

Naval Combat

version 1.3

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There are three types of ship-based combat, all with different effects on combat and a character's role in it.

Mass Naval Combat. This is large-scale engagements between fleets of ships. Individual actions are not as important, but rather the outfit of the fleet and their abilities. This is incredibly rare and requires careful planning to even begin approaching other captains to take part in such a chaotic melee. [The original Pathfinder - 1e rules for this are updated for Pathfinder - 2e here.](#)

Shipboard Combat. Like many other combats, this style of fighting is largely characters against their opponents, except it takes place on a ship. Most shipboard combat will be resolved normally, though there may be a few deviations from standard fights. The size of a ship can limit the scope of a battlefield, falling overboard can quickly swing the tides of combat, and weather can cause the battlefield to quickly morph. If combat happens during a storm or in rough waves, the ship's deck might be difficult terrain or require Acrobatics checks to not fall over or be tossed off the ship.

If a combatant falls overboard, you can find rules for fighting in the water on page 478 of the Core Rulebook.

Ship-to-Ship Combat. This is combat between two vessels over an expanse of water. This type of combat is common for pirates who attack merchants, defend against navy vessels, and decide to raid cities and settlements. Ships are difficult to significantly damage, and it is more profitable to tow or sail another vessel to a friendly port and sell it there. Due to pirates only being paid when they can ransack another vessel, ship-to-ship combat ends when the crew of one ship boards another to fight each other in *Shipboard Combat*.

Ship Basics

The basic rules for movement and combat.

Pilots

A ship requires two elements for it to move- a pilot and a means of propulsion, typically the wind during this period though rowers are often used and a few experimental ships might use magic to propel them forward. A pilot is anyone capable of using the ship's helm and control device, typically the captain but not always. To properly steer a vessel, a pilot should be trained in Sailing Lore, or another appropriate skill per the vehicle's stat block.

Crew

Ships are large vehicles and require a crew, though smaller ships, like a rowboat, can have a single individual who acts as the crew. If a ship has less than a full crew, it begins taking penalties to checks related to sailing and movement. If a ship doesn't have enough crew, it becomes uncontrolled.

Any crew required to operate siege engines are in addition to those crew needed to operate the ship and are labeled as Passengers. During an encounter, you can move passengers from siege engines to crewing the ship.

Size & Space

Ships are typically long and wide, unlike most other creature sizes and space. When using ships on a grid mat, a single square or hex on the map corresponds to 30 feet in distance, rather than 5 feet. Most ships will be long and so instead of taking up a space of equal number of squares per side like creatures, a ship's width is almost always considered to be one square or hex while its length can be 1 space to 5 spaces, or even longer.

Facing & Movement

Ships are unable to move like creatures and their movement is based on their propulsion. They tend to move in the direction of their forward-facing, known as heading, and do so quickly.

Facing

Ships have 4 distinct sides; Forward (Bow), Left (Port), Right (Starboard), and Back (Stern). A ship typically travels where ever it's forward is facing and is fastest when moving in that direction.

A ship's propulsion determines how fast a ship can move, how steep a turn it can make, and how it can combine these elements.

Movement

Ships have a maximum speed listed in its stat block, the maximum speed is the fastest the ship can travel per round. A pilot can use an action to have a ship travel up to that speed, and a vehicle can take part in only 1 move action each round, even if multiple creatures Take Control as pilots on the same round to its maximum.

Every ship is assumed to be in motion during the start of a ship-to-ship combat unless the GM determines otherwise. If a ship is completely stopped, or comes to a stop in combat, the ship must begin accelerating. On the first round a ship begins moving from a stopped position, it can move up to 10 feet. Every round after that, it begins moving 10 feet more than on the previous round.

Long Distance Movement

Travel over long-distance uses a ship's Day Speed, which is measured in miles per hour or day. For rowing-propelled ships, a day represents 10 hours of rowing, if you wish to move more than that, you must have another set of crew take over who are counted as passengers while not rowing. Day Speed can be found in the individual ship stat blocks next to a ship's Speed.

Building a Ship

A crew is nothing without a ship. To have a ship, either one must be procured through less than reputable manners, a ship must be commissioned and built, or simply buy a used ship from a port city. Whether you are commissioning a ship, improving an existing one, or simply taking over a new vessel, a ship is a valuable vehicle that acts as a mobile base of operations. The party's first ship is often designed by the GM and can be improved or replaced later in an adventure.

There are only a handful of steps to build a ship.

Step 1 / Conceptualize Decide what type of ship you are wanting, along with its general purpose and abilities.

Step 2 / Select Frame There are a large variety of ships with different frames as they are meant for different purposes. A galley is great for carrying large quantities of objects, though its defenses are rather poor. A galleon, either with or without cannons, are massive powerhouses that can take down many a pirate before it sinks. Each frame specializes in something unique and has its trade-offs.

Step 3 / Propulsion While this is often dictated by the frame, some frames can have different means of propulsion that can augment its movement.

Step 4 / Improvements Once you have secured proper 'financing' on the high seas, it's time to upgrade the ship and adjust its AC, Hit Points, Attack Rolls, and more. This is a bulk purchase packet that increases the level of the ship. Certain ships, like rowboats, have a level cap that they can not exceed, while most can continually be leveled up so long as you have the funds to do so.

Step 5 / Siege Engines Regardless of the vehicle, you are going to need some powerful weapons to take down your opponents on the open ocean.

Step 6 / Modifications Upgrades and unique changes to make your vehicle your own, like augmenting the ship's silhouette, building more cabin space, and magical enhancements.

Step 7 / Equipment Every ship needs supplies for siege engines and to feed their crew, as well as sailing gear.

Step 1 - Conceptualize

When deciding to build a ship, think about how you want it to behave on the water. Do you wish for it to move fast? Hold a large amount of cargo? Have dozens of siege engines to lay waste to settlements and other ships? These choices help determine what type of ship you might want to build, or liberate from an unworthy captain.

Step 2 - Frame

Each ship has a base frame that determines its size, propulsion, weapon mounts, and more. Each ship's look is unique, even if it has the same frame as another. Some ships might try to hide their frame to sneak up on merchants or to trick others into thinking their ship is slower than it is. A character can use the following action to learn information about a ship's frame.

Unveil Ship Obfuscation {1A}

Concentrate / Secret

Requirements you are Trained in Sailing Lore

You try to determine the base frame of a vehicle whose frame has been obfuscated and obscured. Choose one vehicle and you assess its general build and its behaviors. The GM attempts a single secret Perception check for you and compares the result to the Deception DC of the ship. You typically can't try to Unveil Obfuscations of the same vehicle again until the situation changes significantly.

Critical Success You determine the vehicle's true frame and get a solid idea of its abilities.

Success You can tell the frame has been hidden and what the frame is, though you can't tell what its abilities are.

Failure You detect what a deceptive frame wants you to.

Hiding your Frame

If you wish to disguise your frame, you can use one of the mundane enhancements or come up with your way of trying to disguise the frame. The GM has the final say on what measures must be taken to obfuscate a frame. This type of activity can be done during downtime.

Types of Frames

Caravel A small and fast sailing ship popular with merchants for its low cost and speed. While it may not be as fast as other vehicles, it is small enough to sail up most rivers while still being sea worthy.

Corvette Often thought of as a larger schooner, these are the smallest warships in a fleet. They often act as scouts or sentries, only engaging with light warships like themselves.

Frigate A frigate is typically a smaller warship built for speed and maneuverability. They are too small to be used in line-of-battle naval combat but provide protection for merchants and guard supply lines.

Galleon Large and multi-decked sailing ships that are often used as armed cargo carriers that can safely sail the waters without an escort.

Galley A galley is propelled largely by rowing and known for having a long, slender hull with a shallow draft and capable of carrying a large number of supplies. In more recent times, uses of the galley are beginning to diminish as the vessels simply can't keep up with the newer vehicles that rely solely on sail power.

Ironhull A steam- or elemental-propelled warship protected by heavy iron plates. They are considered to be experimental and their prices keep them out of the hands of many.

Junk A sailing ship with batten sails, wooden slats that are used to hold the sail away from the mast. They are sailed by using a large tiller to steer the vehicle. Thanks to their flat hulls, they can be modified easily to sail up and down shallow rivers.

Keelboat Typically a riverine working boat, this vehicle never leaves the sight of shore due to its short draft and lack of storage for long term ocean-going. Smaller versions are often used as a Ship's Boat or as a larger version of a rowboat.

Longship While these vessels are rarely ever made, a good number of them can still be found prowling through the oceans simply due to their cheapness. They are from a bygone era and are considered relics.

Rowboat A ship's boat, these small vessels are for ferrying men and supplies from the main ship to shore.

Schooner Schooners are largely built for transporting cargo, passengers, and for fishing. Thanks to their speed and shallow draft, they are a favorite among pirates with smaller crews who attack smaller ships.

Sloop Fast and agile with a small crew, sloops are well-loved for their speed and large cargo capacity. Due to how fast they run, they are often left unprotected by frigates, making them a likely target for pirates if they can catch them.

Warship Large and powerful, these ships are built for defense and raw power. They typically feature many weapons and have greater armor than merchant vessels.

Explaining Frame Statistics

A frame is the basic abilities of a ship, it does not come with a crew, means of propulsion, weapons, or anything else that is not the basic components of a ship.

Size This is the size of the ship and the number at the end represents its size modifier, used for various costs.

Price This entry lists the vehicle's price. This does not include any modifications, sails, oars, engines, crew, enhancements, or anything else except the base frame.

Space This entry gives the vehicle's dimensions, not including any creatures pulling the vehicle or the height of the masts.

Decks The number of decks as well as their function. A top deck has no covering, a cargo deck is split evenly between crew quarters (includes sleeping quarters, kitchen, surgeon's room, and more) and the cargo hold. A castle is a room on top of the top deck, though it only takes up about a third of the top deck and can be on the Bow or Stern, typically the castle houses either more supplies or the captains and senior officer rooms.

Crew The crew members required to operate the vehicle;

Passengers The number of passengers the vehicle is typically configured to carry, if any. These can also be additional crew who man the siege engines or act as a backup or a second shift on rowing the ship.

Cargo How much cargo a vehicle can carry.

Propulsion How the vehicle is propelled forward; **Control Helm**

Where a pilot must be in order to control the vehicle.

AC The vehicle's AC and what material is used for it, it's assumed most vehicles have thick wooden beams for its protection; **Fort** The vehicle's saves (typically only Fortitude). If a vehicle needs to attempt a saving throw that isn't listed, the pilot attempts a piloting check at the same DC instead.

Hardness The vehicle's hardness, **HP** The vehicle's Hit Points, its Broken Threshold is half this number; **Immunities** The vehicle's immunities.

Collision The vehicle's collision damage and the DC for saving throws to mitigate that damage. Unless otherwise stated, collisions deal bludgeoning damage.

Weapon Mounts The location and quantity of potential weapons for a vehicle.

Draft The depth of water required for a vehicle to be able to travel. Most ports and rivers can accommodate vehicles of shallow- and mid-draft, while deeper ports are required for vehicles with deep-drafts.

Special Abilities Any abilities unique to the vehicle.

Caravel

Size Huge (3)

Price 700 gp

Space 60 feet long, 17 feet wide, 10 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 15 crew; **Passengers** 25

Cargo 650 bulk

Propulsion Sails (2 masts); **Control Helm** Top Deck

AC 8 (Thin Wood); **Fort** +8 (Trained)

Hardness 10, **HP** 27; **Immunities** critical hits, object immunities, precision damage

Collision 6d8 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 6 Port (TD),
6 Starboard (TD)

Draft Shallow

Corvette

Size Gargantuan (4)

Price 1,500 gp

Space 98 feet long, 22 feet wide, 10 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 20 crew; **Passengers** 45

Cargo 750 bulk

Propulsion Sails (2 masts); **Control Helm** Top Deck

AC 12 (Reinforced Wood); **Fort** +11 (Expert)

Hardness 15, **HP** 30; **Immunities** critical hits, object immunities, precision damage

Collision 6d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 8 Port (TD),
8 Starboard (TD)

Draft Shallow

Frigate

Size Gargantuan (4)

Price 2,375 gp

Space 131 feet long, 40 feet wide, 30 feet high

Decks Top Deck (TD), Cargo Deck (CD), Stern Castle (SC)

Crew 1 pilot, 15 crew; **Passengers** 30

Cargo 1,250 bulk

Propulsion Sails (3 masts); **Control Helm** Stern Castle

AC 12 (Reinforced Wood); **Fort** +11 (Expert)

Hardness 20, **HP** 35; **Immunities** critical hits, object immunities, precision damage

Collision 8d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 7 Port (TD),
7 Starboard (TD)

Draft Mid

Special / Slow Ship's propulsion speed is reduced by -5 feet and its Day Speed is reduced by 13.5 miles (wind).

Galley

Size Gargantuan (4)

Price 1,500 gp

Space 130 feet long, 20 feet wide, 25 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 20 rowers; **Passengers** 6

Cargo 1,000 bulk

Propulsion Oars (20), Sails (1 mast); **Control Helm** Top Deck

AC 10; **Fort** +9 (Trained)

Hardness 15, **HP** 30; **Immunities** critical hits, object immunities, precision damage

Collision 7d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 1 Stern (TD)

Draft Shallow

Galleon

Size Gargantuan (4)

Price 3,000 gp

Space 160 feet long, 45 feet wide, 40 feet high

Decks Top Deck (TD), Gun/Ballista Deck (GBD), Cargo Deck (CD)

Crew 1 pilot, 30 crew; **Passengers** 100

Cargo 2,000 bulk

Propulsion Sails (3 masts); **Control Helm** Top Deck

AC 10; **Fort** +11 (Expert)

Hardness 15, **HP** 35; **Immunities** critical hits, object immunities, precision damage

Collision 8d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 17 Port (GBD),

17 Starboard (GBD), 1 Stern (TD)

Draft Deep

Special / Slow Ship's propulsion speed is reduced by -5 feet and its Day Speed is reduced by 13.5 miles (wind).

Ironhull

Size Gargantuan (4)

Price 3,500 gp

Space 160 feet long, 40 feet wide, 20 feet high

Decks Gun/Ballista Deck (GBD)

Crew 2 pilot, 10 crew; **Passengers** 40

Cargo 100 bulk

Propulsion Alchemical; **Control Helm** Gun/Ballista Deck, at Propulsion

AC 14 (Iron); **Fort** +13 (Expert)

Hardness 20, **HP** 35; **Immunities** critical hits, object immunities, precision damage

Collision 7d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (GBD), 4 Port (GBD),

4 Starboard (GBD)

Draft Mid

Special / Ponderous Ship's propulsion speed is reduced by -15 feet and its Day Speed is reduced by 40.5 miles (alchemical).

Junk

Size Huge (3)

Price 1,250 gp

Space 110 feet long, 30 feet wide, 15 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 20 crew; **Passengers** 40

Cargo 500 bulk

Propulsion Oars (18), Sails (2 masts); **Control Helm** Top Deck (Tiller)

AC 8 (Thin Wood); **Fort** +8 (Trained)

Hardness 10, **HP** 27; **Immunities** critical hits, object immunities, precision damage

Collision 6d8 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 2 Bow (TD), 7 Port (TD), 4 Starboard (TD)

Draft Mid

Special / Variable Draft The centerboard can be removed, which takes the crew 10 minutes, changing the vehicle's draft to shallow. This imposes a -2 item penalty on Piloting checks.

Keelboat

Size Huge (3)

Price 150 gp

Space 60 feet long, 20 feet wide, 15 feet high

Decks Top Deck (TD), Stern Castle (SC)

Crew 1 pilot, 10 rowers, 3 crew (sails); **Passengers** 5

Cargo 100 bulk

Propulsion Oars (10), Sails (1 mast); **Control Helm** Stern Castle

AC 10; **Fort** +8 (Trained)

Hardness 10, **HP** 27; **Immunities** critical hits, object immunities, precision damage

Collision 6d8 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD)

Draft Shallow

Longship

Size Large (2)

Price 75 gp

Space 75 feet long, 15 feet wide, 3 feet high

Decks Top Deck (TD)

Crew 1 pilot, 40 rowers, 2 crew (sails); **Passengers** 8

Cargo 75 bulk

Propulsion Oars (40), Sails (1 mast); **Control Helm** Top Deck

AC 10; **Fort** +7 (Trained)

Hardness 10, **HP** 25; **Immunities** critical hits, object immunities, precision damage

Collision 5d6 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD)

Draft Shallow

Special / Quick Ship's propulsion speed is increased by 5 feet and its Day Speed is increased by 5.5 miles (row).

Rowboat

Size Medium (1)

Price 14 gp 6 sp

Space 10 feet long, 5 feet wide, 3 feet high

Decks Top Deck (TD)

Crew 1 pilot; **Passengers** 2

Cargo 10 bulk

Propulsion Oars (2); **Control Helm** Top Deck

AC 8 (Thin Wood); **Fort** +6

Hardness 5, **HP** 16; **Immunities** critical hits, object immunities, precision damage

Collision 2d4 (DC 10 + level + Pilot's proficiency)

Maximum Level 3

Draft Shallow

Special / Portaged The rowboat can be carried overland by 2 Medium creatures or 1 Large creature. Those creatures are encumbered when doing so.

Ponderous Ship's propulsion speed is reduced by -10 feet and its Day Speed is reduced by 11 miles (row).

Schooner

Size Gargantuan (4)

Price 1,250 gp

Space 120 feet long, 30 feet wide, 10 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 20 crew; **Passengers** 40

Cargo 1,000 bulk

Propulsion Sails (2 masts); **Control Helm** Top Deck

AC 8 (Thin Wood); **Fort** +9 (Trained)

Hardness 15, **HP** 25; **Immunities** critical hits, object immunities, precision damage

Collision 5d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 5 Port (TD), 5 Starboard (TD), 1 Stern (TD)

Draft Shallow

Special / Quick Ship's propulsion speed is increased by 5 feet and its Day Speed is increased by 13 miles (wind).

Sloop

Size Huge (3)

Price 1,000 gp

Space 75 feet long, 20 feet wide, 10 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 7 crew; **Passengers** 10

Cargo 500 bulk

Propulsion Sails (2 masts); **Control Helm** Top Deck

AC 10; **Fort** +8 (Trained)

Hardness 10, **HP** 27; **Immunities** critical hits, object immunities, precision damage

Collision 6d8 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 4 Port (TD), 4 Starboard (TD), 1 Stern (TD)

Draft Shallow

Special / Quick Ship's propulsion speed is increased by 5 feet and its Day Speed is increased by 13.5 miles (wind).

Warship

Size Gargantuan (4)

Price 2,000 gp

Space 160 feet long, 50 feet wide, 40 feet high

Decks Top Deck (TD), Gun/Ballista Deck (GBD), Cargo Deck (CD, 2), Stern Castle (SC)

Crew 1 pilot, 50 crew; **Passengers** 150

Cargo 1,500 bulk

Propulsion Sails (4 masts); **Control Helm** Stern Castle

AC 12 (Reinforced Wood); **Fort** +11 (Expert)

Hardness 20, **HP** 35; **Immunities** critical hits, object immunities, precision damage

Collision 8d10 (DC 10 + level + Pilot's proficiency)

Weapon Mounts 2 Bow (GBD), 23 Port (GBD), 23 Starboard (GBD), 2 Stern (GBD)

Draft Deep

Special / Slow Ship's propulsion speed is reduced by -5 feet and its Day Speed is reduced by 13.5 miles (wind).

Step 3 - Propulsion

Explaining Propulsion Statistics

Propulsion Type How the vehicle is propelled.

Cost The cost multiplied by the vehicle's size modifier.

Speed How fast a vehicle moves during encounter mode.

Day Speed Speed of a fully crewed vehicle in a day.

Pilots Number of pilots required to Drive. If there are multiple pilots, they must spend the same number of actions on a Drive action and succeed on the check.

Crew Minimum The minimum number of crew required to use this propulsion method, a frame may require more members.

Piloting Check Checks a Pilot can use to drive.

Maneuverability How fast a vehicle can turn.

Special Ability Any special abilities of this propulsion.

Alchemical

Propulsion Type Alchemical

Cost 100 gp x size category

Bulk 50 x size category

Speed 60 feet

Day Speed 164 miles

Pilots 2

Minimum Crew 10

Piloting Check Arcana (DC 16 + level), Crafting (DC 16 + level), Engineering Lore (DC 14 + level), Sailing Lore (DC 16 + level)

Slow Turns The vehicle must move its length for each 60-degree turn it makes.

Special / Fuel The vehicle must be supplied with fuel. 1 Fuel takes up 2 bulk and powers the vessel for 4 hours.

Oars

Propulsion Type Rowed

Cost 2 sp / Oar

Speed 30 feet

Day Speed 34 miles

Pilots 1

Minimum Crew 1 per Oar (vehicle requires at least 1 rower per 6 feet of its length)

Piloting Check Sailing Lore (DC 14 + level), Athletics [medium vehicles only] (DC 16 + level), Diplomacy (DC 16 + level), Intimidation (DC 16 + level)

Maneuverable With a full crew, a rowed vehicle can turn swiftly, turn in place, and even row backward. Each 60-degree turn made in less than a vehicle length costs 5 extra feet of movement. A vehicle can row backward at half speed and it can't turn while rowing backward.

Sails

Propulsion Type Wind

Cost 5 gp x size category / mast

Speed 30 feet

Day Speed 81 miles

Pilots 1

Minimum Crew 2 crew / mast (large), 4 crew / mast (huge), 10 crew / mast (gargantuan)

Piloting Check Sailing Lore (DC 14 + level), Diplomacy (DC 16 + level), Intimidation (DC 16 + level)

Sluggish The vehicle must move twice its length for each 60-degree turn it makes.

Special / Additional Masts With additional masts, the ship's speed increases by 15 feet and its Day Speed increases by 27 miles.

Wind While sailing with the wind, your speed is doubled. You can not sail into the wind.

Step 4 - Ship Improvements

When a ship is built, it is considered a level 0 ship until it gains improvements in one of three paths.

Once you choose a specialization for the ship, you can not change that specialization unless you strip your ship of all levels in that specialization and then repurchase ship levels in a different specialization. This typically costs a quarter of all your specialization levels cost to remove improvements, and then the normal cost of purchasing new improvements. It requires a number of days equal to 1d4 times half the number of levels being removed (rounded down).

It takes 1d4 days to upgrade your ship to a new improvement and requires you to be at a port and your ship being serviced during that time. You can still board your ship and sell plunder from the ship, but you can not sail it and it might not even be in the water for much of it.

Defense This specialization is focused on protection and being a sturdy ship that can ignore most light siege engines. They are often lumbering ships that have difficulty keeping up with lighter ships.

Mobility Light and fast, this specialization is about getting in and out as fast as possible. These ships are typically not interested in ship-to-ship combat but rather getting the surprise on a target and catching them with their anchor down.

Offense This acts as a balance between defense and mobility, these ships are better at hitting other vehicles and their speed doesn't suffer due to heavy armor.

In Use

You have a level 5 Defense Warship and wanted to upgrade it to a level 6 Defense Warship, you would pay 29 gp times the size category of your ship, in this case, a gargantuan ship has a size modifier of 4. This would cost 116 gp and take 1d4 days to finish construction. If you instead upgrade your ship to a level 7 Defense Warship, it would take 2d4 days and require 116 gold to improve to level 6, and then 168 gold to improve to level 7.

If you wanted to instead change your ship's specialization, it would cost 43 gold to strip off the 5 levels of Defense, and then cost 172 gold to improve the ship back up to level 5 of its new specialization. This process would take 2d4 days to remove the old improvements and 5d4 days to install the new improvements.

Explaining Improvement Statistics

Level The level of a ship. This value is added to vehicle DCs as well as attack rolls for the ship's siege engines.

Cost GP The cost of each level up, this number is multiplied by the Size Category modifier of a frame.

Hardness This value increases the Hardness of a frame.

HP This value increases the Hit Points of a frame.

Speed This value increases the Propulsion Speed of a frame. For every 5 feet, the Day Speed is increased, or decreased, 13.5 miles for 24 hours of movement. For every 10 feet, the Day Speed is increased, or decreased, 27 miles for 24 hours of movement.

AC The proficiency of a ship with its Armor.

S. Engine The proficiency of a ship with its siege engines.

Defense

Level	Cost (gp)	Hardness	HP	Speed	AC	S. Engine
1	x2	+1	12		Trained	Trained
2	x4		12			
3	x7		12			
4	x12		12			
5	x18	+1	12	-5 ft.		
6	x29		12			
7	x42		12		Expert	
8	x59		12			
9	x83	+1	12			
10	x120		12			
11	x175		12		Expert	
12	x238		12			
13	x345	+1	12		Master	
14	x500		12			
15	x812		12	-5 ft.		
16	x1125		12			
17	x1812	+1	12		Legendary	
18	x2500		12			
19	x4500		12			
20	x8125		12			

Mobility

Level	Cost (gp)	Hardness	HP	Speed	AC	S. Engine
1	x2		8	+10 ft.	Trained	Trained
2	x4		8			
3	x7		8			
4	x12		8	+10 ft.		
5	x18		8			Expert
6	x29		8			
7	x42		8			
8	x59		8	+10 ft.		
9	x83		8			
10	x120	+1	8			
11	x175		8			
12	x238		8	+10 ft.		
13	x345		8		Expert	Master
14	x500		8			
15	x812		8			
16	x1125		8	+10 ft.		
17	x1812		8			
18	x2500		8			
19	x4500		8			
20	x8125	+1	8	+10 ft.		

Offense

Level	Cost (gp)	Hardness	HP	Speed	AC	S. Engine
1	x2		10		Trained	Expert
2	x4		10			
3	x7		10			
4	x12		10			
5	x18		10			Master
6	x29	+1	10			
7	x42		10			
8	x59		10			
9	x83		10			
10	x120		10			
11	x175		10	+10 ft.	Expert	
12	x238	+1	10			
13	x345		10			Legendary
14	x500		10			
15	x812		10			
16	x1125		10			
17	x1812		10			
18	x2500	+1	10			
19	x4500		10		Master	
20	x8125		10			

Siege Engines	Price	Damage	Range (Hex)	Recharge	Bulk	Crew	Weapon	Trait
Ballista								
Ballista (level 5)	320 gp	4d12 P	120 ft. (4)	0	50	2	Volley	30 ft. (1)
10 bolts	5 gp				10			
Ballista, Heavy (level 8)	900 gp	7d12 P	180 ft. (6)	1	75	5	Volley	30 ft. (1)
10 heavy bolts	30 gp				30			
Ballista, Light (level 1)	30 gp	2d10 P	90 ft. (3)	0	50	2		
10 light bolts	2 gp				1			
Bombards								
Bombard (level 5)	300 gp	4d10 B	150 ft. (5)	1	100	3	Burst, volley	30 ft. (1)
10 stone spheres	40 gp				40			
Bombard, Heavy (level 9)	1,400 gp	7d10 B	250 ft. (9)	2	175	5	Burst, volley	60 ft. (2)
10 stone spheres	80 gp				160			
Cannons								
Cannon (level 8)	900 gp	6d12 B	200 ft. (7)	1	120	4		
10 shots	100 gp				60			
10 bomb shots	250 gp	+2d8 Crew			70		Crew Damage	
10 chain shots	300 gp		30 ft. (1)		50			
10 grapnel shots	250 gp	3d12 Crew	20 ft. (1)		30		Crew Damage	
Cannon, Light (level 3)	120 gp	4d10 B	90 ft. (3)	1	70	3		
10 shots	50 gp				30			
10 bomb shots	125 gp	+1d6 Crew			40		Crew Damage	
10 chain shots	150 gp		30 ft. (1)		20			
10 grapnel shots	125 gp	2d10 Crew	20 ft. (1)		10		Crew Damage	
Catapults								
Catapult (level 7)	650 gp	5d10 B	150 ft. (5)	2	100	4	Burst, minimum	30 ft. (1), volley 60 ft. (2)
10 stones	0 gp				40			
10 fire bombs	300 gp	5d10 Fire			70			
10 chain shots	140 gp		60 ft. (2)		30			
10 grapnel shots	200 gp	3d12 Crew	40 ft. (2)		50		Crew Damage	
Catapult, Light (level 2)	60 gp	4d6 B	120 ft. (4)	1	75	3	Burst, volley	30 ft. (1)
10 stones	0 gp				10			
10 fire bombs	100 gp	4d6 Fire			40			
10 chain shots	75 gp		60 ft. (2)		20			
10 grapnel shots	100 gp	2d8 Crew	40 ft. (2)		30		Crew Damage	
Firedrakes								
Firedrake (level 8)	1,000 gp	8d6 Fire	Varies	2	100	4	30-foot cone (1), 60-foot line (2)	
10 fire barrels	500 gp				30			
Firedrake, Light (level 4)	180 gp	5d6 Fire	Varies	2	60	3	15-foot cone (1), 30-foot line (1)	
10 fire barrels	200 gp				20			
Mortars								
Mortars (level 7)	720 gp	5d10 B	100 ft. (4)	2	75	4	Arcless, burst, minimum	30 ft., volley 60 ft. (2)
10 mortar rounds	50 gp				10			

Step 5 - Siege Engines

Siege Engine Statistics

Most siege engines are constructed of wood or metal and use many of the vehicle's statistics to determine their own. A siege engine is an object and uses the vehicle's AC, saving throw modifiers, and relies on the passengers on the vehicle to control it. A vehicle often imposes lesser or standard cover to a siege engine on its top deck while providing greater cover to a siege engine on a lower deck.

If a vehicle has the Volley trait, it can only be mounted on to the top deck or a castle. It can not have a roof or structure that covers it.

Recharge

Siege engines are large and require multiple people to work in coordination to prep the engine, reload it, aim it, and fire it. This entry indicates how many rounds you must wait before you can fire the engine again. This does not require you to spend any actions on reloading the weapon, as it is assumed that the passengers are constantly working to reload the weapon to fire it again on your orders but is an abstraction of how much time has passed while it's reloaded.

A siege engine must have its full complement of passengers who act as its crew or its recharge rate is increased by 1 per missing crew member. The crew that mans a siege engine are taken from the Passengers, though the ship's captain may decide to pull the crew from operating the vehicle's propulsion to man siege engines.

This replaces the normal actions required to aim, load, and fire a siege engine as vehicles may have dozens of siege engines, making it difficult to track them all.

Crew

Siege engines are large, or larger, and require a number of crew to reload it, aim it, maneuver it, and more. The entry indicates how many crew members must be allocated to the engine in order for it to fire.

A Siege Engine's Bulk

A siege engine's bulk does not count against the cargo limit of the ship unless the weapon is not used in a weapon mount and is then treated as cargo. The bulk of a siege engine is not a direct correlation to its weight, but rather the dimensions it has as they would then weigh hundreds or thousands of bulk by themselves.

Ammunition counts against the bulk a vehicle can carry and is a measure of weight and dimensions as normal.

Differences in Operation

Due to the number of siege engines on a vehicle at any one time, individual siege engines do not track how many actions have been made to aim or load, instead it has a recharge value. This is to keep combat on the high seas moving. The only time an individual siege engine actions are tracked is under important and dire circumstances where the GM wants to highlight a particular moment in the combat or it is the last siege engine on the vehicle.

In addition, the range of siege engines are largely constrained to 30 feet as the size of a hex in these rules is 30 feet. This is for ease of play.

Siege Engine Traits

Arcless. This siege engine is not restricted to firing in the specific arc based on its weapon mount, but can be fired in any arc.

Burst. This siege engine's shot explodes on impact, dealing one die of its damage against any crew in the same hex where it hits. If the siege engine misses its attack, no damage is dealt against the crew.

Crew Damage. This type of ammunition is not strong enough to deal damage to a vehicle's components, but rather deals damage to the vehicle's crew that are in the same hex that it hits on an attack.

Minimum. The siege engine can not be used to fire at this value or closer.

Volley. This siege engine is less effective at close distances. It's attacks against targets that are within the range listed take a -2 penalty. A siege engine with this value can not be mounted below deck.

Siege Engine Descriptions

New siege engines are described below, all others can be found in [Guns & Gears](#).

Light Ballista

Item 1

Uncommon, Medium, Mounted

Price 30 gp; **Ammunition** ballista bolt (2 sp, L Bulk)

Usage mounted; **Space** 7 feet long, 4 feed wide, 4 feet tall

Crew 2; **Proficiency** martial

AC 13; **Fort** +8, **Ref** +7

Hardness 5; **HP** 20 (BT 10); **Immunities** object immunities

Speed 20 feet (pulled or pushed)

This siege engine appears to be a large crossbow that hurls large bolts at greater accuracy than a catapult but at a reduced range. Often employed as an anti-personnel engine.

Aim {1A} 35 feet, minimum distance 15 feet

Load {2A} (manipulate) 1 time

Launch {1A} (attack, manipulate, increment 90 feet) 2d10 piercing, single target, DC 15 Reflex

Light Cannon

Item 3

Uncommon, Medium, Mounted

Price 120 gp; **Ammunition** cannonball (5 gp, 3 Bulk)

Usage mounted (black powder); **Space** 5 feet long, 3 feet wide, 2 1/2 feet high

Crew 3; **Proficiency** martial

AC 17; **Fort** +11, **Reflex** +4

Hardness 15; **HP** 50 (BT 25); **Immunities** object immunities

Speed 15 feet (pulled or pushed)

This large-caliber firearm is a type of artillery that launches a heavy projectile using an explosive chemical propellant.

Aim {2A} 45 feet, minimum distance 20 feet

Load {2A} (manipulate) 2 times, requires a successful DC 20 Athletics check

Launch {1A} (manipulate, range increment 90 feet) 4d10 bludgeoning, single target, DC 18 Reflex

Light Catapult

Item 2

Uncommon, Large, Mounted

Price 60 gp; **Ammunition** stones (0 gp, 1 Bulk)

Usage mounted; **Space** 7 feet long, 5 feet wide, 4 feet high

Crew 3; **Proficiency** martial

AC 15; **Fort** +10, **Ref** +3

Hardness 7; **HP** 40 (BT 20); **Immunities** object immunities

Speed 15 feet (pulled or pushed)

A device that can launch projectiles a great distance through the sudden release of stored potential energy from tightly wound cords. Often employed to destroy walls or structures.

Aim {1A} 50 feet, minimum distance 20 feet

Load {2A} (manipulate) 2 times, requires a successful DC 20

Athletics check

Launch {1A} (attack, manipulate, range increment 120 feet) 4d6 bludgeoning, 5-foot burst, DC 17 Reflex

Light Firedrake

Item 4

Uncommon, Large, Mounted

Price 180 gp; **Ammunition** alchemical fire barrel (20 gp, 2 Bulk)

Usage mounted (black powder); **Space** 10 feet long, 6 feet wide, 5 feet high

Crew 3; **Proficiency** martial

AC 18; **Fort** +12 **Reflex** +5

Hardness 6; **HP** 36 (BT 18); **Immunities** object immunities; **Resistances** fire 5

Speed 15 feet (pulled or pushed)

This large engine is often mounted on small wheels and is loaded with alchemist's fire. When properly set it can expel a gout of liquid fire in a cone or a line.

Aim {1A} rotate 45°

Load {2A} (manipulate) 2 times, requires a successful DC 20

Athletics check

Launch {1A} (manipulate) 5d6 fire plus 1d6 persistent fire, 30-foot line or 15-foot cone, DC 19 Reflex. Switching between the firedrake's line or cone mode takes an Interact action, and any of the crew can perform the action.

Special Ammunition

Some siege engines have special ammunition that can be loaded in them, augmenting or increasing their damage.

Bomb, Fire A keg filled with alchemical fire and alcohol. When used in a catapult, it changes the damage from bludgeoning to fire.

Shot, Bomb This cannon shot has a delayed fuse that is ignited when it is shot out of the cannon. It deals the normal damage for the cannon against its target, and then after 1 round, the shot explodes and kills passengers and crews (each takes half of the damage). This can be avoided by the passengers spending 1 action to remove the bomb.

Shot, Chain This shot is made of two small balls chained together. When fired at the masts or sails of a vehicle, it gains a circumstance bonus to damage equal to the number of weapon damage dice. The shot quickly loses effectiveness at longer ranges and halves the range of the siege engine.

Shot, Grapnel This shot is made up of dozens of metal balls that explode on impact. It deals no damage to a vehicle but kills passengers and crew (each takes half of the damage). To determine how many are killed, roll half the damage dice of the siege engine it is fired from. It has a very short range and thirds the range of the siege engine.

Step 6 - Modifications

These components can be added to a ship to better prepare it for combat, sailing long distances, and more. It takes 1d4 days to install most modifications, though certain items may take longer, like upgrading armor.

Mundane

Armor

A ship's normal armor can be reinforced, improved, or changed completely. This type of activity requires a number of days equal to 1d10 times the ship's size modifier.

Most frames are built with thick, wooden beams that provide a base Armor Class of 10. Some vehicles, like rowboats, use smaller planks that help increase a vehicle's speed though they are easier to damage.

Certain frames may start with different armor that can be replaced, doing so may incur a Speed Adjustment by either increasing or decreasing the ship's speed per the chart below. A frame that starts at a certain type of armor is unaffected by the Speed Adjustment of that armor.

The price of removing or adding in the new armor assumes that any material is claimed by the dockyard performing this work to help cover the costs for labor, materials, and other activities.

Ship Armor	Price	AC	Speed Adjustment
Thin Slats	16 gp x size modifier	8	+5 ft.
Wooden Beams	30 gp x size modifier	10	-
Reinforced Beams	55 gp x size modifier	12	-
Iron Siding	125 gp x size modifier	14	-5 ft.

Thin Slats With reduced weight, these thinner slats are ideal for ships focusing on quick approaches.

Iron Siding Thick iron plate bolted on top of a wooden frame, this heavy framework causes vehicles who install this to sail slower through the water.

Reinforced Beams Thick beams of wood with iron straps that hold the siding to the frame.

Wooden Beams Thick beams of wood found in most vehicles.

Expanded Quarters / Expanded Cargo

Requirements

A cargo deck

A ship's cargo deck is adjusted and pick one of the following:

- Can now transport 10% more crew and passengers above its base rate, but its base cargo capacity is decreased by 10%. Additional crew space is counted towards its passenger limit.
- Its base cargo capacity is increased by 10% but the base number of passengers it can carry is decreased by 10% (minimum 1).

This modification costs 20% of the ship's total cost. You can not increase your cargo capacity if your passenger limit is reduced to less than 0.

Helm Armor

Protective walls can be erected around the control device, acting as a shield against damage. When the helm is the target of damage, it instead is dealt to this armor. If the armor is broken, it no longer provides this protection but can still be repaired the same way that the vehicle is repaired. This armor takes up the vehicle's cargo.

Helm Armor	Price	Hardness	HP (BT)	Bulk
Wooden	5 gp x size modifier	5	20 (10)	5
Reinforced Beams	10 gp x size modifier	8	30 (15)	10
Iron Bands	20 gp x size modifier	10	40 (20)	15

Iron Cells

Metal cages are installed in the ship, which can be used for hauling dangerous animals, monsters, or even prisoners and slaves. These iron cells are large enough to hold up to six medium sized creatures or one single large creature. Each cell costs 25 gp and reduces the vehicle's cargo capacity by 30 bulk. The cell has Hardness 7, HP 32 (BT 16) and the cell doesn't come with a lock. Multiple cells can be combined together to increase how many creatures can be locked away and their maximum size, two cells for huge and at least three for gargantuan.

Ram

A ram is installed on the bow of the ship, the ram absorbs any damage that a ship would take if it was attempting to ram a creature or object when using the Run Over action. If the damage exceeds the ram's hit points, it is destroyed and the ship takes any remaining damage. If the ram takes enough damage to exceed its Broken Threshold but is not destroyed, it can not be used to absorb the damage from a collision if you attempt to take the Run Over action again before it is repaired.

Ram	Price	Hardness	HP (BT)
Wooden Figurehead	10 gp x size modifier	5	20 (10)
Reinforced Beams	20 gp x size modifier	10	40 (20)
Ironshod	40 gp x size modifier	15	70 (35)

Ironshod Reinforced wooden beams wrapped in an iron frame ideal for withstanding any impacts.

Reinforced Beams Heavy wooden beams with strips of iron to support the wood and ensure that it doesn't splinter on impact.

Wooden Figurehead A carved and shaped wooden decoration at the bow of a ship that has some relation to the name or role of the ship.

Smuggling Compartments

Bulkheads on the ship are modified so that gaps can be used to hide cargo. A single smuggling compartment can hold up to 25 bulk, which counts as part of the ship's cargo capacity. If a creature is searching for hidden compartments, the GM makes a single secret Perception check against the Ship's DC.

Each compartment costs 50 gp.

Squibbing

A ship can be disguised so that it is no longer recognizable as its previous form or to disguise the type of frame or improvements that have been done to it. This process is quite intensive and requires 1d4 days per size modifier of the ship and costs 20% of the ship's total cost. If a creature is suspicious of the ship, they can attempt to make an Unveil Obfuscations check.

Magical

Alchemical Engine

Refitting a ship with an alchemical engine is an expensive and time consuming process, though inventors and navy generals all believe it is the propulsion of the future. Many balk at the price that comes along with an engine, making it affordable only for kingdoms, the incredibly wealthy, and those who can steal one from another ship.

To install an engine, it takes a number of days at a dock equal to 1d6 times the ship's size modifier. This engine is installed on the bottom-most level of a ship, if that is a cargo deck, it takes up an amount of cargo based on the engine's bulk.

A refitted ship can still keep its oars or sail as a means of propulsion.

Navigator's Wheel

Magical / Modification / Vehicle

Price 35 gp; **Item** 2

Usage Mounted as the ship's wheel; **Bulk** 3

This magical wheel can be installed on a vehicle and be given a specific direction to travel. It can not avoid obstacles or charter a course, but instead simply guides the vehicle in one direction. It's bulk doesn't count against the vehicle's cargo if mounted.

Activate 1 minute, Interact; **Frequency** Once per day; **Effect** You set the direction that the wheel should follow for the next 8 hours.

Step 7 - Equipment

Anchor Used to hold a ship in place by friction and its weight, it needs to be tied off with rope or chain to secure it to a vehicle. A vehicle's anchor that is secured to it doesn't count against the cargo capacity of the vehicle, but additional anchors do. A vehicle is assumed to have an anchor.

Boarding Plank This 15-foot long and 10-foot wide board has hooked ends on either side to hold it in place and unite two vehicles together, it has Hardness 4, HP 16 (BT 8). A creature can spend three actions to interact with the plank to put it into place between two vehicles and anyone who boards the opposing vehicle using this plank is not flat footed during the first round, unless the plank has the broken condition.

In addition, the plank imposes a -1 item penalty to any pilot attempting to take the Escape action and break the grapple between the vehicles, unless it is broken. If the pilot attempting to Escape critically succeeds on the check, the boarding plank is destroyed.

Fuel An alchemical propellant most often used to fuel engines and siege engines. When ignited, it burns like liquid fire.

Grapple Line Set These grapple lines can be used to grapple a ship up to 60 feet away. It requires a number of sets equal to the target vehicle's size modifier to start grappling it. This does not reduce a target vehicle's speed to 0, but can be used to pull ships together using the normal grappling rules for vehicles.

Oars An oar is a thin wood object with Hardness 3, Hit Points 12 (Broken Threshold 6), a broken oar can not be used to propel a ship forward. They are typically 8 to 12 feet long with a flat blade at one end to propel a vehicle forward. See Shearing for more information on oars.

Plunder An approximation of valuable but non-useful cargo. One point of plunder is worth about 100 gp and takes up 50 bulk of cargo capacity.

Raw Materials Various pieces of materials, like wood, cloth, rope, and more that can be used to repair a vehicle as well as make repairs on items that use the same material that is used on a ship.

Rations Food stuffs that can affect morale depending on quality and quantity. See Morale for more information.

Rope Made from carefully wound fibers into a strong and sturdy cord that is used to hoist sails, tie up mutineers, and bind components together. Rope is an object with Hardness 4, HP 16 (BT 8), a broken rope can't be used to hoist sails or tie up a creature but can still be repaired. A ship requires at least 1 mile of rope per mast devoted to tying up sails and for its rigging. A creature that is at least Trained in Athletics automatically succeeds in climbing rigging unless circumstances create a dire situation, per the GM's discretion. Installed rope does not count against the cargo of a ship.

Sails Heavy canvas hoisted to a wooden structure and pulled tight to capture the power of wind and propel a vehicle forward. A single mast holds 10 sections of sails, and each sail is a cloth object with Hardness 1, Hit Points 4 (Broken Threshold 2), a broken sail allows too much wind through to provide propulsion to a ship. When sails are targeted by a siege engine, the mast they are hoisted on is instead the target of the attack.

The cost for sails is 5 gp times the vehicle's size modifier and their combined weight is equal to 10 times the vehicle's size modifier. Sails that are strung on the mast do not count against the vehicle's cargo capacity.

Ship's Boat A small vehicle, typically a rowboat, used to ferry crew members from a large vehicle to the shore, most often used when a ship goes into port but doesn't want to pay docking fees or the port isn't deep enough for the vehicle.

A ship's boat doesn't count against the bulk of a ship carrying it unless there are more than the size modifier of the carrying vehicle and the ship's boat is larger than two sizes smaller than the carrying vehicle. Includes oars to propel it.

Exceeding Cargo Capacity

If a vehicle exceeds its Cargo Capacity, it becomes Clumsy 1. This penalty also applies to any piloting checks made to control the vehicle. A vehicle can not carry more bulk than double its Cargo Capacity as there is simply no room on the vehicle, the vehicle begins taking on water, or its propulsion becomes broken, like a wheel axle.

Item	Price	Bulk
Anchor	10 gp	30
Boarding Plank	1 gp	1
Fuel	10 gp	2
Grapple Line Set	5 gp	5
Masts	100 gp	100
Oars	2 sp	1
Plunder	100 gp	50
Rations, Poor		
<i>1 creature / week</i>	2 sp	L
<i>10 creatures / week</i>	2 gp	3
<i>20 creatures / week</i>	4 gp	6
<i>50 creatures / week</i>	10 gp	15
Rations, Standard		
<i>1 creature / week</i>	4 sp	L
<i>10 creatures / week</i>	4 gp	5
<i>20 creatures / week</i>	8 gp	10
<i>50 creatures / week</i>	20 gp	25
Rations, Good		
<i>1 creature / week</i>	8 sp	1
<i>10 creatures / week</i>	8 gp	10
<i>20 creatures / week</i>	16 gp	20
<i>50 creatures / week</i>	40 gp	50
Raw Materials	1 gp	1
Rope		
<i>50 feet</i>	5 sp	L
<i>1,000 feet</i>	10 gp	5
<i>1 mile</i>	53 gp	20
Sails (1 mast)	Size x 5 gp	Size x 10
Ship's Boat	varies	varies

Sample Ships

Man's Promise (Vehicle 3)

Gargantuan / Schooner / Offense

Price 1,250 gp; **Improvement Price** 52 gp

Space 120 feet long, 20 feet wide, 10 feet high

Decks Top Deck (TD), Cargo Deck (CD)

Crew 1 pilot, 20 crew; **Passengers** 40

Piloting Check Sailing Lore (DC 17), Diplomacy (DC 19), Intimidation (DC 19)

AC 13 (Trained); **Fort** +12 (Trained)

Hardness 15, **HP** 55 (22); **Immunities** critical hits, object immunities, precision damage

Speed 50 feet (2 masts); **Sluggish** The vehicle must move twice its length for each 60-degree turn it makes.; **Wind** While sailing with the wind, your speed is doubled. You can not sail into the wind.

Control Helm Top Deck

Day Speed 136 miles per day

Collision 5d10 (DC 13 + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 5 Port (TD), 5 Starboard (TD), 1 Stern (TD)

Draft Shallow

Quick Ship's propulsion speed is increased by 5 feet and it's Day Speed is increased by 13.5 miles (wind).

Armament

Siege Engine Proficiency Expert

Bow 1 / Ranged Light Ballista +7 (range increment 90 feet),

Damage 2d10 piercing

Port 0

Starboard 0

Stern 1 / Ranged Light Ballista +7 (range increment 90 feet),

Damage 2d10 piercing

Cargo 58 / 1,250 bulk

Plunder 0

Rations Poor, 10 bulk

Ammunition 30 light bolts, **Bulk** 3

Misc. Rope (1,000 feet), 5 bulk;

Black Pearl (Vehicle 10)

Gargantuan / Galleon / Mobility

Price 3,000 gp; **Improvement Price** 1,504 gp

Space 160 feet long, 30 feet wide, 40 feet high

Decks Top Deck (TD), Gun/Ballista Deck (GBD), Cargo Deck (CD)

Crew 1 pilot, 30 crew; **Passengers** 100

Piloting Check Sailing Lore (DC 24), Diplomacy (DC 26), Intimidation (DC 26)

AC 22 (Trained); **Fort** +21

Hardness 15; **HP** 115 (57); **Immunities** critical hits, object immunities, precision damage

Speed 85 feet (3 masts); **Sluggish** The vehicle must move twice its length for each 60-degree turn it makes.; **Wind** While sailing with the wind, your speed is doubled. You can not sail into the wind.

Control Helm Top Deck

Day Speed 202.5 miles per day

Collision 8d10 (DC 20 + Pilot's proficiency)

Weapon Mounts 1 Bow (TD), 17 Port (GBD), 17 Starboard (GBD), 1 Stern (TD)

Draft Deep

Slow Ship's propulsion speed is reduced by -5 feet and it's Day Speed is reduced by 13.5 miles (wind).

Armament

Siege Engine Proficiency Expert

Bow 1 / Ranged Catapult +14 (range increment 150 feet),

Damage 5d10 bludgeoning

Port 17 / Ranged Ballista +14 (range increment 120 feet),

Damage 4d12 piercing

Starboard 17 / Ranged Ballista +14 (range increment 120 feet),

Damage 4d12 piercing

Stern 1 / Ranged Catapult +14 (range increment 150 feet),

Damage 5d10 piercing

Ram Wood Figurehead; **Hit Points** 20 (10); **Hardness** 5

Cargo 1,010 / 2,000 bulk

Plunder 5, 250 bulk

Rations Poor, 75 bulk

Ammunition 340 bolts, 20 stones **Bulk** 340, 80

Misc. Rope (1,000 feet), 5 bulk;

(Vehicle __)

Size _____

Frame _____

Improvement _____

Price ____ gp; Improvement Price ____ gp

Space _____

Decks _____

Crew __ pilot, __ crew; Passengers _____

Piloting Check Sailing Lore (DC __),

_____(DC __), _____(DC __),

_____(DC __)

AC __ (____); Fort + __ (____)

Hardness __; HP __ (__); Immunities critical hits, object immunities, precision damage

Speed __ feet (____); Turn _____

Control Helm _____

Day Speed __ miles per day

Collision _ d __ (DC __ + Pilot's proficiency)

Weapon Mounts _ Bow (__), __ Port (__),
__ Starboard (__), __ Stern (__)

Draft _____

Special

Armament

Siege Engine Proficiency _____

Bow __ / Ranged __ + __ (range increment __ feet), Damage _ d __

Port __ / Ranged __ + __ (range increment __ feet), Damage _ d __

Starboard __ / Ranged __ + __ (range increment __ feet),
Damage _ d __

Stern __ / Ranged __ + __ (range increment __ feet), Damage _ d __

Ram _____; Hit Points __ (__); Hardness __

Cargo __ / __ bulk

Plunder __, __ bulk

Rations __, __ bulk

Ammunition __ bolts, __ fuel; __ shots; __ stones Bulk

— — — —
Misc. Rope (__ feet), __ bulk;

Notes

(Vehicle __)

Size _____

Frame _____

Improvement _____

Price ____ gp; Improvement Price ____ gp

Space _____

Decks _____

Crew __ pilot, __ crew; Passengers _____

Piloting Check Sailing Lore (DC __),

_____(DC __), _____(DC __),

_____(DC __)

AC __ (____); Fort + __ (____)

Hardness __; HP __ (__); Immunities critical hits, object immunities, precision damage

Speed __ feet (____); Turn _____

Control Helm _____

Day Speed __ miles per day

Collision _ d __ (DC __ + Pilot's proficiency)

Weapon Mounts _ Bow (__), __ Port (__),
__ Starboard (__), __ Stern (__)

Draft _____

Special

Armament

Siege Engine Proficiency _____

Bow __ / Ranged __ + __ (range increment __ feet), Damage _ d __

Port __ / Ranged __ + __ (range increment __ feet), Damage _ d __

Starboard __ / Ranged __ + __ (range increment __ feet),
Damage _ d __

Stern __ / Ranged __ + __ (range increment __ feet), Damage _ d __

Ram _____; Hit Points __ (__); Hardness __

Cargo __ / __ bulk

Plunder __, __ bulk

Rations __, __ bulk

Ammunition __ bolts, __ fuel; __ shots; __ stones Bulk

— — — —
Misc. Rope (__ feet), __ bulk;

Notes

Combat

Roles

There are only a few roles available on a ship, but additional actions are provided that any creature can take during combat. Your role can dictate when you act, but for characters, they roll for their own initiative and can hold their turn if they so wish to act when the ship does.

Pilot

You plot the course of a vehicle and dictate where the ship moves. Each ship has a combat speed and their maneuverability is based on the method of propulsion. You can push a ship beyond its normal abilities, though those actions require more skill and can end poorly for all on board the ship. A pilot who routinely risks the ship and causes others to be placed in great danger is quickly removed from their position. A ship can typically only have one pilot and a creature can assume that role only if the control device is unattended too, though the crew may not listen to just anyone unless they can convince them.

Crew

These are the hired workers who are responsible for following the pilot's, and/or captain's, orders. They are responsible for rowing, setting the sails, and ensuring that a ship continues to move forward. So long as there is enough crew per the ship's stat block, the ship can be easily piloted. As soon as the crew is incapacitated or killed, pilots have a harder time controlling their ship.

Passengers

Everyone else on the ship that isn't the pilot or the crew is considered to be passengers. This includes the captain, first mate, cook, surgeon, and many other roles on a ship. These individuals are important to the operations of a ship, but are not part of the normal movements of a ship and so are given their own unique role. Passengers can wield weapons, siege engines, shout out commands to cheer on the crew, and more. Characters are considered passengers, or the pilot, though in some rare cases may act as the crew and their entire turn is taken up with working the oars, adjusting the sails, or other tasks - meaning they take no turn in the initiative until they leave their role as crew and become a passenger.

Non-player characters that are passengers will take their turn during the ship's initiative while player characters roll for their own initiative. A character does not take a turn while they are helping to man a siege engine.

Ship-to-Ship Combat

Ship-to-ship combat is ideally played on a grid of hexes with figures representing the ships in combat. Each hex represents 30 feet and a ship occupies 1 to 2 hexes wide and a number of hexes equal to their length divided by 30 (rounded down). Combat can take place on a square grid, though turning and facing should be adjusted per the GM's discretion.

Beginning Combat

When a ship engages another in ship-to-ship combat, the crew, passengers, and pilot go to their places on the ship and begin preparing for combat.

This behavior may not be obvious to other ships in the vicinity, especially if one ship has disguised itself.

If ships get within 300 feet of each other, this is typically warning enough to the other ship that combat may begin. It is up to the GM to determine who might be caught unaware in combat.

In addition, the GM determines where the combatants are in relation to each other and which way the ships are facing. However, their relative positions and facing can also be established randomly. Roll 3d6 to determine how many hexes separate the ships. Then, roll 1d6 to determine the facing of the ship with 1 meaning the ships are facing the top edge of the grid, and with 2 through 6 proceeding clockwise around the hex.

Determining Initiative

The pilot, crew, passengers, and vehicle all share the same initiative. A pilot spends their turn moving the ship, with the crew acting during this turn to keep the vehicle moving. The pilot can decide if the passengers take their action before or after the pilot and crew take theirs each turn, but not in between their actions.

Ship To determine when a ship acts in initiative, the pilot of the ship makes a Sailing Lore check. A ship dictates when its passengers get to act in initiative.

Pilot The pilot takes their turn during the ship's initiative, deciding where the vehicle moves.

Crew The crew operates with the ship and typically doesn't take any other actions but to control and follow the orders of the pilot. Their actions are dictated by the pilot and they do not get to take specific actions outside of their role.

Passengers Passengers take their turn during the ship's initiative, they can fire siege engines, fire ranged weapons, and other tasks. They follow the orders given to them by the ship's captain. Passengers can act in any order they so choose. See Passenger Actions for more information.

Characters Characters roll for initiative and take their turn like usual. They can choose to give up their place in the initiative and join the crew or act as one of the passengers, like if they want to man a siege engine, but then they don't get to use their special actions they get as player characters.

Moving

The pilot of a ship can take a variety of different actions to drive their ship through the waves and, hopefully, not crash into submerged rocks. Unlike in battles between characters, ships face a specific direction and are slow to turn around. In addition, weapons have firing arcs that limit the area they can threaten, making it important for a ship to quickly move into an advantageous position.

Speed

A ship's speed is determined by its means of propulsion as well as the type of frame and the improvements done to the ship. It can move less than this number though it continues drifting forward at least half of the movement it made last turn but is now uncontrolled by the pilot. A ship can only move in a straight line in the direction the ship is facing, though a ship can change its forward-facing direction based on its propulsion by making turns.

Turns

While moving, a ship can make turns by altering its forward movement direction and firing arcs. This is dependent on the ship's propulsion and can take several turns to do so.

A single turn changes a ship's forward-facing by 60 degrees, or one side of a hex. Every round in which a ship turns, it must have moved a certain amount of feet based on the propulsion of the ship.

For example, a ship propelled by winds and uses Sails as its propulsion has the Sluggish attribute. If a schooner, which is 120 feet long (4 hexes), wishes to make one turn, it must move 240 feet (8 hexes) before it can make the turn. It then must travel another 240 feet before it can make another turn. Since a schooner's Speed is 50 feet, it must move up to its Speed 5 times before it can turn.

If a pilot wishes to turn sooner than that, they can attempt the Sudden Turn action, see Pilot Actions below.

Excess Speed

Not every ship moves in perfect 30-foot increments, in these situations the ship moves a number of hexes and then stores any residual speed for the next turn to use. This excess movement stays with the ship until it is used, the ship comes to a stop, it becomes uncontrolled, or the ship-to-ship combat ends, whichever comes first. A pilot can not choose to 'save' additional movement for future turns but must immediately spend it if their leftover movement exceeds 30 feet. This leftover movement does not count towards the turning movement required for a ship until it has been spent.

For example, a schooner has a Speed of 50 feet. If the pilot decided to spend 1 action to Drive the ship, it would have 20 feet left over. On the pilot's next turn to Drive the ship, they again spend 1 action and move up to 50 feet plus the leftover 20 feet, meaning they move a total of 70 feet. Instead of moving only 1 hex, they instead move 2 hexes (60 feet) and have 10 feet left over to be spent on the next turn. The pilot could not try to bank or save that excess speed for later but must immediately use it or spend no actions on the Drive action, in which case the ship becomes uncontrolled.

Moving Through Other Ships

Ships can not move through the hexes of other ships that are one size smaller or larger. If a ship, or creature, is two sizes smaller or more than your vehicle, you can pass through them but you do not hit them with your vehicle unless you take the Run Over action.

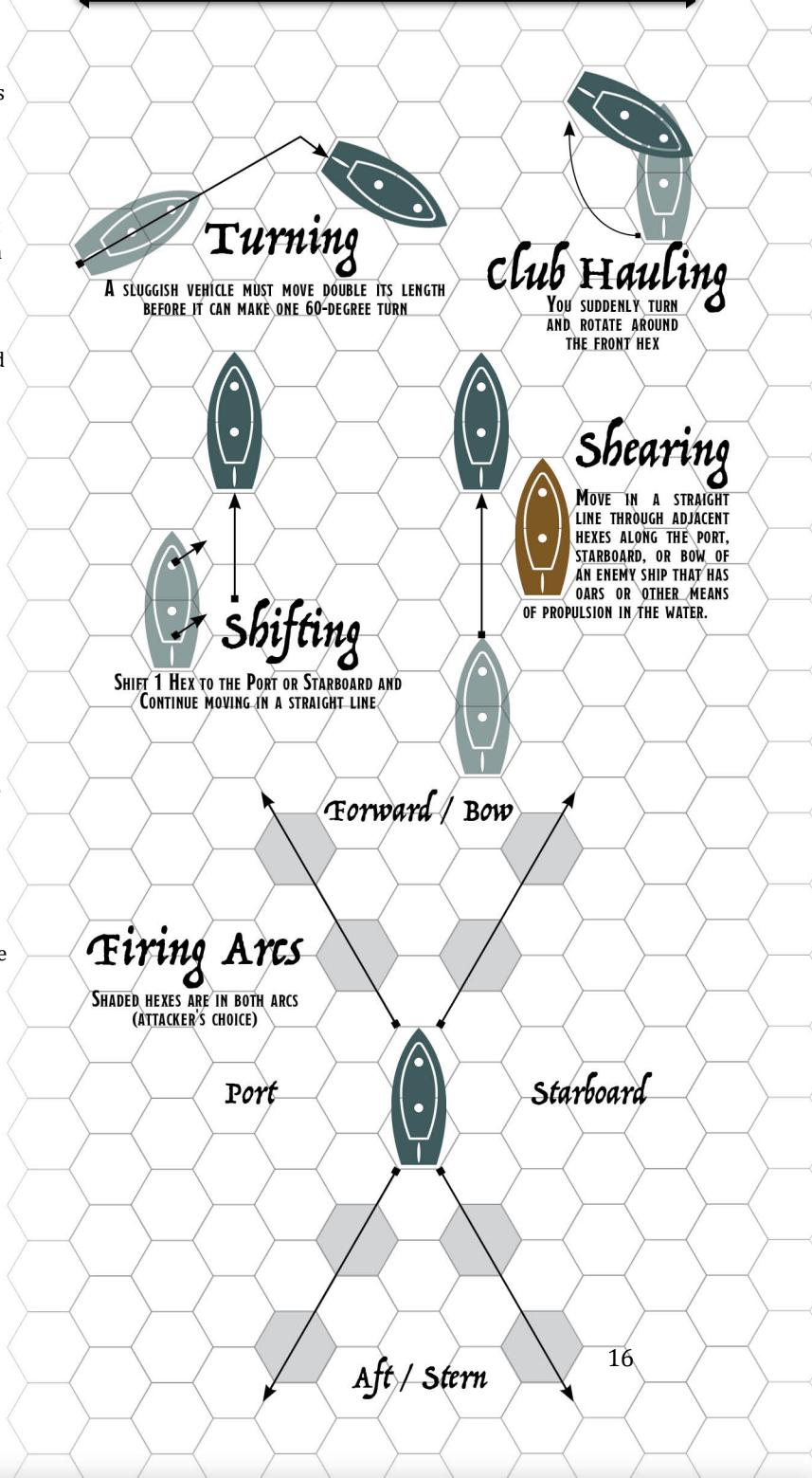
If you attempt to move through a hex another object or creature occupies, and they are one size smaller than your ship or larger, you collide into them and they take your vehicle's collision damage (basic Reflex save against your vehicle's collision DC). If the target takes damage from your collision, your vehicle takes the same collision damage and your movement immediately ends as your vehicle comes to a stop.

In addition, all creatures on your vehicle must make a basic Reflex save against your vehicle's collision DC or fall prone and take half damage from the collision.

Variant to Excess Speed

If keeping track of excess speed isn't something your table wishes to do, you can try one of the following variants:

- Round normally a vehicle's speed to the nearest 30 feet.
- Remove a vehicle's speed and simply assign each one a number of hexes it can move on the map. For this, you might take a vehicle's normal speed, divide by 10 and then halve that number to determine their movement speed in hexes.
- Decrease the amount a hex is worth from 30 feet to 15 feet or 10 feet.
- Excess speed is reset at the end of the round.



Piloting Check

To control a ship in combat, a pilot must make a Sailing Lore check, see Pilot Actions below, to determine the ship's speed and movement for this round. The ship's propulsion determines the maximum speed and determines the limits for such movements. If a ship is using two means of propulsion at the same time, such as wind and rowing, the pilot chooses which system to use for this round's propulsion. The piloting check DC is based on the Ship's Level and is modified by weather conditions, the strength of the wind, and more.

Aid

A character can take the Aid reaction to aid the pilot. This could be providing an extra pair of eyes, shouting commands, or providing advice. The character must make a Sailing Lore check in order to give the Aid.

Piloting Outside Combat

Piloting checks are typically not needed outside of combat so long as the pilot is Trained in Sailing Lore. This can change if a powerful storm sweeps in or the pilot must navigate difficult tides, docking in rough waters, or other situations, per the GM's discretion.

Untrained Pilot

A character untrained in Sailing Lore can attempt to pilot a ship by succeeding on an Intelligence check against the piloting check DC. Outside of combat, a ship only moves at half its Day Speed while piloted by an untrained pilot.

Piloting Actions

Actions found in the Gamemastery Guide pages 175 - 177.

Drive (Varies)

Move

Requirements You are piloting a vehicle.

You pilot your vehicle to move. Decide how many actions you intend to spend before you begin Driving. The effects depend on the number of actions you spend.

- {1A} Attempt a piloting check. On a success, the vehicle moves up to its Speed and can turn normally. On a failure, the vehicle moves its Speed in a straight line. On a critical failure, the vehicle moves its Speed in a straight line and becomes uncontrolled.
- {2A} (reckless) The vehicle moves up to twice its Speed in a straight line at the vehicle's current heading.
- {3A} (reckless) You take a -5 penalty on your piloting check to maintain control of the vehicle. The vehicle moves up to three times its Speed in a straight line at the vehicle's current heading.

Run Over {3A}

Move / Reckless

Requirements You are piloting a vehicle.

You try to run over creatures with your vehicle, possibly also ramming one larger creature or object. If you maintain control of your vehicle, the vehicle moves up to twice its Speed in a straight line at the vehicle's current heading.

You attempt to run over any creatures in your path two sizes smaller than the vehicle or smaller, and you can attempt to ram one target creature or object in your path one size smaller than the vehicle or larger.

Each creature in your path, including a rammed target, takes the vehicle's collision damage (basic Reflex save at vehicle's collision DC). If the rammed target is a vehicle, its pilot can attempt a piloting check in place of this Reflex save, with the same results. If the target of your ram takes damage, your vehicle takes collision damage (no save) and your movement ends.

Stop {1A}

Manipulate

Requirements You are piloting a vehicle in motion.

You bring the vehicle to a stop.

Special. A ship typically continues drifting forward at half of its previous speed for 1d4 rounds. If there is no pilot maintaining control of the vehicle during this time, it may drift in a new direction or along the currents or wind.

Take Control {1A}

Manipulate

Requirements You are aboard the vehicle and adjacent to its controls.

You grab the reins, the wheel, or some other mechanism to control the vehicle. Attempt a piloting check; on a success, you become the vehicle's pilot, or regain control of the vehicle if it was uncontrolled. Some vehicles have complicated controls that cause this action to become a multi-action activity.

New Piloting Actions

Extinguish Fire {1A}

Manipulate

Requirements You are piloting a vehicle, your vehicle is on fire, and your crew has spent their action attempting to put out the fire. See Ships on Fire.

You attempt a piloting check as a Reflex saving throw for the ship. The DC is equal to the total fire damage the vehicle has taken, including the triggering fire damage that set the vehicle on fire.

Critical Success As a success, and the fire damage the vehicle took at the end of its last turn is healed.

Success The vehicle is no longer on fire and won't take persistent fire damage.

Critical Failure The vehicle immediately takes the persistent fire damage (and again at the end of its turn).

Club Hauling {3A}

Move / Reckless

Requirements You are piloting a vehicle in motion.

You attempt to suddenly turn the ship in its space, this move requires an anchor and the anchor must be cut away if you wish to continue moving (no action required). Otherwise, you immediately come to a stop and the vehicle takes its collision damage.

Critical Success The ship takes no damage and can make up to a 120-degree turn, rotating around the front hex it occupies.

Success The ship takes half its collision damage and can make up to a 120-degree turn, rotating around the front hex it occupies.

Failure The ship takes the full collision damage and can make up to a 60-degree turn, rotating around the front hex it occupies.

Critical Failure The ship takes double collision damage and all occupants on the ship must succeed on a Reflex Save against the ship's Collision DC or become Stunned 1. Your vehicle's speed is halved for one round and you do not turn.

Shearing {3A}

Move / Reckless

Requirements You are piloting a vehicle in motion.

You attempt to shear off a means of propulsion that is on the starboard, port, or bow of a vehicle. The vehicle moves up to twice its Speed in a straight line at the vehicle's current heading. You must move along the hex space directly next to the starboard, port, or bow of a vehicle without ramming or colliding in with them.

The opposing vehicle must make a basic Reflex saving throw or their oars, tiller, or similar means of propulsion takes damage equal to your vehicle's Collision damage. If the target of your Shearing action has a higher hardness than your vehicle, your vehicle takes the Collision damage on their failed Reflex save.

Shifting {2A}

Move

Requirements You are piloting a vehicle in motion.

You shift your vehicle so that it moves in the direction of either the forward-port or forward-starboard edge without changing its facing. You must attempt a piloting check.

Critical Success As a success, but you can shift up to 2 hexes in a straight line if you have the movement for it.

Success You move up to the vehicle's Speed in a straight line at the vehicle's current headings and as part of that movement, you shift up to 1 hex to the port or starboard.

Failure You move up to the vehicle's Speed in a straight line.

Critical Failure As a failure, but the vehicle becomes uncontrolled.

Sudden Turn {3A}

Move / Reckless

Requirements You are piloting a vehicle in motion.

You pilot your vehicle to suddenly turn. You take a -5 penalty on your piloting check to maintain control of the vehicle.

Critical Success As a success and you move up to the ship's Speed once.

Success You turn the ship suddenly in a 60-degree turn.

Critical Failure All occupants on the ship must succeed on a Reflex Save against the ship's Collision DC or become Stunned 1 and your vehicle's Speed is reduced by 10 feet for its next turn. You do not turn.

Reckless Piloting

Actions that have the reckless trait push the pilot and the vehicle beyond the normal parameters for safe operation, and the pilot risks losing control of the vehicle. When performing a reckless action, the pilot must first attempt an appropriate piloting check to keep control of the vehicle, with the following effects. Resolve this piloting check before resolving the action itself.

Success The action occurs as described.

Failure The vehicle moves its Speed in a straight line along its most recent heading, drifting up to 45 degrees to the port or starboard at the GM's discretion, and becomes uncontrolled.

Uncontrolled Vehicles

Some situations can cause a pilot to lose control of their vehicle. Most commonly, this is due to a failed piloting check for a reckless action, but it can also occur if a round passes without a pilot using a move action to control the vehicle or Stopping the vehicle. A vehicle can also become uncontrolled if the pilot becomes unable to act during a move action to control the vehicle. For example, if a vehicle's movement triggers an Attack of Opportunity that knocks the pilot unconscious or paralyzes them, the vehicle becomes uncontrolled.

An uncontrolled vehicle continues to move each round at its most recent pilot's initiative position. The distance it moves each round is 10 feet less than on the previous round, always in a straight line at its current heading until it crashes or it comes to a stop. At your discretion, it could slow down more if it's on uneven terrain, difficult terrain, on an upward slope, or facing adverse wind conditions; by the same token, it could stay at the same speed or even accelerate if it's on a downward slope or being pushed by strong winds.

An uncontrolled vehicle in motion interacts with obstacles, other vehicles, and creatures using the effects of the Run Over action, except that the distance it moves is dictated by the factors above instead of the Speed specified in that action.

Control Devices

Every vehicle needs a control device and a way to provide propulsion to the vessel. A control device is typically an object that dictates the steering of a ship and a pilot must be interacting with the control device with at least one hand in order to pilot the ship. The most common control devices are listed below along with their Hardness, Hit Points, and Break Threshold.

A control device can be targeted, the control device typically has the same AC as the ship and the vehicle often provides Standard or Greater Cover to the control device. If a control device gains the Broken condition, it can still be used but it imposes a -5 item penalty on all piloting checks until it is repaired. When a control device is destroyed, a ship cannot be piloted until the control device is repaired. Any damage to the control device does not apply to the ship's hit points.

Control Device	Hardness	HP	BT	Typical Material
Oars*	3	12	6	Thin Wood
Steering Wheel	5	20	10	Wood
Tiller	10	40	20	Wooden Structure

*Oars only gain the broken condition if at least half of them on the ship are destroyed.

Propulsion

Every vehicle must have a means of propulsion, typically ships can use currents, rowing, wind, or all three. Different methods of propulsion can affect a ship's speed or control, while also increasing the difficulty of controlling a ship.

Alchemical. A vehicle relies on an engine that propels the ship forward, this requires far less crew to run but still requires a team of individuals to man the engine and ensure it does not explode.

An alchemical-propelled ship requires an Engineering Lore check, but that can be substituted for an Arcana, Crafting, or Sailing Lore check at a +2 increase to the DC. Regardless, a Pilot still needs to be at least Trained in Engineering Lore in order for a ship to travel at its Day Speed, otherwise, it can only travel at half its speed.

A ship that relies on an engine requires fuel.

Current. Any vessel in the water can rely on water currents to push them forward, though it is typically slow going. Vehicles typically only rely on the current when their vessel is so broken they have no other choice. Vehicles are forced to follow the direction and speed of the current.

A current-propelled ship requires a Sailing Lore check for its piloting check. A current typically pushes a ship at a speed of 30 feet per round or 80 miles per day.

Rowed. Rowing ships require the use of oars and the crew is responsible for rowing for 10 hours a day. Most rowing vessels try to stay within sight of land and might rely on currents to push them forward during off-hours, otherwise, they stay out of currents so they aren't swept away and pushed off course.

A rowing ship requires a Sailing Lore check, but that can be substituted for a Diplomacy or Intimidation check at a +2 increase to the DC. Regardless, a Pilot still needs to be at least Trained in Sailing Lore in order for a ship to travel at its Day Speed, otherwise, it can only travel at half its speed.

All of the oars on a ship are consolidated into a single pool of hit points unless a specific effect only targets a singular object, per the GM's discretion.

Wind. Wind can be harnessed by vehicles with sails that gather up the power of the wind to push them forward. Some of the largest sailing ships may have three or even four masts covered in dozens of sails to catch every bit of wind.

A wind-propelled ship requires a Sailing Lore check, but that can be substituted for a Diplomacy, Intimidation, or Nature check at a +2 increase to the DC. Regardless, a Pilot still needs to be at least Trained in Sailing Lore in order for a ship to travel at its Day Speed, otherwise, it can only travel at half its speed.

A ship that relies on the wind can not travel against it.

Attacking a Vehicle

When a ship fires a siege engine at another ship, that action is resolved with the following check. Attacks are made during the ship's initiative turn by the passengers who are often led by the captain or first mate. A siege engine can only be fired once per round and requires several rounds to be recharged and fired again.

Manning a Siege Engine

It takes the crew manning a siege engine their full turn to aim, load, and fire a siege engine and can not take part in other actions during combat until they stop working on the siege engine. A member of the crew helping with siege engines must decide at the start of the ship's initiative if they wish to continue working on the siege engine or if they do something else with their turn.

Striking with a Siege Engine

Siege engines deal damage much like weapons and spells, but they have a different Critical Success when it comes to attacking a vehicle. Attacks are automatically made against the hull of a ship, which assume the Hit Points of a ship. If you want to target a specific component of a ship, see the Targeting action.

Critical Success As a success, and you deal damage to a randomly selected component of the ship. Roll a d4: (1) Helm, (2) Propulsion*, (3) Siege Engine, (4) Hull.

Success You deal damage according to the siege engine, including any modifiers, bonuses, and penalties you have to damage.

*If more than one propulsion method is used on a ship, roll to determine which is targeted and takes damage. Different modes of propulsion include: Masts, Oars, Engines, and other components.

Range and Arc

A siege engine has a range that it can reliably fire known as its range increment. Attacks with these siege engines work normally up to that distance. Attack rolls beyond a siege engine's range increment take a -2 penalty for each additional multiple of that increment between the siege engine and its target. Attacks beyond the sixth range increment are impossible.

A siege engine has a weapon mount on a specific facing of the ship, either Forward, Port, Starboard, or Bow. A siege engine can only be used against ships in the same arc as that weapon; see the diagram. If the targeted vehicle is in a hex that lies in two arcs, you decide which arc's siege engines target it; it can't be targeted by siege engines in two arcs.

Siege Engine Checks

Each ship has a proficiency with siege engines based on its improvements. An engine requires a Ranged Attack by rolling a 1d20 and adding the vehicle's attack modifier.

$$\text{Ranged attack modifier} = \text{Vehicle's proficiency bonus} + \text{other bonuses} + \text{penalties}$$

Damaging a Ship

Ships have Hardness, Hit Points, Armor Class, Broken Threshold, and other elements of being an object and vessel. Most ships are made of wood and thus will have lower Hit Points than an object made from metal or stone.

Broken Threshold

When a vehicle is broken, it becomes harder to use. It takes a -2 penalty to its AC, saves, and collision DC, and the DC of all piloting checks related to the vehicle increase by 5. The broken vehicle's Speeds are halved.

Sinking

A vehicle reduced to 0 HP is destroyed, like any other item. A ship immediately begins sinking, though it takes a number of rounds equal to the ship's Fortitude saving throw bonus before the ship sinks beneath the waves. Each additional hit on a sinking ship reduces the remaining time for it to sink by 1 round. A ship that sinks completely drops to the bottom of the body of water and is considered destroyed.

Critical Hits

When a critical success with a siege engine is rolled against a vehicle, the attacker randomly determines what major system on the ship was damaged in addition to the target of the attack. On a critical success, you deal damage against the target of the attack, typically the hull, and then you roll a 1d4 to determine a component that takes the same damage from this attack.

- 1. Helm.** The control device for the vehicle, page 16. If this device is destroyed, a vehicle can't be piloted.
- 2. Propulsion.** What propels a vehicle forward, this could be oars, one of several masts, or another component. If there are multiple propulsion methods for a single ship, roll to determine which is targeted. Oars have their hit points consolidated into a single pool of hit points.
- 3. Siege Engine.** The vehicle's siege engine, if there are multiple, roll to determine which is targeted.
- 4. Hull.** The hull of the ship takes damage, if the hull is the original target of the attack, you apply the ship's Hardness to the damage only once.

Ships on Fire

Fire can be quite dangerous on a wooden ship, though they won't simply go up with a dropped torch or lantern. If a wooden vehicle takes enough fire damage to bypass the ship's Hardness, the ship must make a basic Fortitude saving throw equal to $10 + \text{the damage taken}$ (after Hardness is applied to the damage). On a failed save, a ship is on fire and takes 1d4 persistent fire damage, this damage ignores the Hardness of the ship.

The crew can attempt to extinguish the flames during their turn by letting the vehicle become uncontrolled and they spend the round attempting to put out flames on the ship. The pilot then must take the Extinguish Fire action.

If a vehicle is subjected to multiple sources of fire, and it fails on multiple Fortitude saving throws, the persistent fire damage die is increased by one step for each additional source of fire to a maximum of a 1d12.

Magic

Most instantaneous spells do not last long enough to catch a ship on fire, magic can only set a ship on fire if it lasts for multiple rounds, per the GM's discretion.

Repairing a Ship

A ship can be repaired during Downtime by a creature Trained in Crafting and has a repair kit. The DC is typically the same as the Pilot check DC, though the check is typically harder to do while on the move and not docked, in addition, supplies are scarcer unless additional materials have been bought.

Characters use the action listed below to repair vehicles.

Repair Vehicle

Downtime / Manipulate

Requirements Trained in Crafting, You have a repair kit (CRB page 291).

You can repair a vehicle from raw materials.

To repair a vehicle, you must meet the following requirements:

- The vehicle is your level or lower. A vehicle that doesn't list a level is level 0. If the vehicle is 9th level or higher, you must be a master in Crafting, and if it's 16th or higher, you must be legendary.
- You must be Trained in Sailing Lore.
- You have an appropriate set of tools and in dock. If you are not in dock and attempt to repair the ship, you take a -2 circumstance penalty to the check.
- You must supply raw materials worth at least 1 gp per hit point. You always expend at least that amount of raw materials when you Craft successfully. If you're in a settlement, you can usually spend currency to get the amount of raw materials you need, except in the case of rarer precious materials.
- You must spend 1 day at work, at which point you attempt a Crafting check. The GM determines the DC to Repair Vehicle based on its level, rarity, and other circumstances. It is typically the same DC as the Piloting check DC.

If your attempt to repair the vehicle is successful, you restore a number of hit points based on your proficiency rank you have in Crafting and must expend enough raw materials, 1 gp worth per hit point restored. If you are unable to supply the required material, you can not recover hit points beyond the amount of material supplied. For every additional downtime day you spend working on the ship, you continue to make repairs to the ship based on your check.

Critical Success You restore 10 Hit Points to the vehicle, plus an additional 10 Hit Points per proficiency rank you have in Crafting (a total of 20 HP if you're trained, 30 HP if you're an expert, 40 HP if you're a master, or 50 HP if you're legendary).

Success You restore 5 Hit Points to the vehicle, plus an additional 5 per proficiency rank you have in Crafting (for a total of 10 HP if you are trained, 15 HP if you're an expert, 20 HP if you're a master, or 25 HP if you're legendary).

Critical Failure You deal the vehicle's collision damage to the vehicle. Apply the vehicle's Hardness to this damage.

Selling a Ship

Captured vehicles can be sold for half their cost at a settlement, though the size of a ship restricts what locations are willing to buy a ship. Hamlets and villages are often willing, and able, to purchase small and large vehicles, while towns can purchase huge vehicles, and cities and metropolises can purchase gargantuan vehicles. A vehicle can be sold for half of its cost, and any improvements it has, though the total is reduced by an amount based on any damage it has taken. If you are part of a pirate ship and attempting to sell a captured vehicle, the crew expects to be given their portion of the proceeds, similar to how plunder is sold.

Using the Crew

The crew is responsible for moving a ship and guiding it per the pilot's instructions. The crew is busy during combat tending the sails, rowing the boat, or any other task important to the propulsion of a vehicle. The crew can man siege engines, leaving their stations and propelling the ship, but the number that leave negatively effects the speed and difficulty of controlling such a ship.

Crew Size

The penalty for different crew sizes does not stack.

<90% If there is 90% or less of the crew tending to the propulsion of a vehicle, the vehicle suffers a -5 foot item penalty to its speed, and the DC for the piloting check is increased by 1.

<75% If there is 75% or less of the crew tending to the propulsion of a vehicle, the vehicle suffers a -10 foot item penalty to its speed, and the DC for the piloting check is increased by 2.

<50% If there is 50% or less of the crew tending to the propulsion of a vehicle, the vehicle suffers a -15 foot item penalty to its speed, and the DC for the piloting check is increased by 5.

<25% If there is 25% or less of the crew tending to the propulsion of a vehicle, the vehicle suffers a -20 foot item penalty to its speed or moves at half its speed, which ever is worse. In addition, the DC for the piloting check is increased by 5.

If the pilot or captain of the ship wish to move crew members from their stations as the crew to taking over passenger roles, the decision must be made at the start of the crew's turn and the penalties immediately take place on the vehicle. It takes 1 round before the Crew can take on new roles.

Crew & Boarding

Crew immediately leave their station and join in when it comes to boarding an enemy vehicle.

Attacking the Crew

If a character decides to target the crew, instead of the vehicle, you can use the following guidelines to have a rough approximation for them.

- The vehicle loses 1 crew member every time the crew takes damage equal to the vehicle's level. The crew has weakness to area damage equal to the opposing vehicle's level, and to splash damage equal to half the opposing vehicle's level.
- The crew has a single hit point pool, it's hit point maximum is equal to the vehicle's level times the number of crew. Once a crew member dies, the hit point maximum decreases by the vehicle's level.
- The crew's Armor Class is equal to 15 plus the vehicle's level. A vehicle typically grants Lesser to Greater Cover to those on board.
- The crew's saving throw is equal to the vehicle's level.

Of course, these basic statistics are only for the nameless crew, many vehicles have marines, officers, captains, and more who will have their own stat blocks.

Using the Passengers

The Passengers can be paying travelers, additional crew members to man siege engines, Player Characters, or anyone that is not part of the crew who tend to the propulsion of a vehicle. Passengers, if they are willing to be ordered by the captain or pilot, can join the crew in tending to the propulsion of a vehicle though it takes 1 round before they can join the crew and get into place.

Passenger Actions

During the ship's initiative, the passengers on the ship can take their actions to do one of the following. Passengers share the pool of 3 Actions they get. If a character is manning a siege engine, they use their full turn to help.

If multiple siege engines are fired, a vehicle suffers a penalty to subsequent attacks the same as the Multi Attack Penalty.

Bombard {3A}

Passenger / Attack

Requirements Have 3 or more siege engines on a single facing that are loaded and manned by the required number of passengers

All siege engines on one facing, that are manned, Strike. They must all be loaded with ammunition. Roll one attack roll and add a circumstance bonus to the attack roll based on the number of siege engines firing. Roll damage once using the siege engine with the lowest damage and add a circumstance bonus to damage for this attack equal to the number of siege engines firing.

Drilling Reload {2A}

Passenger

Requirements A siege engine has not recharged and is manned by the required number of passengers

The vehicle makes a Fortitude saving throw against the piloting check DC.

Critical Success As a success, but reduces it by 2.

Success The siege engine reduces its recharge time by 1, potentially making it ready to fire this turn.

Critical Failure The siege engine increases its recharge time by 1.

Fire Control {3A}

Passenger

Requirements The vehicle is on fire

The passengers begin helping to stamp out the fire. The passengers begin working to extinguish the fire for the crew, keeping the crew working on propelling the vehicle and it doesn't become uncontrolled.

Siege Engine Strike {1A}

Passenger / Attack

Requirements A siege engine is loaded and manned by the required number of passengers

The siege engine makes a basic Strike against a vehicle.

Move {1A}

Passenger / Move

Any number of passengers move from one facing of the vehicle to another, as part of this action they can man a siege engine.

Target {2A}

Passenger / Attack

Requirements A siege engine is loaded and manned by the required number of passengers

The siege engine targets a specific component of a ship like the helm, masts, keel, siege engines, or crew. It then Strikes.

Boarding & Grappling

When a crew wishes to board an enemy's vehicle and attack its crew, they must first grapple the other ship. Before a vehicle can grapple another vehicle, they must be in adjacent hexes or within 30 feet of one another. If both pilots of the vehicles want to grapple, the action immediately happens and no check is required. The two crews throw out rope and draw the vehicles together, making each ship's speed reduced to 0 and uncontrolled.

Ramming

If you take the Run Over action and successfully ram the other vehicle, and they take your vehicle's Collision damage, you can immediately take the Grapple action as a reaction.

Grappling

If the other vehicle does not wish to be grappled, the pilot of the vehicle can use the following action to force them into grappled position.

Grapple {1A}

Attack / Reckless

Requirements You are piloting a vehicle, and your vehicle is adjacent to the target vehicle.

You attempt to lock your vehicle with another, grappling them and allowing your crew to pull you in with grapple lines. You must make a piloting check against the target vehicle's Fortitude DC.

Critical Success As a success and the target's crew are flat-footed until the end of your next turn.

Success Your opponent's vehicle is grabbed.

Failure Your speed is reduced to 0.

Critical Failure As a failure, and your vehicle takes its own collision damage or the opponent's vehicle moves up to its speed once as the pilot's reaction (their choice).

Breaking a Grapple

If a pilot finds their ship being grappled, and they don't want to be in this situation, on their next turn directly following being grappled, they can attempt to break the grapple. This might mean that some of the opponent's crew members make it onto the vehicle before they can break the grapple.

Escape {1A}

Attack

Requirements You are piloting a vehicle that has been grabbed since the end of your last turn

You attempt to break your vehicle out of being grabbed, immobilized, or restrained. Choose one creature, object, vehicle or other impediment that has grabbed you. Attempt a piloting check against the Fortitude DC of the opposing vehicle.

Critical Success As a success, and your vehicle can then move up to its Speed once.

Success Your vehicle gets free and remove the grabbed, immobilized, and restrained conditions imposed by your chosen target.

Critical Failure Your vehicle doesn't break free and you can't attempt to Escape again.

Grapple Lines

Most grapple lines can only be used up close, though you can purchase grapple line sets that allow you to grapple a vehicle up to 60 feet away. You need a number of grapple line sets equal to the target vehicle's size modifier to start pulling them closer; otherwise you must be in an adjacent square to the vehicle to grapple them with shorter grapple lines and boarding planks.

Boarding

Once two vehicles are locked together, the pilot, or captain, can order the crew to board the opposing ship and ship-to-ship combat comes to an end unless the opposing pilot can successfully take the Escape action on their next turn. Once boarding begins, normal combat takes place. Ships are typically 5 to 10 feet away from each other in this position.

Handling Vehicle Crews

If a Grapple action was successful and the two vehicles have dropped out of ship-to-ship combat and are now in a typical encounter, the GM may decide to only focus on the major characters on the boat and describe off screen how the two crews are fighting each other. On the other hand, a GM might want to create several troops as stat blocks to fight each other on the decks of the ships.

Another option is to use the rules below.

Crew Battles

With this small system, the crews are fighting pitch battles on their own and can give boosts to their allies to show that their side is winning, or a side can turn in their points to attack the opposing enemy's crew, reducing their chances of helping their side.

1. Each vehicle's crew loses their place in initiative and instead take their 'turn' at the start of the round.
2. At the beginning of the round, each group rolls a number of d8s equal to the number of crew members on their side, including all crew and passengers taking part in the fight. They then count the number of 8's that appear on their dice, each 8 is worth 1 point - they keep the number of points they gained a secret from the opposing side. The number of d8s being rolled by each side is not a secret.
3. Each crew can then, secretly, decide how many points they wish to spend attacking the opposing force. Once both sides have decided how many of their points they are spending, they compare the results.
4. Which ever side has spent the most points wins this round and deals an amount of damage to the opposing side's crew equal to the difference between the points spent. Each point of damage removes one crew member from the opposing crew. If the result is a draw, neither side gains any ground against each other and neither crew is reduced.

5. Any remaining points can be gifted to the player characters who can add any number of points, each worth a +1 circumstance bonus, to any check they make - they must announce how many points they are spending before they roll their check.
6. Any unused points vanish at the end of the round.

Only crew members who have weapons can take part in battle, it is assumed that they have at least a club.

In Use

Your schooner has a crew of 20 and 5 passengers, not counting the player characters. Your opponent, a rather small keelboat, has a crew of 13 and 3 passengers. You would roll 25d8 and your opponent would roll 16d8, each would then count the number of 8s that appear on the d8s.

Your Roll 7, 1, 4, 5, 6, 3, **8, 8, 7, 5, 8, 4, 7, 3, 8, 5, 3, 6, 5, 8, 6, 1, 1, 6**

Your Total 5 points

Opponent's Roll 5, 2, 1, 6, 1, 5, 5, 6, 5, 7, **8, 1, 7, 8, 3, 5**

Opponent's Total 2 points

You then decide how many points you wish to spend on your crew's attack against your opponent, while your opponent then decides. You know that your crew is larger and, statistically, will probably be capable of overwhelming your opponent. You spend 3 points on your crew's attack, saving 2 points to spend on your player characters later this round.

You and your opponent both reveal how many points they are spending this round, you reveal the 3 points you are spending on this attack and your opponent reveals they have spent all 2 of their points to try and keep their crew from being reduced.

You win and deal 1 point of damage against the opponent's crew, reducing their numbers from 16 to 15. You then have 2 more points that you can spend on your player characters this coming round.

At the top of the next round, you then roll 25d8 and your opponent now rolls 15d8 to determine how many points they gain this round.

Keep In Mind

While you can completely decrease an opponent's crew to 0, it does mean that if you lose any crew members, you won't have any left to restock your crew after this attack - or have anyone to question afterwards.

Then again, if you only spend points on your player characters, your crew will quickly be defeated and you will be stranded out at sea with no crew to work the sails or oars of your vehicle.

Too Many d8s

If your crew is in the 30s, 40s, or even the hundreds, rolling that many d8s may slow down the game too much. In which case, the GM may decide to halve or further reduce the number of d8s you roll based proportionally to how many crew you have on your side. You'd then roll the reduced number of d8s, make note of how many points you gained and then multiply that to reflect the number of crew members you have.

This might mean if you have 100 crew members, you'll roll 20d8 and then multiply your result by 5.

It's not recommended that you decrease this number below 16d8 as the chances of rolling no 8s increases the fewer dice you roll, which might not fully recognize the abilities, and quantity, of your crew.

Narrative Points

When a player character decides to spend any points the crew has given them, they should come up with narrative reasons as to how their crew is helping them in the fight. This could be their crew members tossing them a new weapon after they've been disarmed, a crew member swinging in on a rope creating a distraction, or that a crew member shouted a warning just as a deadly swing was aimed at their character's head.

The GM may decide that these points can be used for other effects that make for exciting play at their table.

Player Characters

While on a ship, characters follow these rules.

Attacks. Attacks made with a weapon that are not from a siege engine while on a vehicle that moved within the last round take a -2 penalty, or a -4 penalty if the vehicle is uncontrolled or any action in the last round had the reckless trait.

Cover. A character has cover from certain angles of attack. Most ships offer lesser cover while specialized ships might offer standard cover, greater cover, or even total cover depending on where the character is. A broken vehicle reduces its granted cover by one step.

Turns. A character can take their turn like normal, or decide to act with the crew or passengers. Characters that act separately roll their initiative and can use Sailing Lore instead of Perception for such checks.

Boarding. A character can board an opposing ship so long as the two ships are next to each other and one is attempting to make a Grapple check. A character can only jump as far as normal, but they can utilize ropes to swing onto another ship using the Boarding action below. Most ropes only swing a character out 30 feet.

Special Player Actions

As there is typically only one player piloting the vehicle, and so they spend their actions controlling the vehicle and moving about the map, the other players may feel as if there is little for them to do until the vehicles are ready to be boarded. While they are always free to fire ranged weapons or cast spells, that requires the vehicles to be within a few hundred feet, if not closer. The following actions can be used to help give them additional options in the fight, encouraging them to stay focused.

Brace {1A}

Requirements You have a hand free and something sturdy to hold on to that is connected to the vehicle, like a mast or bolted down furniture.

You grab onto the sturdy object and hold tight. If you must roll a saving throw or ability check to avoid being knocked prone or shoved, you gain a +1 bonus to those checks until the start of your next turn. This ends immediately if you take an action with the move trait or you must use your free hand for something else, like interacting to Grab an Item.

Boarding {2A} [Untrained]

Move

Requirements You are holding a rope with two hands that can allow you to swing onto or off a vehicle

You make an Acrobatics check against the vehicle's Fortitude DC and swing on a rope up to your Speed.

Critical Success As a success, and you are not flat-footed.

Success You move up to your Speed and land on a vehicle. You are flat-footed until the beginning of your next turn.

Failure You must stay on the rope, returning to where you first started this movement (wasting the action), or you fall and land prone at your intended destination. If you fall, your turn ends.

Critical Failure You fall, if you were attempting to move from one vehicle to another, you land between them, and your turn ends.

Sample Boarding Tasks

Untrained vehicle is stopped, calm waters
Trained swinging against heavy wind, slick rope
Expert swinging with one hand, storming
Master rough waters rocking a ship, powerful storm
Legendary gale force winds, burning rope

Climb the Rigging {3A}

Move

Requirements You are on the top deck and in a hex where a mast is.

You must attempt an Athletics check to Climb against the Piloting DC of the vehicle. On a success, you climb up from the deck to the mast top (25 feet above the deck), or from the mast top to the crow's nest (only on the main mast of the vehicle, 60 feet above the deck). You can use this action to climb down the mast, from the crow's nest to the mast top, or from the mast top to the deck.

Critical Success This movement only takes two actions to complete.

Success You move from the deck to the mast top, or the mast top to the crow's nest (or vice versa).

Failure You fail to make progress and remain where you were originally.

Critical Failure You fall. If you began the climb on the deck, you fall and land prone. If your fall is from the mast top, you fall 25 feet + (1d4 x 5). If your fall is from the crow's nest, you fall 60 feet - (1d4 x 5).

Hoist the Colors {3A}

Requirements You don't have a flag flying, or a false flag is flying, and you are in the same hex as the main mast.

You hoist the flag for your vehicle, like a pirate's flag or a nation you represent. All creatures within 300 feet, that can see the new flag and are enemies of that flag, become demoralized. The captain of the opposing vehicle must attempt a Will save against the Piloting DC of your vehicle to control the crew. If you are a pirate and using Infamy (see *Infamy & Plunder* for more information), you gain a bonus to this DC equal to your Infamy Threshold (Disgraceful +1, Despicable +2, Notorious +3, Loathsome +4, and Vile +5).

Critical Success The crew is unaffected.

Success The crew becomes Frightened 1, these penalties roll over to the vehicle.

Failure As a success, but it is Frightened 2.

Critical Failure As a success, but it is Frightened 3.

Medic {1A}

Requirements You have Battle Medicine and crew in the same hex as you has taken damage since the start of your last turn

You attempt to save the crew from their wounds, attempt a DC 20 Medicine check. See *Attacking the Crew* for more information.

Critical Success You heal HP equal to the vehicle's level and increase the crew's HP maximum by the vehicle's level, restoring 1 lost crew member.

Success You heal HP equal to half the vehicle's level, up to the crew's HP maximum.

Critical Failure You deal 1d4 damage to the crew's HP.

Move {1A}

The character Strides one hex towards the bow or stern of the vehicle, or moves up or down one deck to another.

Overboard {2A}

Manipulate

Requirements A conscious creature has gone overboard, they are within 60 feet of the vehicle, and you have two hands free

You attempt to toss the overboard creature a rope and must succeed on a DC 20 Athletics check. See the Reel action for more information.

Critical Success As a success, and you automatically pull them 10 feet closer to the vehicle.

Success You successfully toss the rope close enough that the creature in the water can spend their reaction to grab the rope with a free hand.

Failure You fail to throw the rope far enough, but so long as you continue to hold the rope in both hands, you can use an action to try again.

Plot Course {1A}

Requirements You are on the mast top or crow's nest

You shout out to the pilot, letting them know what is ahead and any dangers, like another vehicle or sandbars. They gain a +1 circumstance bonus to their next Piloting check to Drive the vehicle. This bonus must be used before the end of their next turn. If you are in the crow's nest, this is a +2 circumstance bonus.

Quick Patch {3A}

Manipulate

Requirement The vehicle has taken damage since this action was last taken, you have a repair kit, and you are near where it was damaged

You quickly throw together repairs, and make a Crafting check. The DC is equal to 10 + the total damage the ship has taken (the vehicle's hit point maximum minus the vehicle's current hit points). These temporary Hit Points last until the end of the encounter and do not remove the broken condition from the vehicle.

Critical Success The vehicle gains 10 temporary Hit Points plus an additional 2 temporary Hit Points per proficiency rank you have in Crafting.

Success The vehicle gains 5 temporary Hit Points, plus an additional 1 temporary Hit Point per proficiency rank you have in Crafting.

Critical Failure You deal 1d4 damage to the vehicle, bypassing the vehicle's Hardness.

Rally {3A}

Emotion, Mental

Requirements You are in the same hex as a siege engine that is fully manned

You rally the crew, getting them ready to fire. You can attempt a Diplomacy or Intimidation check against the Piloting DC of your vehicle. If the crew doesn't fire the siege engine within 1 minute, they lose the bonus.

Critical Success The siege engine gains a +2 circumstance bonus to its next Strike and, if it isn't reloaded, you reduce its recharge time by 1.

Success The siege engine gains a +1 circumstance bonus to its next Strike.

Critical Failure The crew is confused and they take a -1 circumstance penalty to their next Strike.

Reel {1A}

Interact

Requirements Someone is overboard and has grabbed on to the same rope you are holding while you are on the deck of a vehicle

You must attempt a DC 20 Athletics check.

Critical Success You pull them 20 feet closer.

Success You pull them 10 feet closer.

Critical Failure The rope slips and they are pulled 10 feet further away.

Senior Officers

It is assumed that players take senior officers as positions on a vehicle, though a number of NPCs can also take up position on the vehicle. While a player character may be willing to work for 'free' on a vehicle, most NPCs need to be offered some form of payment before they are willing to work on a crew. This might mean that they get a portion of the plunder that the party splits between them, instead of the smaller share that the crew splits among themselves, or they may demand payment upfront, promise of a favor in return, or anything else that would motivate them to work. Officers can be treated as slaves, though they aren't likely to be as motivated as someone being paid for their work, the GM decides what effect this has on the NPC and their duties.

Not all of the following positions must be filled by an officer, but the more that are, the more benefits that a vehicle and the crew gain. An officer can not switch positions every day, but rather must pick a position to be in. If they wish to change, they must spend a week of downtime getting adjusted to their new duties, workstations, and role on the vehicle before they gain the benefits of their new officer role.

A character can choose to fill a position and take on the role, but unless they meet the requirements for the position, they and the ship do not gain any benefits.

Reading the Entry

Each officer's entry lists the following pieces of information.

Role The officer's responsibilities and position.

Requirements Any requirements, if any, the officer must have to take on this role.

Ship Benefit The benefit the vehicle or crew receives.

Officer Benefit The benefit the officer receives.

Boatswain

Role In charge of watching the deck crew perform their tasks and ensure that tasks are being completed.

Requirements Trained in Diplomacy or Intimidation

Ship Benefit The ship's cargo capacity increases by 5%.

Officer Benefit The boatswain gains a +1 status bonus on Diplomacy or Intimidation checks to affect the crew's morale or fighting ability.

Captain

Role The lead person in charge of the vehicle.

Ship Benefit Once per day, if the crew fails a check, they can choose to reroll it. This is a fortune effect.

Officer Benefit While the crew (not including player characters) can see the captain, and the captain rolls a success on a Will save against a fear effect, the captain gets a critical success instead.

Cook

Role Responsible for feeding the crew, watching over livestock, as well as fishing and maintaining rations.

Requirements Trained in Cooking Lore or similar

Ship Benefit The cook reduces the number of rations needed per week for the crew by 1 bulk per proficiency rank in Cooking Lore (1 if trained, 2 if expert, 3 if master, 4 if legendary).

Officer Benefit The cook gains a +1 status bonus to saving throws against disease and poisons.

First Mate

Role The second in charge for the vehicle, they oversee all other officers and report to the captain directly. They often handle any punishments that must be meted out.

Ship Benefit The crew's Morale Check DC increases by 1, to a maximum of 18.

Officer Benefit While the crew (not including player characters) can see the first mate, and the first mate gains the frightened condition, reduce its value by 1.

Master Gunner

Role Responsible for training the crew to fight.

Requirements Expert in weapons

Ship Benefit The vehicle gains a +1 status bonus to attack rolls with siege engines.

Officer Benefit If the master gunner is manning a siege engine, they can choose to use their proficiency in weapons instead of the vehicle's when they Strike. This has no effect if the ship takes the Bombard action.

Musician

Role Acting as the entertainer for the ship, this officer keeps the crew in good spirits.

Requirements Trained in Performance

Ship Benefit The crew is well entertained and the DC to increase morale is $13 + \text{the crew's Morale Score}$, instead of $15 + \text{the Morale Score}$.

Officer Benefit The musician can gain 1 additional point of Infamy at a settlement once per Infamy Threshold, increasing that settlement's maximum to 6 instead of 5.

Navigator

Role Charters the ship's passage using celestial bodies.

Requirements Trained in Sailing Lore and Survival

Ship Benefit The vehicle's Day speed increases by 5%. This has no effect on the vehicle's speed in combat.

Officer Benefit While on board the ship, you gain a +1 status bonus to Perception checks to spot hazards, vehicles, or weather events.

Quartermaster

Role Supervises the vehicle's stores and barracks.

Ship Benefit Supplies and materials are well cared for and the crew gains a +1 status bonus on checks to sell supplies and plunder.

Officer Benefit The quartermaster increases their carrying capacity by 2 bulk.

Sailing Master (Pilot)

Role Controls the voyage of the vehicle.

Requirements Trained in Sailing Lore

Ship Benefit If the pilot is steering the vehicle, once per day, they can use a single action to grant a +1 status bonus per proficiency rank in Sailing Lore to the vehicle's Armor Class and Fortitude save (+1 if trained, +2 if expert, +3 if master, +4 if legendary). This bonus lasts until the start of the pilot's next turn.

Officer Benefit The pilot is not flat-footed while on a vehicle due to turbulent waves or weather, or when boarding another vehicle.

Shipwright

Role In charge of maintaining the vehicle and making repairs as needed. If worse comes to worse, they may be tasked to take over the surgeon's role after combat.

Restriction Trained in Crafting & Sailing Lore

Ship Benefit The vehicle automatically regains 1 hit point per day requiring no check or raw material, this only functions while the vehicle is traveling.

Officer Benefit They gain a +1 status bonus when they take the Seek action to find smuggling compartments, or other hidden locations on a vehicle, and when they take the Unveil Ship Obfuscations action.

Surgeon

Role Maintains the health of the crew, performs surgery, and provides free dental for the crew.

Restriction Trained in Medicine

Ship Benefit After ship-to-ship combat, and the crew lost members in the fight, the crew is able to save a number of them from death equal to the surgeon's proficiency bonus in Medicine. The crew regains 5 members plus an additional 2 per proficiency rank in Medicine (7 if trained, 9 if expert, 11 if master, or 13 if legendary).

Officer Benefit While the officer is aboard the vehicle, they do not become temporarily immune to Treat Wounds actions they make on themselves.

Infamy & Plunder

The Infamy & Plunder conversion has been moved to a new document, [found here](#).

Infamy

Wealth isn't everything. For many pirates, wealth is only used to grow their reputation and power. Infamy can be used to intimidate enemies, press-gang crew, repair their ship, get discounts from merchants you don't wish to rob, and far more. As a pirate's infamy grows, so does their presence on the seas. You can garner support from pirate lords, win with only a few words, and even rally whole pirate armadas under your flag. This system is intended for characters to track their legend and provides a tangible reward for their growing influence.

Plunder

Most ships pirates encounter rarely are loaded with gold coins, jewelry, and expensive magic items, instead, they typically hold trade goods, foodstuffs, spices, and mundane valuables. Without getting bogged down, these various goods are simplified into a unit known as plunder. Plunder is roughly equal to 100 gold pieces and takes up 50 bulk in a vehicle's cargo space.

Plunder is used to increase a pirate's infamy, pay the ship's crew, and convert into money at port when sold.

Morale

Morale controls how happy the crew is and their relationship with the officers of a ship. In most circumstances, the crew are NPCs while the Player Characters are seen as the officers. If the party is part of the crew, they may choose to ignore the Morale Score of a ship or influence it to better reflect their goals.

Morale Score

The crew's morale is determined by their morale score. This is a scale of 1 to 20 and may change day-to-day. A new crew's morale score starts at 12, a crew's morale score dictates the speed of a vehicle, as well as how hard they are willing to fight in a battle.

If the morale scale should ever reach 1, the crew mutinies. See Mutiny for more information.

Food

Food is a major factor in the welfare and morale of the crew. If the crew is given good rations, their morale score increases by 1 every week they are on good rations to a maximum of a 14. If they are taken off good rations and go to standard rations for a week, their morale score decreases by 1. This decrease only happens once.

If the crew is given poor rations, their morale score decreases by 1 for every week while on poor rations. This penalty stops if they are given standard rations for a week, their morale score then increases by 1. This increase only happens once.

If the crew is given partial rations, treat the type of rations they are given as one step lower in quality. This means if they are given only a partial portion of good rations, the crew treats it like standard rations, and if only given a partial portion of standard rations, it is treated as poor rations.

For every day the crew goes without food, or if they are given only partial poor rations, their morale score decreases by 1 until they mutiny.

Weather

While out at sea, the ship can be tossed by wild storms or have beautiful and clear days to sail through. The weather can affect crew morale and may lead to many refusing to leave below deck for fear of being swept into the tumultuous ocean. During typhoons or gale winds, the crew's morale score is reduced by 1 for every day of bad weather and the crew may refuse to go on deck if their morale score is 6 or lower during these storms, requiring a very hard DC check to encourage them on to the top of the ship.

If strong winds help propel your ship faster towards their destination, the crew can sense the surge of wind at their back and are excited to be moving faster across the waves, the crew's morale score increases by 1 once per week.

Other weather effects are considered normal and the crew is not likely to be affected by it. If the ship experiences supernatural or magical weather that negatively affects the ship, the GM may decide that this provides a bonus or penalty to the crew's morale score.

Schedule

It's important to keep on schedule for the sake of the crew's mental health. Many expect to reach land when they were told they were going to do, and dislike being misled or forced to serve on the ship longer than they were told. When a ship becomes lost, the crew's morale score decreases by 1 if they are still lost by the end of the day, their morale score continues to decrease by 1 at the end of every day they are lost.

Pay

The crew expects to be paid properly and fairly, and their morale score can reflect unprofitable voyages. At the end of every voyage when plunder is being sold, the crew is paid one point of plunder for every plunder given to the officers. If the ship or officers are unable or unwilling to pay that, the morale score drops by 1 for each point of plunder sold that they don't get a portion of.

If the ship and officers pay the crew 2 points of plunder for every point of plunder they gain, the morale score increases by 1.

Officers

Officers can play a large part in the behavior of the crew during a voyage, and their interactions with the crew can do a lot to help improve morale. As a downtime activity, the boatswain can choose to spend their day granting extended breaks, providing instructions, and finding ways to improve morale. At the end of the day, the boatswain can make a Make An Impression action against the crew's morale score + 15. On a successful check, the crew's morale score increases by 1.

If the officers on board the ship are forced to take disciplinary action, the morale score decreases by 1 for each offense that the crew feels is unfair or biased against them. The GM may decide that certain circumstances do not require a decrease in their morale.

Shore Leave

A big part of sailing on a ship is landing in exotic ports and new experiences. When the crew is allowed shore leave, either at a port or on an island, their morale score increases. If the crew's morale score is 3 or lower, the score increases by 1 for each day the crew spends in port or ashore. If the crew's morale score is 4 or higher upon taking shore leave, their score increases only by 1.

Mutiny

A poorly led or mistreated crew might turn against its officers. At the end of the day, if the crew's morale score is at 1, the crew mutinies. Not all mutinies are violent, and many have a specific cause that has led to the mutiny. After a mutiny has ended, the crew's morale score increases by 1d4.

Food Shortage

A morale score that hits 1 due to a shortage of food rations experiences a mutiny as the crew members begin demanding more food. Many stop working if it continues for more than a day as if the vehicle has only half of its crew, and rations may be stolen. If the rations aren't increased, or an adjustment to the ship's journey to a closer port isn't made, the crew may become violent.

At the end of each day of the mutiny, and the officers have done nothing towards the crew's grievances, an officer must make a Make An Impression or a Coerce check to keep the crew in check. The DC is equal to 20 + 1 for each day that the crew is mutinous. On a failed check, the crew becomes violent.

Foul Weather

A morale score that hits 1 due to bad weather experiences a mutiny as the crew refuses to work in unsafe conditions on the deck. While the crew is experiencing foul weather, they refuse to go on deck and the ship loses all progress for that day. Once the foul weather breaks, the morale score stays at 1 and the crew act as if their spirits were broken by the storm. The vehicle only moves as if it only has half of its crew until the morale is improved.

Lost

A morale score that hits 1 due to being lost experiences a mutiny as the crew demands a new navigator. During this mutiny, the crew refuses to work until they are heard and changes are made to the officers, with the ship losing all progress for that day. The crew might vote for a junior officer to take over, either another character or an NPC whom they have chosen.

The current navigator can spend a downtime day 'campaigning' among the crew in an effort to persuade the crew to keep them as quartermaster. At the end of the day, the officer must make a Make An Impression check, this sets the DC for the election.

The crew then votes and the GM rolls a d20. If the result is equal to or less than half of the officer's Make An Impression check, then the officer stays in their current position. If the result is higher than the officer's check, then the crew votes for another to take the navigator's place. The captain may refuse the results of the vote, in which case the captain must make a Make An Impression or Coerce check. The DC is a hard DC for the vehicle's level. On a fail, the crew gets back to work, but the ship will act as if it only has half of its crew until their morale increases to 2 or higher. On a success, the crew gets back to work like normal, and the morale increases to 2.

Pay

A morale score that hits 1 due to the crew not being paid their proper amount experiences a mutiny as the crew demands the rest of their pay. During this mutiny, and if the ship is docked at a settlement when a crew is normally paid, the crew begins stealing from the ship. An officer in charge of watching the ship must make a Perception check to notice the crew stealing from the ship, with a hard DC for the vehicle's level.

On a success, the officer ensures that supplies aren't stolen, though the responsible party may become violent if the officer tries to bring them in for justice. On a failed check, the officer doesn't notice the crew stealing from the ship, and the ship loses 1d6 points of plunder or a similar amount in supplies.

Officers

A morale score that hits 1 due to its officers experiences a mutiny and a violent crew demanding reparations. The crew rises up against the officers and attacks them, trying to kill them, throw them overboard, or imprison them below decks. The crew is typically lead by a leader, with a level equal to the vehicle's level - 2, and the leader is typically accompanied by 1d6 crew, with a level equal to the vehicle's level - 4.

If the leader is killed or incapacitated, the rest of the supporters may surrender. The captain must then make a Make An Impression or Coerce check to cow the rest of the crew to prevent any other mutinies with a hard DC for the vehicle's level. On a success, the crew quiets down and returns to their duties, their morale score increases to 2. On a fail, the crew returns to their duties and the ship acts as if it only has half of its crew. Every day after that, while the morale score remains at 1, there is a 20% chance that another uprising occurs on the ship.

Other Effects

A crew's morale affects other aspects of a ship, making it important to keep the crew happy and in good spirits. See the chart below.

Morale Score	Vehicle Speed	Combat Die	Morale Check
1	-5 feet	1d20	10
2-4	-5 feet	1d12	11
5-7	-	1d10	12
8-13	-	1d8	13
14-16	-	1d6	15
17-19	+5 feet	1d4	17
20	+5 feet	1d4	18

Combat Die

This value augments the die the crew rolls during crew battles. The highest value on the die is worth 1 point during their combats. A crew that is happier and more invested in their ship, and its exploits, are fiercer fighters.

Morale Check

Not everyone is willing to fight to the death, especially on a ship where their morale is lacking. During certain moments, up to a GM's discretion, a crew can make a morale check to determine the likelihood of them to continue fighting each other, and providing bonuses to their officers. A morale check shouldn't be called every round unless circumstances have drastically changed, but the DM can choose to call for one whenever it is appropriate. A few ideal times to call for a check are:

- A crew is surprised
- Faced by a larger or better-equipped force
- A senior officer is killed
- 25% of the crew has fallen
- 50% of the crew has fallen
- Their leader is killed or runs away
- Given a chance to surrender after having made a previous morale check

Making a Morale Check

When the GM calls for a morale check, the crew must roll a 3d6. If the crew rolls under their morale check, they continue their normal course of action.

If they roll a value equal to or greater than their morale check, they fail the check and may surrender, retreat, or some other appropriate action as determined by the GM. If they were fighting another crew, they stop fighting. Their morale score is decreased by an amount equal to how much they failed the morale check.

The other crew can still continue rolling their combat die like they were still taking part in crew battles, sending points to their officers, but if they attack a surrendered crew, that crew may immediately begin fighting again and won't make another morale check until meeting other criteria to do so.

Adjusting a Morale Check

Certain circumstances may require that the crew rolls their morale check with a penalty or a bonus. This could happen for a wide variety of reasons, like losing a captain, horrible weather, strange and unusual magics used against them, or they could gain a bonus instead if circumstances are on their side.

Senior Officers & the Crew

Just because the crew surrenders, or stops fighting, doesn't mean the captain and senior officers do. While the crew won't immediately turn on their captain, they may abandon them and avoid losing any more of their members. If a party's crew fails their morale check, the party can continue fighting. If they eventually win the fight against the opposing captain, they'll have to get the enemy crew under control by demoralizing them, fighting them, or coercing them into submission.

Errata

Created by [VaranSL](#) and [Dump Stat Adventures](#).

Future Additions

- Additional siege engines
- Additional mundane and magical enhancements

Version 1.3

- New frame: Junk
- Corvette AC changed from 14 to 12
- Added link to Mass Naval Combat/Fleet Rules, [additional link here](#).
- Updated siege engines to be in the same format as found in **Guns & Gears**
- New section for Special Player Abilities
- Table of Contents for ease of reference
- Clarified and cleaned up wording

Version 1.2

- New frame: Caravel, Corvette
- New pilot action: Club Hauling
- Sloop weapon mount increase
- Removed crew weapons for simplicity
- Added new ammunition and equipment
- Switch Steps 4 & 5 with each other (Siege Engines & Ship Improvements)
- Added in Officers
- Separated Infamy & Plunder to another document, [found here](#).
- Minor grammar & spelling corrections and clarifications

Version 1.1

- Added in Selling a Ship
- Increased ship hit points; base frames get more hit points based on size (Gargantuan +10 HP; Huge +7 HP; Large +5 HP; Medium +1 HP)
- Increased hit points gained per level to be closer to GMG; Defense 12 HP; Mobility 10 HP; Offense 8 HP

Version 1

- Created ship-to-ship combat based on Pathfinder 1e, Pathfinder 2e, Starfinder, and 5e
- Morale and Crew Battles

Credit

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