The Updated Spacefarer's Guide

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Contents

Arcane Space

Everything you know about space is wrong.

Infinite space; stars as flaming spheres of super-heated plasma; movement through space as a balance of scientific forces, thrust providing acceleration and maneuverability; scientific fact breaking up natural phenomena; life on other planets built along blocks of carbon or silicon elements.

Forget all that. It's wrong.

You can get out of the atmosphere on the back of a Roc; fly between planets on a breathable ocean of air; sail between the crystal spheres that surround habited worlds on a river of magical energy; encounter roving mind flayers and beholders. The stars are a living thing in some areas, great bowls of fire in others, and pinpoints of light painted on the inside of a crystal sphere in some cases.

Welcome to Spelljammer; the universe that exists outside of the atmospheres of planets and between solar systems. This is a galaxy postulated on magical, not scientific, laws. There are still universal truths that must be obeyed but they are based on the arcane, not the limits of physics. In due time, you will be sailing the stars and Phlogiston, engaging in stellar adventures, and living up to the namesake of the great Spelljammer.

What Every Groundling Should Know

All fantasy space shares certain, universal capabilities and properties. This allows ships to fly between planets and to voyage beyond the crystal spheres. This section covers these universal laws.

In an overview, celestial bodies (like planets, suns, and comets) are suspended in wildspace. Wildspace is the standard void that exists between planets and stars within a solar system. Wildspace, and the celestial bodies it holds, is contained within a crystal sphere. Many, many crystal spheres exist each with unique contents and all float upon the Phlogiston. This turbulent river of explosive, multicolored gas flows under its own currents; emanating from the primordial planes and flowing down to the astral and upper planes. With the right ship and proper planning, you can see it all.

Celestial Bodies

The most immediately noticeable celestial body is the ground under your feet; whether this is Krynn, Oearth, Toril, or one of the many other planets.

Celestial bodies extend upward in size up to suns, and downwards to asteroids and planetoids. Given the nature of wildspace, there are even more types of objects that fall into this category. Roughly speaking, any large, non-living conglomeration of matter counts as it wheels about the void. Most often, these objects are spherical but cubes, elliptical shapes, amorphous forms, rings, and hollow forms exist out there. Crazed old sailors even speak of seeing complex, Mobius forms.

Most of the large bodies have an atmosphere. However, this is not a hard rule and many voyages have failed for thinking so. Any celestial body may have an atmosphere

of gas or they may not. These atmospheres could be safe, poisonous, thick, thin, windy, or still.

A sun in wildspace is anything that provides sufficient light and heat to its crystal sphere. These celestial bodies can be aflame due to internal reactions, openings to the plane of fire, or some other reason.

Wildspace

All celestial bodies within a crystal sphere float in the airless void called wildspace. Interplanetary journeys within the crystal sphere journey predominantly in wildspace; the first obstacle to would-be travelers.

As an adventurer moves higher and higher, the air grows thinner and thinner until they reach the vacuum. Luckily, air is clingy in Spelljammer and collects around masses in amounts proportional to the object's size. A traveler who enters wildspace can still breathe for a limited time. This is why ships, having much more mass to carry air, are the chosen method of wildspace travel.

Within an air envelope, fire behaves naturally. Be warned, as it will consume breathable air at an alarming rate. Within the vacuum of the wildspace, however, fires will not burn and are extinguished immediately.

Magical fire will work in the vacuum of wildspace as the heat is fueled by magic, not air. Objects that should be set aflame by magical fire do not catch in a void unless some kind of magic sustains it.

Crystal Spheres

All wildspace is bound by crystal spheres. Inside the crystal sphere is the vacuum of wildspace, then the planets, and stars. Outside these shells exists the Phlogiston and other spheres. Beyond those, the elemental, astral, and upper planes mark the ends of the Phlogiston sea.

The size of the crystal sphere is determined by the celestial bodies contained within. In most cases, the sphere has a radius twice the distance of the center to the outmost celestial body. Because of their great size, the shell appears virtually flat when approached.

The spheres consist of a dark, ceramic-like material that is impervious to all attempts to break it. Some legends state (and most theologians agree) the spheres were placed by the gods to protect their creations from the Phlogiston, which is held to be the prime matter of the universe. Less charitable philosophers maintain that the shells were placed to confine gods and men. In any case, all spheres are uniform excluding size.

The spheres are definitely solid but exert no gravity. No magic or means have been found to alter or damage the spheres. Even spells that allow the opening of portals are thought to be accelerating a natural phenomenon rather than altering the sphere. At this point, only 5 methods are known to penetrate the barrier:

1. The barrier can be passed using a Dimension Door or Teleportation spell.
2. Spells or magic items that force a portal to appear on the surface like Create Portal.
3. Naturally occurring portals appear on the shell at random intervals. Finding one can be a time-consuming task.
4. In some systems, the local star is part of the shell and a portal itself. Passing through this type can only occur by diving straight into the heart of the star. It is recommended to check locally before accidentally incinerating yourself.
5. The legendary Spelljammer and space dragons seem to have an innate ability to open portals that close slowly over time. A daring ship could sneak in behind them.

While described as portals, these only make part of the shell ethereal for a limited time and do not transport matter to another plane. Indeed, magic that relies on other planes or dimensions are notoriously fickle near the sphere shells.

Crystal spheres also outline the definite border of a god's or other dimensional creature's power and influence. Magic that summons or draws power from one of these beings does not function outside of a sphere with their influence. Clerics and Paladins do not naturally regain spells slots above 2nd level when in the Phlogiston or in a sphere where their deity, or an aspect of their deity in another pantheon, is not recognized.

In spheres where stars light up the night sky, they often just have lights mounted to the inside of the shell. This varies from sphere to sphere though. Some are simply portholes letting in light from the Phlogiston, others have the stars painted on the shell, some are alien cities living on the shell, and even more are statues holding great pyres in the reigning god's honor.

The Phlogiston

Outside and between the spheres is a turbulent, rainbow ocean of flammable ether called the Phlogiston. Within this ether floats the many crystal spheres that make up the spelljamming universe. Phlogiston refers to both the ether and the area it fills.

The Phlogiston has varying thicknesses in space and forms dense rivers between spheres. Travelers find that they sail faster when following these concentrations; rising out of and diving deeper to control their movement. This relation is completely dependent on the surface area exposed and the reason why spacefaring ships keep their groundling sails.

Phlogiston is none of the known matters in the world. It is comprised of neither air, water, nor earth. It cannot be reproduced or brought into a crystal sphere or another plane. Any attempt to take it into a sphere or plane sees the material dissipate; even in sealed containers.

Finally, the Phlogiston is dangerously flammable. Any flame brought into it or ignited within the ether immediately explodes and subsequently extinguishes. The explosion increases both the radius of the effect and the damage by 3 times.

Candle: 1d6 fire damage; 4'' radius

Lantern: 3d6 fire damage; 1' radius

Oil Flask: 3d6 fire damage; 3' radius

Cooking Fire: 4d6 fire damage; 10' radius

Match: 1 fire damage; 2'' radius

Gunfire: 2d6 fire damage; 2' radius; shot misfires

This effect occurs immediately. For instance, trying to light a candle is impossible as the match explodes as soon as it is struck. Spells like Fireball explode as soon as the fire appears on the wizard's hands to full effect, centered on the wizard.

Because of this, ships fly dark in the Phlogiston; extinguishing all flames before entering. Luckily, the Phlogiston is radiant and lights all of the outer decks of a ship in it. Below deck, or in rare (and haunted) Dark Regions, cold lights like glowing moths, mushrooms, or fireflies or magical lights are used. Unless, of course, the crew can naturally see in the dark.

The flow of phlogiston between spheres typically has currents in both directions. However, it is possible for one-way flows to exist; making travel upstream impossible.

Crystal spheres bob in the Phlogiston like corks in the ocean (mind-boggling, enormous corks, but they do bob). They naturally move around but do not change the flow of the Phlogiston. The Phlogiston always thickens to prevent collisions between spheres so they keep their relative positions. Navigation is therefore possible in this strange ocean, albeit more of an art than a science.

Gravity

The reason matter pulls air through wildspace is because of gravity. Gravity is the reason people can stand on the deck of a ship without floating off and on a spherical planet without falling.

Every collection of mass (planets, ships, creatures, and the cup you dropped over the ship's size) all have gravity. In Spelljammer, gravity is a generous force in that its direction always seems to be "that which is most convenient". On large celestial bodies, gravity always pulls toward the object's center. This way, anyone on the object's surface is pulled down to the ground no matter where they stand on it. On smaller objects, like spacecraft, gravity is not a point but a plane that bisects the object horizontally through the point of most mass.

Significantly, this plane is two-directional; it allows attraction from both the top and bottom. A sailor can actually stand on the bottom of a ship's hull and move around just as easily as if he was on the deck.

One of the odd effects of this is that objects thrown off the side of a spelljamming ship oscillate back and forth across the plane. First, it falls down towards the plane, passes it, then reverses and falls "up" in the other direction. To a person, on deck, it looks as if the objects falls down, then up, then down, and so on in a bobbing manner. This trick is commonly used to amuse passengers new to space travel. More than one groundling has gotten in trouble for standing at the ship's rail and tossing apples to see them bob.

Interestingly, objects caught on this gravity plane and not connected to the mass itself will slowly drift away from the center. A sailor who falls overboard will eventually leave a ship's atmosphere and gravity plane.

A carefully thrown or shot object can actually begin to orbit the ship. Such orbits tend not to last long; the object usually collides with a mast, rigging, or oar. One of the favorite pranks of seasoned sailors is to throw an object from one side to hit someone standing on the opposite side of the ship.

When two gravity planes exist in the same area and both remain intact, objects within their ranges adhere to whichever object's mass is closer. Therefore, a sailor could jump from ship to ship with their "down" changing mid-flight. Once the two objects collide, the gravity plane of the larger of the two objects becomes the main gravity.

Combat and function in zero gravity is difficult. All attack rolls and ability checks are performed at disadvantage. Additionally, creatures in zero gravity cannot control their movement. However, missiles shot across wildspace continue traveling. A trained archer can still fire through the vacuum but arrows and bullets fired into space are usually lost for good.

Temperature

Due to planetary activity, and various gates to the plane of elemental fire, temperature in wildspace is not an issue. The ambient temperature in space is about the same as a moderate summer day. Some spheres may vary from this temperature and planets very likely will.

There are no seasons in space but local temperatures vary. Being close to a sun could incinerate a ship while other phenomenon could result in frozen chunks of matter floating about.

Time

Local time on planets varies by location, rotation, culture, customs, and other factors. As such, Spelljammers tend to use an agreed-on standard day.

One standard day is 24 hours divided into three 8 hour shifts; first, second, and night. A standard week is 7 standard days and a month is four standard weeks for a 28-day total.

Spelljammers have no need or care for measurements greater than months. Seasons are just as irrelevant.

Air

Most creatures need to breath to survive and adventurers are no exception. As these air-dependent beings leave an atmosphere, air becomes thinner and thinner before becoming the vacuum that is wildspace. Luckily, air is clingy and will hold to a creature as it leaves the atmosphere.

Breathing in Space

A medium creature drags along enough air to last 2 minutes. Should one of these creatures enter wildspace on a 40-foot-diameter boulder, they may have enough air to last months. Generally speaking, a creature larger than medium doubles the air time for each size category above medium while smaller creatures halve it.

For larger objects, like ships, it is easier to calculate air volume in tonnage. Every 1 ton of object is roughly 100 cubed yards of space. This is considered enough air to sustain one medium creature of 4 months under normal circumstances. A 30-ton frigate, therefore, could support its standard d8-sized crew, and a handful of adventurers, for 4 months. Ships loaded with more or less than standard crew use air at rates proportional to the crew on board. A frigate with a crew of 16 would have 2 months of fresh air while one with a crew of 4 could last 8 months.

Air Quality

Air quality around a ship or object can be one of three classes – fresh, fouled, or deadly. These states exist for any creature that can breathe the air. So an atmosphere full of poisoned air could be fresh, fouled, or deadly on top of retaining its poisonous quality.

Fresh Air: This is fully breathable air usually obtained by entering a planet atmosphere or leaving a port. This lasts for the durations as described above.

Fouled Air: Stale and depleted. It is humid with others' breath and smells bad. Fresh air becomes fouled after creature have been breathing it for the provided times. Additionally, air might become fouled from poison, fire, or spells. Air stays fouled for the same amount of time it would be fresh. So a standard ship is fouled for the fifth through eighth months after the initial four. Medium creatures alone have fouled air for 2 minutes after the initial, fresh 2.

Players who must breathe within fouled air suffer disadvantage on ability and attack rolls. Crews suffer disadvantage on Attack, Power, and Morale checks.

Deadly Air: This air is completely depleted and cannot support life. In fact, this air is deadly to those creatures that could breathe it. Air becomes this after foul air is breathed for its given durations. Anyone who breathes in this atmosphere must make a DC 10 Constitution saving throw each turn or fall unconscious until brought into fresh or fouled air. Additionally, creatures who must breathe that enter this air begin to suffocate. All open flames die out when exposed to deadly air.

When bodies meet in space, their atmospheres are exchanged. The smaller of the two objects adopts some of the larger's atmosphere. If the smaller object is less than 1/3 third the larger object's size, the smaller object adopts the atmosphere of the larger object. If the smaller object is 1/3 to 2/3 the larger's size, both objects get the larger's current air minus 1 week. A smaller object of 2/3 the size or equal in size to the larger object equalizes the better air between the two objects. For example, if a frigate with twelve weeks of fresh air joins a frigate with 1 week of foul air remaining, both ships part with 6 weeks of fresh air.

These rules apply to creatures of various sizes by steps. Two medium creatures will equalize, a medium creature counts as 2/3 the size of a large, and a small creature will adopt the air of a huge one.

Air operates the same out in the Phlogiston as it does in wildspace. However, when the air goes deadly, or there is no air, a special property takes over. Instead of dying at the end of their oxygen, the creature falls into suspended animation. Their skin turns grey and stone-like, remaining so until rescued and brought into air. Most rescues are not for good intentions though. Pirates will often take whatever is good and toss the bodies back. Neogi and Mindflayers use these poor souls as free slaves.

Ships

Ships in wildspace are collectively referred to as spelljammers; named after the largest and oldest ship to sail the universe, The Spelljammer. Due to their size and air envelope, spelljammers are the preferred method of travel through wildspace. These ships have a number of attributes and statistics to describe their performance and capabilities. There are dozens of ship types that sail through the spelljamming universe and new versions every day. To some capacity, they all have the following attributes.

Hull

The hull of a ship is measured in tonnage and represents the size of the ship and how much volume it displaces. The hull size is also indicative of how much damage a ship can sustain before breaking up, how much damage it can resist and how maneuverable it is.

Tonnage

In general terms, one ton equals 100 square yards of space to be filled with crew, weapons, and cargo. The health of a ship and its threshold for damage is directly proportional to how much tonnage it has.

Ship Health: The ship's health is equal to the tonnage times 10.

Damage Threshold: This represents a ship's damage tolerance and is derived from the ship's maximum health. Any total damage from a single attack or effect amount less than the damage threshold, unless otherwise stated, is ignored. Damage that meets or exceeds the threshold is applied. For example, a ship is hit with a ballista bolt for 11 points of damage. If this ship has a maximum health less than or equal to 300, it takes 11 points of damage as 11 is higher than the 0 and 10 thresholds. Ships with a health of

300 or greater are unaffected by the hit; being too large for this puny bolt to harm them.

Ship Health Range	Damage Threshold
1 – 99	0
100 – 299	10
300 – 499	15
500 – 999	20
1000 – 1499	25
1500 +	30

Material

Ships have to be made of something. What makes up a ship is important as this determines the base Armor Class of the vessel. A ship made of metal is inherently more resistant to attacks than a ship made of crystal. Common ship materials are as follows:

Material	AC
Cloth	11
Leather	12
Crystal	13
Ceramic	13
Thin Wood	14
Thick Wood	15
Bone	15
Stone	17
Metal	19

Saving Throws

Ships are large and do not behave as normal creatures. Ships automatically succeed Strength and Constitution saving throws given their size and power. Dexterity saving throws are made using the ship's *Reaction Modifier*. Since they have no consciousness, ships automatically fail any Wisdom, Intelligence, or Charisma saving throws. Finally, they are immune to both Poison and Psychic damage as well as the following effects: blinded, charmed, deafened, exhaustion, frightened, incapacitated, paralyzed, petrified, poisoned, prone, stunned, and unconscious.

Cargo

Pirate, merchant, or otherwise, all ships need space to hold their goods, ammo, and crew. Cargo space is quite literally the empty space on a ship that can be filled with goods, additional weapons, backup weapons, or special rooms. Generally, all ships have cargo space equal to their tonnage. Weapons and *Modifications* added to the ship may take up some of this space. Any tonnage not occupied by something on the ship may be considered cargo space and therefore filled.

Movement

Spelljamming ships have a number of movement methods whether they are locked in combat or cruising the Phlogiston. Overall, movement is controlled by the ship's helm. Without a helm and an operator to power it, a spelljamming ship is dead in the void.

The Helm

The spelljamming helm is arguably the most important part of a ship and what separates as spelljammer from a groundling ship. Most helms are created in secret Arcane shops, sold by the strange blue beings, and powered by mages. The Minor and Major helms are the industry standard for helms but immense Dwarven foundries, helms that draw power from life force, and Gnomish pedals also exist.

Each helm provides power in different ways but all helms provide a speed value. This number represents how many 100 foot increments (hex spaces) a ship can move or how many turns a ship can execute each round. In general, a helm provides a speed from 1 to 9. Each speed point can be used to move the ship forward, backwards, or execute a turn.

Two helms cannot be active on the same ship. In most cases, neither helm functions until the other turns off. In the worse cases, the two helms immediately pull the ship apart into pieces.

When operating a helm, the operator may choose to expand their awareness above and behind the ship. This allows them to see the outside of the ship as a whole to properly command and navigate it. When doing so, the operator is blind and deafened from their own bodily senses.

Minor Helm: A static chair and helmet built into the hull. Supports up to 50 tons of ship. Speed is equal to 2/3 the level of the operator's highest unspent spellslot, rounded down, to a minimum of 1. A creature must have at least one unspent spellslot to operate the helm. Casting spells, aside from cantrips, is not allowed while operating.

Major Helm: A static chair and helmet built into the hull. Supports up to 100 tons of ship. Speed is equal to the level of the operator's highest unspent spellslot. A creature must have at least one unspent spellslot to operate the helm. Casting spells, aside from cantrips, is not allowed while operating.

Lifejammer: A diabolical-looking Minor Helm that can hold a creature of large or smaller and comes with built-in restraints. Being hooked up to this helm draws 1d8 of health and applies one level of exhaustion for each day attached; either at dawn or the first time the creature is attached to the helm for that day. Health taken and exhaustion added this way can only be restored by non-magical means after one full day not operating the helm. The speed granted by the helm is equal to 1/3 the creature's level or CR, rounded down, to a minimum of 1.

Space Engine: A propulsion thrust engine built by gnomes and attached to the back of the craft. This object is typically reserved for lifeboats and shuttle-craft. Speed using

this engine is 1. This helm cannot achieve spelljamming speeds and cannot liftoff from a celestial body.

Series Helm: These helms link the mind power of multiple living beings to power a ship and can have 1-5 of these helms linked. For each creature operating a helm, the speed increases by 1. Should a helm be destroyed or disabled, the ship loses all speed for 1 turn as the system recalibrates. Afterwards, it resumes with a speed equal to the remaining operated helms.

Other rare and unique helms exist to be found.

Maneuverability

The helm of a ship provides the raw speed and thrust, but there are many other factors to how a ship moves. The material it is made of, how well the ship is rigged, and the size all play a role in how well the ship handles. This is called the ships maneuverability class and determines the ship's base reaction modifier and turn allowance; similar to the dexterity bonuses a flexible rogue has.

Maneuverability Class: All ships come with a rating of A to F, with F being the most sluggish. A ship can only have a class G maneuverability from taking damage or modifications. Class F is typically reserved for large flagships or converted groundling ships while fighters and escape craft are labeled as Class A.

Ships cannot be changed in any way to exceed the A-G classifications.

Each category provides the following benefits:

Class	Turn Allowance	Reaction Mod
A	3*	+8
B	2	+6
C	2	+4
D	1	+2
E	1	0
F	1*	-2
G	0*	-4

* denotes special properties defined below

Turn Allowance: This number represents the number of hex faces a ship can change when executing a turn. A turn can be made once per hex at the cost of one speed point. When a turn is made, the ship can change its facing by a number of hex sides up to its turn allowance.

For instance, a class B ship with 3 speed points could move forward, turn two faces to the right, and then move forward again. Alternatively, it could just move forward 3 hexes or turn at after moving 2 hexes forward.

Class A ships do not spend a speed point to turn.

Class F ships must move forward one hex before turning.

Class G ships spend a speed point to attempt a turn. There is a 30% chance the turn is successful otherwise the point is wasted.

All ships may change their facing by one hex side if they moved at least one hex at the end of their movement.

Reaction Modifier: This value represents the ship's ability to dodge and avoid disasters. This number is used when resolving ramming and shearing checks and is added to the rolled check as described in the sections below. Note that ships that are unpowered, disabled, or otherwise inoperable do not add their reaction modifier.

The reaction mod is also used to resolve initiative and functions the same as a player's initiative.

Combat Speeds

When approaching a significant gravity well of 5 tons or greater, a ship will slow to a low speed to prevent a potentially devastating crash. When this occurs, ships enter large, hex-grid field to represent the local area. Movement through this field is resolved via turns with initiative when applicable. At any point during its turn in a round, a ship may decide to leave the area. If there is no object or creature preventing this event within 25 hexes, the ship resumes its spelljamming speeds and course. A failed escape from the area does not end the turn and the individual operating the ship is notified of the failure but not why.

Leaving the area, when hostiles are present, may result in a pursuit. Since spelljamming ships all travel at the same spelljamming speeds, it is not a simple task to run away from pursuers. Given the long distances traveled, a pursuer will need to match their target's heading exactly or end up miles away. In order to pursue a target, the pursuer must also jump to spelljamming speeds in the same heading soon after. The pursuing ship must make Wisdom (Survival) check to follow their prey. On a success, they match the heading well enough and will catch up to the other ship when it stops. On a failure, the pursuing ship continues on a heading where the two ships will never meet. Neither ship has any idea whether they are being chased or not, unless aided by magical means.

Spelljamming Speeds

Outside of combat-like scenarios, all spelljammer helms boost a ship's speed well beyond what groundling craft can obtain. Depending on the travel path, ships move as follows:

In Atmosphere: Spelljamming ships movement caps at 17 miles per hour or 400 miles per speed point granted by the helm. With a working helm, ships in atmosphere ignore planetary gravity locally and are capable of hovering in place.

In Wildspace and Beyond: Without a planet restricting movement, spelljamming ships are able to move at incredible speeds. During this movement, the atmosphere of the ship works like a protective bubble and moves small obstacles out of the way. However, the ship will slow to combat speeds when passing near an object of 5 tons or greater. At

this speed, the spelljamming ship is capable of traveling 100 million miles per day (about 4 million an hour).

Take-off and Landing

At some point, a ship might need to land with the intent of taking off some time after. This rule covers landing and taking off from a surface and does not apply to docking at a spaceport (a feat that is easily accomplished with movement so long as the dock is large enough). All ships come with some indication of whether they can handle a water and/or land touchdown. Those that are incapable usually have lifeboats or tow a dingy to handle setting down crew.

Landing: All ships can land; though some do it better. To begin, spelljamming ships slow down as they approach a planet's gravity well. In doing so, the ship must spend a certain amount of time slowing to approach the planet's surface. Once it nears, the ship may land on the surface, if it is capable of doing so, in 1 minute. A ship without the proper landing gear for the surface intended makes a *Crash Landing*.

Take-off: This functions similar to landing in reverse. First, 1d8 is rolled to determine how long takes for the helm to warm up and the ship to prepare for launch. If a quick take-off was anticipated, roll 2d8 and take the lower value. The result is the number of minutes it takes for the ship to be ready to launch. If the helm never stopped operating between landing and take-off, this time is 1 minute. Once ready, the ship takes off and can travel at the *In Atmosphere* rate until the gravity well of the planetoid is reached.

During warm-up, ships are considered unpowered.

The time in/out of the planetoid gravity well is determined by two factors: the object's size class and current atmospheric weather. There are a large number of possibilities for leaving a planetoid, ranging from 1 minute to 3 days. In some conditions, take-off might not even be possible.

Planet Size	Time to Take Off
< A	1 Minute
A	10 minutes
B	20 minutes
C	20 minutes
D	30 minutes
E	40 minutes
F	1 hour
G	2 hours
H	4 hours
I	8 hours
>= J	16 hours

Weather Condition	Take-off/Landing Modifier
Becalmed	1x Time
Light Breeze	1x Time
Favorable	1x Time
Strong Winds	2x Time
Rain/Snow	2x Time
Storm	4x Time
Gale	4x Time
Hurricane/Blizzard	Landing/Take-off Impossible

Standard Armament

Wildspace is dangerous. Pirates wait in the shadows of asteroids and Neogi slavers are not afraid to capture a weakened ship. Beyond that, large creatures call the space between planets home. Most ships therefore come with large weapons and armed crew to keep the ship afloat.

Weapons

Ships have the capability of housing large siege-sized weapons to use against other ships and huge creatures. Most all ships come with the ability to hold one Light or Medium weapon without taking any cargo space. *Additional Weapons* can be added in exchange for cargo space up to 50% of the ship's total tonnage. Ship weapons can only target an object of Huge or larger unless otherwise stated.

Fire Arc: Weapons can only be fired across certain arcs. Weapons, like ballista, are typically mounted on a pivot and can fire anywhere in range freely. Others, like catapults and bombards, have a limited firing arcs and are only able to fire over the hex sides they are facing. Any weapon not tagged as *Mounted* can be rotated on its turn instead of fired.

Range: Range represents the hex count (or number of 100 foot increments) the weapon can fire in naturally. Attacks beyond this range are resolved as *Intentional Misses*.

Critical: When the d20 is rolled for attacks, some weapons can score critical hits on rolls other than 20. Any roll on the attack die that falls in the critical range invokes a critical hit on the opposing ship. Critical hits against a ship deals normal damage plus a roll on the critical effect chart. Critical hits cannot be scored against crew on a ship but can be landed on unique PCs and NPCs.

Weapon Size: Some weapons come in sizes of light, medium, and heavy. Each has different characteristics but are functionally the same. Heavy weapons take twice the space (2 Standard Armament points and/or cargo) of light or medium weapons.

Anti-Personnel: When attacking with one of these weapons, choose an exposed deck. Any crew on the ship and any characters on the deck are subject to the weapon's effect.

Ram: Built in as part of the ship's hull. These take up cargo and allow the Ramming attack. Rams are always mounted and usually apply a secondary or critical effect.

Volatile: When a ship's hull is attacked while carrying these weapons, there is a chance the ammo storage for the weapon is hit and ignites. Any attack that does damage to the ship has a -1 to land a critical attack. A level 1d10 fire occurs as in addition to the critical effect.

Mounted: These weapons are fixed to the deck and cannot rotate without a turret.

Arching Fire: These weapons require large, arching shots. These cannot attack targets within 100 feet (the same hex).

Name	Range	Fire Arc	To Hit	Damage	Critical	Tags
Light Ballista	6	Full	+8	2d10 Piercing	20	
Medium Ballista	4	Full	+6	3d10 Piercing	19+	
Heavy Ballista	2	Full	+4	4d10 Piercing	18+	
Light Catapult	5	Face +/- 1	+6	4d10 Bludgeoning	20	Arching Fire
Medium Catapult	4	Face +/- 1	+5	6d10 Bludgeoning	19+	Arching Fire
Heavy Catapult	3	Face +/- 1	+4	8d10 Bludgeoning	18+	Arching Fire
Light Jettison	3	Face	+6	1d6 Bludgeoning	20	Anti-Personnel
Medium Jettison	2	Face	+5	2d6 Bludgeoning	20	Anti-Personnel
Heavy Jettison	1	Face	+4	3d6 Bludgeoning	20	Anti-Personnel
Greek Fire Projector	1	Face	+4	3d10 *Fire*	18+	Fire, Mounted, Volatile
Gnomish Sweeper	3	Full	+6	2d6 Slicing	20	Anti-Personnel
Cannon	2	Face	+3	8d10 Piercing	20	Volatile
Blunt Ram	0	Front or Back	--	Tonnage*Tiles Moved in Line	Always	Ram
Piercing Ram	0	Front or Back	--	Tonnage*Tiles Moved in Line	Always	Ram
Grappling Ram	0	Front or Back	--	--	--	Ram

Additional weapons can be bought and stored on a ship for emergency or replacement. Weapons stored so take cargo space equivalent to the last column in the table below.

A weapon stored in cargo can be brought out to replace the broken one. No proficiency is needed for this. However, a heavy weapon cannot be placed on a normal *Turret*. It takes 30 minutes to bring the new weapon up and replace the broken one. The broken weapon can be stowed for repairs or simply thrown off the ship as part of this process.

Name	Cost in GP	Cargo Space
Light Ballista	400	1
Medium Ballista	600	2
Heavy Ballista	800	4
Light Catapult	500	1
Medium Catapult	700	2
Heavy Catapult	1,000	4
Light Jettison	400	1
Medium Jettison	600	2
Heavy Jettison	800	4
Greek Fire Projector	1,000	2
Gnomish Sweeper	800	2
Cannon	20,000	2
Blunt Ram	100	-
Piercing Ram	200	-
Grappling Ram	100	-

Crew

Any spelljamming vessel preparing for combat would do well with a crew. Not only do they keep a ship running, they are directly useful in combat. Whether defending from enemy boarders or launching the attack themselves, you certainly do not want to be alone when ships get grappled together.

The number of crew a ship can sustain is directly proportional to the tonnage. This number represents the total crew that can live in the ship's air for 4 months before fouling it.

A ship with a crew operates at full capacity so long as a minimum number of crew is met. A ship that requires 1/4th the total crew capacity to operate normally. A ship meeting or exceeding this value operates as normal. A ship that operates less than this value functions at one *Maneuverability Class* less. Any ship that can sustain a crew needs a crew of at least 1 to operate at all; less than that and the ship is dead in space. As an example, a ship with a crew of 8 functions normally with 2 or more crew, at one less Maneuverability Class with 1 crew, and cannot move once the crew is exhausted.

Ships without a crew allowance require at least one person to operate at full speed and maneuverability.

Crew Capacity: For ships less than 10 tons, crew size is 0. For ships 10 tons or greater, the crew size becomes 4 at 10 tons and gains an additional 2 for every 10 tons over 10. So, a 30-ton ship could support a crew of size 8.

Please refer to Matt Colville's *Strongholds & Followers* (Appendix: Warfare, pg. 233) for rules on building, purchasing, and maintaining units, as well as information on Combat.

Generally though, a crew of some kind can always be found with enough coin and time in a spaceport. Crew will need to be paid up front with their wages and will require

payment every 3 months. Crews are bought with a minimum size of 4 and a maximum of 12. So long as there is room on the ship, additional crew can be recruited; even if parts of the old crew are still on board.

Given the sailing nature of Spelljammer, it is very unlikely for crews comprised of flying, cavalry, levy, or siege engines units to be found. Implementation and use of these units is up to the DM's discretion.

Ships can support up to double the normal crew and take up cargo space proportional to 2 times their size over the standard allotment. For example, a ship that can support a crew of 8 loaded with 12 would lose 8 tons of its available cargo room to crew quarters and supplies. Not to mention the ship's air would last less.

The Amphibious trait applies to low and zero gravity fighting.

Furthermore, some additional ancestries can be chosen:

Name	Attack	Power	Defense	Toughness	Morale	Traits
Giff	+1	+1	+2	+2	+1	Martial, Stalwart
Hadowzee	+2	+1	+0	+0	+1	Amphibious, Frenzy
Hurwaeti	+0	+0	+2	+0	+2	Eternal, Courageous

Ship Combat

In the event your ship comes under fire, you will need to defend it as best you can. Allies and safe havens are few and far between. Hold nothing back when another ship is bearing down. Any captain worth their stardust should familiarize themselves with the tactics and maneuvers available to their ship.

Turn Resolution

Ship combat takes place after all character and enemy turns on a separate initiative list. When combat involves ships, initiative will be determined for any creature taking part in the fight as normal. Then, roll a separate initiative for each ship using its reaction modifier.

Each round in combat begins will all player/character actions, followed by the ships. Players may choose to hold actions to be triggered during the ship phase or may opt to perform an action under the *Player Actions* section. Otherwise, they may perform any normal actions.

Ships, led by their captain(s), may always move during their round as much or as little as they please. At any point in this movement, a ship may fire any number of their weapons as their main action. So, a ship with cannons on their side might pull up alongside an enemy ship, fire all of their weapons then turn to bring the rear jettison down on their enemies. As a bonus action, ships may attempt one of the *Close Combat* tactics on their turn. Crew actions available are resolved on the ship's initiative. All actions require a crew, or a handful of characters for smaller ships, to be on deck and participating.

At the very end of the round, *Missed Shots* are resolved.

Long Range Combat

Long range combat between ships is very similar to combat between two archers. The difference being that there are usually a lot of archers firing, the archers are hurling boulders and cannonballs, and the platforms they are standing on are moving about.

Weapon Fire

Each ship weapon that fires against an enemy ship or creature rolls to hit with the appropriate attack bonus versus the target's AC. Any attack attempted beyond the weapon's long range is considered an *Intentional Miss*.

Anti-personnel weapons make their attacks against multiple targets on the exposed deck of the target ship. For these, roll an attack and add the *to hit* modifier. Any character not part of the crew on the exposed deck is attacked with this value versus their AC. On a hit, that character takes the appropriate weapon damage. One crew on deck, chosen at random, is attacked with this value as the attack roll. If this roll succeeds, roll a *Power Check* using the following modifiers.

Name	To Hit	Damage	Power
Light Jettison	+6	1d6 Bludgeoning	+2
Medium Jettison	+5	2d6 Bludgeoning	+3
Heavy Jettison	+4	3d6 Bludgeoning	+5
Gnomish Sweeper	+6	2d6 Slicing	+3

Missed Shots

Shots fired near a celestial body have the nasty habit of falling to gravity before being useful. Luckily, missiles in wildspace continue traveling indefinitely (well, until they hit a ship, planet, or debris field) and can pose a threat well beyond their normal range. This means that shots fired and missed outside of gravity pose a danger to all ships on the battlefield. These come in two types: natural misses and intentional misses.

Natural Miss: Some shots just miss. These missed shots get placed in any of the three hexes beyond the missed target's hex. Shots are oriented away from the two ships in the manner that most makes sense. When all three spaces beyond the target are filled, no more missed shots are added to the board for that direction. More may be added if the position of ships change between shots.

Jettison shots fire a large scatter of projectiles. These are guaranteed to hit a ship and break up ineffectually afterwards. No projectiles are added to the board for these kind of shots.

Intentional Misses: With the behavior of projectiles in wildspace, shots can just be fired out into space. In these cases, the shots are intentionally added to the board as hazards, deterrents, or literal shots in the dark. To perform these attacks, the shot taken is placed anywhere in the firing arc and oriented in the most natural direction away from the ship.

Jettison fire behaves a little differently. Rather than continuing across the board, the scattered shot becomes a static debris field where launched.

Missed shots are resolved at the very end of initiative. Shots placed this round do not do anything. Older missed shots are moved across the board according to their speed (hexes moved; equal to the weapon's range) until they are out of combat, collide with a debris field, or hit a target. If at any point the projectile occupies a hex with a ship during the projectile's movement, the ship makes a DC 10 + the projectile's speed saving throw using its *Reaction Modifier*. If the projectile misses, the shot continues its trajectory.

Projectile Type	Speed
Heavy	2
Medium	4
Light	6
Cannonball	2
Gnomish Sweeping Bolt	4

Firing at a Hex with 2+ Ships

Sometimes, attacks are made against targets that are grappled, ramming, or otherwise sharing the same hex. In these instances, attacks are made against the intended target first. If the attack misses, it must be made against another ship in the same hex chosen at random. This continues for all ships within the same hex until a hit happens or it misses all targets. If all targets are missed, the projectile becomes a missed shot.

Jettison attacks hit all ships in a hex simultaneously. Resolve a jettison attack against each ship in the hex.

Tethering

Sometimes, it may be necessary to reel in opposing ships or creatures for up-close and personal combat. To do so, the ship making the attack must have a tethered shot prepared on a ballista bolt and loaded into the weapon. As part of the ship's attack, the loaded ballista can be fired at a target within its normal range. A tethered shot cannot be made with an *Intentional Miss* shot.

A successful tether shot does full weapon damage and attaches the tether. Various types of tethering material are available but each supports a number of tonnage. When the sum of all tether's tonnage is equal to or greater than the tonnage of the smaller of the two ships tethered, the two ships become linked until lines are cut, the ships move apart, or the ships are magically separated. If the sum of the tether tonnage is less than either ship's tonnage, any movement between the two ships breaks the tether lines.

Type	AC	Health	Tonnage	Cost
Grapple Rope	12	5	10	10gp
Grapple Line	15	12	20	25gp
Grapple Chain	18	20	30	50gp

When linked, the spelljamming devices on both ships begin to interfere with one another. In these cases, only the stronger of the two helms is capable of moving. Here, helm strength is determined by magical power and is equal to the current speed of the ship. The new speed of the stronger ship becomes the difference between the two strengths. So, if a ship of speed 5 grapples a ship with a speed of 3, the ship that was originally 5 may move at a speed of 2 while tethered. This movement is not limited by the tether so it is possible for the stronger ship to pull the other tethered ship.

Tethers may be pulled by the firing ship to reel in the target at a rate of 1 hex per round by the crew; the smaller of the two ships, or a random ship if even tonnage, is pulled towards the other.

Missed tether shots do not create a missed projectile on the board. Whether hit or missed, the weapon is inoperable for one round as the remaining tether is reeled in.

Close Combat

Some ships prefer to fight up close rather than keeping their distance. For those that want to, the following are available as bonus actions for ships as either part of movement or crew actions.

Ramming

A ship equipped with a ram can bring the full weight of their ship down on an enemy. To do so, the ramming ship must enter a hex with the target ship from an outside hex. Roll a grappling check plus the ships' reaction modifiers to resolve the ram.

On a successful ram, the attacking ship inflicts damage to the target equal to their tonnage times the number of hexes moved in a straight line before the ramming. Ram damage ignores *Damage Thresholds*. Rams also inflict a number of critical effects based on the type.

Piercing Ram: Target ship suffers the *Ship Shaken* and *Hull Holed* critical effects. Ships have a 50% chance of being *Grappled*.

Blunt Ram: Target ship suffers a *Ship Shaken* critical effect and another *Critical* as determined by the critical chart. There is no chance the ships are *Grappled*.

Grappling Ram: The target ship suffers no damage from the ram and is immediately *Grappled*.

A ship that fails to ram its target can continue to move unhindered. Otherwise, the ramming ship's remaining speed is dropped to 0 for this turn.

If the rammer fails to ram and it entered the target's hex from the front or back, the target ship may immediately attempt a counter ram. The dice are rolled again with roles reversed. If successful, the defending ship using the counter-ramming ship's tonnage multiplied by the number of hexes the defending ship has moved.

Any ship without a ram attempting a ramming maneuver attempts a *Crashing Ram*.

Shearing

A shearing attack is a close pass to an enemy ship in attempts to drag away their rigging and ship's infrastructure. This maneuver reduces an opposing ship's steering and can only be performed once per turn. This can be attempted as long as the two ships are in the same hex and the shearer is not grappled or tethered. Roll a grappling check plus the ships' reaction modifiers to resolve the shearing attempt. If the ship attempting the shear rolls a 20, the shear succeeds and the target ship suffers a *Critical*.

For each successful shear against a ship its *Maneuverability Class* is reduced by 1 to a minimum of class G. A ship can only have its maneuverability reduced by 2 classes through this method.

On a failed shearing, the target ship can immediately counter-shear.

Crashing

There are a number of situations where a ship collides with another large body or ship. Some events include a ship without a ram attempting to ram another ship, a ship without appropriate landing gear attempting to land, or a ship that is teleported into another mass. If a ship ends up in this case, the outcome is usually never good for either side. In all cases, the smaller of the two objects is what is crashing into the other.

Crash Landing: So long as the helm is operable, most ships are able to slow down to suffer minimum damage when landing without proper gear. In these cases, the ship landing takes bludgeoning damage equal to their tonnage from the stress of setting down. Any armaments or objects mounted to a bottom deck are destroyed.

Crash Ramming: A ship that purposefully dives into another ship without a proper ram or is magically shunted into another object damages both objects. If the object being crashed into is mobile and powered, resolved a grappling check using both ships' reaction modifiers. Otherwise, in cases like a ship purposefully ramming into an asteroid, the crash always occurs. Both objects involved suffer bludgeoning damage equal to the tonnage of the smaller object times the number of hexes moved in a straight line before the crash. Both objects suffer the *Ship Shaken* effect.

Crashing: In the event that two objects are on a collision course and neither is powered, no roll is made. The two objects automatically collide with damage as if *Crash Ramming*.

Landing on an Other Ship

Rather than ramming, smaller ships might find infiltration or delivering a crew of adventurers on an enemy ship a better option. If a small ship is 1/10 the tonnage of a larger one, it may land on the other ship, even during combat.

If unaware, the smaller ship can land without trouble so long as their stealth is not compromised. Otherwise, resolve a grapple check using the two ships' reaction modifiers. On a successful roll, the smaller ship lands.

The smaller ship will need the ability to make a ground landing or this landing counts as a *Crash Landing* and immediately notifies the ship being landed on.

Once the two ships are together, they behave as if willingly grappled.

Grappling

Before ships can be boarded, the two ships must be grappled and pulled together. So long as two ships are in the same hex, a grapple may be attempted by spending the crew's action. Each ship involved rolls a grapple check and adds their reaction modifier. On a success, both ships are bound together and crew can freely go from one ship to another. The grappling crew may make one attack as part of this action.

If the combined total tonnage of the ships exceed either helm's tonnage allowance, neither ship can move until the grapple is broken. If any helm is active, the stronger of the two helms (the one with the higher speed) may move all ships combined as one unit with the speed of the difference in helms. So, if one helm is active, both ships will move together as the active ships decides. If two helms are active with a speed of 5 and 3, the ship with a speed of 5 can move the ships at a speed of 2. The combined mass of ships moves as if a *class F* ship. Speeds are determined at the start of the round and remain even if the grapple ends before the round is over. So, if the 5 and 3 speed ships were grappled but detangle, the first can move at a speed of 2 that turn and the other cannot move at all until the next turn.

Either ship may spend their crew's action (or one player's action is no crew is present) to decouple the ships. The grapple check is rerolled using the ships' reaction modifiers. If the crew looking to release the grapple has the higher value, the grapple ends.

Two ships may want to willingly grapple and travel together under one helm. For example, a larger ship might tie up a Wreckboat for use as a dingy later. In these cases, the crew has more time to properly lash the two ships together. The active helm travels as if controlling a ship of the combined vessels' weights and has a maneuverability of the worst ship. Each ship retains their own health pools and AC and can be targeted individually unless one ship is stowed inside the other.

Boarding

Once two ships are grappled, either side can make melee crew attacks against the opposing ship with their crew action. A ship with crew engaging in boarding cannot use its weapons on the same turn.

Please refer to Matt Colville's *Strongholds & Followers* (Appendix: Warfare, pg. 233) for rules on crew combat.

As a quick reference, a crew attack proceeds as follows:

Attack: The attacking crew makes a d20 roll plus their Attack modifier versus the defender's Defense value. On a success, combat moves on to a Power check.

Power: The attacking crew makes a d20 roll plus their Power modifier versus the defender's Toughness value. On a success, the defender's health die is reduced by 1. Any time this check lowers the defenders health below half, the defender is Diminished.

Diminished: Crews/Units with half or less of their maximum health are considered Diminished. Any time a Diminished unit takes damage, they must make a DC 15 Morale check (d20 plus their Morale modifier). On a failure, the unit's health die is reduced by 1.

Ranged crew cannot be attacked until all melee-based crew has been removed from the field.

Crew units aboard a ship will recover as normal over time. If a crew is reduced to 0 and their ship is destroyed, that crew has been permanently defeated unless a new ship is found (or they are captured) immediately after battle.

Rather than boarding, the entire crew on a ship can spend their attacks to attempt de-grappling.

Ranged Crew

Ranged crew does not require ships to be grappled to attack. They may make an attack at a range of 1 hex (100 feet).

Criticals

When an attack against a ship lands a critical hit, it suffers the normal damage of the attack plus another effect. Any time a ship drops to half health, it immediately suffers a critical hit. It is possible for a ship to suffer a critical, drop to half health, and then immediately suffer a second critical.

When a critical hit is scored, roll a d12. The target ship suffers that effect.

Index	Effect
1	Double Damage
2	Crew Casualty
3	Weapon Damaged
4	Fire
5	Ship Shaken
6	Sheared
7	Loss of Speed
8	Hull Holed
9	Double Damage
10	Crew Casualty
11	Weapon Damaged
12	Spelljammer Shock

Doubled Damage

Whatever just hit the ship tore through a vital piece of it. The damage that caused this critical to occur is doubled.

Crew Casualty

The damage inflicted on the ship created a spray of shrapnel across a large section of crew. A random crew aboard the ship lowers their hit die by 1.

Weapon Damaged

This hit took a weapon down with it. One random ship weapon is damaged and unusable until Repaired.

Fire

This damage hit something flammable. A 3d10 *Fire* breaks out on the ship.

Ship Shaken

The force of this damage shakes the ship to its frame. All unique PCs and NPCs are knocked prone unless already sitting and must make a DC 15 Dexterity saving throw or be stunned on their next turn as well. Crew suffer disadvantage on Attack and Power checks on their next turn.

Sheared

The damage that caused this critical knocked out rigging or an important part of the ship's steering. The ship suffers one successful *Shear*.

Loss of Speed

The damage inflicted unbalanced the ship and the helm operator must adjust. For the next minute, the ship loses 1 speed point.

Hull Holed

The attack blew open a hole in the ship. A large enough hole to board and fire through is created in a logical position to the attack or a random section of the ship.

Spelljammer Shock

This damage caused an arcane feedback pulse to shot through the current helm users. The user is thrown out of the helm by force and must make a DC 15 saving through using their spellcasting ability. On a failed save, they are rendered unconscious for 1d4 days. On a successful save, they are rendered unconscious for 1d4 rounds.

For ships using a foundry, forge, or helm that does not require a living being to power it, it is rendered unusable for 1d4 days.

In either case, the ship is unpowered until a replacement user operates it. If another user can enter the helm within 10 minutes, the helm does not need to be *Warmed Up*.

Hazards

Certain other hazards exist for ships outside of weapon projectiles that captains and crew should be ready for.

Fire

Any time a fire lights on a ship, the ship immediately takes 1d10 fire damage as a fire starts. On the start of the ship's turn, the fire spreads and deals a cumulative 1d10 additional damage. For example, a fire left alone for two turns after starting would be of size 3d10 and have inflicted a total of 6d10 damage. Fires of this kind bypass *Damage Thresholds*.

The fire starts on a random deck and takes up a 5 foot radius for each d10 it has. Position is determined by the DM in the location that makes most logical sense or at random.

Any fire started on a ship by hand or through a magical effect that ignites objects, begins as a 1d10 unless otherwise specified. Some effects, like the Greek Fire Projector or *Fire Critical Hit*, start a fire greater than 1d10.

As an action, the crew or a player can reduce the fire by 1d10. A fire is extinguished when it is reduced to 0.

Fire always ignores damage thresholds. For every 3 rounds a fire burns, the air envelope's time is reduced by one week.

Ships on fire behave as expected in the Phlogiston. Upon entering, the fire explodes and deals 3 times the current d10 value to the ship any creature within 3 times the current fire radius. Only a captain with a death wish would sail into the Phlogiston on fire.

Debris

Wildspace is full of jettisons, asteroids, and general fields of small objects. These are summed up as debris and can be dangerous to a crew when traveling through. Captains are advised to slow down and proceed with caution when traveling through hexes filled with debris. One hex at a time is the recommended travelling speed.

The number of spaces moved before entering a debris field determines how much damage can occur. If the debris was adjacent to the starting hex, no damage is suffered. Otherwise, they harm the crew as follows:

Hexes Moved	Hits as if
1	Light Jettison
2	Medium Jettison
3	Heavy Jettison

For example, a ship is beginning its turn in front of 4 hexes of debris. The ship begins its move and heads into the first debris field, taking no damage. The captain continues to move into the second hex, where his ship is bombarded as if attacked by a light jettison. He continues into the third hex and pelts the crew with debris as if being attacked by a medium jettison. Realizing his error, the captain stops before continuing into the last hex. On the next turn, the captain heads into the fourth hex without damage and continues on his way.

Repair

Ships will need to be repaired at some point. Battle is a common occurrence and you are bound to take a few shots. Unfortunately, ships do not heal over time as living beings do and must be actively repaired.

Repairs can be made while sailing or at a shipwright.

Repairs while sailing can happen so long as someone on board has the proper proficiencies. Carpenter's tool proficiency is required for ships made of wood or wood-like materials, blacksmith's tool proficiency is required for ships of metals, and stonemason's tools are required for ships of stone or crystal. With raw tonnage of materials available, repairs can be much more effective by consuming these resources.

If the crew on a ship cannot repair, shipwrights of all varieties can be hired at most ports.

Repairing a Hull

Each repair workday requires 50gp worth of repair material. These materials are typically bought in tons worth 250gp, where one ton can make 5 repairs. Any repair on a ship with less than half health requires twice the material to make of for the large damage.

For each workday spend repairing a hull, roll a d10 and the Proficiency bonus of the person with tool proficiency working on the ship. The ship is repaired for that many hit points.

One ton of raw ship material can be used to improve the hit points restored to a ship for five workdays. The next five repairs on the ship's hull use a d20 instead of a d10.

For ships without a crew member trained in repairs, this service can usually be bought at ports for a slight service fee per day; on top of the material costs.

Repairing a Weapon

Weapons disabled by a *Weapon Damaged Critical* can be repaired back to working order with one day's worth of work and $1/4^{th}$ the weapon's cost in materials.

Repairing a Shearing

One day of work can be spent repairing the intricate rigging and steering of a ship to remove one point of *Shearing* from a ship. This takes 50gp worth of rope and scrap per fix.

Player Actions

Not every character on a ship is useful in all situations. Likewise, running the ship is usually best left to the trained sailors when the pressure builds up. An enemy ship 600 feet away leaves most barbarians sitting there fuming. A boarded ship might urge your party ranger to help de-grapple the hulls and put some distance in between. In certain situations, player characters might want to consider one of the following for their action. Be wary, as foes might employ the same tactics.

Spelljamming Boost

A character operating or adjacent to a *Minor* or *Major* helm can spend their highest-level spellslot to boost the speed of the ship by one for one round.

A character operating a *Lifejammer* can suffer 1d8 damage to do the same effect.

Other helms using a form of consumable energy can boost speed by 1 for a round by expending the equivalent resource.

Helms like the *Space Engine* and *Series Helms* cannot be boosted.

De-Grapple

A character may spend their action calling on the crew to cut grapple lines. This immediately prompts a *De-Grappling* check at disadvantage for the player's ship.

If the ship does not have a crew, the check is rolled normally.

Grapple

A character may spend their action calling on the crew throw grapple lines. This immediately prompts a *Grappling* check at disadvantage for the player's ship.

If the ship does not have a crew, the check is rolled normally.

Rally

The character spends their action rallying one crew unit nearby. Their next Attack or Morale roll is made at advantage until the start of the character's turn. Furthermore, the unit can be commanded to change decks or locations; such as having them take cover in the hold.

Brace

The character braces for an incoming attack on the ship. They gain three-quarter's cover against antipersonnel attacks and immunity to the *Ship Shaken* effects until the start of their next turn.

Armament Help

The character helps load, aim, and fire a ship's weapon. The next attack made with this weapon is made at advantage.

Douse a Fire

The character spends their action pouring water or otherwise smothering fires. A ship *Fire* is reduced by 1d10.

Breaking up

When a ship's health reaches 0, the internal structure fails and the hull breaks apart. Roll a d6 for every 10 tons of ship. This represents how many pieces that 10 tons of ship breaks in to that retain air. The hex the ship occupies upon destruction becomes *Debris*.

Each weapon and turret has a 30% chance of surviving and is considered *Disabled* if they do. Cargo has a 50% chance of surviving per ton.   Helms, being mostly magical, have an 80% chance

of survival on break-up as the mechanical components may become damaged. This value does vary for mundane and organic helms.

Any living crew will be spread across the pieces; reduced to 1 health. Crew with 0 health when their ship breaks apart are lost for good.

Since most of a ship remains intact, a desperate crews can spend 2 hours per piece lashing a make-shift ship back together. This emergency ship has a maneuverability of *class F* and health equal to the tonnage of the pieces lashed together.

Be careful setting this rigged craft back together. The victors of the battle may have full intention of scavenging the remains of your ship; whether this be for loot, resources, or your head.

Ship Versus Creature Combat

There are times when a ship may need to engage the natural behemoths that roam wildspace. In battle against creatures of Huge or larger, combat is typically resolved as ship-to-ship combat. The creature uses its Dexterity modifier in place of a Reaction modifier and it cannot be boarded against its will.

Battle against creatures of Large and smaller should be resolved using the ship's deck and the battlefield. This uses normal combat.

As a reminder, ship weapons cannot attack anything smaller than Huge unless it is an anti-personnel weapon.

Salvaging

Ship material can be rare resource, especially in out in wildspace. A derelict or destroyed ship can be just as valuable as the cargo it holds. With enough time and effort, a crew can dismantle almost any ship back into raw materials for use in repairs, additions, or new ships.

Destroyed Ships

A ship that has been destroyed is rather easy to salvage. Unfortunately, the act of breaking up renders a noticeable amount of tonnage splintered, shattered, or otherwise unusable.

A crew can recover 1/3 the original tonnage of a destroyed ship, rounded down. A team working towards dismantling this type of ship can usually recover 1 ton of raw material in 2 hours.

Complete Ships

A complete and usable ship offers more raw material than one that has been destroyed. At the end of the day the ship is still stable and allows more precise dismantling to recover usable goods.

A crew can recover 1/2 the original tonnage of a complete ship, rounded down. A team working towards dismantling this type of ship can usually recover 1 ton of raw material in 2 hours.

The amount recovered here assumes a completely repaired ship. The tonnage of usable goods may be adjusted to account for heavy damage sustained before dismantling. Let's say a group of adventurers rammed a large hole in it and brought it down to 30% health before capturing it, for instance. A few tons of materials might be knocked off what can be recovered at the DM's discretion. Being said, a ship that is still standing should always award more scrap tonnage than if the ship was destroyed.

Moving Cargo, Weapons, and Helms

Cargo, weapons, helms, and other such features of a ship can be recovered with ease using zero gravity and standard ship equipment. Regardless of whether the goods are on a complete or destroyed ship, these objects can be moved by a group of 5 in about 30 minutes; 15 minutes to remove it from the old ship, and 15 minutes to store it on the new ship. The travel time in-between depends on where the ships are relative to one another.

Helms stored as an emergency back-up takes up 1 ton of cargo.

Custom Ships

Ships can be just as unique as the individuals who run them. Professional shipwrights in most ports make a living modifying ships to a captain's needs. Warships can be converted to merchant vessels in times of peace, or the reverse in times of war. Captain's with enough coin and materials can even design and build a brand new ship.

Customizing an Existing Ship

With time and money, a captain can have some of the following modifications made on their ship. Services may vary between different workshops but can usually be found with reasonable effort.

May take up a certain amount of the ship's total cargo tonnage. Any space not used for a modification is considered the amount of cargo space available on a ship. For example, a 5-ton ship can have a medium ballista added while still having 3 tons of cargo space. If no cargo space is available for a modification, the ship cannot be modified until space is cleared.

Additionally, any actions that would cause a ship to have a Maneuverability Class lower than G cannot be performed.

Weapons

The most common modification to a ship is the placement of new weapons. Weapons take up a number of cargo space depending on their *size*. Ships can handle up to one half of their total tonnage in weapons. Cost varies.

Additional weapons can be bought and stored in case of *damage*. They take up the same cargo space when stored but do not count towards the weaponry limit.

Turrets

Turrets allow the weapon attached on top to fire in any direction, presuming parts of the ship are not in the way. A normal turret can support a light or medium weapon,

takes 1 ton of cargo space to install, and costs around 500gp. A large turret can support a heavy weapon or lower, takes 2 tons of cargo to install and costs up to 1000gp. The tonnage taken up by a turret is included in the 50% weaponry limit.

Additional Turrets can be bought and stored in case of *damage*. They take up the same cargo space when stored but do not count towards the weaponry limit.

Rams

Adding a ram to the front and/or rear of the ship requires reinforcing the hull throughout the ship, not just the front. This process takes 10% of the ship's total tonnage, minimum of 1, from the available cargo space. Cost depends on the ram installed but is charged per ton of ship, plus the service fee is applicable, and 1 day per 5 tons of ship. A 10-ton ship adding a Piercing Ram would cost about 1500gp and take about 2 workdays, for example.

The ram's tonnage is not included towards the ship's weaponry limits. A ram can easily be removed in half the time of installation. Most shipwrights will perform this service for free under the agreement that they keep the ram and materials.

Hull Thickening

The largest flagships of any armada are known for their thick, sturdy hulls. Thickening any ship's hull requires adding extra layers of materials to the outer walls and doubling-up the main beams.

Thickening the hull increases the ship's base AC by 1. This change costs 1 ton of material per 10 tons of ship. This material must be the same or better than the material of the ship. Additionally, this reduces the ship's cargo space by 20% of the ship's total tonnage, minimum of 2, and takes 1 day per 2 tons of ship. Shipwrights will charge around 100gp per ton for this service.

A hull can only be thickened once. The modification is reversed as if performing a *Hull Thinning*.

Plating

For a juggernaut of a ship, captains can look to plate the outsides of their vessels with a material harder than the hulls. Some captains have taken to arming their ships with dragon-like scales or spiked metal plates.

Adding plating increases the ship's AC by 1 but reduces the ship's Maneuverability Class by 1. This process costs 1 ton of plating material and 1 workday per 3 tons of ship. Shipwrights will likely charge around 100gp per ton for this service, unless they are willing to keep the materials as payment.

Only one set of plating can be on a ship at a time. The plates can be removed by anyone with the right tools in half the time and return half of the plating material used.

Material Replacement

One-of-a-kind ships exist where the owner has taken the time and effort to replace the entire hull with different materials. In some cases, this is done as a practical change to replace the hull with a stronger material. In impractical cases, hulls have been replaced with pure bones for shock and awe or precious gems as status symbols.

Changing of this magnitude require one ton of new materials for each ton a ship has. A ship can be converted to a new material at a rate of 1 ton per workday. Half of the original ship material is returned as scrap. Shipwrights will likely charge 200gp or more per ton for this service.

Topping Out

Topped out ships are easy to spot. Traditionally, full sails and rigging adorn their exposed decks but Spelljammers may have extra wings, tentacles, or any number of modifications. In combat, topped out ships are always in the right positions to be most effective.

Topping out increases a ship's Maneuverability Class by 1. The extra rigging requires twice the minimum _Crew_ to operate than normal; 2 crew is required to function at all, 1/2 the total crew is required to function normally.

This modification requires 100gp of materials per ton and can be completed at a rate of 2 tons per workday. This rigging can be removed in half the time by virtually anyone.

Stripping

Light ships tend to be more maneuverable than large ones; at least as far as these captains are concerned. Ships that are stripped remove some of the bulky hull parts to reduce weight and improve maneuverability.

A stripped ship has their Maneuverability Class increased by 1 and their AC reduced by 2. This process costs 100gp per ton and 1 workday per 10 ship tons.

A ship can only be stripped once. The process can be revered in the same amount of time and cost by a trained shipwright.

Battle Steering

Ship owners looking for more maneuverability on their ship can install additional steering mechanisms for increased evasion. Whether this involves adding smaller sails or wings to the hull or upgrading the main steering system, this is an upgrade to consider if your ship is often in tight spaces.

This process takes 20% of the ship's total tonnage, minimum of 2, from the available cargo space and increases the ship's Maneuverability Class by 1. Additionally, it costs 100gp per ton of ship and 1 workday per 5 tons.

This addition can be made once on any given ship. This feature can be removed as if performing a _Mercantile Conversion_.

Hull Thinning

Retired warships can be found throughout wildspace serving as merchant freighters. To increase capacity and profit, one of the first changes to these vessels is a reduction in the standard hull thickness. Ships with a thin hull can carry more goods but should be escorted if traveling through danger.

Thinning the hull increases the ship's cargo space by 20% of the ship's total tonnage, minimum of 1. However, the ship's base AC is reduced by 2. This process will likely be performed for free by shipwrights if they can resell the material scrapped or about 200gp per ton. This process can be completed at a rate of 2 tons per workday.

A hull can only be thinned once and reversed as if undergoing a *Hull Thickening*.

Mercantile Conversion

For captains more interested in shipping goods, they may opt to remove some of the bulky steering equipment to make room for more storage in their hold. Squeezing a little extra coin out of their shipments is worth the risk to their crews.

This process reduces the ship's Maneuverability Class by 1 and adds 20% of the ship's total tonnage, minimum of 1, to the available cargo space. Shipwrights will usually perform this modification for 100gp per ton of ship and 1 day of work per 5 tons of ship.

This modification can be made once on any given ship. This change can be reversed as if performing a *Battle Steering* modification.

Netting

A thick web or netting is stretched to cover exposed decks and protect the crew. While the web exists, the crew and characters have half cover from ranged physical attacks (antipersonnel and ranged weapons, including magical ones, but not spells and spell-like effects).

Netting is destroyed after one heavy or two medium catapult hits. Jettison, ballista, and light catapult attacks pass through the netting without harm to the netting.

When attempting to board, the melee crew attempting to board must spend one attack action cutting through the netting. The crew under the netting can attack outward without detriment.

Netting can be bought for 3gp per ton of ship. Additional netting can be bought and stored in 1 ton of cargo space. It can be used to replace damaged netting in 1 hour.

Specialty Rooms

Some captains prefer to make their ships feel more like home or as a workshop for their trades. Each room is added at the cost of 5 tonnage worth of cargo space. Install time and cost vary. Multiple rooms can be built on one ship.

Workshop: Whether the workshop is a fully functioning forge, a room full of tools and lumber for a carpenter, or bolts of cloth and threads for a tailor, this room provides anything an artisan would need. A workshop allows someone with the appropriate

artisan tool proficiency to work on projects while traveling. Each workshop provides this benefit to one artisan tool proficiency. A person who wanted to blacksmith and leatherwork while traveling would need to have two workshop rooms installed.

Altar: An altar room comes in any form worship requires. This can be filled with pews and a gilded holy symbol or smeared with blood around a sacrificial slab. So long as the installment aligns with their faith, a cleric or paladin who long rests on this vessel will have their spell slots restored as if their god is present. Be warned that bringing a rival's altar into a sphere may have undesirable attention from the local gods.

Brig: Captains who have to deal with the transportation of creatures might look to invest in a dedicated brig. This room allows for the containment of 5 medium creatures with reasonable assurance. The details of this room, and how secure it is, is decided at construction.

Life Boats

In exchange for cargo space, emergency craft can be stored on a ship. These hard-shelled vessels are designed to fall towards the largest nearby gravity well. This is intended to land occupants on nearby planets but watch when using lifeboats near suns or large enemy ships. The shells around the vessels prevents most damage from outside sources but cannot handle the stress of spelljamming. After making a landing, these ships are unable to take off again but could be recovered. Lifeboats can be launched using 1 action.

Size	# Medium Creatures	Cargo Space	Cost
Large	20	10	10,000gp
Medium	5	2	5,000gp
Small	2	1	1,000gp

Collapsible versions are available for all varieties. These versions take up 1 ton of cargo each and cost triple the listed price. These lifeboats require 30 seconds (5 actions) to set up before launch.

Passage Device

The passage device is a creation of the Arcane, who use it to create portals through crystal spheres. It functions the same way as casting the *Create Portal* spell but does not require a mage.

Such devices require 1 ton of cargo space per 10 tons of ship and cost 10,000gp per ton of ship.

Portal Locator

Another device of Arcane design, the Portal Locator functions as is using the spell *Locate Portal*. This device is relatively reliable (90% accuracy) and is often "thrown in" by the Arcane on new purchases.

These devices take up 1 ton of cargo space and costs around 5,000gp.

Planetary Locator

This arcane device is usually used as an incentive for buyers to purchase hulls from the Arcane. The device magically tracks and displays the celestial bodies within a crystal sphere as soon as it is powered or enters the sphere. The display covers the floor of a desired deck and also shows the ship's current position.

The locator does not track bodies of size B or smaller. These smaller objects can be added manually and will be displayed thereafter.

Finally, the locator does not track bodies that move erratically. Should one be operated in a system that behaves abnormally, the device simply will not display. Likewise, it does not function outside of a crystal sphere.

This mechanism needs 1 ton of cargo space for installation and costs around 2000gp.

Figureheads

Figureheads are primarily used as decorations on the front spar of a ship. Many various shapes and designs exist out in wildspace but all can generally be crafted with one ton of material and a day's work. These take up no cargo space and serve the purpose of identifying custom ships or striking fear into your enemies.

Should a captain desire, there exist shipwrights capable of making magical figureheads that improve the ship as a whole. Given their magical nature, these figureheads can be affixed to a ship in one hour.

Building a Ship

The ships found in wildspace may not be to your liking though. In that case, an enterprising captain may pay for a brand new and unique ship to be built. This offers a number of advantages over grabbing any given ship but comes with a large up-front cost, a decent weight, and the potential for design flaws. If the design is successful, others may commission their own versions.

Designing Custom Ships

Building a new ship starts with contracting an engineer or artificer trained in the skill. A design company is usually present at every port. However, costs vary wildly based on skill, expertise, and how much material is needed to build a prototype.

Designing: Once a contract has been made, the design process starts and the engineers will want to know the specifics. Provide a rough idea of the shape, looks, and size to the engineers.

Know that all engineering styles are not created equally. Each company provides bonuses to ships they build depending on their specialization. You may choose to forego a specialist but here a few specialties to consider looking for. Others exist to be found and different specialties are worth more than others.

Training	Bonus
Human	+1 to AC, +1 to Maneuverability Class, or a unique trait like that on the Triop or Vipership.
Dwarf	+2 to AC for stone or gem hulls.
Elf	+1 to AC for organic hulls; Class A Maneuverability if under 5 tons.
Gnome	+1, 0, or -1 on Maneuverability Class and AC (roll each); Discount on mechanical helms.
Aracokra	+1 Speed; +1 AC when using wooden hulls.
Giff	75% of the hull's tonnage can be used for weapons if ½ of this space is used for cannons.
Illithid	+2 to AC when using Thick Wood; Free *Topping Out*.
Lizardfolk	+1 to AC.
Scro	+1 to AC or Maneuverability Class. Discounts on Rams.
Neogi	+1 to Maneuverability Class; free Grapple Ram; discounted Lifejammers.
Arcane	Virtually any change if you can afford the cost

Tonnage and Material: Decide the exact tonnage and materials to be used on the ship. Tonnage determines the amount of time and materials needed. Materials determine the base AC and cost. The hull cost of the ship will be equal to the material cost times the tons of the ship. This is assuming the buyer cannot supply the appropriate materials.

Precious metals and gems are available at extreme costs and act as Metal and Crystal respectively.

Material	AC	Maneuver Class	Cost (gp per ton)
Cloth	11	C	200
Leather	12	E	1,000
Crystal	13	D	3,000
Ceramic	13	D	2,000
Thin Wood	14	C	500
Thick Wood	15	D	1,000
Bone	15	D	1,000
Stone	17	F	2,000
Metal	19	E	3,000

Maneuverability and Rigging: All custom ships begin with a *Maneuverability Class* determined by their material. A non-spelljamming ship converted into one has a class of F. Additional modifiers are as follows:

- The ship is 60 tons or more: Maneuverability Class -1
- The ship is 5 tons or less: Maneuverability Class +1
- Standard rigging is added for 100gp per ton: Maneuverability Class + 1
- The Ship's tonnage is 60 or less

Finalizing Design: A design takes one week to put together per 50 tons of ship. During this time, a smaller prototype is made and tested to find any design flaws. A design flaw could reveal a decrease in the ship's Reaction Modifier or Turn Allowance. On the other hand, one of these aspects might turn out better than expected. Either way, the finished schematic is returned to the purchaser to build at their discretion. If this design is not to liking, a new design will need to be made.

With a schematic in hand, the ship can be built by virtually any shipwright.

Ship Building

Shipwrights can build virtually any ship from a schematic and many common ships from memory. Once you select a hull design, the remainder is up to flavor.

The Hull: The hull needs to be made out of the material described in the schematic. This costs the material's cost times the tonnage of the ship. However, the builder's likely will not be upset if the materials are supplied by the purchaser.

The Helm: Spelljammers need a power source. Most basic helms are available through the builders and/or the designing firm; some at reduced prices. Otherwise, the purchasers will need to supply their own or procure them from the Arcane. Aside from raised eyebrows, most shipwrights will have no issue installing any helm.

Ram Selection: Adding a ram during construction is much easier than adding one after the fact. Now is the best time add a ramming device if you want one. Adding a ram at this stage requires only the cost of the ram times the ship's tonnage. This represents the materials for the ram and internal bracing. More complex rams, like a grapple ram, may require the apparatus to be supplied. Rams take 1 ton of weapon space.

Weapon Selection: Any weapons intended to be added to the ship can be purchased and installed as part of the building; usually at no charge. Most builders will throw in a one for free so their work is not immediately destroyed on its maiden voyage. Installing a ram on the front and/or rear of the ship is also cheaper during this process.

When the specifics are decided, construction can begin. Building a ship takes 1 day per ton the ship has. This can be sped up for increased cost or by the Arcane. Cost is tallied and paid as agreed by the shipwright.

Races

Many elves, dwarves, gnomes, halflings, and humans fly the spaceplanes. Indeed, it is possible to find most races in Wildspace given enough time. Being said, there are even more races that have long since abandoned their home worlds and can only be found in Wildspace.

Dracon

Dracons are dragon-centaurs that have begun appearing on the fringes of the Known Spheres. They have heavy, grey four-legged bodies with broad, fat elephant-like feet and long tails. Their torsos and forearms are humanoid with six-fingered hands topped with claws. Their heads are reptilian with the horns and flanges of dragons.

Dracons are herd creatures who spend their lives performing rituals designed to allow them to interact with the herd with no dissention. The Dracon herd is often seen as weak, given their preference to flee or discuss rather than fight. However, battles have been turned with the surprising effectiveness and dedication of a herd once it has made up its mind. A lone Dracon is a freak. If cut off from the herd, it will grow ill and die at a rapid rate. Lone Dracons will immediately seek a new herd or immediately try to start a new one; even with a group of non-Dracons.

Ability Score Increase: Your Charisma score increases by 2 and your Constitution score increases by 1.

Size: Medium.

Age: Dracons age about the same as humans.

Alignment: Dracons are perceived as neutral; Actions tend to do the most good for the herd.

Speed: Your base walking speed is 40.

Charge: You can make a charge attack by moving at least 10 feet towards a target and then hitting it with a melee attack in the same turn. If you hit with this charge attack, roll your weapon's damage dice twice and add the results together to determine how much damage you have inflicted. Once you have made a charge attack, you must complete a short rest or a long rest before you can make one again.

Equine Build: You count as one size category larger to determine your capacity to carry, push and drag. However, when climbing, each foot of movement costs you +4 extra movement instead of the normal +1 foot. You can allow a creature of Medium or smaller size to ride on your back, but you still act independently when you have a rider.

Herd Mentality: During a long rest, you visit each of your companions to build comradery. Choose up to 6 friendly creatures you are spending the rest with within 30 feet or the same inn, campsite, etc. Each of these creatures gains temporary hit points equal to your level + your Charisma modifier.

Diplomatic: You gain proficiency in the Persuasion skill.

Languages: You can speak, read, and write Common and Draconic.

Giff

Giff are powerfully muscled, 9'-tall mercenaries. They have stocky, flat, cylindrical legs, barrel-shaped torsos, broad chests, humanoid arms and hands, and heads like a hippopotamus. Giff skin is black, grey, or gold with brightly-colored tattoos.

The Giff live structured and organized lives centered on their obligations to the race-wide chain of command. They take pride in their strength and skill in weapons and view all life as a pursuit of glory and rank. Their pride in strength gives them unease around truly strong creatures like Giants but will flex their prowess in front of races they can consider weak.

Sparring and shows of dominance are expected between two Giff but always without weapons. If a Giff draws blade on another, it is a challenge to the death.

Giff are unable to use magic and spelljamming helms. They are inherently skeptical for that reason. Having lost their home world long ago, Giff are at the mercy of their employers; going where their employers say and fighting on their behalf.

Ability Score Increase: Your Strength or Dexterity increases by 2; the other increases by 1, and your Constitution score increases by 1.

Size: Medium.

Age: Giff age about the same as humans.

Alignment: Giff are lawful; following the instructions of their employers and superiors.

Speed: Your base walking speed is 30.

Magically Inept: You cannot cast spells, including those provided by magical items, or use any magical spelljamming helms. Any spell that would affect you, either hostile or friendly, has a 10% chance of being ignored. You may use magic items but anything that requires attunement has a 10% chance of failing the attunement process. Attunement may be attempted again after a failure.

Natural Armor: You have thick, leathery skin. When you aren't wearing armor, your AC is 12 + your Constitution modifier. You can use your natural armor to determine your AC if the armor you wear would leave you with a lower AC. A shield's benefits apply as normal while you use your natural armor.

Born Fighter: You have proficiency in all weapons.

Headbutt: Your skull is thick and powerful to keep with traditional Giff greetings. Your headbutt counts as a melee weapon with which you are proficient. When they hit, the target takes 2d6 plus your Strength modifier in bludgeoning damage.

Languages: You can speak, read, and write Common, and two other languages of your choice.

Grommam

Grommams are gorilla-like creatures with strong shoulders, long arms (~9' span), short legs, and padded grasping feet. Grommams have brown skin with short copper-red fur covering everything but their faces, hands and feet.

Grommams are close-knit, highly religious, and organized. They are usually peaceful; lead by "director" matriarchs serving demigods. These matriarchs oversee the Grommam community as

the populace goes about their daily lives. The remainder make up the backbone of Grommam armies with more than a few leaving to be sailors and adventurers.

Grommam ships are usually repurposed old or traded ships decorated with bright colors. Being so adept at climbing, they make heavy use of ropes and swing bars in their rigging.

Size: Medium.

Age: Grommam age twice as fast as humans and therefore live to about 40 years old.

Alignment: Grommam tend towards lawful good.

Speed: Your base walking speed is 30.

Natural Climbers: You have a climbing speed equal to your walking speed.

Large Arms: You have advantage on attempts to grapple a target.

Languages: You can speak, read, and write Ape Speech and either Common or Elvish.

Select one of the following disciplines when creating a Grommam:

Disciple

> **Ability Score Increase:** Your Wisdom score increases by 2 and your Intelligence score increases by 1.

> **Celestial Service:** You gain the ability to cast both Ceremony and Augury as rituals.

Steward

> **Ability Score Increase:** Your Dexterity score increases by 2 and your Strength score increases by 1.

> **Ambidextrous Strength:** Your mix of strength and dexterity allow you to wield heavier weapons with ease. You can use two-weapon fighting even when the one-handed melee weapons you are wielding aren't light.

Hadowzee

Hadowzee, or "Deck Apes," are tall, slender, tailless apelike humanoids. They are covered with brown hair, including a shaggy mane around their face. The Hadowzee mouth is a protruding muzzle with several long fangs. Additionally, they have a long flap of skin that runs from their arms to their legs. When drawn tight by stretching their extremities, Hadowzee can achieve a limited gliding ability.

Hadowzee are rude, reserving their coarse commentary only in the presence of elves and their employers. When outside their controlling influences, they usually utter a continuous stream of profanities and insults with a tongue so sharp even the most seasoned spelljammers take notice.

Hadowzee are tolerated due to their extremely diligent work and are respected for their willingness to get the job done. For this reason, elves prefer to hire them and Hadowzee prefer to work for them. Regardless of the captain, Hadowzee will sign on to a crew in groups and stay so long as they are treated equivalent to the work they do.

The Hadowzee homeworld is temperate and warm. With their fur, they prefer to wear light to no clothing unless traveling to a cold area. The less restriction on their gliding and climbing capabilities, the better in their minds.

Ability Score Increase: Your Dexterity score increases by 2 and your Wisdom score increases by 1.

Size: Medium.

Age: Hadowzee age twice as fast as humans and therefore live to about 40 years old.

Alignment: Hadowzee tend towards neutrality. With the right captain and enough pay, there is little they won't do.

Speed: Your base walking speed is 30.

Natural Climbers: You have a climbing speed equal to your walking speed.

Glide: While not wearing armor or in light armor, you may move laterally 1 foot for every foot you fall towards a gravity plane. You may control your orientation. To use this feature, you must not be in a vacuum.

Ambidextrous Nimbleness: Whether imposing a weapon last minute or using the flash of your weapons to move out of the way, you are nimble and hard to hit while holding two weapons. You gain a +1 bonus to AC while you are wielding a separate melee weapon in each hand.

Sailor: You are more efficient at running a ship than any other being. You have proficiency with water vehicles, including spelljammer ships. You gain an additional 10 feet of walking and climbing speed aboard a familiar ship.

Languages: You can speak, read, and write Ape Speech and one language of your choice.

Hurwaeti

Hurwaeti, or "Wiggles," are an ancient reptilian race. They are basically reptilian with small, thick, olive-green scales, long froglike legs, and webbed fingers and toes. Their gnomelike faces have large ears, pointed noses, and sharp bearded chins.

Hurwaeti are greedy but non-aggressive. Nobody gets anything from a Hurwaeti for free and they do not expect anything for free. They prefer to fly on other races' ships as spellcasting Hurwaeti and series helms are hard to find. Even then, most of their ships are traded or derelict ships fitted for their use. Hurwaeti are often hired for long spelljamming voyages as multiple Hurwaeti can refresh the air of a ship by secreting a mist of purified air and water.

Hurwaeti will never surrender to Neogi, Illithids, or Beholders. They will do anything to avoid capture by these groups and will doggedly fight to the death if no other options are present.

Ability Score Increase: Your Wisdom score increases by 2 and your Dexterity score increases by 1.

Size: Medium.

Age: Hurwaeti mature in less than one year and can live for 300 years.

Alignment: Most hurwaeti tend towards self-interest, and rarely develop the extremes of alignment.

Speed: Your base walking speed is 30.

Natural Swimmers: You have a swimming speed equal to your walking speed.

Standing Leap: Your long jump is up to 25 feet and your high jump is up to 15 feet, with or without a running start.

Fog Cloud: You can cast fog cloud as a 1st-level spell once with this trait and regain the ability to do so when you finish a long rest. When you reach 5th level, you can instead cast it as a 2nd-level spell. This ability may be used to purify 10 ship tons worth of deadly or fouled air. The total air must be able to change from deadly to fouled or fouled to clean otherwise this has no effect beyond the normal spell effects. Multiple Hurwaeti may do this simultaneously to increase the number of tons effected.

Natural Armor: You have small flexible scales. When you aren't wearing armor, your AC is 11 + your Dexterity modifier. You can use your natural armor to determine your AC if the armor you wear would leave you with a lower AC. A shield's benefits apply as normal while you use your natural armor.

Languages: You can speak, read, and write Common and Deep Speech.

Rastipede

Rastipedes are insectoid centaurs with eight walking limbs, a humanoid torso and two upper "arms," all covered in a chitinous exoskeleton. Their heads have two compound eyes, insect mandibles, and a pair of long, whiplike antennae.

Rastipedes are the penultimate traders of the Known Spheres. Only the Arcane are more willing to make trade. Unfortunately, the Rastipedes do not care so much about niceties and uniform prices. Anyone who makes trade with Rastipedes are advised to count their coin, crew, and limbs.

Rastipedes are not truly dishonest though. They rarely renege on a bargain once struck and always deliver on time. The issue is that Rastipedes always deliver to the letter of the bargain, not the intent. They are fond of making deals knowing that the other party is assuming something is not true. They will trade in anything of value unless those things disobey smuggling and slave-trafficking laws.

Most Rastipedes are under the employ of the Arcane and usually are the point of contact in deals with them. They are inherently peaceful since fighting is bad for business but can and will fight as necessary.

Ability Score Increase: Your Constitution score increases by 2 and your Charisma score increases by 1.

Size: Medium.

Age: Rastipedes age slowly. They maintain a larval stage for a decade before metamorphosing and reaching maturity at age 20. They can live for hundreds of years after.

Alignment: Rastipedes tend towards impartiality.

Speed: Your base walking speed is 40.

Equine Build: You count as one size category larger to determine your capacity to carry, push and drag. However, when climbing, each foot of movement costs you +4 extra movement instead of the normal +1 foot. You can allow a creature of Medium or smaller size to ride on your back, but you still act independently when you have a rider.

Natural Armor: You have heavy chitinous plates. Your AC is 17. You cannot equip armor by any means.

Bladed Armor: Your chitinous armor provides natural weapons, which you can use to make unarmed strikes. If you hit with them, you deal slashing damage equal to 1d6 + your Dexterity modifier, instead of the bludgeoning damage normal for an unarmed strike.

Tunnel Cunning: You can always well your depth underground no matter the terrain. Whenever you make a check to determine a grade in an underground tunnel or to detect structurally unsafe walls, ceilings, or floors in a subterranean setting you are considered proficient and add double your proficiency bonus to the roll.

Sensitive Antennae: Your antennae are especially sensitive to smells. You have advantage when making a Wisdom (Perception) check to find or determine a smell. Additionally, you cannot be surprised if you can smell the threat.

Languages: You can speak, read, and write Insect Speech, Common, and one other language of your choice.

Scro

Scro are a muscular goblinoid race; they resemble orcs but are larger, stronger, and more intelligent. They average 6' in height, with long, sharp teeth filed to a point and inscribed with various totemic symbols and tiny gems. Their skin color varies from jet black to burnt orange, with some greens, tans, and grey in between. Their eyes have a phosphorescent glow which can be seen in dim light.

The Scro are as military-minded as the Giff and live their entire lives oriented around the military hierarchy. The most powerful Scro run the highest levels. Where the Giff pursue glory and fame, the Scro seek mayhem, destruction and the devastation of their enemies.

Scro society is codified in a rigid set of laws and customs laid down by the founder of the Scro, Dukgash the Almighty First Leader. The Spartan lifestyle that this code permits is oriented towards improving the mind and body so victory can be achieved.

Scro vessels are always warships. Onboard weapons are oriented for quickly grappling and getting into hand-to-hand combat. While the Scro are excellent strategists, and they do use ranged weapons, they prefer to make costly heavy assaults rather. Contact with these warships

is rare but are always violent encounters. At best guess, they seem to wish to force all other spacefaring races onto planets and out of their skies.

Ability Score Increase: Your Strength score increases by 2 and your Intelligence score increases by 1.

Size: Medium.

Age: Scro reach adulthood at age 12 and live to about 40.

Alignment: Scro appear as evil to those outside Scro society and are lawful to the hierarchy's demands.

Speed: Your base walking speed is 30.

Darkvision: Thanks to your orc blood, you have superior vision in dark and dim conditions. You can see in dim light within 60 feet of you as if it were bright light, and in darkness as if it were dim light. You can't discern color in darkness, only shades of gray.

Primal Intuition: You have proficiency in two of the following skills of your choice: Animal Handling, Insight, Intimidation, Medicine, Nature, History, or Investigation.

Glory Kill: Scro take pride in ripping their enemies' throat out with their teeth. As a bonus action, you can use your powerful jaws to bite an enemy. Make an unarmed attack against an enemy. If it hits, this attack does 1d4 + Strength modifier in damage. If this attack reduces the enemy to 0, you gain temporary health equal to your level.

Languages: You can speak, read, and write Orc, Common, and Elvish.

Xixchil

Xixchil are six-limbed insectoid beings with body structures not unlike a praying mantis. Their forward limbs are long and hook-like, with sharp retractable blades. While their center pair of limbs are smaller, and often fitted with delicate mechanical manipulators.

The Xixchil decorate themselves through surgical modification. A typical Xixchil will have gems, jewels, and precious metals fitted to their exoskeleton and formed into exquisite shapes.

The overarching philosophy of the race is "survival of the fittest." Each individual is expected to improve itself through study and surgical modifications. Xixchil surgeons can accomplish amazing transformations that turn each member of their society into a unique being.

The philosophy extends to xixchil morality as well. An individual's alliance is to itself first, then family, and finally society. They may accept party-mates as "family" but would never sacrifice for them. Adventuring Xixchil wander the universe seeking ever more prestige through experience and more and more utilitarian "treasures." Beauty to a Xixchil is much different than to a human. They find just as much joy in an efficiently executed killing machine as a dwarf does with a well-crafted hammer.

Ability Score Increase: Your Intelligence score increases by 2 and your Dexterity score increases by 1.

Size: Medium.

Age: Xixchil grow rapidly and reach their final metamorphosis by the age of 1. Average age varies as Xixchil are always looking for to prolong their lives. With enough money and modification, Xixchil might be able to live forever.

Alignment: Xixchil are neutral and always do what is of the greatest benefit for them.

Speed: Your base walking speed is 30.

Natural Armor: You are covered in a thin but sturdy exoskeleton. You have an AC of 15. You cannot wear armor and you cannot benefit from a shield. You can spend time and money to have metal protection affixed to your body. Each procedure takes 1 week to complete and you must complete each level if modification in order. Costs are as follows:

AC	Cost in gp
16	150
17	400
18	3000
19-22	5000 ea.

This common procedure does not carry the same risks as Body Modifications and can be performed without procedure rolls.

Natural Scythes: Your main limbs are natural, surgical-sharp blades. Your scythes count as a melee weapons with which you are proficient. When they hit, the target takes 2d4 plus your Dexterity modifier in bludgeoning damage.

Bite: You may make an unarmed attack to bite an enemy with your mandibles. This attack does 1d4 + Strength modifier piercing damage.

Weak Hands: While dexterous, your appendages with phalanges are too weak to use effectively in combat. You cannot wield weapons or shields. These arms may perform the somatic components of spells and may otherwise function as normal hands.

Extra Limbs: You have the physiology and mental structure to support basic extra limbs. You may surgically add two light melee weapons on extra limbs to your body. These limbs take one week and 10 times the weapon's cost to attach per limb. When you take the attack action, you may make attack rolls with one or both additional limbs as a bonus action. These attacks are treated the same as striking with a bonus action while two weapon fighting.

This common procedure does not carry the same risks as Body Modifications and can be performed without procedure rolls.

Natural Poison: You can synthesize an individual-specific poison or anesthetic by tasting an organic creature. You may spend a bonus action after a successful melee or bite attack to synthesize a poison or anesthetic. After one round, you may apply this concoction to a weapon as a bonus action or deliver it as a part of a bite attack. The concoction lasts for 1 minute before breaking down. Each concoction only affects the type of creature it was prepared from.

Anesthetics do not affect creatures larger than you or of a CR equal to or higher than your level. On the next hit with the poisoned weapon or bite attack, the creature must make a Constitution saving throw of DC 8 + your Constitution modifier. A failed save forces them to suffer the effects of the type of concoction made:

Poison - The target takes 2d4 (3d4 if delivered via a bite attack) poison damage.

Anesthetic - The target is paralyzed for 1d4 (1d6 if delivered by a bite attack) rounds.

You may use this feature a number of times equal to your Constitution modifier (minimum of 1) times. You regain all expended uses on a long rest.

Body Manipulation: You gain the ability to perform body manipulations on others.

Languages: You can speak, read, and write Insect Speech, Common, and one other language of your choice.

Languages

Languages are just as important in Wildspace as they are on any of the Spheres' planets. A few new languages are available to linguists looking to expand their vocabulary. Additionally, some groundling languages serve more purpose off-planet.

Updated Languages

Draconic: The Dracon race uses draconic as their native tongue. Adventurers knowing this language will find dealing with the herds easier.

Deep Speech: The ancient Hurwaeti speak a hissing and clicking dialect of this language when conversing away from outsiders.

Orcish: A somehow more refined but just as guttural version of this language is used by the Scro.

New Languages

Ape Speech: A language communicated through gestures, body postures, facial expressions and a variety of hoots, screams, and calls. A dialect focused on the physical aspects is preferred by the Grommams while an unnecessarily heavy emphasis is placed on the vocal aspects by the Hadozee.

Insect Speech: This alien language is expressed through chirps and clicks; often involving the exoskeleton in addition to the mouth. Rastipedes use a simple version of this language. The Xixchil's dialect augments the sounds by including subtle gestures and actual spoken words taken from other languages.

Ship Signaling: Ships have evolved to have their own complex forms of languages; much more than the simple signaling of groundling vessels. A spelljammer who dedicates themselves to learning this non-verbal language will always find a place on a ship. This language includes flag, light, and other signaling between ships. In addition, it allows

the speaker to recognize basic heraldry and warning signals. For example, someone proficient in this would be able to identify a ship flying elven colors and the distress signal they use but would not be familiar with the fine embroidery work that identifies the ship as a specific elven noble's vessel.

Altered Magic

Some magic types behave differently in wildspace and the Phlogiston due to the very nature of the regions. The most obvious change is how the gods' influence changes across crystal spheres. Clerics who sail out beyond their home sphere will do well to remember the specifics of extra-spherical worship. For similar reasons, Conjuration and Summoning can have interference around and beyond crystal spheres. The area within a sphere is definitively part of the material planes but the line between planes gets blurry in the Phlogiston.

Holy Magic

Clerics and paladins that draw their power from holy sources may find their connection to their deity limited. Not all gods are recognized in every sphere and the Phlogiston is a no-man's-land for deities. A cleric or paladin in one of these places does not regain expended spellslots above level 2 naturally.

In cases where a god may be represented as a different local entity, these classes may regain spellslots naturally. Not all aspects agree with one another though; a forge god in one realm may be evil there and be good in another. You're free to take the power offered but may want to have a good reason in some cases.

Temporary connections can be made with spells like *Contact Home Power*. These connections are limited, however. They do not last forever and may go against the local deities in each crystal sphere.

A cleric or paladin outside of their god's influence may substitute their holy power with arcane means. A Pearl of Power will still function as normal for either of these classes but still requires having that specific object.

An enterprising individual may work towards building an altar or shrine to their god. This would allow slots to be regained when resting nearby; a popular choice for spacefaring missionaries being to build an altar on their ship.

The most devout might even seek to bring their god and/or pantheon to the new sphere. This take considerable time and resources spread across garnering worshipers, building a dedicated temple, and performing the appropriate rituals. Remember that gods are fickle and may not appreciate having more territory added to their domain without their knowledge.

All but the arcane means fail in the Phlogiston; clerics and paladins can never regain higher-level spellslots through divine methods out there. Any attempt to do so is left unanswered.

Finally, be wary when dealing with existing crystal spheres' gods. Your deity may have been banished or killed from the realm. In the best cases, repeated contact with your being may

anger the locals. In the worst, expect to be smited upon entering a sphere just because you are a follower.

Conjuration and Summoning

Spells that conjure beings from the surrounding area will not function if none of these creatures are within range. Conjure Animals will very likely not work in wildspace for example.

Spells that pull a being from or force a being to another plane do not work in the Phlogiston. No god, elemental, fiend, or other meta-planar creature can be summoned here. Spells that contact other planes also fail in the Phlogiston.

Planar Travel

Travel between planes of existence function normally within a crystal sphere. In the Phlogiston, dimensions and pocket dimensions cannot be accessed. A familiar is either trapped with you or trapped in another dimension. Etherealness spells, Portable Holes, and Bags of Holding are inoperable. The items are safe but inaccessible.

New Spells

Arcane power flows in wildspace and beyond. Those with the skill to cast spells will find they can twist their magics in new and wonderful ways.

Create/Foul Air

1st Level Alteration

Classes: Cleric, Druid, Ranger, Bard, Artificer

Casting Time: 1 Hour

Range: 90 feet

Components: V, S, M (A small flask with a stopper)

Duration: Instantaneous

You generate a bubble of fresh, breathable air around a creature you can see in range. This new air instantly pushes away any of the air currently surrounding the being if they are surrounded by an atmosphere. When cast, you have the option of generating clean or fouled air.

When cast on a creature surrounded by atmosphere, gas, or liquid, the bubble surrounds them long enough for them to take a full breath (1 round) before it dissipates into the existing gas or is pushed away by the liquid.

When cast on a creature in a vacuum, the air bubble is subject to the rules of personal air bubbles in Wildspace but does not dissipate.

When you cast this spell using a spell slot of 2nd level or higher, the number of creatures you generate an air bubble around increases by 1. You may decide if the air created is clean or fouled for each creature individually.

Contact Home Power

2nd Level Conjuration

Classes: Cleric, Paladin

Casting Time: 1 Hour

Range: Unlimited

Components: V, S, M (A small horn)

Duration: 1 week

You blow a small horn and call to your patron deity. This establishes a tenuous link through the astral plane from you to your deity or their seat of power. This link allows you to regain all of your spells slots at the end of a long rest as if you were in place that recognizes your god's power. Upon the completion of the spell, you regain all of your spells slots above 2nd level if you did not receive them from your last long rest.

Distance has no effect on the casting of this spell but dimensional gates, anti-magic fields, and the effects of dispel magic will prevent the casting of this spell. If one of these effects is placed on the caster or the caster travels to another plane, the link is severed and the spell ends. Traveling out of the current sphere severs the connection as well.

Additionally, this spell will not succeed in the Phlogiston or in a sphere your deity has abandoned (either through banishment or their own will). Attempting the spell in such a place will have the caster informed that such contact is forbidden by the local celestial authority (or no response in the Phlogiston). Continual attempts to contact in these cases may result in adverse effects.

Detect Powers

2nd Level Divination (Ritual)

Classes: Cleric, Paladin

Casting Time: 1 Action

Range: 600 feet

Components: V, S, M (A fistful of sand cast at the sphere)

Duration: Instantaneous

Casting this spell outside a crystal sphere allows you to determine if there are friendly and/or other powers that align with your faith and will allow you to regain higher-level spell slots naturally.

Additionally, you learn the alignment of the new deity of your faith if one exists. While similar, accepting power from a god of opposing alignment may cause tension between you and your main deity.

Locate Portal

2nd Level Divination (Ritual)

Classes: Wizard, Sorcerer, Artificer, Cleric

Casting Time: 1 Action

Range: 300 feet

Components: V, S, M (A conch shell)

Duration: Instantaneous

You focus your arcane abilities and attune them to a crystal sphere. You know instantly the nearest portal through the shell, either in or out of the Flow. You know the direction and distance of the portal.

 If no active portals are available, you learn when and where it will open.

Airsphere

3rd Level Alteration

Classes: Wizard, Sorcerer, Artificer, Warlock, Bard

Casting Time: 1 Action

Range: 60 feet

Components: V, S, M (A small crystal or glass sphere containing air)

Duration: Concentration, up to 1 minute.

You create a mobile, 20-foot-radius sphere of breathable air, identical to the atmosphere of your home world, centered on you. The air can become fouled from use as with other airs but it retains its sphere shape and displaces foul air and liquids for the first minute of existence. After that minute, the air continues to exist but follows natural laws.

While concentrating on the sphere, the caster can move the sphere up to 90 feet as a bonus action. When the sphere begins your turn outside of the spell's range concentration is broken. When concentration is broken, the sphere obeys gravity laws but retains its sphere form and moves other airs/liquids away until the first minute expires.

If the airsphere contacts a fire in the Phlogiston, the fire expands to fill the entire sphere and fouls it. Anything that would suffer fire damage from the explosion takes double the damage (on top of tripled Phlogiston as described above).

Chill Fire

3rd Level Alteration

Classes: Wizard, Sorcerer, Artificer, Warlock

Casting Time: 1 Action

Range: 30 feet

Components: V, S, M (A sliver of glass or ice)

Duration: Concentration, Up to 1 Minute.

When cast in the Phlogiston, this spell suppresses the area's explosive qualities in a 30-foot-radius sphere from a point you can see. While in effect, fire and explosions do normal damage within the spell's area. Effects that would trigger the explosive qualities of the Phlogiston still trigger instantly. This applies to both magical and non-magical fire.

This spell has no effect when cast outside of the Phlogiston.

When you cast this spell using a spell slot of 4th level or higher, the radius of the sphere increases by 5 feet for each slot above 3rd.

Enhance/Reduce Rating

3rd Level Alteration

Classes: Wizard, Sorcerer, Artificer, Warlock

Casting Time: 1 Action

Range: 10 feet

Components: V, S, M (A small ivory arrow; Pointed up to enhance and down to reduce)

Duration: Concentration, Up to 1 Minute.

You lend a portion of your power or sap the power of someone currently operating a helm. When cast on an individual you can see using a Minor or Major spelljamming helm, including those created via spell, The SR of their ship increases or is reduced by 1 for the duration (your choice). The individual affected by this spell cannot benefit from multiple castings of this spell.

When cast as Reduce Rating, the target must make an Intelligence saving throw. If they succeed, the spell has no effect.

Softwood

4th Level Alteration

Classes: Cleric, Artificer, Ranger, Druid, Paladin, Bard

Casting Time: 1 Action

Range: Touch

Components: V, S, M (A piece of bark)

Duration: Instantaneous

A willing or unconscious creature, up to size Large, targeted by this spell has their body immediately surrounded by soft, spongey wood. This material is a magical plant that inhabits the air envelope of the creature and sustains its life at a lower-than-natural level. The individual inside is placed in a suspended animation and is rendered unconscious. A creature at 0 hit points is stabilized by the spell and regains consciousness and 1 hit point 1d4 hours after the cocoon dissolves, unless healed.

The softwood surrounding a creature is immune to heat and cold temperatures and immune to all damage while the creature is unconscious. As an example, a creature in this spell could fall from Wildspace, through an atmosphere, and crash into a planet's surface unscathed.

After being exposed to air for 30 minutes, the softwood dissolves and the creature within is awakened. If cast in air, the target will be cocooned normally for 30 minutes until the spell dissolves.

When you cast this spell using a spell slot of 5th level or higher, you may cast the spell on one additional individual for every two slots above 4th.

Spark Burst

4th Level Evocation

Classes: Wizard, Sorcerer, Artificer, Druid, Bard

Casting Time: 1 Action

Range: 120 feet

Components: V, S, M (A piece of flint and a chunk of ferrous metal)

Duration: Instantaneous

You agitate the matter within an atmosphere at the chosen location, releasing electrical energy in a 20-foot-radius sphere. This spell works across sphere portals and across vacuums but cannot be cast centered in a vacuum.

In an atmosphere, this spell damages all creatures for 3d4 lightning damage. Any explosive or flammable objects not being worn or carried have a 50% chance to ignite.

In the Phlogiston, the cracks of electricity ignite the air. Each creature in range must also make a Dexterity saving throw or also take 3d4 Fire damage. Any explosive or flammable objects not being worn or carried ignite; potentially causing more damage when contacting the Phlogiston.

Any ship within the sphere of effect suffers the sum of all effects as damage.

When you cast this spell using a spell slot of 5th level or higher, the lighting and fire damage increases by 1d4 for each slot above 4th.

Create Portal

5th Level Alteration

Classes: Wizard, Sorcerer, Bard, Artificer

Casting Time: 10 Minutes

Range: 300 feet

Components: V, S, M (A piece of wire wrapped around a chunk of amber)

Duration: Concentration, Up to 1 Minute.

This spell causes a portion of a crystal sphere to become insubstantial and ethereal, allowing objects and ships to pass through it. When cast, choose a point on the sphere within range. A circle with a radius of 100 feet is turned into this ethereal portal centered on the point you choose. Opening this portal does not weaken the sphere. Any objects resting physically on the sphere are unaffected.

If this opening is dispelled or concentration is lost while an object is attempting to cross, roll a d10. The fate of the object is determined as follows:

Roll	Effect
1 – 5	The portal closes before the object reaches it. The object *Crashes* into the sphere.
6	The portal closes on the object. The object is cut neatly in half. If the object was a living creature or a ship it is killed/destroyed unless it has a means to survive bisection.
7 – 10	The portal closes after the object passes through.

Debris Barrier

5th Level Alteration

Classes: Cleric, Druid, Ranger

Casting Time: 1 Action

Range: 60 feet

Components: V, S, M (Multiple pieces of debris)

Duration: Concentration, Up to 1 Minute.

You animate small pieces of debris into either a defensive barrier or offensive maelstrom. Begin by choosing a tile of space debris or jettison, the remains of a jettison attack or ammo, a collection of arrows, or any other sufficient source of debris. If this debris occupies tile, it is removed from that tile.

If used offensively, you bring the debris into a 10-foot-radius sphere to batter everything within in. Each creature that ends its turn within the sphere takes 4d8 bludgeoning damage.

If used defensively, you can spread the debris into a large shield-like circle with a 20 foot radius, oriented as you choose. In Wildspace, this is large enough to cover personnel across two hex sides of a ship.

Any mundane small projectiles, like arrows, bullets, jettison attacks, or asteroids, passing through the spell's area are absorbed by the spell and become part of the debris barrier. Large projectiles, like those from catapults or ballistae, and those from a magic source are not absorbed.

As a bonus action, you can switch the spell's form, change its orientation, and move it up to 90 feet to a point within range.

When you cast this spell using a spell slot of 6th level or higher, the bludgeoning damage increases by 1d8 for each slot above 5th.

Enhance/Reduce Maneuverability

5th Level Alteration

Classes: Wizard, Sorcerer, Warlock, Bard, Druid

Casting Time: 1 Action

Range: 400 feet

Components: V, S, M (A vial of wind from an air-based world)

Duration: Concentration, Up to 1 Minute.

On a ship of 10 tons or less that you can see within range, you conjure arcane winds to speed or hinder it. If you choose to enhance the ship's maneuverability, you increase its *Maneuverability Class* and AC by 1. Alternatively, reducing the ship's maneuverability lowers its *Maneuverability Class* and AC by 1.

As an action, you may change switch targets of the spell and/or change the spell's effects. If the target ship leaves the spell's area, they are no longer effected but the spell does not end.

When you cast this spell using a spell slot of 6th level or higher, the max tonnage of ship the spell can affect increases by 10 tons for each slot above 5th.

Flyfield

5th Level Alteration

Classes: Wizard, Sorcerer, Artificer, Bard

Casting Time: 10 Minutes

Range: 100 feet

Components: V, S, M (Two magnets and a sphere of crystal)

Duration: 1 Week

This spell allows someone to cause a powerless, drifting amount of material to suddenly lunge through space. When you cast the spell, designate up to five words as the command. When the command is spoken as a Reaction, the object you are in contact with, up to 30 tons, and

everything on it is launched in any direction you choose up to the spell's range instantly. If none is chosen, the object is launched the full range in a random direction.

You may designate someone other than yourself to be the activator. To do so, they must be in contact with you for the duration of the spell casting. They learn the command word and only they can activate the spell.

The spell may be lost if dispel magic is cast on the person with the spell stored or they enter into an anti-magic field. The spell is also lost on death or should the person become incapable of speaking. The spell may still be activated in an area of magical silence.

The spell may not be activated when in contact with two objects or when in contact with an object actively powered by a helm. Attempting to cast in such conditions does not end the spell.

If the spell is activated on an object larger than allowed, the spell fizzles and is lost.

If the object will intersect with another, resolve a Crash between the two objects. If the two objects would share the same space at the end of this travel, the object moved by the spell is shunted to the nearest unoccupied space.

When you cast this spell using a spell slot of 6th level or higher, the max tonnage of the object the spell can affect increases by 5 tons for each slot above 5th.

Create Minor Helm

6th Level Enchantment

Classes: Wizard, Sorcerer, Bard, Cleric

Casting Time: 1 Hour

Range: 30 feet

Components: V, S, M (A stool, chair, or suitable seat)

Duration: 1 week

You transform a normal chair or seat into a minor spelljammer helm suitable of powering a ship through space. This spell does not replace the need for a permanent helm and is used primarily as a back-up or as an emergency situation.

This temporary helm may power a ship of up to 10 tons and is identical to a minor helm in every way. However, when this spell ends or is dispelled, the helm must be created again.

When you cast this spell using a spell slot of 7th level or higher, the max tonnage of ship the spell can affect increases by 10 tons and the duration increases by 1 week for each slot above 6th.

Disable Helm

6th Level Abjuration

Classes: Wizard, Sorcerer, Bard

Casting Time: 1 Action

Range: 180 feet

Components: V, S

Duration: Concentration, up to 1 Minute.

You focus your arcane and life power on a magical spelljamming helm you can see within range. You immediately suffer 1d4 necrotic damage as you try to interfere with powerful magic.

The targeted helm immediately ceases operation and cannot be activated by any means until the spell expires.

If the helm has an operator they make an Intelligence saving throw. On a failed save, they take 4d10 psychic damage and fall unconscious for 1d6 turns. The unconscious spelljammer cannot be awoken early. On a successful save, they take half the Psychic damage but remain conscious.

Create Major Helm

7th Level Enchantment

Classes: Wizard, Sorcerer, Bard

Casting Time: 1 Hour

Range: 30 feet

Components: V, S, M (A stool, chair, or suitable seat)

Duration: 1 week

You transform a normal chair or seat into a major spelljammer helm suitable of powering a ship through space. This spell does not replace the need for a permanent helm and is used primarily as a back-up or as an emergency situation.

This temporary helm may power a ship of up to 30 tons and is identical to a major helm in every way. However, when this spell ends or is dispelled, the helm must be created again.

When you cast this spell using a spell slot of 8th level or higher, the max tonnage of ship the spell can affect increases by 20 tons and the duration increases by 1 week for each slot above 7th.

Collapse Portal

8th Level Alteration

Classes: Wizard, Sorcerer, Bard

Casting Time: 2 rounds

Range: 300 feet

Components: V, S, M (Two smooth stones of any size, one diamond and one obsidian)

Duration: Concentration, up to 2 rounds.

A rarely known spell, sailors share stories in taverns of ships being torn asunder by its power. However, this spell is just as unreliable as it is powerful.

Begin by choosing a crystal sphere portal you can see within range. Then, roll a spellcasting check using your spellcasting modifier against a DC of 15. On a failed check, the spell fizzles just as soon as it leaves your hands.

Otherwise, your spell takes hold of the portal and makes it unstable. If at any point during the spell's duration a ship attempts to cross the targeted portal, the portal begins to collapse. Roll a d10 to determine the outcome.

Roll	Effect
1 – 2	The portal collapses before the ship enters. The ship has enough time to avoid the collapse but must turn immediately. Any additional forward motion results in a crash should they continue course.
3 – 5	The portal collapses before the ship enters but without enough time to react. The ship unavoidably *Crashes* into the sphere.
6 – 9	The portal closes on the ship, bisecting and destroying it.
0	The ship makes it through the portal as it closes just behind them.

Any ship that crashes into the sphere from this spell suffers a *Spelljammer Shock* critical effect in addition to the physical damage.

Create/Destroy Atmosphere

8th Level Alteration

Classes: Wizard, Sorcerer, Druid

Casting Time: 1 Minute

Range: 300 feet

Components: V, S, M (A small stoppered flask with a drop of water)

Duration: 28 Days

This difficult, unreliable spell creates not only air, but a magical self-renewing atmosphere that survives for one month. When cast, you use your own life force to power it and lose 1 point from your maximum HP, permanently.

Choose an object you can see within range to count as the font. If Create Atmosphere is cast, the object will continually create fresh air for the month. If Destroy Atmosphere is cast, the object will absorb the atmosphere it is contained in. Both act at a rate of 10 tons worth of air per day but will not exceed the maximum atmosphere size of the object or atmosphere the object is contained in.

A Create Atmosphere casting can be ended with a Destroy Atmosphere version of this spell and vice versa. Dispel magic has no effect on this spell.

The HP lost to casting this spell can be restored with nothing less than a Wish spell.

Destroy Minor Helm

8th Level Alteration

Classes: Wizard, Sorcerer

Casting Time: 1 Minute

Range: 300 feet

Components: V, S, M (A pinch of dust once part of a long-destroyed magical item)

Duration: Instantaneous

You focus your magical power to permanently dismantle lesser helms and disrupt larger one. Aim at a spelljamming helm you can see within range and cast the spell. The helm suffers the following effects based on the type.

Minor Helm:

The helm targeted is destroyed beyond repair. Additionally, the magical energy of the helm bursts into *Spark Burst* spell (4th level) centered on where it once stood. If the helm was in use at the time of casting, the user must make an Intelligence saving throw. On a failure, they suffer 1d4 rounds of unconsciousness and 1d4 days of "magical death" (Spell slots are not restored during a long or short rest).

Major Helm or Death Helm:

The helm experiences interference. The helm is inoperable for 1 round and the SR of the ship is reduced by 1 for 1d12 rounds afterwards. If the helm is in use at the time of casting, the user must make an Intelligence saving throw. On a failure, they suffer 1d4 Psychic damage and 1 round of unconsciousness.

Pool Helms and Series Helms:

The specific helm targeted suffers the same effects as a Minor Helm. Other helms connected are unharmed though the *Spark Burst* may affect their operators.

Lifejammers:

These helms suffer the same effects as a Minor Helm. Additionally, the destruction of the helm floods stolen lifeforce back into the unfortunate user. They heal for 2d4 when the helm is destroyed.

Foundries and Furnaces:

These helms are rendered inoperable for 2d4 rounds.

Destroy Major Helm
9th Level Alteration

Classes: Wizard, Sorcerer

Casting Time: 1 Minute

Range: 300 feet

Components: V, S, M (A pinch of dust once part of a long-destroyed magical item)

Duration: Instantaneous

You focus your magical power to permanently dismantle even the greatest helms. Aim at a spelljamming helm you can see within range and cast the spell. All sorts of spelljammer helms (including Death Helms, Lifejammers, Pool Helms, Series Helms, and Furnaces) are utterly destroyed and their magic dissipates.

When destroyed, a helm releases a Spark Burst (6th Level) centered on the helm. If the Helm was being used at the time of casting, the user must make an Intelligence saving throw or be rendered unconscious for 1d4 rounds and suffer 1d4 days of "magical death" (Spell slots are not restored during a long or short rest).

A dwarven foundry suffers the same effects but is not destroyed. A team of skilled dwarves working 1d100 days can repair the foundry to a usable state.

Feats

Adventurers in Wildspace deserve feats groundlings cannot match. When looking to take a feat, consider some of the following to round out your spacefaring.

Zero Gravity Training
- Being held to the ground was the real limit. You do not suffer disadvantage for combat or skill checks due to being in low or no gravity situations.
- You can control your orientation in zero gravity. By grabbing and throwing debris or leveraging larger object's gravities, you can slightly affect your direction of travel. You cannot control your speed in a vacuum.
- You have mastered breathing techniques. As an action, you can enter a trance-like state to focus on breathing as if concentrating on a spell. You are incapacitated for the duration. While in this state, you consume one tenth your normal air intake and can hold your breath for 10 times as long. You are aware of your surrounding can return from this state as a bonus action.

Spelljammer Navigation
- While helming or navigating a spelljamming ship, you know how to make the most of celestial bodies and gravity wells in wildspace. You arrive at your destination 10% faster when dedicating your time to one of these two activities inside a Sphere.

- You have studied the Phlogiston and know all of the known paths between spheres. When helming or navigating in the Phlogiston, you can decide which sphere to travel to rather than being at the whim of the currents. Additionally, you may try to forge a new path. To do so, make a Wisdom (Survival) check versus a DC determined by the DM (based on the distance and difficulty of getting to the new sphere from the chosen position). On a success, you create a new known path between two spheres. On a failure, there is no telling where your ship will end up.
- You have advantage on ability checks to maintain your heading.

Ship Looter
- You gain proficiency in one of the following: Carpenter's Tools, Mason's Tools, or Blacksmith's Tools.
- When observing a wrecked ship, you can immediately identify the various materials, weapons, and cargo worth salvaging and how much of it is present.
- Any scavenging effort you lead can recover goods from another ship in half the time.

Shipwright
- You gain proficiency in one of the following: Carpenter's Tools, Mason's Tools, or Blacksmith's Tools.
- You count as a skilled worker for the purposes of repairing a ship.
- You can design and build a ship of 10 Tons or less without additional help.
- When you roll to *Repair* a ship's hull, you can roll the repair dice twice and take the higher result.

Firearms

Firearms are the pride of the Giff army and have been since adopted and modified by other races. Use the *Gunslinger* firearms rules, transcribed here. Firearms require martial weapon proficiency to wield properly.

Reload: The weapon can be fired a number of times equal to its Reload score before you must spend 1 attack or 1 action to reload. You must have one free hand to reload a firearm.

Misfire: Whenever you make an attack roll with a firearm, and the dice roll is equal to or lower than the weapon's Misfire score, the weapon misfires. The attack misses, and the weapon cannot be used again until you spend an action to try and repair it. To repair your firearm, you must make a successful Tinker's Tools check (DC equal to 8 + misfire score). If your check fails, the weapon is broken and must be mended out of combat at a quarter of the cost of the firearm. Creatures who use a firearm without being proficient increase the weapon's misfire score by 1.

Explosive: Upon a hit, everything within 5 foot of the target must make a Dexterity saving throw (DC equal to 8 + your proficiency bonus + your Dexterity modifier) or suffer 1d8 fire damage. If the weapon misses, the ammunition fails to detonate, or bounces away harmlessly before doing so.

Ammunition: All firearms require ammunition to make an attack. Ammunition can be bought or crafted using Tinker's Tools. Each firearm uses its own unique ammunition and is generally sold or crafted in batches listed below next to the price.

Name	Cost in gp	Ammo Cost	Damage	Range	Properties
Palm Pistol	50	2gp for 20 rounds	1d8 Piercing	(40/160)	Light, Reload 1, Misfire 1
Pistol	150	4gp for 20 rounds	1d10 Piercing	(60/240)	Light, Reload 4, Misfire 1
Musket	300	5gp for 20 rounds	1d12 Piercing	(120/480)	Two-Handed, Reload 1, Misfire 2
Pepperbox	250	4gp for 20 rounds	1d10 Piercing	(80/320)	Reload 6, Misfire 2
Blunderbuss	300	5gp for 5 rounds	2d8 Piercing	(15/60)	Reload 1, Misfire 2
Hand Mortar	500	10gp for 1 round	2d8 Fire	(30/60)	Reload 1, Misfire 3, Explosive

Body Manipulations

For adventurers looking to enhance their body beyond natural means, there are Xixchil surgeons that may be willing to operate on them. With their unique glands and extra dexterous limbs, Xixchil are the only peoples who can attempt these procedures. The benefits of these procedures could extend your capabilities beyond what is natural for most beings but there is always the chance the procedure goes wrong.

To begin, an adventurer would need to find a practicing Xixchil. Worlds-renowned surgeons can be found in places of luxury and offer prices that match their lifestyle. For those on a budget, back-alley clinics exist in the less scrupulous spaceports. Alternatively, a befriended Xixchil could be persuaded to attempt a procedure. Any way you go about it, the materials for the procedure will cost a few thousand gold (market price of around 5000gp), not to mention the service fee imposed by the surgeon.

Procedures

Enhanced Strength: Your Strength score increases permanently by 3.

Enhanced Constitution: Your Constitution score increases permanently by 3.

Enhanced Dexterity: Your Dexterity score increases permanently by 3.

Flight: You gain large wings. You gain a flying speed of 30 ft.

Body Armor: You gain a tough outer shell. You gain a +2 to AC.

Embedded Weapon: You gain an extra limb shaped as a light melee weapon. This limb can be used when taking the Attack action or as a Bonus Action as if two weapon fighting.

Infravision: You can see normally in darkness, both mundane and magical, to 60 ft.

Due to the stress on the body, only one procedure can be performed on an individual. Additionally, Xixchil always choose function over appearance; your Charisma score decreases by 5 permanently.

Performing the Surgery

Procedures take a minimum of two weeks plus one week for every Constitution score point under 12. You are unconscious for the first week and recovering for the remaining time. While

recovering, you are awake and able to move and perform non-strenuous acts. Any strenuous activity is performed at disadvantage.

You are unconscious for the procedure and your life is placed in the surgeon's hands. The Xixchil performing the surgery must make an Intelligence (Nature), a Dexterity (Sleight of Hand), and a Wisdom (Medicine) check; each against a DC of 15. If all three checks succeed, the surgery is completed without any further detriment. Otherwise, count the number of failures and proceed to the appropriate chart below.

1 Failure

Roll a d4:

Roll	Effect
1	There was a complication and recovery time is increased by one week.
2	Infection occurred and you have 1 point of exhaustion until the end of the recovery time.
3	You bleed internally and have halved Max HP for the recovery time.
4	One random ability score is temporarily 6 for the duration of the recovery.

2 Failures

Roll a d4:

Roll	Effect
1	You lose an arm due to complications.
2	You are vulnerable to poison damage due to adverse reactions to the medicines used.
3	You are vulnerable to Bludgeoning damage due to weakened bone structure.
4	You have difficulty clotting and are now vulnerable to Slashing damage.

3 Failures

The procedure was a complete failure. Despite (or because of) the surgeon's efforts, you did not survive and passed on to the next life on the operating table. You are dead.

Don't Panic.