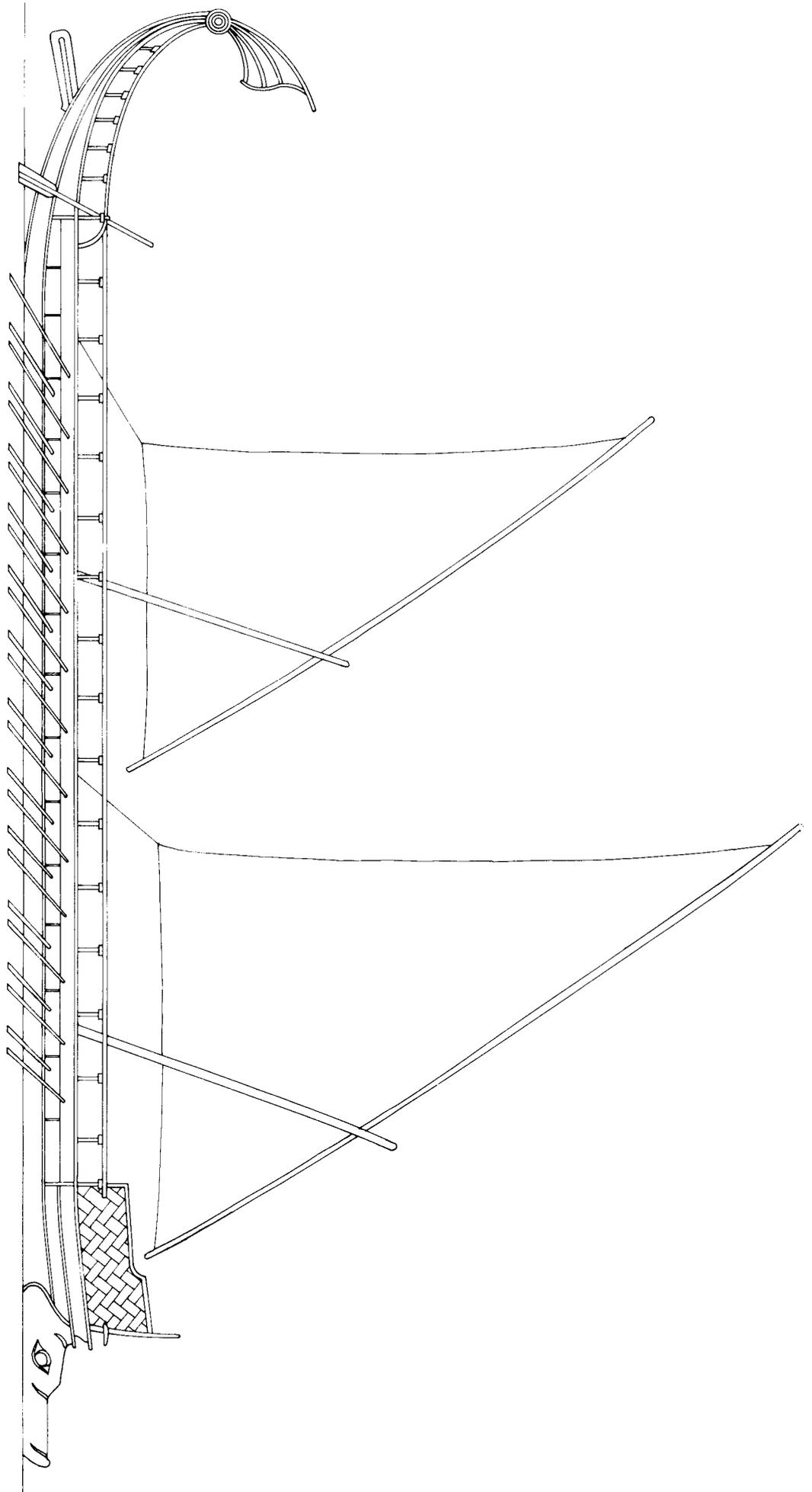
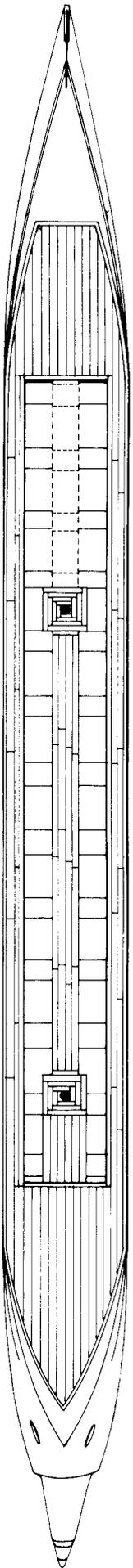
BATTLE GALLEY

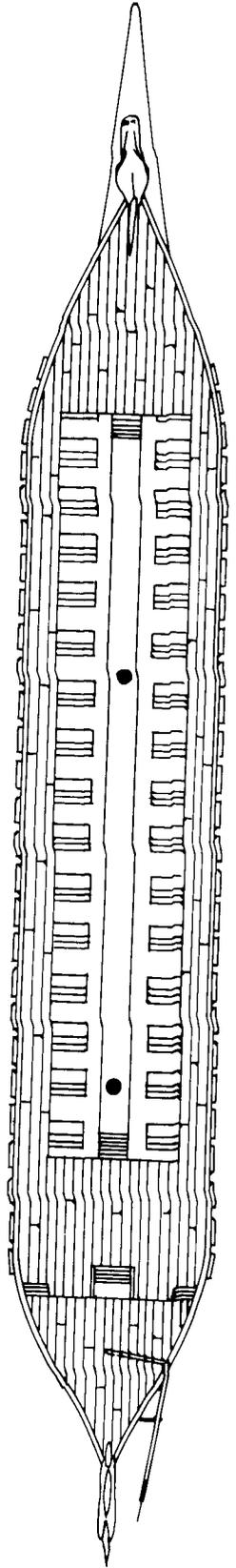
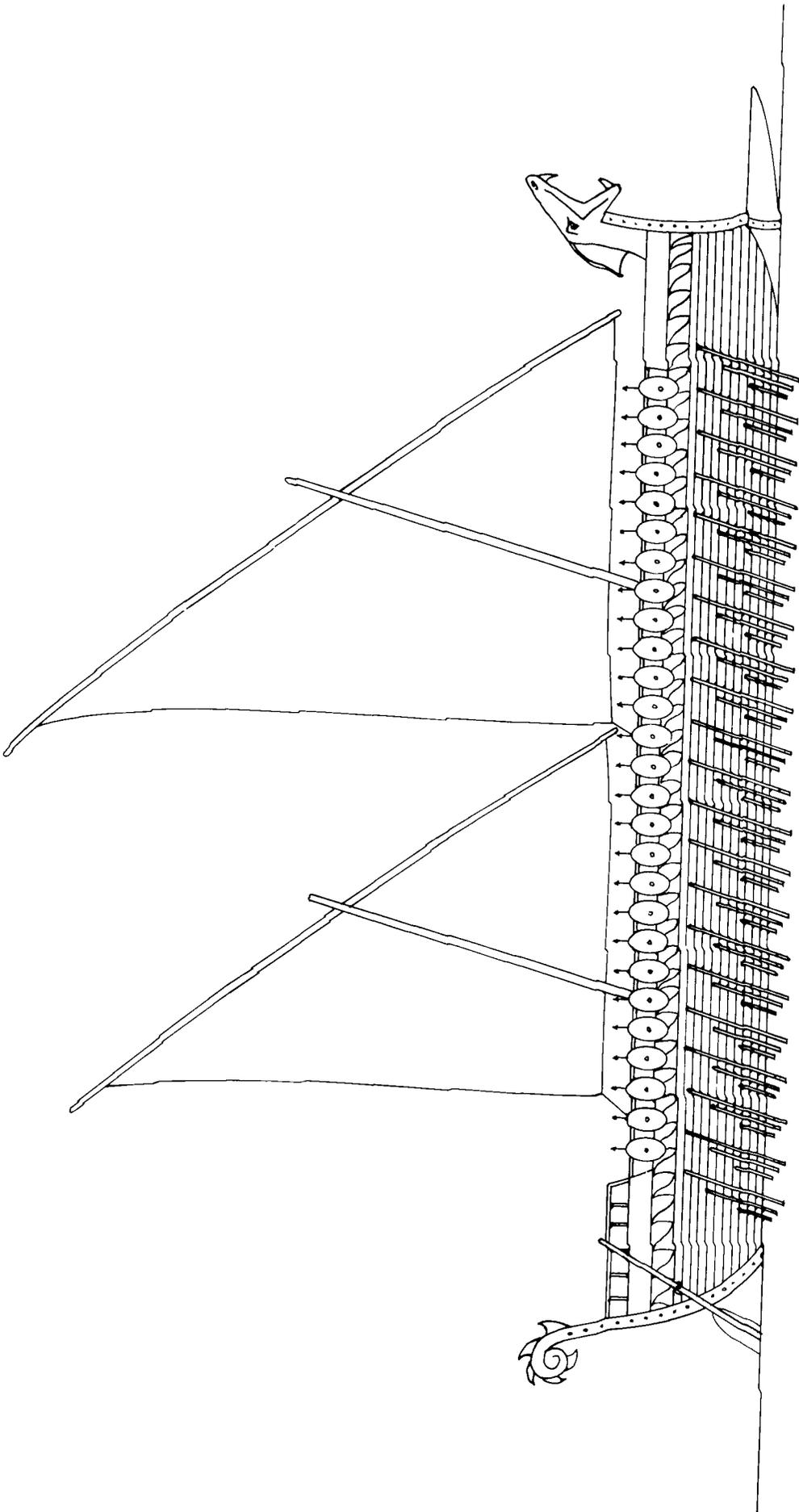




RECON GALLEY

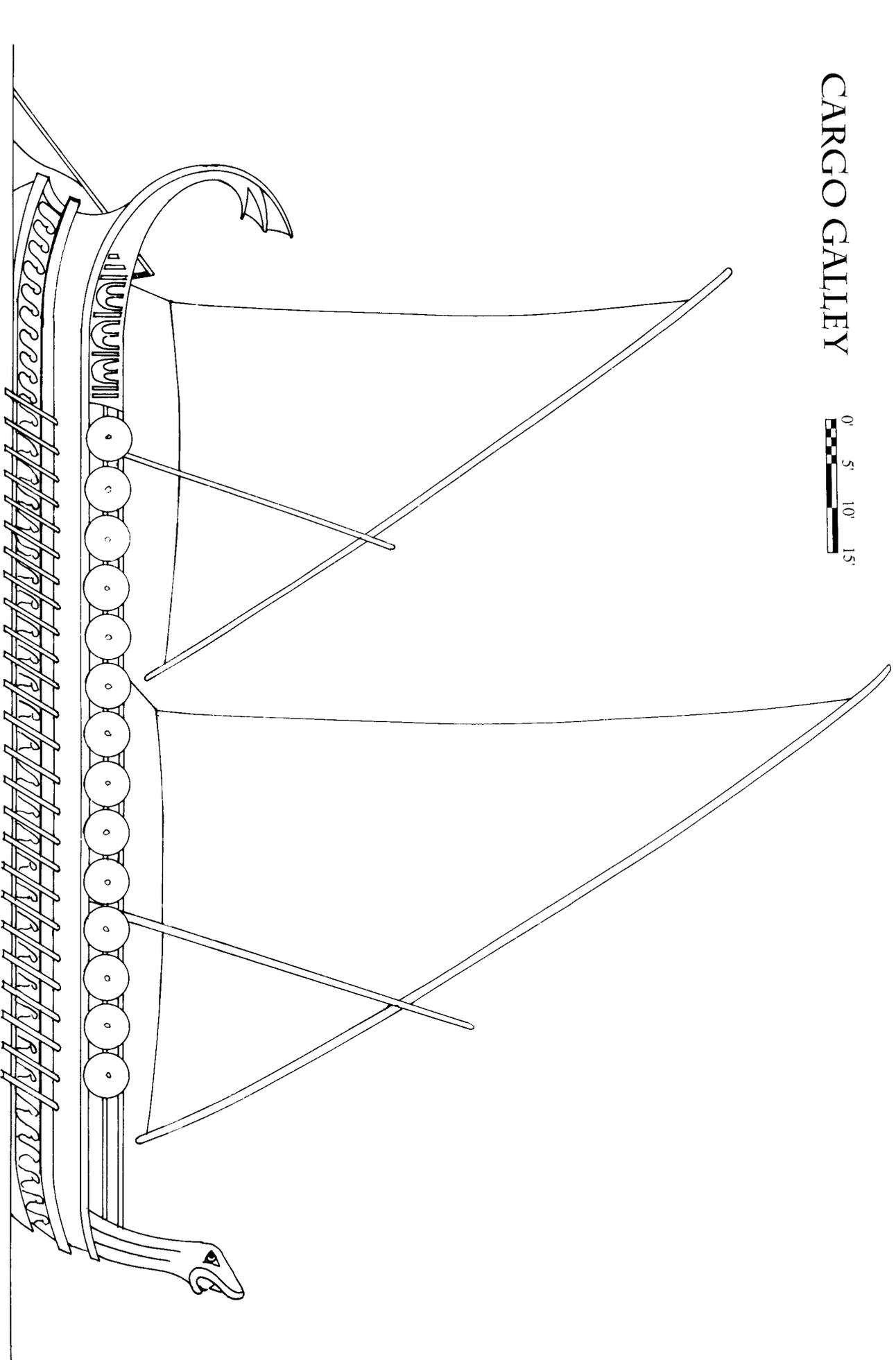
LARGE DOMON



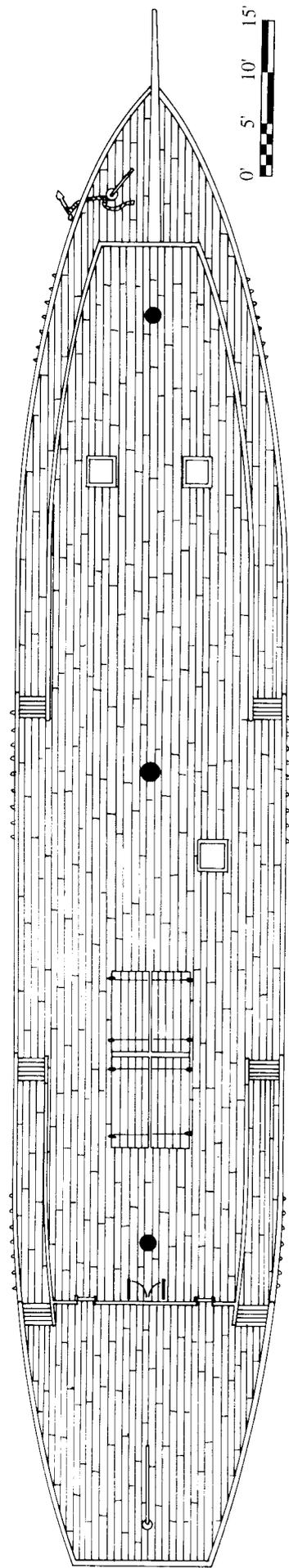
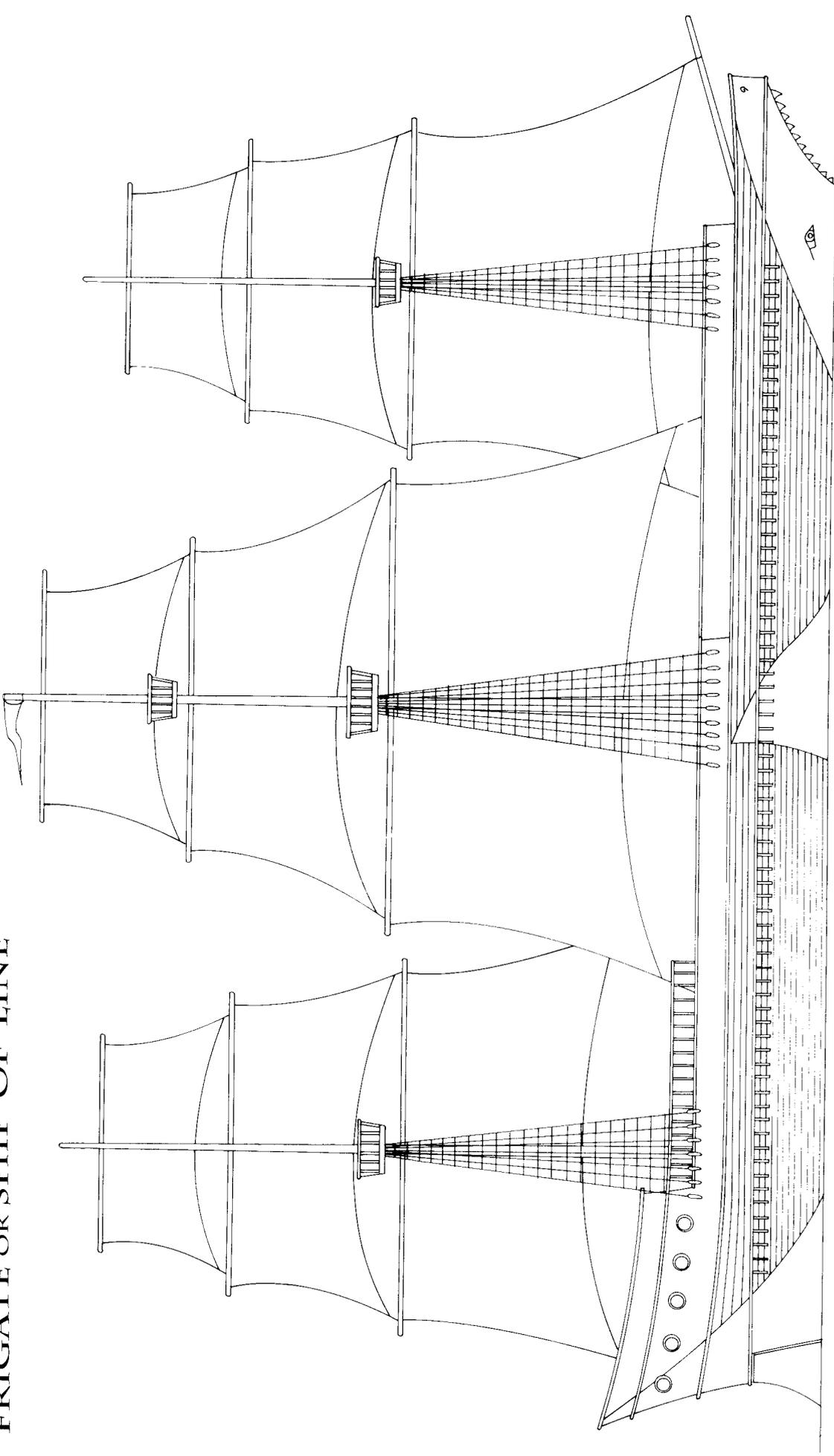


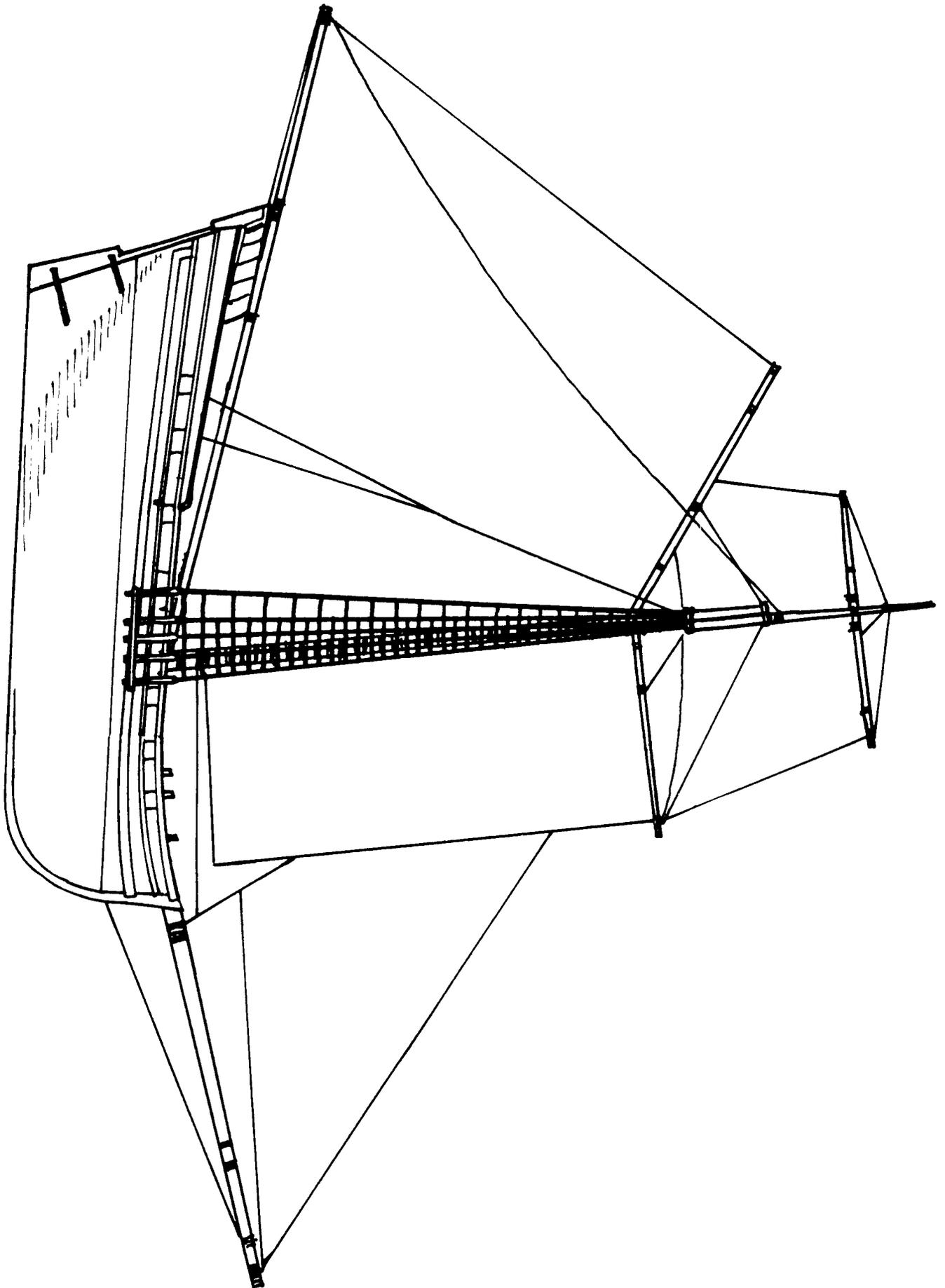
QUINQUEREME

CARGO GALLEY

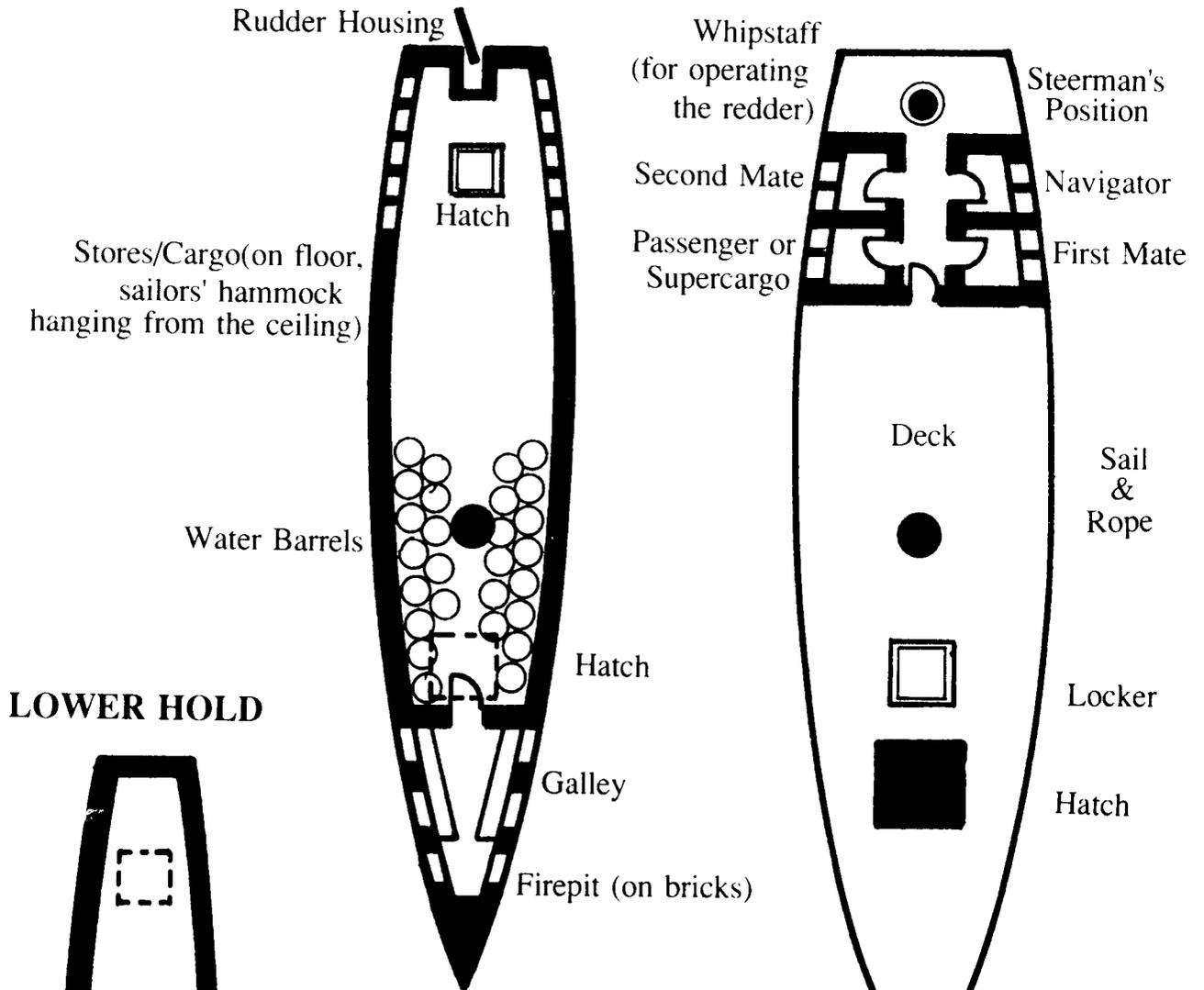


FRIGATE OR SHIP-OF-LINE





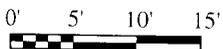
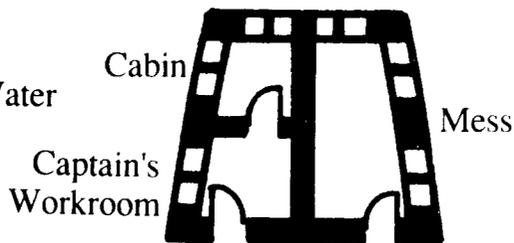
FIRST LEVEL BELOW DECKS



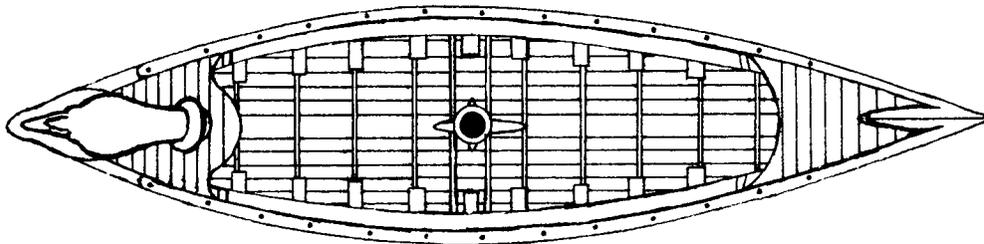
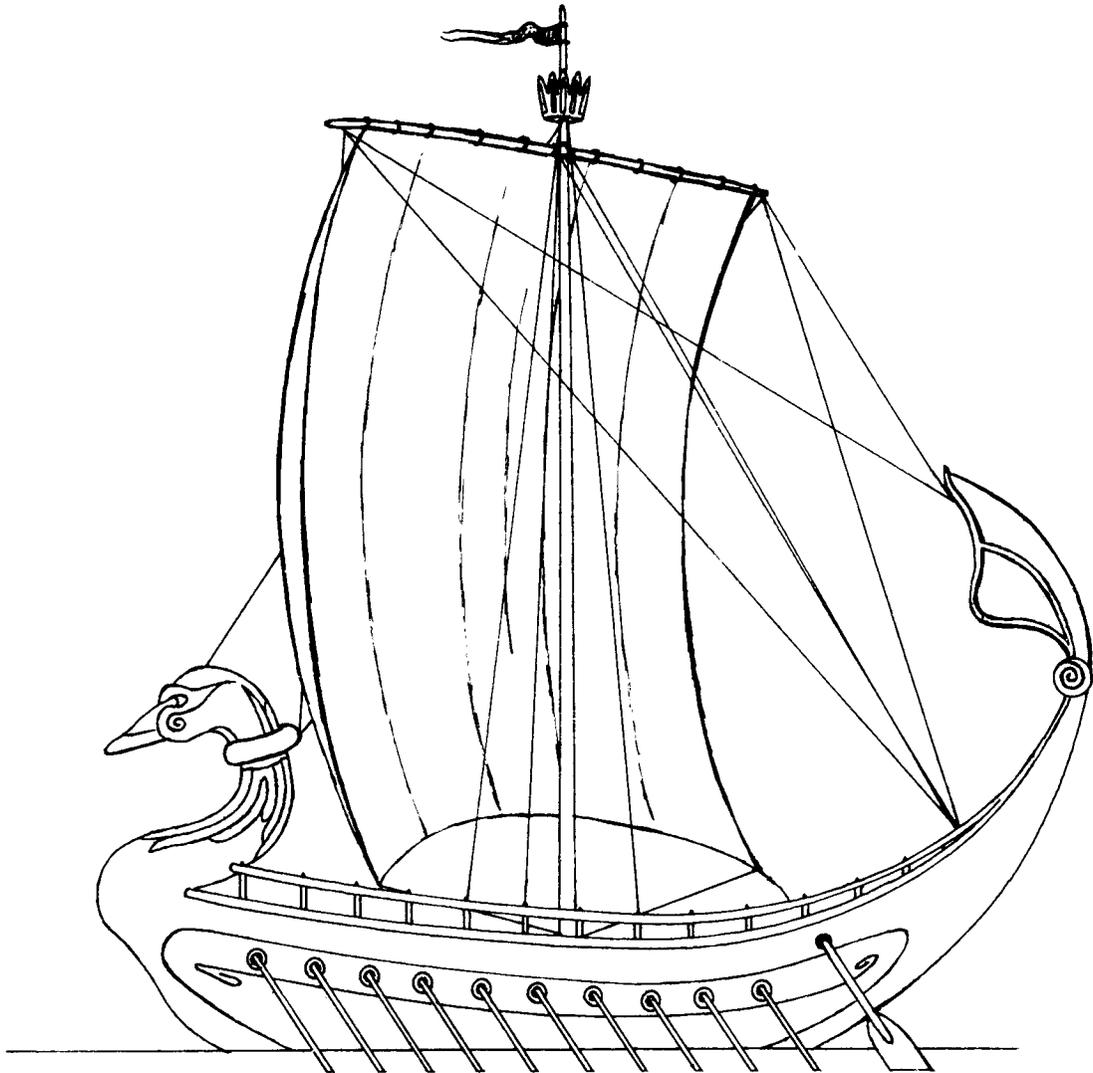
LOWER HOLD



UPPER LEVEL OF THE STERN CASTLE



SLOOP (A SAMPLE PC SHIP)

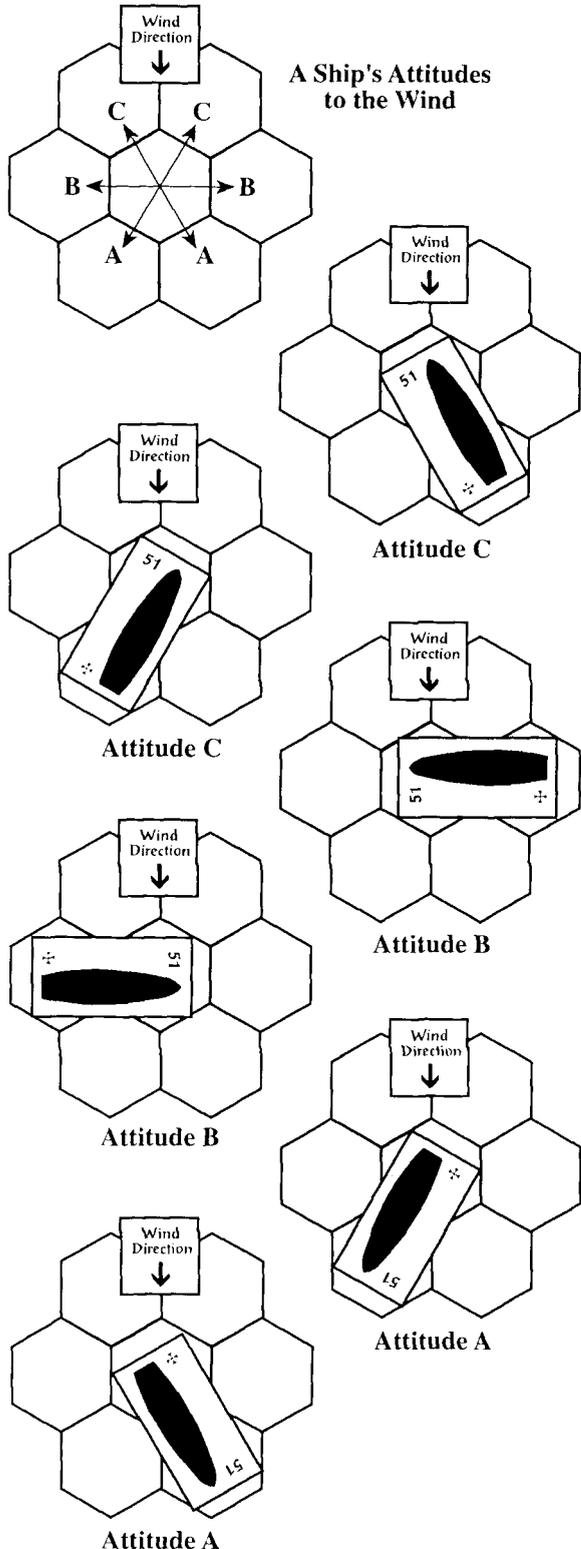


APPENDIX — THE CHARTS

THE TURN SEQUENCE SUMMARY

1) Recovery Phase

- Weather & sea state rolls at beginning of a Strategic Turn.
- Resolve ship sinkings and crew survival.
- Roll for active fires.



2) Order Phase

- Record spells to be cast and resolve non-attack spells.
- Record planned ship movement.

3) Movement Phase

- Roll for sail failure for all ships using a full sail bonus.
- Resolve ship movement, collisions, and ram attacks.
- Resolve sheering attacks and drifting.

4) Grapple Phase

- Resolve grappling attempts.
- Resolve ungrappling attempts.
- Order boarding actions.

5) Missile/Spell Phase

- Resolve all missile attacks and attack spells.

6) Melee Phase

- Resolve all boarding actions.

7) Orientation Phase

- Resolve orientation rolls.
- Resolve unfouling attempts.
- Change Sail/Oar status.
- Reload and partially reload weapons.
- Check morale for ships that lost a leader or with 50%+ casualties.

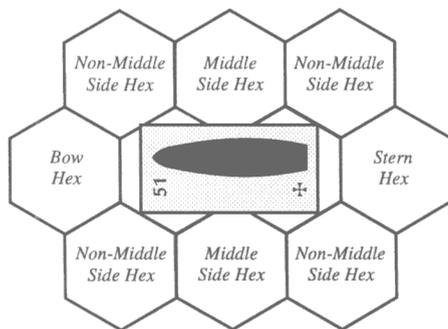
MOVEMENT/MANEUVER OPTIONS CHART

Maneuver/Turn	Code	Restrictions	MP Cost
Sail Movement:			
Pause (Back Sails)	P	none	1
Forward	F (or #)	none	1
Turn Left	L	none	2†
Turn Right	R	none	2†
† — 3 MPs for Galleons.			
Oared Movement:			
Pause	P	Cruise & Battle only	1
Forward	F (or #)	All Speeds	1
Turn & Forward, Right	fR	All Speeds	1 or 2 ‡
Turn & Forward, Left	fL	All Speeds	1 or 2 ‡
Bow Turn, Right	bR	Cruise only	1
Bow Turn, Left	bL	Cruise only	1
Stern Turn, Right	sR	Cruise only	1
Stern Turn, Left	sL	Cruise only	1
Backward	B	Cruise only, no Forward	2
‡ — 1 MPs for small ships, 2 MPs for all other ships.			
Miscellaneous Orders (use notes area):			
Speed Change	<i>new speed</i>	See Section 5.2.1	—
Reload	Reload	Give which weapon	—
Anchor Orders	<i>varies</i>	See Section 8.7	—

FOULING CHART						
	None	La	Sq	LR	FR	SR
None	0	-	-	-	-	-
Lateen Sail (La)	5	10	-	-	-	-
Square Sail (Sq)	5	10	15	-	-	-
Lateen Rigged (LR)	10	15	20	35	-	-
Fore&Aft Rigged (FR)	10	20	25	35	40	-
Square Rigged (SR)	15	25	30	40	45	50

DISABLING CHART							
Contact Point(s)	Oarsmen Quality						
	P	G	Re	R	V	E	C
Bow or Stern Hex Only	20	15	15	10	10	5	5
1 Non-Middle Side Hex	70	60	50	40	30	20	10
1 Middle Side Hex	90	80	70	60	50	40	30
2 Side Hexes	100	95	90	80	70	60	50

Note: A target being rammed increases these chances by 20%; the ship doing the ramming reduces them by 20%.



POINT OF IMPACT MODIFICATIONS CHART	
Impact Point on Target	Mod
Bow Hex, with Ram	-30
Bow Hex, with Spur	-20
Bow Hex, no Ram or Spur	-10
Non-Middle Side Hex	+10
Stern Hex	+20
Middle Side Hex	+30

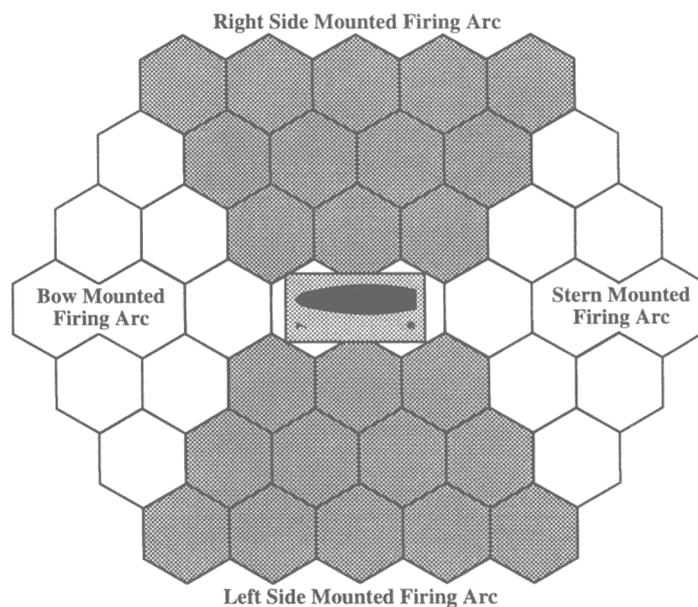
TYPE OF PASS MODIFICATIONS CHART	
Type of Pass	Mod
Into or out of a "Middle Side Hex"	-20
Into and out of a "Middle Side Hex"	+0
Into and/or out of a "Middle Side Hex" and into and/or out of one "Non-Middle Side Hex"	+10
Into and/or out of a "Middle Side Hex" and into and/or out of two "Non-Middle Side Hex"	+25

GRAPPLE & UNGRAPPLING CHART					
# OF GRAPPLES/UNGRAPPLES ALLOWED					
Contact Point (s)	Ship Size				
	Tiny	Small	Med	Large	Huge
Bow or Stern Hex Only	1	1	2	2	3
1 Non-Middle Side Hex	1	2	3	3	4
1 Middle Side Hex	1	2	4	5	6
2 Hexes	1	2	4	8	12

% CHANCE OF GRAPPLING							
Contact Point(s)	Crew Point Quality						
	P	G	Re	R	V	E	C
Grappling Chance:							
Bow or Stern Hex Only	20	25	30	35	40	45	50
1 Non-Middle Side Hex	30	35	40	45	50	55	60
1 Middle Side Hex	40	45	50	55	60	65	70
2 Hexes	45	50	55	60	65	70	75
Ungrappling Chance							
	30	35	40	45	50	55	60

Note: If individual crew men have unusually high Grappling Hook skill, these % chances can be modified accordingly.

TARGET AND AMMO RESTRICTIONS CHART		
Weapon	Allowed Targets	Allowed Ammo
Lt. Ballistae	Crew	Grape
Other Ballistae	Hull, Rigging, Crew	Ball, Grape
Mangonels	Hull, Rigging, Crew	All
Catapults	Indirect	Ball
Trebuchets	Indirect	Ball
Swivel Guns	Crew	Grape
Other Powder Weapons	Hull, Rigging, Crew	All



WEAPON ATTACK STAT CHART

Weapon	Allowed Target Choices	Range Mod based on # of Hexes														Max Result
		1	2*	3	4	5	6**	7	8-9	10-12***	13-16	17-22	23-30	31-45		
Small Arms Fire ‡																
1 Marine Point	C	-100	na	na	na	na	na	na	30							
2 Marine Points	C	-70	na	na	na	na	na	na	60							
Ballista																
Light (LtBa)	C	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	na	30
Medium (MdBa)	H,R,C	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Heavy (HvBa)	H,R,C	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	na	90
Mangonel																
Light (LtMa)	H,R,C	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Medium (MdMa)	H,R,C	-30	-50	-70	-100	-200	-300	na	na	na	na	na	na	na	na	90
Heavy (HvMa)	H,R,C	-20	-30	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	105
Catapult																
Light (LtCa)	I	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Medium (MdCa)	I	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	na	90
Heavy (HvCa)	I	na	0	-20	-40	-60	-80	-100	-200	-300	na	na	na	na	na	105
Trebuchet																
Light (LtTr)	I	na	-50	-100	-300	na	na	na	na	na	na	na	na	na	na	120
Medium (MdTr)	I	na	-35	-75	-100	-300	na	na	na	na	na	na	na	na	na	135
Heavy (HvTr)	I	na	-25	-50	-100	-200	-300	na	na	na	na	na	na	na	na	150
Greek Fire Tube §																
Swivel Gun (SG)	C,R	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	na	30
Saker (Sa)	C,R,H	-50	-75	-100	-200	-300	na	na	na	na	na	na	na	na	na	60
Demi-Culverin (dCu)	C,R,H	-20	-30	-40	-60	-80	-100	-200	-300	na	na	na	na	na	na	105
Culverin (Cu)	C,R,H	0	-10	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	na	na	120
Demi-Cannon (dCa)	C,R,H	+10	+0	-10	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	na	135
Cannon (Ca)	C,R,H	+20	+10	+0	-20	-30	-45	-60	-75	-90	-95	-100	-200	-300	na	150

* — Max range for Crew/Weapon target choice & for grape ammo. ** — Max range for chain ammo. *** — Max range for Hull target choice.

§ — Use the Grape vs. Crew/Weapons Ship Attack Table T-1.5, but all criticals are fire criticals.

‡ — Use Attack Table T-1.5, but ignore all hull and rigging damage and treat all criticals as an additional “†” crew damage.

WEAPON STAT CHART

Weapon	Ammo lb	Ammo Types	Av. Crew	Fum-ble	Fire Rate §
Ballista, Light	15	G	4	3	2/0
Medium	25	B,G	8	4	3/0
Heavy	50	B,G	11	5	5/0
Mangonel, Light	10	B,G,C	5	4	5
Medium	20	B,G,C	9	5	7
Heavy	40	B,G,C	12	6	9
Catapult, Light	25	B	5	5	8
Medium	50	B	8	6	10
Heavy	75	B	12	7	13
Trebuchet, Light	100	B	10	2	13
Medium	200	B	15	3	15
Heavy	300	B	20	4	20
Greek Fire Tube	—	special	3	10	5
Swivel Gun	1	G	1	2	4
Saker	6	B,G	2	3	5
Demi-Culverin	9	B,G,C	3	4	8
Culverin	18	B,G,C	3	4	8
Demi-Cannon	24	B,G,C	5	4	8
Cannon	32	B,G,C	5	4	8

§ — This is the approximate reload time in rounds. Even though some weapons can reload and fire more than once in a SeL turn (2 minutes), each weapon can only make one attack each turn. (i.e., the multiple firings are considered to be one attack).

TARGETING & AMMO CHART

Indirect Attack (I) — Non-indirect fire weapons that fire from a higher elevation (≈100') must use the Indirect Attack Table.

Rigging Attack (R) — No restrictions.

Hull Attack (H) — 1-12 hex range only

Crew/Wp Attack (C) — 1-2 hex range only

Ball Ammo — No special range limit. Ball ammo is any single projectile (e.g., boulder, bolt, cannonball).

Grape Ammo — Maximum range is 2 hexes. Grape ammo is an ammo load that consists of numerous small projectile designed to damage crew and weapons (e.g., small stones, bundle of arrows, cannister of bullets).

Chain Ammo — Maximum range is 6 hexes. Chain ammo is an ammo load that consists of small chunks of material linked together; it is designed to damage sails (e.g., links of chain).

Ram Attack (R) — Special; 1 hex range.

Sheer Attack (S) — Special; 1 hex range. If a target has no oarsmen/oars, ignore the damage.

T-4.3 • MELEE COMBAT TABLE

Strength Pt Tot.	Roll (non-opened)					
	01-15	16-40	41-60	61-80	81-95	96-100
01-05	0	0	0	0	†	1
06-10	0	0	0	†	1	1
11-15	0	0	†	1	1	2
16-20	0	†	1	1	2	2
21-25	†	†	1	1	2	2
26-30	†	1	1	2	2	3
31-40	1	1	1	2	3	3
41-50	1	1	2	2	3	4
51-60	1	1	2	2	3	4
61-80	1	1	2	3	4	5
81-101	1	2	3	3	4	5
101-120	1	2	3	4	5	6
121+	1	2	4	5	6	8

MELEE STRENGTH POINT CHART

Crew Type	Quality						
	P	G	Re	R	V	E	C
Marines	4	5	6	7	8	9	10
Seamen	2	2	3	3	4	4	5
Oarsmen	1	1	2	2	3	3	4

Note: P=Poor/Slave; G=Green; Rv=Reservists; R= Regular; V=Veteran; E=Elite; C=Crack.

BOARDING CHART

# of Common Hexsides	Boarding Party Ship Size				
	Tiny	Sm.	Md.	La.	Huge
1, Bow/Stern to Bow/Stern (A)	1	1	2	2	3
1, Bow/Stern to Side (B)	1	2	2	3	4
1, Side to Side (C)	1	2	3	4	5
2, Side to Bow/Stern (D)	1	2	4	6	8
2, Side to Side (E)	1	3	6	8	10

Note: This chart gives the maximum initial boarding party size and the maximum reinforcement that may be added in each following turns. This number is doubled if the ships are side by side (i.e., both of the ships have two hexes adjacent).

CHARACTER CASUALTY CHART

Modified Roll	CHARACTER'S AT				
	12, 20-19	11,15 16,18	4, 8,10, 14,17	3, 6,7, 9,13	1, 2,5
91+	A	A	A	B	C
81-90	A	A	B	C	D
71-80	A	B	C	D	E
61-70	B	C	D	E	E, A
51-60	C	D	E	E, A	E, B
41-50	D	E	E, A	E, B	E, C
31-40	E	E, A	E, B	E, C	E, D
≤ 30	E, A	E, B	E, C	E, D	E, E

ELEMENTAL SPELL ATTACK CHART

Spell	Attack Table	Max Result	OB Mod	Special Notes
Shock Bolt	T-1.5	30	-50	#1
Water Bolt	T-1.5	60	-35	#1
Fire Bolt	T-1.5	60	-25	#1, #2
Ice Bolt	T-1.1,1.2,1.3	60	-25	—
Lightn. Bolt	T-1.1,1.2,1.3	90	-20	#3
Cold Ball	T-1.5	60	-30	#1
Fire Ball	T-1.5	60	-40	#2

Note: Roll each ball attack separately. Roll once for each type of bolt attack made against the same target in the same turn; this attack will be modified as indicated at the bottom of this chart.

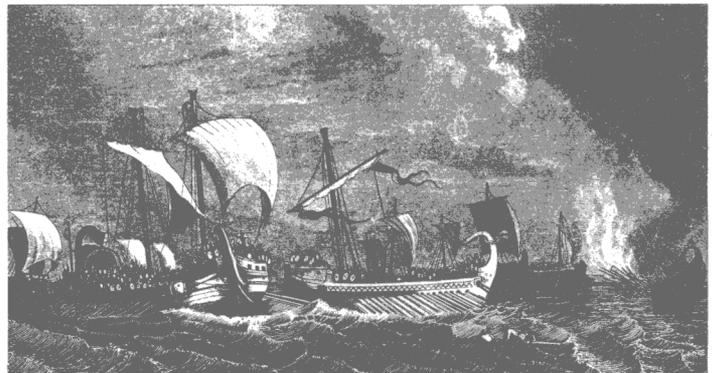
Note #1: Ignore hull and rigging hits and treat all criticals as Weapon/Crew criticals.

Note #2: Roll a fire critical of equal severity to any other critical obtained.

Note #3: Roll a fire critical of one severity less than any other critical obtained.

EFFECTS OF MULTIPLE BOLTS

# Bolts Cast (PP Mult)	Prep Rnds / Spell (1 caster)	Prep OB Mod	Max Result Change	% Failure Chance (1 caster)
1	2	-25	+0	2
2	2	-20	+0	4
3	2	-10	+0	5
4	2	+0	+6	7
5	1	+5	+6	9
6	1	+10	+6	11
7	0	+15	+12	13
8	0	+20	+12	14
9	0	+25	+12	16
10	0	+30	+15	18
11	0	+35	+15	19
12+	0	+40	+15	20



CASUALTY PERCENTAGE CHART

Casualty Type	Crew Quality						
	P	G	Re	R	V	E	C
Dead *	40	40	40	40	40	40	40
Wounded *	40	40	40	40	40	40	40
Dazed	0	5	5	10	15	20	20
Shirkers	20	15	15	10	5	0	0

* — Dead and Wounded percentages may shift due to the quality and availability of medical resources.

T-4.4 • DAMAGE EFFECTS TABLE

* — All effects are cumulative (e.g., if 9 hull sections are marked off, the ship is taking 6 hull hits per turn, 50% of the stores are soaked, and its MPs have been reduced by two).

HULL DAMAGE

Sections
Marked Off Effect * (round up fractions)

1	5% of stores are soaked.
2	Ship takes 1 hull hit per turn.
3	15% of stores are soaked.
4	Ship takes 1 hull hit per turn.
5	-1 MP to sail and oared movement.
6	Ship takes 2 hull hit per turn.
7	30% of stores are soaked.
8	Ship takes 2 hull hit per turn.
9	-1 MP to sail and oared movement.
10	Ship sinks.

RIGGING DAMAGE

Sections
Marked Off Effect * (round up fractions)

1	Sail MPs reduced by 20%, no Full Sail Bonus.
2	Sail MPs reduced by 20%.
3	Sail MPs reduced by 20%, no Sails&Oars Bonus.
4	Sail MPs reduced by 20%.
5	No Sail Movement.

SEAMEN DAMAGE

Sections
Marked Off Effect * (round up fractions)

1	May only fire 75% of weapons.
2	May only fire 50% of weapons.
3	May not fire any weapons.
4	Ship surrenders.

OARSMEN DAMAGE

Sections
Marked Off Effect * (round up fractions)

1	Oared MPs reduced by 25%.
2	Oared MPs reduced by 25%.
3	Oared MPs reduced by 25%.
4	No Oared Movement.

OAR DAMAGE

Sections
Marked Off Effect * (round up fractions)

1	Oared MPs reduced by 25%.
2	Oared MPs reduced by 25%.
3	Oared MPs reduced by 25%.
4	No Oared Movement.

OARSMEN EXHAUSTION

Sections
Marked Off Effect *

1	No effect.
2	No effect.
3	Cannot use ramming speed.
4	Cannot use battle speed.
5	No Oared Movement.

MORALE CHART

Crew Quality	Base Morale Value	% Casualties Before Surrender is Possible
Poor / Slave	10	50%
Green	20	50%
Reservists	30	50%
Regular	40	50%
Veteran	50	60%
Elite	60	70%
Crack	70	80%

MODIFIERS TO MORALE CHECKS

Reason for Modifier	Modifier
Officer/PC Direction *	+50% Leadership Bonus (round up)
Popular Officer killed during the current turn	-5
Captain killed during the current turn	-10
Losses Over 50% of Crew	-10 per 10% > 50%
Ship has been Boarded by the Enemy	-15
Conflict with Racial/Cultural Enemy	+10
Attacked by "pirates" who do not kill prisoners §	-10
Attacked by "pirates" who kill prisoners §	+10
Each PC Alive and Acting as Leader (optional) §	+2 / PC

* — To use this bonus, the Captain (or other commanding officer) must be able to communicate with his crew (either by using a megaphone or magical means).

§ — Applies only to Morale Checks made to determine if a crew surrenders.

RESULTS

Modified Roll	Result
101+	No Effect
91-100	Crew demoralized: -5 to ship's OB
81-90	Crew demoralized: -10 to ship's OB
71-80	Crew demoralized: -15 to ship's OB
61-70	Crew demoralized: -20 to ship's OB
≤ 60	Crew demoralized: -25 to ship's OB. Possible Surrender if 50% or more casualties.

ANCHOR MANEUVERS OPTIONS CHART

Maneuver/Turn	Code	Restrictions	MP Cost
Anchor Normally	aN	anchored normally	0
Anchor at Bow §	aB	anchored at end of turn	0
Anchor at Stern §	aS	anchored at end of turn	0
Up-anchor *	U	needs 2 crew pts.	2 turns
Cut Anchor *	cA	needs 1 crew pt.	1 turn
Stern Pivot, Left *	spL	aS & only 2 per turn	—
Stern Pivot, Right *	spR	aS & only 2 per turn	—
Bow Pivot, Left *	bpL	aB & only 2 per turn	—
Bow Pivot, Right *	bpR	aB & only 2 per turn	—

* — Only ships already anchored may issue these orders.

§ — Only ships anchored in these manners may pivot.

PROPORTIONAL MOVEMENT CHART (Optional)

Segment #	Ship's Movement Points																			
#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-	-	-	M	-
3	-	-	-	-	-	-	M	-	-	-	-	-	-	M	-	-	-	-	-	M
4	-	-	-	-	M	-	-	-	-	M	-	-	-	-	M	-	-	-	-	M
5	-	-	-	M	-	-	-	M	-	-	-	M	-	-	-	M	-	-	-	M
6	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	M
7	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M
8	M	-	-	M	-	-	M	-	-	M	-	-	M	-	-	M	-	M	-	M
9	M	-	M	-	-	M	-	-	M	-	-	M	-	M	-	M	-	M	-	M
10	M	-	M	-	M	-	M	-	M	-	M	-	M	-	M	-	M	-	M	-
11	M	-	M	-	M	-	M	M	-	M	M	-	M	-	M	-	M	-	M	-
12	M	-	M	-	M	M	-	M	M	-	M	M	-	M	M	-	M	-	M	-
13	M	-	M	M	-	M	M	-	M	M	-	M	M	-	M	M	-	M	M	-
14	M	M	-	M	M	-	M	M	-	M	M	-	M	M	M	-	M	M	M	-
15	M	M	M	-	M	M	M	-	M	M	M	-	M	M	M	-	M	M	M	-
16	M	M	M	M	-	M	M	M	M	-	M	M	M	M	-	M	M	M	M	-
17	M	M	M	M	M	-	M	M	M	M	M	-	M	M	M	M	M	M	M	-
18	M	M	M	M	M	M	M	M	M	-	M	M	M	M	M	M	M	M	M	-
19	M	M	M	M	M	M	M	M	M	-	M	M	M	M	M	M	M	M	M	M
20	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M

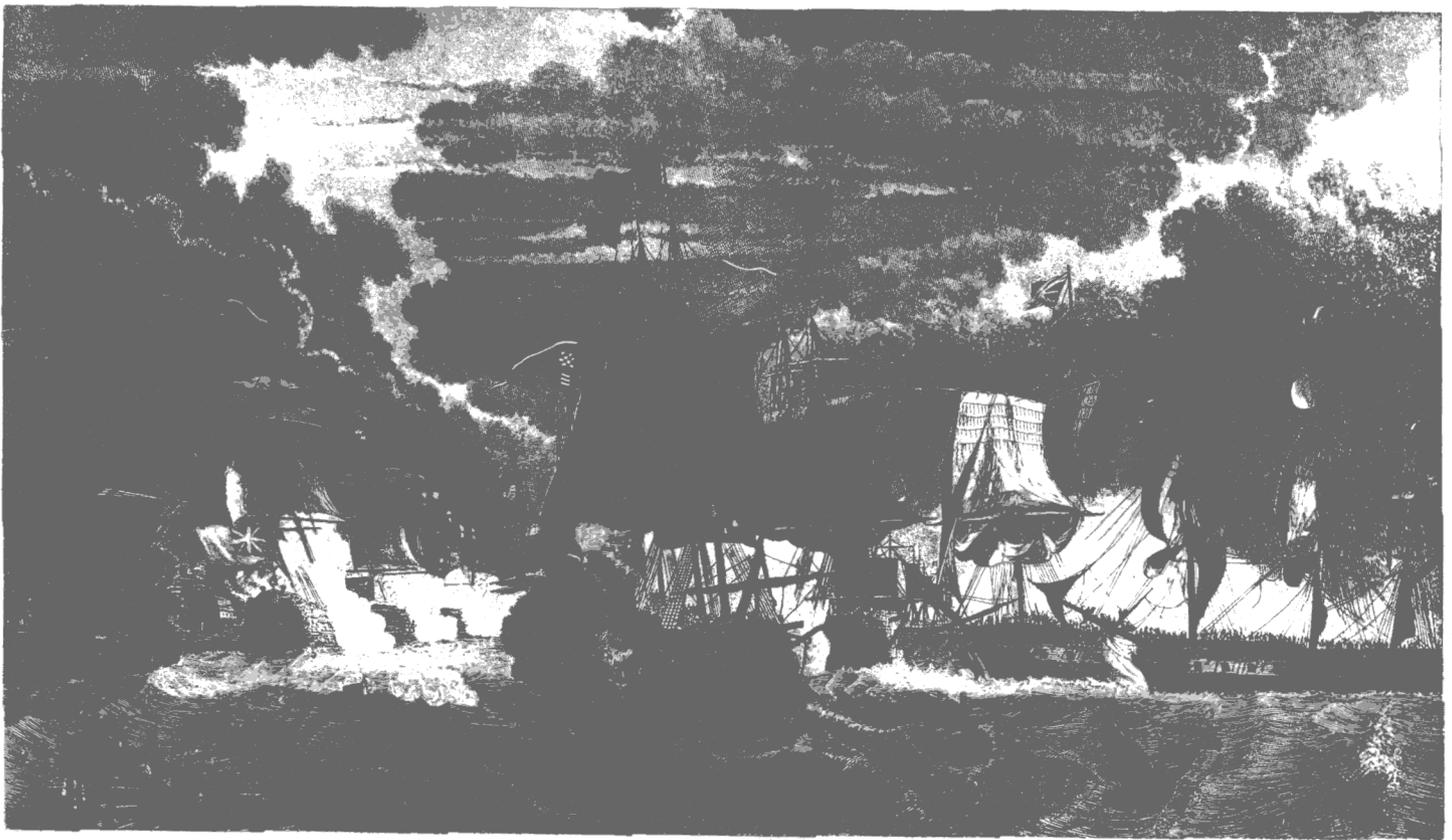
OPPORTUNITY MOVEMENT CHART

Modified Roll	Result
101+	New movement orders may be recorded for the ship's remaining MPs (i.e., not for those already used).
91-100	The movement orders must be executed as recorded.
76-90	The movement orders must be executed as recorded, and the ship's available MPs are reduced by one.
05-75	The movement orders must be executed as recorded and the ship's available MPs are reduced by one and no more attempts to change movement orders may be made this turn.
< 05	The entire ship's crew is thrown into a state of confusion. The ship's available MPs are reduced by two and no more attempts to change movement orders may be made this turn or on the following turn and the ship must expend the rest of its MPs in forward movement.
Modifications:	
<ul style="list-style-type: none"> • Half of the Captain's Leadership skill bonus (round up). • <i>Crew Quality Modifiers</i>: Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30. 	

OPPORTUNITY FIRE (OF) CHART

Modified Roll	Result
126+	The OF attacks are made with no penalty.
111-125	The OF attacks are made with a -10 penalty.
91-110	The OF attacks are made with a -20 penalty.
76-90	No Opportunity Fire (OF) this turn, but the OF weapons may make a normal attack modified by -20 during the Missile/Spell Phase.
11-75	The gun crews are confused, the OF weapons may not make any attacks this turn.
≤ 10	The gun crews are thrown into a state of confusion for the rest of this turn. The Opportunity Fire weapons will fire at the first "friendly" target that enters their firing arc during the current turn.
Modifications:	
<ul style="list-style-type: none"> • The Captain's Tactics skill bonus. • <i>Crew Quality Modifiers</i>: Crack: +30; Elite: +20; Veteran: +10; Regular: +0; Reservists: -10; Green: -20; Poor/Slave: -30. 	





NAVIGATION CHART

Modified Roll	Result
176+	<i>Absolute Success:</i> You determine your location to within 2 miles. You get a +20 to all navigation and perception rolls for the next hour.
111-175	<i>Success:</i> You determine your location to within 10 miles.
91-110	<i>Near Success:</i> You determine your location to within 25 miles, but you are not confident. You may try again after 10 minutes of contemplation.
76-90	<i>Partial Success:</i> You determine your location to within 50 miles, but you are not aware that you are that far off. You may not try again for 2 hours.
05-75	<i>Failure:</i> Your location determination is off by 50-100 miles, but you are not aware that you are that far off. You may not try again until the next normally scheduled position fix.
-25-04	<i>Absolute Failure:</i> Your location determination is off by 50-500 miles, but you are not aware that you are that far off. You may not try again until the next normally scheduled position fix, and any navigation attempts you attempt for the day are modified by -50.
≤ -26	<i>Blunder:</i> Your location determination is off by 50-1000 miles, but you are not aware that you are that far off. You may not try again until the next normally scheduled position fix, and any navigation attempts you make in the next week are modified by -50.

SPOTTING CHART

Conditions	Maximum Spotting Distance
<i>Daylight:</i>	
Clear Skies	20 Miles
Cloudy, Overcast	10 Miles
Misty or light drizzle	1 mile
Light Fog or rain	1000 feet
Heavy fog or downpour	20 feet
<i>Night (Double distance if target has lights):</i>	
Clear, moonlit, many stars	8 miles
Moonless, cloudy	2 miles
Misty or light drizzle	1000 feet
Light fog or rain	500 feet
Heavy fog or downpour	10 feet

Note: If a telescope or similar spotting tool is not used reduce these distances by half (round up).

Modifications:

- Navigation bonus
- Half of Astronomy skill bonus (round up)
- + Difficulty Mod (routine:+30; easy:+20; light:+10; medium:+0; hard:-10; very hard:-20; extremely hard:-30; sheer folly:-50; absurd:-70)

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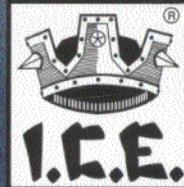
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