

STAR KINGDOMS

CORE RULES V2.6.8

Introduction

Star Kingdoms is a Nation-States Role Playing Game. Each player takes on the leadership of a single space-faring civilisation, and will advance through a mixture of science, conquest and negotiation. There are no victory conditions or scoring – as in any other RPG there is no way to “win” the game. One or more players will take on the role of the Gamesmaster (GM). They will be responsible for running any NPC factions on the galactic stage and will also interact with the players directly with events that will occur within the player’s own governments. Although this document contains the core rules, the GM has the prerogative at any time to break these in any way they see fit. The GM’s word is always law. Likewise, if a player thinks of something cool that they want to do, the GM should attempt to accommodate this. This may be in response to an event occurring narratively, it may be a new technology the player wants to design, or anything else. As a storytelling game, players should work with the GM to make the story interesting and fun for everyone.

Main Themes

Roleplaying

Player civilisations will have a strong identity which will impact how they interact both internally and with the galaxy as a whole. This is done from the perspective of the ultimate leaders of the civilisation, so whilst they can set policies and conduct negotiations with other species, they do not manage the day to day activities of the civilisation.

Exploration and Expansion

Players will start with only a small civilisation just achieving FTL space flight. Over the game they will explore the galaxy, settle new worlds, investigate strange anomalies, and research new technologies.

Warfare

Whilst this is not a wargame and direct, all-out player wars are rare, it is expected that there will be some level of military threat. Precisely what form this takes will depend on the narrative of the particular game, but as this is a game heavily featuring spaceships it's expected that they will be shooting each other occasionally.

Design Objectives

Minimise work for the GM

The GM should not have to be generally involved in the turn-by-turn operation of a civilisation, and only interfere where the story requires it.

Few, meaningful decisions

Players should not have to do large amounts of admin on a turn-by-turn basis, but that the actions they do take should feel significant.

Maintain verisimilitude

The outcomes of actions taken in-game should reflect what could be reasonably expected to happen in the real world.

Turns

The game takes place over a number of turns - whilst the precise number will vary from game to game, and the end-point will be determined by the GM when they feel it is dramatically appropriate, a full game is expected to last somewhere between 30 and 50 turns. Each turn is split into two phases - the player phase and the GM phase.

During the player phase the players will negotiate with each other, roleplay whatever characters they have devised in their factions, and decide what actions they wish to take. At the end of the phase they will submit their turn to the GM. Each player phase will normally last around 2 weeks.

During the GM phase the GM will review each player's turn submission and create a feedback sheet for each player detailing what has happened that turn as a result of their decisions. This will include things like the outcomes of any battles, results of any new surveys or anomaly studies, and encounters with new alien life. Each GM phase will normally last around 2 days (though GMs have lives and sometimes a fast turnaround is not possible!).

Timing of events

Each turn of SK takes place over roughly 1 Earth year of game time. Whilst some events will take many turns to complete, others will happen much faster.

Instant events take place over hours or days, and as such are treated as happening instantaneously. For example, space combat is an instant event. Prolonged events take a turn or more. For example, ground combat is a prolonged event.

Instant events resolve at the start of each turn, immediately after fleet movement. Prolonged events will resolve half-way through the turn, after the Instant events but before any projects complete. Projects complete at the end of the turn, after everything else.

If multiple projects would complete simultaneously and they have an impact on each other, the resolution order will be determined by the GM. In general, defensive actions will complete before offensive ones.

Rounding

Some effects in play will apply multipliers to various numbers. If fractional answers ever occur, round up to the next whole number.

Not submitting a turn

If the turn submission deadline is passed and a player has not submitted their turn, the GM will act as though their faction is not taking any new actions. Any ongoing actions will continue as normal and the player will still receive a turn feedback. If you don't think you're going to be able to meet the deadline, it's best to discuss it with the GM in advance to try and find a workaround.

Turn order

- 1.Start new projects and actions***
- 2.Gain income***
- 3.Travel***
- 4.Space combat***
- 5.Orbital Bombardment***
- 6.Ground Combat***
- 7.Gain progress on projects and actions***
- 8.Projects and actions complete***

Districts

In order for a planet to do anything, a civilisation must build districts on it. There are several basic types of districts available to all civilisations, however further advanced forms of districts may be researched at a later date.

Industrial Districts

Industrial districts are how a civilisation obtains the funds needed to fuel a successful economy. This will be detailed more thoroughly in the “Currency” section. Industrial districts also carry out planetary construction, such as building other districts.

Academics Districts

Academics districts are where scientists research technologies and improve the faction’s general understanding of the universe. This will be detailed more thoroughly in the “Technology” section.

Shipyard / Military Districts

Shipyard and Military districts act in very similar ways, for the creation of starships or the training of armies. These will be detailed more thoroughly in the “Ships” section and “Armies” section.

These districts also manage logistics and supply for your ships / armies. This will be detailed more thoroughly in the “Logistics” section.

Military districts also provide some protection from orbital bombardment.

Currency

Every civilisation will use its own currency. Some civilisations may even use multiple currencies. Because of this, whilst traders across the galaxy will generally accept any of these currencies, and their exchange rates may vary, deals are generally made using “Credits”. This is a stable way of representing a given value regardless of the currency it is in. From a game perspective we don’t worry about why this is or how it works economically. Just go with it.

Each planet within a civilisation has a Planetary Economy, which represents the flow of goods and services around the planet’s surface and from the planet to the rest of the civilisation. This is primarily generated by the planet’s districts, but can be influenced by various other factors. Each district increases the Planetary Economy by 4.

Industrial districts also run mining operations to extract useful materials from the planet’s crust. Each level of Industrial District increases the Planetary Economy by an amount equal to the planet’s Mineral Rating.

A civilisation combines the Planetary Economy of each of their planets (as well as any other bonuses from elsewhere) into an overall Economy Rating, which models the overall economic strength of the civilisation. Each turn, a civilisation will gain 10 x Economy Rating credits.

Example

Mars has a Level 2 Industrial District, Level 2 Shipyard District, Level 1 Military District and Level 1 Academic District. This increases the planetary economy by $4 \times 6 = 24$.

Mars also has a Mineral Rating of 5. This increases the planetary economy by $5 \times 2 = 10$. The total Planetary Economy for Mars is therefore $24 + 10 = 34$.

Non-Academic Research

Industrial, Shipyard and Military districts also have some limited ability to research technologies in their dedicated areas.

Trade

Because there is no central “Galactic Bank”, digital transfer of funds between civilisations is impossible. In order to transfer wealth from one civilisation to another, resources must be physically shipped between them. This is done using Trade Organisations, which will be explained in detail later.

Systems

Star Kingdoms games cover a large area of space, which is broken down into smaller sections.

The basic unit of area is a System. A System generally comprises a solar body and its orbiting planets. Systems can also contain additional features such as asteroid belts or anomalies which have their own rules.

Planets

The most important features within a System are its planets. Some planets can be colonised to expand the reach of your empire.

Each civilisation will start the game with at least one colonised planet (their Homeworld), and this will likely increase throughout the game as the galaxy is explored. Planets have a Biosphere, which determines the terrain, atmosphere and habitability of a world. There are five types of Biosphere – Desert, Temperate, Arctic, Desolate and Uninhabitable. A planet's Biosphere will determine how easy it is for a civilisation to colonise.

The conditions required for a planet to be colonisable are rare - exactly how rare will be down to the GM when they are creating the map. Planets also have a Mineral Rating - this reflects how prevalent and easy to access the planet's mineral deposits are. Generally this will be between 1 and 4.

Planets may also have unique modifiers, these will be handled on a case-by-case basis with the GM.

Planets are generally assumed to be large enough that lack of space will not be an issue. If planet size is a particular limitation, this will be handled by way of a unique modifier.

Asteroid Belts

Asteroid Belts are a relatively common feature in the galaxy, and some of them contain valuable minerals. Such belts can be mined with appropriate technology.

Asteroid belts will have a Mineral Rating, generally between 1 and 5. The higher the mineral rating, the more income the better can provide.

Anomalies

Some Systems contain unusual anomalies - these can be anything and everything from odd gas clouds to abandoned space stations, to rips in space time. These will generally require multiple turns of investigation before their rules are discovered, and these are entirely created by the GM.

Anomalies will vary wildly in complexity and rewards, though the reward will generally be commensurate with the complexity. Rewards might range from a bit of money or technology up to control of an ancient mega-shipyards!

Nebulae

Some systems will be inside a Nebula. This interferes with a ship's sensors, preventing it from detecting anything that isn't really close. Only a ship with Nebula Sensors can operate inside a nebula. If a ship is attacked in a Nebula without Nebula Sensors it will generally attempt to retreat immediately.

Unusual Colony Sites

There may also be other stellar bodies which are colonisable in the same way as planets, such as moons, giant space stations or ringworlds.

These follow the same basic rules as planets, with their special nature reflected in their traits. Any rules which apply to planets will also apply to these, unless their traits specify otherwise.

Planetary Anomalies

Not all anomalies are in space - some planets may have ancient ruins or exotic megafauna that warrants investigation!

Retreat!

If a ship without Nebula Sensors accidentally enters a Nebula, it will immediately retreat back the way it came.

Technology

Overview

A faction's technology is a key part of what defines it. Some technologies are common to every civilisation, such as weapons and armour, whilst others apply extra effects which will lend flavour to a faction and may guide how they act.

Technologies come in two types - Core and Supplemental. Core technologies are broad, fundamental building blocks - for example Ship Weapons is a core tech. Supplemental technologies unlock new modules which change how a core technology works - for example "Long Range Weapons" is a supplemental tech for "Ship Weapons". Supplemental technologies will have prerequisites before you can research them - for example, you must have "Ship Weapons" at least Level 3 before you can research "Beam Weapons".

Core technologies can increase in level to become more effective. Precisely how this works is detailed in each technology. Supplemental technologies do not increase in level - in order to increase in power you must still improve the core technology.

Designing new technologies

It is expected and encouraged that players invent new technologies beyond those which are listed here. This is a collaborative effort between the player and the GM, determining what the technology does and what level it is. When designing a technology, players and GMs should first consider if any existing technology could be easily re-flavoured to meet the player's needs. New technologies should fill a previously empty niche, and not be too similar to any existing technologies.

When reviewing new technologies GMs should be wary of anything that adds additional complexity to processing, such as new weapons or defensive systems. They should also be wary of allowing multiple stacking modifiers even if these are only applicable in specific circumstances - players will find ways to make a rare corner case their main strategy if it gives them an edge, so assume that any special case technology invented will be used more often than not

As with everything else, GMs have final veto over any new technologies and should not feel obliged to give any reason for why they decline or restrict a proposed technology. Players are not privy to all the background knowledge GMs have, and should trust that if the GM is saying "No" that it's for a good reason even if they can't say what it is.

Breakthroughs

Throughout the game, players will accumulate Science Points in each of the three fields of technology. These are used to represent a general understanding of scientific theory in a particular field, but unrelated to any individual technology. There will be various methods of obtaining Science Points, but the primary one will be studying the various anomalies scattered throughout the galaxy.

Science Points can be spent to have a breakthrough and instantly obtain a technology. The technology must be in the same field as the Science Points spent. The number of Science Points depends on the level of the technology.

Fields

Technologies in SK fall into three broad fields - Physics, Engineering, and Xenology. Whilst these do not directly impact the technology itself, they are useful as tags that other things can reference - for example a faction of geneticists may have advantages on researching Xenology technologies.

Technology List

A list of all technologies can be found in Appendix A

Tech Level	Points Required
1	5
2	20
3	45
4	80
5	125

Projects

Projects are how a government achieves its goals. Whether it's building districts on a world, researching a new technology, building new warships or training armies, this is all achieved through the use of projects.

Nothing a government does is ever fast. Many projects will take several turns to finish. Projects also require investment from the government. The entire project budget must be paid up-front.

Each planet can perform one Industrial, one Academic, one Shipyard and one Military project at a time. A planet can at any time cancel an ongoing project and start a new one - if a project is cancelled then all progress on it is lost, but 50% of the funds spent are refunded. Academic districts allow the research of new technologies. Shipyard districts allow the construction of new spaceships. Military districts allow the training and equipping of armies.

The amount of time a project takes to complete depends on both its level and the level of the appropriate districts on the planet. When a project is started it is given a completion target. Each turn, projects will gain a number of points of progress equal to the level of the appropriate districts on the planet. Once a project has accumulated points equal to its target, it will complete at the end of that turn.

I start constructing a Level 3 Cruiser on Mars, which costs me 450 credits. As a level 3 project, it has a completion target of 9. I have a Level 2 Shipyard on Mars, so each turn it will gain 2 points of progress. It will therefore take 5 turns in total to complete.

Rushing Projects

It is possible to rush a project by giving it extra funding. Each project can be rushed a number of times per turn equal to the level of the relevant district (or Planetary Construction tech Level for Construction projects), at a cost of 75 Credits. Rushing a project grants an additional point of progress for this turn.

Three turns later, the cruiser I'm building on Mars has 6 points of progress out of its target of 9. It will gain 2 points of progress this turn because of my Level 2 Shipyard district. I choose to pay 75C to rush the project and gain an extra point of progress, bringing my total at the end of the turn to 9. This means the ship completes this turn, instead of next turn.

Project List

A list of all projects can be found in Appendix A

Project Level	Target	Cost
1	1	50
2	4	200
3	9	450
4	16	800
5	25	1250

Higher Level Projects

Projects may exist over the course of the game which are level 6 and above, but you will not be able to start a level 6+ project unless story related circumstances permit it. GM permission is ALWAYS required before you start a project of level 6 or higher.

Tip

Rushing projects can get very expensive. Until you have an established empire with multiple income streams, don't expect to be rushing much!

Project List

Industrial

Construct District: Level = New District Level

This constructs a new district or increases the level of one of the existing districts.

When constructing a District on a world which doesn't match your native Biosphere, treat your Planetary Construction as though it were 1 level lower. When constructing a District on a Desolate world, treat it as if it were 2 levels lower instead. When constructing a District on your Homeworld, treat it as if it were 1 level higher.

Construct Office: Level = Number of Offices on planet + 1

Construct either a Head Office for a new Organisation, or a Subsidiary Office for an existing Organisation.

When constructing an Office on a world which doesn't match your native Biosphere, treat your Planetary Construction as though it were 1 level lower. When constructing an Office on a Desolate world, treat it as if it were 2 levels lower instead. When constructing an Office on your Homeworld, treat it as if it were 1 level higher.

Rebuild and Repair: Level = 1

Reduce the Devastation on this planet to 0. The planet must not currently be suffering Orbital Bombardment or an Invasion.

Research Planetary Construction: Level = New Tech Level or prerequisite Level

Improve the level of your "Planetary Construction" technology by 1, or gain a new Supplemental technology which has "Planetary Construction" as a prerequisite.

Academic

Research Core Technology: Level = New Tech Level

Begin research of a new core technology, or increase the level of any of your existing core technologies.

Research Supplemental Technology: Level = Core Tech Pre-requisite Level

Begin research of a new supplemental technology.

Analyse: Level = GM Discretion

At points during the game you may find yourself wanting to investigate something more closely, such as a race of natives on a planet or a derelict spaceship. In these cases the GM will give the project a level and once the analysis is complete you will receive the information.

Biospheres

The penalty to Planetary Construction can make developing colony worlds difficult - luckily, this penalty can be removed with the appropriate technology.

What are Offices?

See the section on Organisations.

Homeworld Bonus

Don't forget the +1 bonus to Planetary Construction technology on your homeworld!

Transferring Technology

Whilst Academics districts are able to research new technologies, they are restricted to your own space and aren't able to effectively liaise with other civilisations. Technology transfer requires the use of Science organisations - detailed later.

Project List

Shipyard

Construct Ship: Level = X

Construct a ship of level X. Completed ships appear in orbit around the planet containing the Shipyards in which they were constructed.

Repair Ship(s): Level = X

Restore either two level X ships or one ship of level no more than X+2 to full Hull.

Refit Ship: Level = X

Restore one ship of level no more than X+1 to full Hull, and upgrade all of its modules to the level you now understand.

Research Ship Construction: Level = New Tech Level or prerequisite Level

Improve the level of your “Ship Construction” technology by 1, or gain a new Supplemental technology which has “Ship Construction” as a prerequisite.

Military

Train Detachment: Level = Army Level

Construct an detachment of level X. Completed detachments appear on the planet containing the Military Districts in which they were trained.

Reinforce Detachment(s): Level = X

Restore either two level X detachments or one detachment of level no more than X+2 to full health.

Refit Detachment: Level = X

Restore one detachment of level X+1 to full Health, and upgrade all of its modules to the level you now understand.

Research Military Theory: Level = New Tech Level or prerequisite Level

Improve the level of your “Military Theory” technology by 1, or gain a new Supplemental technology which has “Military Theory” as a prerequisite.

Organisations

A government can only do so much on its own. Sometimes its best to hand things off to independent organisations, free from the bureaucratic red tape. Organisations can help a faction in a variety of ways, whether that's exploring new worlds or sending mining expeditions to asteroid belts. For this rules doc we will assume that these Organisations are akin to private companies in our world, but this can be re-flavoured to be appropriate for whatever civilisation a player creates.

Offices

Organisations grow in power by building Offices. An Organisation's Power is equal to the number of Offices it controls. Each Organisation can have a maximum of one office on each planet.

Offices are constructed using the "Construct Office" Industrial project. When you construct an Office on one of your planets, it must immediately be assigned to an Organisation. This can either be one of your existing Organisations or a brand new Organisation. Whenever you create a new Organisation you must give it a name and choose what type of Organisation it is. Once created, an Organisation can take actions from a limited pool based on its type - these actions are called Operations.

E.g. I want to create a new Science Organisation, Interplanetary Expeditions which will be headquartered on my homeworld of Earth. Earth already has two offices on it - one for an intelligence organisation "Psi Corps" and one for a trade organisation "Edgars Industries". Constructing the first office for my new organisation will therefore be an L3 Construction project.

I consider instead building the new office on Mars. As Mars only has a single office - the one for Edgars Industries - it would only be an L2 project to build it here.

Branches

Organisations have the ability to establish a presence on inhabited alien worlds or on outposts in space to extend their reach. How they do this varies by type of Organisation, and it allows them to extend their influence. We refer to these collectively as branches. In general, creating a branch on a planet or outpost owned by another player requires that player's consent, and the owner of a planet or outpost will know what branches are present at any time - though there are exceptions to this and these will be detailed in the specific cases where they apply. If you attempt to create a branch on another player's planet or outpost without their consent, you automatically fail.

An Organisation can never have a branch on an uninhabited planet or a planet you control - they are exclusively for use on outposts or on alien planets. Each Organisation can only have one branch on any given outpost or planet.

Outposts

Organisations can use operations to set up branches on Outposts. When you attempt to create a branch on an outpost and there is not already an Outpost in the system, one is automatically created under your control at the same time as the branch. Each system can support a maximum of one Outpost, and each Outpost can support a number of branches equal to its owner's Offworld Construction technology level. If you attempt to add a branch to an Outpost that can't support it, you automatically fail.

What are Organisations?

For this rules doc we will assume that Organisations are akin to private companies in our world, but this can be re-flavoured to be appropriate for whatever civilisation a player creates. They might equally well represent different clans, or an AI's various sub-processes. Work with the GM to determine what Organisations mean for your civilisation.

Duplicate Organisations

A civilisation can have many Organisations of varying types. They can even have multiple Organisations of the same type, and each one acts independently.

Multiple Branches

Although an Organisation can never have more than one branch on the same planet or outpost, they can have two branches in the same system if one of them is on an outpost and the other is on a planet.

Organisation Bonuses

As well as expanding the power and reach of the Organisation, branches and offices can also provide permanent, passive bonuses to the civilisation they are a part of. The nature of the bonus is dependant on the type of Organisation, and where the branch/office is located. Some types of organisation will also use your civilisation's technologies in their actions.

Science / Exploration

- Offices provide a number of random Science Points each per turn equal to the organisation's Power.
- Branches on alien planets provide a number of Science Points each turn equal to the organisation's Power. The field is chosen when the branch is first established. If the planet does not have a Space Age civilisation, only Xenology points are available.
- Branches on outposts provide Sensors points of progress each turn towards a spacial anomaly in the system. Once the anomaly study has been completed, the facility may be able to exploit it to gain passive science point income. This requires you to be Uncontested in the system. The amount and type of income will be determined by the GMs on a case by case basis.

Trade / Economy

- Offices increase the Planetary Economy by the organisation's Power.
- Branches on alien planets increase your Economy Rating and the planet's Planetary Economy by the organisation's Power.
- Branches on alien planets can instead be black markets - these are harder to establish, but don't increase the planet's Planetary Economy. They can also have unusual effects on the planet's social principles.
- Branches on outposts increase your Economy Rating by 2.

Military

- Offices and branches on alien planets will lend troops to the defence of the planet - any attack on the planetary government will be opposed by a number of deployed Heavy Security Teams equal to the organisation's Power.
- Branches on outposts will lend ships to their defence - any attack will be opposed by a number of deployed Fighter Squadrons equal to the organisations's Power. These fighters will support the organisation's interests even if the Outpost itself is not under direct attack.

Intelligence / Espionage

- Branches on outposts can either be safe houses or forward operating bases.
- Forward operating bases learn of any safe houses present or being established on that Outpost and can remove them at will.
- Safe houses are hidden, and are not automatically detected by the planet or outpost owner.

Religious / Ideological

When you first establish a Religious / Ideological organisation, choose one social principle to be that organisation's guiding principle.

- Offices increase adherence towards the guiding principle by 1.
- Branches on alien worlds increase adherence towards the guiding principle by 1, to a maximum of 1.
- Branches on alien worlds or outposts can be hidden - these are harder to establish, but are not automatically detected by the planet or outpost's controller.

Sensors Technology

Science organisations always use your current Sensors level.

Military Technology

Any troops or ships deployed by a Military Organisation use your current technology level to determine their weapons and armour.

Hidden Branches

Hidden branches do not require permission to establish and do not take up space on outposts.

Guiding Principle

See the section on Culture for information about social principles

Operations

Operations are how an organisation gets things done. The base level of every Operation is equal to the number of turns it would take to travel between the target system and your closest planet or branch of the organisation. Each Operation will also have a level modifier, which is added to the base level to determine the adjusted level. The Target Number for the Operation is based on this adjusted level (see sidebar).

Each turn the Organisation gains a number of points of progress towards its Operation equal to its Organisation Power. As they operate outside the usual government, Organisations are self-funding and so their Operations are free.

Edgars Industries has 2 offices, and so has an Organisation Power of 2. It wants to take the Establish Trade Hub operation on Gorash, which is 1 turn away from Earth. Establish Trade Hub has a level modifier of +1, so the adjusted level of the operation is 2. This gives a target number of 4, so the action will complete in 2 turns.

Science / Exploration

Survey System: Level = +0

Perform an Active survey on the target system. If this operation is contested you will still obtain the Passive survey data.

Explore Wormhole: Level = +1

Choose a wormhole in the target system. Perform an Active survey on the system on the other side of the wormhole. If this operation is contested you will still obtain the Passive survey data.

Study Anomaly: Level = +0

Add the organisation's Power * Sensors Tech Level points of progress to target anomaly study.

Study Planet: Level = +0

Perform a Planetary Survey on the target planet. This requires you to be Uncontested.

Establish Research Base: Level = +1

Set up a branch on a valid alien world.

Share Technology: Level = +X

Transfer a technology of level X+1 to the owner of the target planet. The planet's owner must meet all prerequisites for the technology for you to start this operation.

Establish Deep Space Science Facility: Level = +1

Set up a branch on a valid Outpost.

Adjusted Level	Target Number
0	1
1	1
2	3
3	6
4	10
5	15

Offices, Branches and Power

Remember that only Offices increase an organisation's power. Branches make it easier to perform operations further away from your own worlds, but they don't increase the speed at which these operations gain progress.

Trade / Economy

Establish Trading Station: Level = +1

Set up a branch on a valid Outpost.

Establish Trade Hub: Level = +1

Set up a branch on a valid alien world.

Establish Black Market: Level = +2

Set up a black market branch on any alien world.

Transfer Resources: Level = +0

Send any amount of Credits to target civilisation.

Outcompete: Level: +2

Target a branch of a rival trade organisation. Its effects are suppressed for a number of turns equal to the organisations's Power. If it is already suppressed, it is instead removed.

Send Asteroid Mining Expedition: Level = +1

Target an asteroid belt in a system in which you are Uncontested. Gain Credits equal to 50*Mineral Rating. Reduce the Mineral Rating of the asteroid belt by 1.

Military

Counter Insurgency: Level = +1

Send military advisors, unmarked vans and any org military units in the area, to help suppress a problem. When targeting an unwanted branch, this suppresses the target for a number of turns equal to the organisations's Power. If it is already suppressed, it is instead removed. When targeting narrative issues, local insurrections and adherence, the GMs will tell you what happens.

Insurgency: Level = +1

Support an illegal branch, minority adherence or local insurrection. Supporting an illegal branch will block one suppression attempt made in the next organisation Power turns. When supporting a minority adherence or local insurrection, the GMs will tell you what happens.

Establish Outpost Defences: Level = +1

Set up a branch on a valid outpost.

Establish Forward Operating Area Level = +1

Set up a branch on a valid world.

Intelligence / Espionage

Establish Safe House: Level = +1

Set up a safe house branch on an alien world or on an alien Outpost.

Establish Forward Operating Base: Level = +1

Set up a forward operating base branch on a valid Outpost.

Forward Operating Bases

FOBs can only be established on Outposts, not planets. Whilst it is possible for them to root out enemy Safe Houses in such a confined space, doing so on a planet is quite another thing.

Planetary Recon: Level = +0

Learn the levels of all districts on this world and the name and progress of the currently active projects. Learn the names and types of all offices on this world.

Military Recon: Level = +0

Learn the names, levels and classes of all Armies and Ships in this system.

Fundamental Scientific Recon: Level = +0

Learn the levels of all Core technologies of the target planet's owner.

Advanced Scientific Recon: Level = +0

Choose a Core technology. Learn the level of that technology and any of its Supplemental technologies the target planet's owner knows.

Organisational Recon: Level = +0

Target a branch or office or a given organisation. Get details of all other valid branches and offices belonging to that organisation. This will reveal invalid branches, on worlds your organisation has offices in.

Police Crackdown: Level = +2

Target one of your own worlds. All safe houses and hidden lodges are suppressed for a number of turns equal to the organisation's number of offices. If it is already suppressed, it is instead removed.

No information is gained about any branches that were suppressed / removed.

Cultural Recon: Level = +0

Learn the details of all social principles on the target planet.

Religious / Ideological

Establish Lodge: Level = +1

Set up a branch on a valid Outpost or alien world.

Establish Hidden Lodge: Level = +2

Set up a hidden branch on any alien Outpost or alien world.

Spread the Word: Level = +2X

Increase the level of the Guiding Principle on the target planet by 1. X is equal to the current Adherence of the Guiding Principle on the target world.

Burn the Heretics: Level = +2X

Decrease the level of any social principle on the target planet by 1. X is equal to the current Adherence of the target social principle on the target world.

Sponsor Colonists: Level = +1

Add the organisations's Power * Offworld Construction Tech Level points of progress to an ongoing colonisation action. When it completes, the target colony increases its Adherence to the Guiding Principle by 1 (this does not stack with multiple applications of this operation).

Investigate Competition: Level = +0

Learn the details of all social principles on the target planet.

Culture and Social Principles

It's extremely rare for any civilisation to be truly homogenous. Most civilisations will be composed of billions of individual people who, even if they all generally agree on some things, will have differing opinions on others.

A civilisation's culture is also likely to vary from planet to planet - the ideals of those on the homeworld may fade as new colonies get established and new priorities come to the fore.

Each planet will have a number of Social Principles - these represent general ideas or philosophies that the population believes in. Each social principle will have an Adherence from 1 to 5 representing how prevalent and fervent the principle is on that planet. This doesn't correlate with the population of the planet, but is more a measure of the general strength of that principle on that world.

It is important to note that whilst the strength of social principles on each world will be tracked and visible to the player, and there will be mechanisms available for players to interact with these to strengthen or weaken principles or even create whole new principles, the player cannot directly control them. Social principles are primarily a roleplaying tool that the GMs can use to provide narrative beats, warn of planetary cultural shifts, etc. This may sometimes have mechanical effects, but will be entirely down to GM discretion.

Whenever a colony is created it copies the social principles from the closest of your planets and subtracts 1 from each of their Adherences. The new colony will therefore start with a similar ideology to the local planet, but the social principles will not be as strong.

The Solvaskr culture revolves heavily around their religious beliefs. As such, their primary Social Principle is "Enlightenment through Beauty", which starts at Adherence 3. Secondary to this they have two distinct castes who pursue this in different ways - their other social Principles are therefore "Solkr" and "Vaskr" which translates roughly as "People of Form" and "People of Song" - these castes are both societal equals, so these are both Adherence 2. Finally, there is a small group who believe that Enlightenment should be shared with all, forcibly if needed, so the "Kynshikr" is Adherence 1, translating very roughly as "Enlightened people of Conflict"

Ratfolk society is based around kleptocratic ideals called the Great Game, in which all clans participate constantly by stealing from their wealthier neighbours. Their primary social principle is therefore "The Great Game" at Adherence 3. Secondary to this their "government" for lack of a better term favours anarchistic clans instead of any centralised government, with each clan responsible for itself and members. "Clan Society" is therefore at Adherence 2. Finally there is a small but influential clan which has gained some traction recently "Feudalism" is therefore the final principle at Adherence 1.

Detecting Principles

It's not possible for a civilisation to hide its broad social principles from anyone who has a permanent presence on their worlds. A player with a branch of any organisation automatically learns the details of any social principle on that world which has an adherence of 3 or higher. A player with a branch of an Intelligence or Ideological organisation learns the details of an principles of aderence 2 or higher instead, since those organisations are more interested in investigating the local culture.

Fleets and Armies

Ships and detachments work in similar ways. Ships allow a civilisation to conduct their affairs in space, and detachments allow them to conduct their affairs on the ground. Ships and detachments carry out both military and civilian operations - some ships or detachments might not have any combat ability at all, being solely dedicated to science, trade or exploration. We use the term "unit" to refer to either a ship or detachment.

Units have a level from 1 to 5 based on their size.

Ships

Star Kingdoms assumes that civilisations are relatively new to spacefaring, and as such do not have vast fleets at their command - at least not at first. Each ship is important and whilst your first ships may be small and relatively disposable, larger ships are expensive and time consuming to manufacture and operate.

Detachments

Ships are wonderful for causing destruction, but are ineffective at taking and securing land. For this, you require infantry and ground forces. There is no limit to the number of detachments on a planet, or the number of detachments that can land on a planet simultaneously. (It's assumed that armies are small, and planets are big. Relatively speaking, of course).

Creating Units

Star Kingdoms uses a modular system to construct units. The larger the unit, the more modules it will have. What each type of module does will be defined in the Technology list.

Units built to fill a given role tend to follow the same general designs. Whilst there will be some minor variations, the core design will be the same. When building a unit we therefore first select its Class - this gives the unit its initial loadout of modules. It also gives a number of Flexible module slots which allow the designer to customise it - these can be used for any known module the designer wishes to add. Designs are specific to a level and type of unit - for example the "Light Cruiser" design is for L3 ships only.

At each level there will be at least one class which is available to all players automatically - these designs are generally fairly simple, such as a basic warship or survey team. More advanced, specialised and powerful designs are available to research - these will be detailed in the Technology list. The automatically available classes will be noted as "Basic" in the class list.

In order to strengthen my navy, I want to build a new L1 warship. Checking the classes available to me I see that the "Patrol Ship" class is the most appropriate. This has a default loadout of 1 Sublight Engines, 1 Flux Stabiliser, 1 Ship Armour and 2 Ship Weapons. It also has 1 Flexible slot, which I decide to use for an extra Ship Weapons module.

Terminology

In some places the word fleet is used. A fleet is any number of allied ships occupying the same system. Likewise an Army is any number of allied detachments.

Classes

A full list of classes can be found in Appendix B. Each advanced class is researched individually.

Creating new classes

It is possible during play to create new classes, though it is not expected to be a common practice. Much like designing new technologies this is a collaborative effort between the player and the GM, and the GM has final veto over any new classes without obligation to explain why. Just like with designing new technologies, new class designs should fill a niche that is not already covered at that unit level.

Variants

Some technologies will grant access to ship or detachment Variants. These are alternative versions of normal classes which have some sort of special rule. For example, they may be equipped with Missile weapons instead of normal ones. The specific rules will be covered in the technology description. All players can see if a ship is a variant or not - instead of appearing as “Light Cruiser” for example, it may appear as “Light Missile Cruiser”.

Unit Attributes

Hull / Health

Ships have a “Hull” attribute which represents their remaining health, and armies have the equivalent "Health". Once this is reduced to 0, the unit is destroyed. This can be increased using defensive technologies such as Ship Armour.

Firepower

Units can have a “Firepower” attribute which represents the amount of damage they can deal in combat. This can be increased using offensive technologies such as Infantry Weapons.

Evasion

All units have an “Evasion” attribute which represents how hard they are to hit in combat. This depends primarily on their level, and can be increased using defensive technologies such as Point Defences. Evasion can never be raised above 80 by any means.

Ships in a Nebula without Nebula Sensors have their Evasion reduced by 40 (to a minimum of 0). The Evasion of anything they try to shoot is increased by 40 as well - it's hard to shoot what you can't see!

Speed

All units have a “Speed” attribute which represents how fast they can travel - a high speed allows a ships to force or avoid battles. For ships this can be increased using Engines technologies, but armies only ever have a Speed of 1.

Stability

All units have a “Stability” attribute which represents how safe it is for them to traverse unstable wormholes. For ships this can be increased using Wormhole Stabilisation technologies, but armies only ever have Stability 1.

Mobility

Detachments have a "Mobility" attribute, which represents how easy it is for them to move around the planet. This can be increased using Engines technologies.

Only One Variant

A unit can only have a single variant applied to it. You can have a Missile Cruiser or a Beam Cruiser; but not a Missile Beam Cruiser.

Combat

See the Combat section for details on battles.

Unit Level	Evasion
1	40
2	30
3	20
4	10
5	0

Unstable Wormholes

See the Movement section for details on Wormhole travel.

My L1 Patrol Ship has a default loadout of 1 Sublight Engines, 1 Flux Stabiliser, 1 Ship Armour and 2 Ship Weapons. It also has 1 Flexible slot, which I decided to use for an extra Ship Weapons module.

The final ship therefore has 3 Ship Weapons modules, which at my current Tech Level each provide 5 points of Firepower. It has 1 Ship Armour module giving 15 Hull, 1 Sublight Engines module giving Speed 1, 1 Flux Stabiliser module giving Stability 1, and a base Evasion of 40 for being an L1 ship.

Vision

Not everything can see everything else in the same system - for example, an army on the ground won't be able to see the warships passing through. The following table shows what can see what (observer is on the left, thing being observed is across the top).

	Units in Space	Units on the Ground	Wormholes	Space Anomalies	Ground Anomalies
Units in Space	Yes	No	Depends on Sensors	Depends on Sensors	Yes*
Inhabited Planets	Yes	Yes	Depends on Sensors	Depends on Sensors	Depends on Sensors
Units on the Ground	No	Yes	No	No	Depends on Sensors

Logistics

A large fleet or army is nothing without the complicated supply chain that backs it up. Whilst logistics are a key part in any military, we don't want to get bogged down in the minutia of supply convoys and food rations. Therefore, it is assumed that the logistical support structure for your ships and armies is included within the districts that create them.

Each Level of Shipyard district provides you with 5 Fleet Logistics Points. Each level of Military district provides you with 5 Army Logistics Points. Ships and detachments cost Logistics Points to maintain based on their level. Additional Logistics points can be acquired through technology.

If you do not have enough Logistics Points to support your armies or fleets, then your Economy Rating is reduced by 1 for every point you are lacking.

I have 3 levels of shipyards and no logistics technology. I therefore have 15 Fleet Logistics Points. I have 4 Corvettes (L1), 3 Destroyers (L2) and one Cruiser (L3). This is a total of 19 Logistics Points required. I'm short 4 Logistics Points, so my Economy Rating is reduced by 4.

Unit Actions

As well as fighting aliens, units also carry out vital civilian duties to support and expand your civilisation.

Contested Actions

Many actions can only be attempted if they are Uncontested. This does not necessarily mean that you are the only person there, just that you are able to conduct that action in the system without anyone interfering with you.

If no other faction has any ships present in the system (or detachments present on the planet, for ground actions), then you are automatically Uncontested. If there are other units present but they are all unarmed and you have at least one armed unit present then you are also Uncontested. In any other situation then the system/planet is potentially Contested, and the action must either be aborted or your units must fight the faction who is contesting you.

Planet Vision

It's assumed that inhabited planets have telescopes, sensor arrays and ground survey equipment which use your current Sensors tech level to detect anomalies.

Ground Anomalies

Some ground anomalies may be visible from space, but these can still only be investigated by survey teams.

Unit Level	Logistics Cost
1	1
2	3
3	6
4	10
5	15

When do I fight?

Whenever multiple factions meet, the GM will determine what happens based on the Standing Orders for each faction involved. This will be detailed more in the "Orders and Relationships" section.

Unit Actions

Space Surveys

When a ship moves into a system, its sensors immediately perform a passive survey. This reveals basic information about the system:

- Any wormholes with a Concealment rating of 0.
- Space anomalies (or ground anomalies which are visible from space) with a Concealment rating of 0.
- Biome of any potentially habitable planets, and if they are inhabited by a Space Age civilisation.

Obtaining more detailed information requires a dedicated survey from a ship with the appropriate equipment. A ship equipped with a Deep Space Sensors module can spend a full turn studying the system to also learn:

- Details of space anomalies with Concealment rating \leq the ship's Sensor level.
- Any ground anomalies which are visible from space with Concealment rating \leq the ship's Sensor level.
- Mineral ratings of any Asteroid belts
- Any wormholes with a Concealment rating \leq the ship's Sensor level.

I want to survey Vinzin. I have a scout ship in the next system. I move it into Vinzin this turn. At the end of this turn I will receive the basic survey data for Vinzin. I decide I want to do a full survey, so leave the ship there with orders to do a Deep Space Survey and get the more detailed system data.

Planetary Surveys

A detachment equipped with a Planetary Survey Corps module can spend a full turn studying a planet to also learn:

- Traits/Quirks of any habitable planets
- Any Planetary Anomalies with a Concealment rating \leq the detachment's Sensor level.

Completing a dedicated survey of a system or planet requires you to be Uncontested.

Construction

Whilst Infrastructure districts are responsible for construction on your homeworld and colonies, sometimes you want to build something on a planet you don't control, or in space. This is done by using either Engineering Corps modules or Space Construction Gear modules respectively. Construction actions will have a Construction Rating. Each module provides a number of points of progress each turn equal to the level of its Offworld Construction technology. Once the amount of progress made is equal to or higher than the Construction Rating of the action, it is completed. Construction actions can be partially completed, paused and resumed at will.

Initiating a Construction action costs an amount equal to 5x Construction Rating, which must be paid in full, up-front.

Construction requires you to be Uncontested.

I want to construct a Deep Space Sensor in the system "Vinzin". I have a ship with a single L2 Space Construction Gear Module in the next system. I move it into Vinzin on turn 1. On turn 2 it can start constructing the Deep Space Sensor, gaining 2 points of progress towards the Construction Rating of 4. On turn 3 it will complete the construction.

Ships without sensors

Even ships without sensors can complete passive surveys, since they only detect things with concealment 0, which are blatantly obvious to even the most blind of science officers!

Collaboration

Multiple of your ships / detachments can work together on Construction or Anomaly Study actions, combining their relevant modules. If you want to collaborate with an alien race though, you'll need the appropriate technology.

Unit Actions

Colonisation

Colonising new worlds is a key part of Star Kingdoms, and any growing civilisation will soon find that its homeworld is not sufficiently large to manage everything. Starting a new colony is the default Construction action that is available to everyone. When the Construction action completes, the colony will be born with a single L1 Industrial district.

Before a planet can be colonised, it must first be surveyed. This will tell you the Construction Rating required to colonise it, which for an average planet is 10 but which may increase or decrease based on the situation. Colonising worlds which don't match your native biosphere increases this by 100%. If the world is Desolate it's even harder, and is increased by 300% instead!

You cannot colonise a planet inhabited by another player. Attempting to colonise a planet inhabited by pre-FTL natives may cause problems. Discuss with your GM.

Anomaly Studies

Studying an anomaly requires you to be Uncontested. Studying spacial anomalies requires the Deep Space Sensors module, studying planetary anomalies requires the Planetary Survey Corps module.

Anomalies will have an Anomaly Rating based on their complexity. When analysing Anomalies, each relevant module will provide a number of points of progress equal to the level of the Sensors technology. Once the amount of progress made is equal to or higher than the Anomaly Rating of the anomaly, the player will gain information about it. Anomalies can be partially studied, paused and resumed at will.

Some anomalies may allow for continual study after they have been analysed. In such cases, as long as the player controls the Outpost in that system, they will receive the ongoing benefits of studying the anomaly. Generally this will be a regular supply of Science Points, though there may be additional effects.

I want to study an anomaly with an Anomaly Rating of 11. I have a scout ship with a three level 2 Sensors modules in the system. It gains 6 progress this turn, and 6 progress next turn. I therefore learn the results of the study at the end of the 2nd turn.

Decommission

Whilst in a system containing a Shipyard District that you control, a ship can be decommissioned. This destroys the ship, and recovers a number of credits equal to $10 * \text{Ship Level} * \text{Ship Construction Technology Level}$.

Whilst on a planet containing a Military District that you control, a detachment can be decommissioned. This destroys the detachment, and recovers a number of credits equal to $10 * \text{Detachment Level} * \text{Military Theory Technology Level}$.

Boots on the Ground

As it is a Ground Construction action, colonising planets requires detachments equipped with Engineering Corps modules - it can't be done from space.

Upgrading

Remember that just improving your technology level won't automatically increase the effectiveness of your survey units or construction units. They have to go home and be refitted with the latest tech.

Movement

Sublight

Ships have Sublight drives which allow them to move around within a system. The scale of this game is large enough that spaces within a system are not mapped out, so sublight drives are primarily relevant for avoiding other ships within the system.

Ships do not have to travel at full speed - indeed where multiple ships are acting as part of a larger fleet, they generally use the Sublight Speed of the slowest ship.

Most armies are equipped with their own transport ships for space travel - these are bulky and slow, unable to defend themselves against attack and unable to outrun even the slowest of combat ships. Sending armies out unguarded is therefore a high-risk strategy as they will be prime targets for enemies or even small pirate factions. Armies can also be transported on larger ships using Cargo Space, which can give them added protection from stellar hazards, allow them to benefit from a cargo ship's speed, and potentially allow access to more advanced movement options depending on what the movement system is.

Wormholes

Rapid travel around the galaxy is made possible thanks to the existence of wormholes. Either natural or (more likely) a remnant of an ancient and advanced empire, wormholes connect systems by creating a tunnel of compacted space - physically shortening the distance between the two points. Ships therefore do not actually travel at Faster than Light speeds - it's just that they don't have to travel as far to get from one system to the next.

All wormholes have two characteristics - Instability and Concealment.

Concealment is how difficult the wormhole is to detect. This will range from 0 to 5, with 0 being easy to detect and 5 being almost impossible. Wormholes with a Concealment of 0 are immediately obvious to any ship entering the system. Wormholes with a Concealment of higher than 0 can only be discovered when the system is Surveyed by a ship with Deep Space Sensors of technology level at least equal to the Concealment rating. Once it has been detected a wormhole remains revealed to all of your ships - it's much easier to find when you already know where it is.

Instability is how difficult the wormhole is to traverse. This will generally range from 1 to 10, with 1 being easy to traverse and 10 being extremely difficult - though Instability is technically uncapped, and effects which increase it may exist! Wormholes can only be traversed by a ship with a Stability at least equal to the Instability rating. Without specialised technology or a cargo transport, detachments can only travel through wormholes of Stability 1.

When a unit has traversed a wormhole, it emerges in the destination system. Given it then has to travel across the system on sublight drives, it is not possible to exit one wormhole and enter another in the same turn.

Wormhole Distribution

Quite how wormholes are distributed in Concealment and Instability will vary from game to game, but it is expected that a good chunk of the galaxy will be traversable using wormholes of Instability 1 and Concealment 0. It's unlikely to be a particularly direct route though and will likely take a lot longer than using the harder to find or less stable wormholes.

Following

Whilst it is possible to tell your units to follow someone, if they go through a wormhole you don't know about or that is too high Instability, the movement will fail.

Pursuit

Given the size and general emptiness of space, it is almost impossible to force a battle if the enemy is faster than you. If one fleet wants to fight and the other does not, the fleets compare Sublight Speeds. If the fleeing fleet has a higher Speed, then they will be able to safely stay out of the range and prevent a battle occurring. If not, they are forced to fight.

Armies travelling in their own transports have a Speed of 0 - they can't escape from even the slowest warship.

A fleet that is using it's higher speed to avoid a battle cannot contest the system.

Unarmed ships will always stay out of combat range if possible, and will retreat at the first sign of being forced into combat.

Retreat

If space combat does occur, it may be that ships wish to retreat. If the retreating ship had moved that turn, it will always retreat back through the wormhole it entered from. If a ship remains in a system for at least 1 turn it can choose its retreat route - this must be set in advance though. If a player does not set a retreat route for a ship, it will by default retreat back through the last wormhole it used.

Orders and Relationships

Whilst the players control their governments and the deployment of their ships, the actual day-to-day ship operations are left in the hands of the ship captains subject to the standing orders of the controlling government. The most basic form of standing orders is Relationships. This is a broad way of detailing how your faction feels about each other faction. The five possible relationships are Allied, Friendly, Neutral, Wary and Hostile.

Your Relationship will determine how the GMs resolve actions which are potentially Contested and will also impact if combat occurs.

Relationship	Contest Actions	Engage in Combat
Allied	No	No
Friendly	No, unless the action uses a limited or consumable resource. If so, check specific orders	No
Neutral	Check specific orders	No
Wary	Yes	Check specific orders
Hostile	Yes	Yes

Any standing orders more specific than Relationships should be detailed at the top of the player's turn orders and should be relatively simple. Generally these will involve specifically granting permissions for another player to complete an action, ordering ships to attack a specific target, or what to do if an action is contested.

If one of your actions is contested and no specific orders are given about how to handle it, the ship's captain will decide how to proceed based on their assessment of the situation, taking into consideration your Relationship with the faction who is contesting them.

Ships can be given specific orders to complete a set task - such as studying an anomaly or colonising a planet (detailed below). If there is a conflict between your standing orders, specific orders, and/or a specific situation, the GM will decide what your captain does in the moment. They will take your orders into consideration, but be warned that the outcome may not be what you expected or desired.

Zabania is an isolationist, law abiding but arrogant civilisation. They are Allied with ED-E, Friendly with Bellatrix and Wombles, Neutral with Ratfolk, and Wary of Fongari. In addition, they have the following specific orders:

*ZABANIAN SPACE (BBC, AAB, CCD, STT, STU, PQR, MNO, JKL)
Engage all wary.*

*ALIEN SPACE
Do not contest friendlies or neutrals. Do not engage wary.*

Default Relationship

Players should declare their relationships with each alien species on their turn sheet. They should also declare the default stance for any unknown alien races they may encounter. If a relationship is not declared, the GM will assume it to be Wary.

Default Orders

If the GM would need to check your specific orders and they have not been given, it is assumed that actions WILL be Contested and ships WILL NOT be engaged.

Specific Orders vs Relationship

Specific orders will not override the default stances for contesting or engaging determined by the Relationship. This is because this aspect of the system is highly likely to be automated, so the GM won't necessarily see your specific orders.

We're not suicidal!

Ship captains will in general not willingly engage an enemy where they are obviously outmatched unless they have no choice. (This is left to the GM's discretion - obviously exceptions exist, such as defending your homeworld).

Combat Battles

When a battle does occur, the result will be calculated entirely by the GM and players will be notified of the results in their turn feedback. The GM may decide to deviate from the rules below based on the narrative circumstances, but this is the general principle. These rules aren't meant to precisely describe the movement and firing of every ship, but try to model the mobility advantages of smaller ships and the chaos of battle.

Combat takes place over a number of rounds. Each round, units will fire in phases, in order of size, from smallest to largest. Units in the same phase fire simultaneously. Combat continues until one side is either destroyed or retreats from the field.

Space combat is relatively quick - the full combat is resolved in a single turn. Ground combat takes significantly longer - each game turn between one and three rounds of combat will take place. If one side has an average Mobility at least 2 points higher than their opponent then they will determine the number of rounds, otherwise it will default to 2. In general, attackers want more rounds and defenders want fewer. When calculating the average mobility, the weight of each unit's contribution is equal to its level.

*My opponent is invading with an L5 Infantry Division with Mobility 2. I am defending with 5 units of L1 militia with Mobility 1 and 2 units of L3 Guerilla Fighters with Mobility 6. My average Mobility is therefore $(5*1*1 + 2*3*6) / (5*1 + 2*3) = 41 / 11 = 4$. Because my Mobility is at least 2 points higher than theirs I have the advantage, and so there is only 1 combat round per turn.*

When a unit fires, it's Firepower is divided into a number of shots equal to its level (any fractions are rounded normally). Each of these shots are then targeted at an enemy unit, and a check is made to determine if it hits or not - this is a percentage roll against the target unit's Evasion. Some special weapons and defences will impact this, such as point defence systems or beam weapons. Each shot that hits is applied as damage to the Hull / Health of the enemy unit - if it is reduced to 0 Hull or lower, it is destroyed and any extra Firepower from that shot is wasted. The target for each shot is determined randomly from the list of currently living enemy units at the start of each phase. This means that it is quite possible for all of your units to concentrate fire on the same enemy and massively overkill it - but given the random nature of target selection, this is unlikely.

My Cruiser is firing. It has 98 Firepower, which is therefore split into 3 shots of 33. I am attacking a pair of damaged Corvettes with 25 hull each and a heavily damaged Battleship with 55 hull remaining.

The Corvettes fire first, both hitting and damaging my cruiser but it's still very healthy. My cruiser fires next, the randomly selected targets for my three shots being Battleship, Corvette 1, Corvette 1. The Battleship has Evasion 10 and the corvettes have Evasion 40. To hit the Battleship I therefore need to roll more than a 10, and to hit the Corvettes I need to roll more than 40.

My shot against the Battleship rolls a 23, which hits. I therefore deal 33 damage to the Battleship leaving it on 22. My shots against Corvette 1 roll a 32 and a 57, so one of them hits and the other misses, reducing it to -8 and killing it. The Battleship fires last, all four of its shots targeting my Cruiser as there are no other targets. The round ends, and a new round begins with Corvette 2 firing.

Random Targeting

Whilst it may seem odd that targeting is random, this is designed to represent that both sides of the battle are doing their best to both target their own shots and prevent the enemy from targeting them. Over the course of a battle this will average out. To improve your chances at getting a positive outcome, look at the Battle Tactics technology - the player with the higher Battle Tactics can re-roll an entire turn and pick the best outcome! This represents the fact that their commanders are more likely to be able to have the right units in the right place at the right time.

Morale

Fights to the death are extremely rare, as very few commanders are willing to throw the lives of their men away without dire cause. Normally, once a force has suffered sufficient casualties, the commanders will order a retreat. This is represented in play by their determination.

Events in combat can cause a force's determination to fall - if it ever reaches 0 or lower, the force immediately attempts to retreat. When this happens, one final round of combat is calculated. During this round the retreating units have double their usual Evasion, but only half of their usual Firepower. For space combat, any ships that survive this extra round leave as detailed in the Retreat section (see "Movement", above). For ground combat, armies will retreat to their transports but remain in the system. Armies must be uncontested in space in order to retreat - otherwise their transports will be promptly destroyed by the enemy ships! If retreat is not possible the losing armies will surrender instead.

In the case where both forces reach 0 or lower determination simultaneously the forces which dropped furthest below 0 will retreat. In a tie, both forces will disengage and avoid combat for the rest of the turn, but not retreat.

The initial determination for a force is equal to the total number of unit levels in the fleet which are above 50% Hull / Health. This can be modified by a multitude of factors - Officer training technology, being in friendly territory, recent narrative events, etc. These modifiers only occur once, at the start of the combat.

Because ground combat can last over multiple turns, it is possible to receive reinforcements. If you receive reinforcements, provided the reinforcing detachment is at least at 50% health, the army's determination is increased by the Level of the reinforcing detachment.

Reason	Initial Determination Modifier
System contains one of your colonies	x1.25
System contains your homeworld	Infinite
GM narrative event	GM discretion
Combat Event	In-combat Determination Modifier
Friendly unit reduced to 50% Hull / Health	- Unit Level
Friendly unit destroyed	- Unit Level
GM narrative event	GM discretion

I have a fleet of 3 ships - two L2 Vorchans and an L3 Primus. One of the Vorchans has been in a fight previously, and is below 50% hull.

My base determination is therefore $2 + 0 + 3 = 5$

I am in a system containing one of my inhabited planets so I get a x1.25 determination boost, giving me a final determination of 7.

Forces

The term Force applies to any group of allied ships or group of allied armies.

Prisoners of war

Surrendered armies are treated as destroyed for the purposes of the combat, however it would be highly irregular for them to actually be killed.

They may be sold back to their original owner (negotiations left up to players) or they may be dispersed. With the right technology or trait, you may even be able to turn them to fight for you...

Unarmed ships

Unarmed ships, or ships which are vastly outnumbered (See "We're not suicidal!" above), will always attempt to retreat immediately if forced into combat. The GM will only run the "Retreat" round of the combat - in which the retreating ships get enhanced Evasion.

Attacking Planets

Blockades

Having control of the space around a planet allows you to exert a great deal of economic pressure without resorting to actually bombarding the planet. Being able to prevent trade ships from coming and going stifles a planet's economy, and any ships launching from the surface are easy targets whilst they are still caught in a planet's gravity well.

If you are Uncontested in an inhabited system your armed ships may Blockade the planet. Each armed ship blockading the system increases the Blockade rating by 1. Whilst Blockaded, the planet is unable to launch any ships with Speed lower than the Blockade rating, and its Planetary Economy is reduced by $10 * \text{Blockade Rating} \%$.

Other civilisations also cannot gain any trade benefit from a blockaded planet.

Devastation

Devastation is a general indicator of the "Health" of a planet. It can be caused in many ways such as natural/artificial disasters, orbital bombardment or collateral damage from invasion.

Devastation makes everything on a planet harder. For each level of Devastation, the Planetary Economy is reduced by 2. Once a planet has suffered 5 points of Devastation, a random district is damaged and reduced by 1 level, and the Devastation is reset to 0. The districts affected will be determined by the GM.

Devastation does not reduce naturally - it requires dedicated effort and heavy equipment. Reducing devastation requires a planet to take the "Rebuild and Repair" construction project.

If Devastation has reduced the Planetary Economy to 0, any further levels of Devastation instead start damaging districts. This is unlikely to happen on anything except the newest of colonies.

Planetary Defences

Many governments will install static defences in their systems to defend against space attack. These can take the form of either ground based or satellite based weaponry. Satellite based weaponry is created in Shipyards, whilst Ground based defences are a class of detachment equipped with ground to space weapons.

Given how massive space is and as they cannot move, planetary defences are unable to contest a system. Instead, they protect a planet against being invaded, blockaded, or bombarded from.

If a fleet wishes to blockade, bombard or land troops on a planet, then removing any space based system defences is not optional, but a required first step to the process.

Ground based defences work slightly differently. Whilst they cannot participate in space battles, their job is to prevent enemies orbitally bombarding or landing troops on the planet. How they do this will be covered in the relevant Technology section.

Orbital Bombardment

Once a fleet has achieved superiority in a system, there is little to prevent them from raining death on the planets from orbit. Though extremely dishonourable, in war every tactic available is a valid one.

Unfortunately for the would-be genocidal maniac, weapons optimised for space combat perform poorly in atmosphere and are not designed for constant use. Further, in order to orbit at a low enough height to achieve a noticeable effect, a bombardment ship exposes itself to heavy fire from any system defences on the planet.

When bombarding a planet, each bombarding ship carries out one combat round's worth of fire against the planet. Military districts provide interception and shielding to the rest of the planet, granting Evasion of 5 per district. For every 100 points of damage dealt, the planet gains one level of Devastation. This damage will carry over between turns, so if you deal 99 on one turn you only need to deal 1 on the subsequent turn. The counter resets to 0 if a planet is not bombarded for 1 full turn.

Any ships orbitally bombarding a planet are also considered to be blockading it.

Invasions

Since space is big, it is easy to see an invading force coming. A planetary invasion will never be a surprise - both sides will have had ample time to prepare themselves.

An invasion force will first need to engage any defending fleet. Troops remain on their ships until the battle is finished, since it isn't practical to land an invasion force during a space battle. Once the battle has resolved, all surviving troops will land together. If the ship carrying the troops is destroyed during the battle however, all the troops aboard are lost as well.

At the end of each turn of ground combat, the planet gains 1 level of Devastation for every 10 levels of non-militia detachment that are involved in the combat.

During a planetary invasion, the Blockaded rating of the planet is increased by 1.

Militia

When an invading force lands on a planet, it is met by any armies down on the planet already as well as a militia of the civilian population. A planet will create a militia detachment for each level of district it contains, and an additional militia detachment for each level of military district. These militia detachments have 8 Firepower, 25 Health, 40 Evasion and 2 Mobility, and do not benefit from any technologies unless that technology explicitly states that it applies to militia.

Militia armies will never retreat or surrender, and cannot leave their planet. These are civilians defending their homes, they will fight to the last.

Civilisation creation:

Traits

The first thing to consider when creating a civilisation is what type of civilisation you are after. This will affect how you build your civilisation later, how the galaxy will interact with you, any random events that may occur throughout the game, and any exotic technologies you may wish to develop.

Each civilisation will have three traits. A trait is a word or short phrase that describes a key aspect of your civilisation. At least one of these must be a drawback – no civilisation is perfect! If your trait is not clearly obvious just explain what you mean to your GM, but try and keep the traits as self-evident as possible.

Your traits will have mechanical impacts which will alter the way the game rules work for your civilisation. These could be minor changes such as altering the costs to run specific projects, or sweeping changes such as sharing a world with another player! You will work with the GM when creating your civilisation to decide what the traits do.

One of your traits should be related to your homeworld - what makes your planet different to others? Does it have regular dust storms which cause problems for construction? Does it have ancient ruins which can be exploited for alien technology?

Other players will be able to determine what this trait is and what it does by surveying your homeworld.

I decide that my homeworld has enormous crystal deposits, and so my buildings are carved directly into the crystal. This makes them extremely beautiful, but they must be very carefully constructed - Infrastructure projects on my homeworld cannot be accelerated.

Your second trait should be related to your people, government or culture - what does your civilisation value? What do you not care so much about? Do you follow a single powerful leader who can inspire your armies, or is your bureaucracy so byzantine as to slow down even the simplest of tasks? Are your people religious fanatics?

Other players will be able to determine what this trait is (but not necessarily what it does) by setting up a branch of an Organisation on any of your planets.

I decide that my people are scientists and scholars, seeking knowledge for its own sake. The cost to initiate an "Analyse" project is reduced by 50%, and all "Analyse" projects are automatically rushed at no extra cost.

Your final trait should be related to your ambitions - what does your civilisation want? Do you seek to conquer the galaxy with an iron fist, or are your people just looking for more space to breed in? Do you want to explore every inch of the galaxy, or do you simply want to stay safe and make an awful lot of money?

Other players will have to deduce what this trait is and what it does through interactions with your civilisation.

I decide that my people want to bring enlightenment to the galaxy, sharing their knowledge with everyone. Whenever one of my Science organisations takes the "Share Technology" action its Organisation Power is treated as being 2 higher.

Social Principles

After choosing your traits, you select your starting Principles. Each civilisation will start with at least 3 social principles on their homeworld, with one each of Adherence 3, 2 and 1. Starting with more than 3 should be discussed with the GM in advance. These represent the civilisation's initial cultural beliefs.

My people have a rigid heirarchy and system of guilds which spans their entire populace and is drilled into everyone from an early age - I set "Guild System" at adherence 3. They are also very insular and protective of their own world and space, so I set "Xenophobia" at adherence 2. Finally, although the guilds are theoretically supposed to be equal, there is almost always one which has more power than the others and so is able to sway policy - currently this is the Geneticists, so I set them at adherence 1.

Homeworld Setup

Biosphere

Select your native Biosphere. This must be either Desert, Temperate, or Arctic.

Minerals

Unless otherwise agreed with the GM as part of your faction setup, each homeworld will have a Mineral Rating of 3.

Starting Districts

Industrial district L2. One other district at L2. Both remaining districts at L1.

I decide that my people are focused on technology and progress, and so allocate my L2 to Academics. They are not as concerned with warfare, and so my Shipyard and Military are left at L1.

Starting Technology

All Core Technologies at Level 1. Two Core Technologies at L2.

I plan to explore the galaxy and learn its secrets, so I take Sensors and Wormhole Stabilisation at L2.

Starting Ships

Two L1 ships of any basic class.

I take a pair of Survey Probes - I hope I don't meet anything hostile out there!

Starting Detachments

Two L1 deatchments of any basic class.

I take a Survey Team and a Construction Gang - I want to find and colonise a new world sooner rather than later.

Starting Organisations

1 Organisation of any type.

To help with my early survey efforts, I take a Science / Exploration organisation.

Starting Funds

450 Credits

APPENDIX A - TECHNOLOGY

Planetary Construction - Xenology

You may not construct a District of higher level than you have in this technology, and a planet may not have more Offices than your level in this technology.

Hardened Materials - Engineering

Requires Planetary Construction L2

Increases the number of levels of Devastation required to destroy a district by 2.

Advanced Mineral Extraction - Engineering

Requires Planetary Construction L2

Allows you to benefit from any Planetary Traits that require this technology.

Planetary Shields - Physics

Requires Planetary Construction L3

Allows construction of Planetary Shields. These are ground based installations which can project an energy shield above the key areas of a planet's surface. Constructing a Planetary Shield is an L3 Industrial Project. Each planet can have only 1 Planetary Shield.

When an enemy force attempts to bombard a planet, the Planetary Shield can be activated. This increases the Evasion of the planet by 10.

Construction Techniques (Arctic) - Engineering

Requires Planetary Construction L3

This technology increases the effectiveness of your construction methods on Arctic planets. When building on Arctic planets, treat your Planetary Construction level as though it were 1 higher.

Construction Techniques (Temperate) - Engineering

Requires Planetary Construction L3

This technology increases the effectiveness of your construction methods on Temperate planets. When building on Temperate planets, treat your Planetary Construction level as though it were 1 higher.

Construction Techniques (Desert) - Engineering

Requires Planetary Construction L3

This technology increases the effectiveness of your construction methods on Desert planets. When building on Desert planets, treat your Planetary Construction level as though it were 1 higher.

Construction Techniques (Desolate) - Engineering

Requires Planetary Construction L4

This technology increases the effectiveness of your construction methods on Desolate planets. When building on Desolate planets, treat your Planetary Construction level as though it were 2 higher.

Ship Construction - Engineering

You may not construct a ship of higher level than you have in this technology.

Grants access to the “Cargo Bay” module. A ship with Cargo Space can transport items and troops. Each Cargo Module increases the ship’s carrying capacity by 1. Transporting a detachment takes a number of points of carrying capacity equal to the level of the detachment. The GM may also require a certain number of points of carrying capacity if you wish to transport miscellaneous items between planets.

Ship Design - Engineering

Requires Ship Construction Level X

Grants access to an advanced ship class of level X+1. If the class has any special modules you must possess the relevant technology for that module.

Fighters - Engineering

Requires Ship Construction L1

Grants access to the “Fighter Squadron” ship blueprint. Unlike other ships, Fighters do not have Flux Stabilisers and therefore cannot travel through wormholes. They can however be disassembled and transported by cargo ships - each fighter squadron takes up 1 point of cargo space. Reassembling the fighters requires a planet with a shipyard, but does not require a project or action and can be done for free.

Also unlike other L1 ships, Fighter squadrons have a base Evasion of 50.

Salvage Rigs - Engineering

Requires Ship Construction L2

Gives access to the “Salvage Rig” module. A ship with a Salvage Rig module is capable of collecting valuable components from abandoned or destroyed ships. Each turn, each Salvage Rigs module can reclaim $10 * \text{Ship Level} * \text{Tech Level}$ credits from the remains of a destroyed ship in the same system. This destroys the remains. Salvaging requires you to be Uncontested.

A ship with a Salvage Rig module is also capable of towing other ships. If it wishes to tow another ship then its Speed is reduced to 1. Half of any excess speed is then converted into Tug Power. Ships can tow another ship if their combined Tug Power is at least equal to the level of the ship being towed.

Some anomalies may also require Salvage Rigs to extract their contents. Quite how this works will vary from anomaly to anomaly.

Interceptors - Physics

Requires Ship Construction L2 and Fighters.

Grants access to the Interceptors variant for fighter squadrons. This variant trades off power for even more maneuverability, enabling them to line up their shots more easily. They reduce their firepower by 25%, but also reduce the evasion of their targets by 25.

Bombers - Engineering

Requires Ship Construction L2 and Fighters

Grants access to the Bomber variant for fighter squadrons. This variant trades is equipped with heavy torpedoes capable of dealing serious damage to larger ships. Unfortunately these are slow-moving weapons, and are easier to avoid or shoot down. They increase their firepower by 50%, but also double the evasion of their targets.

Ship Construction - Engineering

You may not construct a ship of higher level than you have in this technology.

Grants access to the “Cargo Bay” module. A ship with Cargo Space can transport items and troops. Each Cargo Module increases the ship’s carrying capacity by 1. Transporting a detachment takes a number of points of carrying capacity equal to the level of the detachment. The GM may also require a certain number of points of carrying capacity if you wish to transport miscellaneous items between planets.

Carriers - Engineering

Requires Ship Construction L2 and Fighters

Grants access to the “Fighter Bays” module which allows fighter squadrons to be carried without being disassembled. Each fighter bays module allows one fighter squadron currently being transported to be deployed directly into combat. Note that you still need the cargo space to transport them! Also grants access to the "Light Carrier" ship class.

Atmospheric Fighters - Engineering

Requires Ship Construction L3 and Fighters

Unlocks the "Atmospheric" variant for fighter squadrons. Atmospheric fighter squadrons can operate in a planet's atmosphere, and can therefore participate in ground combats as though they were Detachments.

Advanced Fighter Construction - Engineering

Requires Ship Construction L3 and Fighters

When taking the Construct Ship action to construct fighter squadrons, you can increase the level of the project to construct more squadrons simultaneously. An L2 project constructs 3 squadrons, an L3 constructs 6, and an L4 constructs 10.

Engines - Physics

Gives access to the “Sublight Engines” module.

Each Sublight Engines module increases the Sublight speed of the ship by Tech Level / Ship Level.

Gives access to the “Suborbital Transports” module.

Each Suborbital Transports module increases the Mobility of the detachment by Tech Level / Detachment Level.

Starship Towing - Engineering

Requires Engines L2

Gives access to the “Towing Gear” module.

Each Towing Gear module increases the Tug Power of the ship by Tech Level.

Ships can tow another ship if their combined Tug Power is at least equal to the level of the ship being towed.

Military Theory - Xenology

You may not train a detachment of higher level than you have in this technology.

Detachment Design - Xenology

Requires Military Theory Level X

Grants access to an advanced detachment class of level X+1. If the class has any special modules you must possess the relevant technology for that module.

Cryo-Freeze - Xenology

Requires Military Theory L2

Grants access to the “Cryogenic Storage” ship module. A ship with Cryogenic Storage can transport troops between planets. Each Cryogenic Storage Module increases the ship’s carrying capacity by 2, but this capacity can only be used to transport detachments.

Naval Logistics - Xenology

Requires Military Theory L2

Your Fleet Logistics cap is increased by 5x Military Theory Tech Level

Army Logistics - Xenology

Requires Military Theory L2

Your Army Logistics cap is increased by 5x Military Theory Tech Level

Scavengers - Engineering

Requires Military Theory L2

Gives access to the “Scavengers” module, the “Scavenge” detachment action, and the "Archaeologists" detachment blueprint. A detachment with a Scavengers module is capable of collecting valuable components from destroyed detachments.

Each turn, each Scavengers module can reclaim $10 * \text{Detachment Level} * \text{Tech Level}$ credits from the remains of a destroyed detachment in the same system. This destroys the remains. Scavenging requires you to be Uncontested.

Some anomalies may also require Scavengers to extract their contents. Quite how this works will vary from anomaly to anomaly.

Battle Tactics - Xenology

In combat, the relative levels of this technology are compared. If one side is superior, the GMs will calculate the results of the battle an additional time for each level of discrepancy, then select the result most favourable to the side with the higher level Battle Tactics.

Guerilla Warfare Techniques - Xenology

Requires Battle Tactics L1

Your Militia armies have Evasion 50.

Naval Training Techniques - Xenology

Requires Battle Tactics L2

When in a space battle, your Ships only lose determination at 40% Health, instead of 50%.

Army Training Techniques - Xenology

Requires Battle Tactics L2

When in a ground battle, your Armies only lose determination at 40% Health, instead of 50%.

Offworld Construction - Engineering

Grants access to the “Space Construction Gear” and “Engineering Corps” modules. See “Construction” under Unit Actions in the main rules.

Grants access to the “Colonise” Construction Action. See “Colonisation” under Unit Actions in the main rules.

Collaborative Construction - Xenology

Requires Offworld Construction L2

This technology allows ships or detachments from multiple factions to work together on construction projects. One faction must act as the primary constructor and ensure that they record the assistance of other ships/armies. Both factions must have this technology in order to work together.

Both factions must agree on who the primary constructor is. If agreement cannot be reached, the collaboration cannot make progress.

Once the construction is complete, ownership of the resulting thing is given to the primary constructor.

Climate Control - Xenology

Requires Offworld Construction L2

This technology allows you to more easily colonise Desert, Temperate and Arctic planets which do not match your native Biosphere. When colonising such planets, instead of the Colonisation Rating being increased by 100%, it is instead only increased by 50%.

Habitation Domes - Xenology

Requires Offworld Construction L3

This technology allows you to more easily colonise Desolate planets. When colonising such planets, instead of the Colonisation Rating being increased by 300%, it is instead only increased by 150%.

Asteroid Mining - Engineering

Requires Offworld Construction L2

Allows your ships with Space Construction Gear to construct mining facilities in Asteroid belts. Each asteroid belt may only contain one mining facility. These have a Construction Rating of 10.

Asteroid Mining Facilities increase a civilisation’s Economy Rating by the asteroid belt’s Mineral Rating.

Orbital Repair Yards - Engineering

Requires Offworld Construction L2

Allows your ships with Space Construction Gear to construct Orbital Shipyards around one of your inhabited planets. These have a Construction Rating of 20.

Orbital Shipyards are only capable of taking the “Repair Ship(s)” action, which they do as though they had an L1 Shipyard district.

A player who is Uncontested in a system may destroy any Orbital Shipyards present without contest.

Strip Mining - Engineering

Requires Offworld Construction L3

Allows your Detachments with Engineering Corps to construct Strip Mines on an uninhabited planet or moon. These have a Construction Rating of 30. Each planet / moon may only contain one strip mine.

Each Strip Mine increases a civilisation's Economy Rating by 3 times the Mineral Rating of the planet / moon.

Sensors - Physics

Grants access to the “Deep Space Sensors” module and the “Planetary Survey Corps” modules.

Collaborative Anomaly Study - Xenology

Requires Sensors L2

This technology allows science vessels from multiple factions to combine their efforts to analyse anomalies. One faction must act as the primary investigator and ensure that they record the assistance of other ships. Both factions must have this technology in order to work together.

Both factions must agree on who the primary investigator is. If agreement cannot be reached, the collaboration cannot make progress.

Rewards from any anomaly which are knowledge based -e.g. narrative, new technologies, will be obtained by all contributors. All physical rewards will be provided to the primary investigator to dispense as they see fit.

Remote Sensors - Physics

Require Sensors L2

Gives access to the “Remote Sensor” Space Construction project. This has a construction rating of 5, and constructing one in a system requires you to be Uncontested.

A Remote Sensor gives its owner vision of the system as though they had a ship there. These sensors are easily detectable, and can be freely destroyed at any time by any player who is Uncontested in the the system.

Nebula Sensors - Physics

Requires Sensors L2

Grants access to the “Nebula Sensors” module and the "Long Range Science Ship" class. A Nebula Sensors module allows a ship to operate normally in a Nebula, and allows it to guide other ships - though this is dangerous as if anything happens to the guiding ship all its followers will be helplessly lost.

Wormhole Stabilisation - Physics

Gives access to the “Flux Stabiliser” module.

Each Flux Stabiliser module increases the Stability of the ship by Tech Level / Ship Level.

Wormhole Stabilisers - Physics

Requires Wormhole Stabilisation L2

Grants access to the “Wormhole Stabiliser” Space Construction project. This has a construction rating of 20.

A Wormhole Stabiliser reduces the Instability of a wormhole by 1, to a minimum of 1. A wormhole can have one Stabiliser on each end, so the Instability can be reduced by 2.

Flux Stability Field - Physics

Requires Wormhole Stabilisation L3

Grants access to the “Flux Stability Field Projector” class L4 ship and the “Flux Stability Field” module. Each Flux Stability Field module allows one other ship using the same wormhole to use the projecting ship’s Stability instead of its own. A ship can only benefit from this if it is equal to or lower level than than the projecting ship.

Starship Weapons - Physics

Grants access to the “Starship Weapons” module. Each Starship Weapons module increases the Firepower of the ship by Tech Level + 4.

Missile Launchers - Engineering

Requires Starship Weapons L3

Grants access to the “Missile” ship variant. Missile ships increase their Firepower by 50%, but enemy Evasion is doubled against Missile attacks. This makes them particularly effective against ships with low Evasion.

Beam Weapons - Physics

Requires Starship Weapons L3

Grants access to the “Beam” ship variant. Beam ships reduce their Firepower by 25%, but enemy Evasion is reduced by 25 against Beam attacks. This makes them particularly effective against ships with high Evasion.

Assault Weapons - Engineering

Requires Starship Weapons L3

Grants access to the “Assault” ship variant. Assault ships increase their Firepower by 50%, but do not attack on the first round of combat.

Flak Weapons - Engineering

Requires Starship Weapons L4

Grants access to the “Flak” ship variant. Flak ships reduce their Firepower by 25%, but grant [Ship Level] Evasion to all allied ships.

Spinal Weapons - Physics

Requires Starship Weapons L4

Grants access to the “Spinal” ship variant. Spinal ships increase their Firepower by 25% and only have 1 shot, no matter what level the ship is.

Starship Defences - Engineering

Grants access to the “Starship Armour” module. Each Starship Armour module increases the Hull of the ship by $(3 * \text{Tech Level}) + 12$.

Deflector Shields - Physics

Requires Starship Defences L2

Gives access to the “Deflector Shields” module.

Each Deflector Shields module grants a number of Shield points equal to $(3 * \text{Tech level}) + 12$. Shield points work the same way as Hull except they are lost first, and regenerate at the end of the turn. Shield points count as Hull for purposes of Determination.

Self-Repairing Armour - Xenology

Requires Starship Defences L2

Gives access to the “Self-Repairing Armour” module.

If the ship is damaged at the end of the game turn, each Self-Repairing Armour module restores 20% of the ship’s maximum Hull.

Point Defence Cannons - Engineering

Requires Starship Defences L2

Grants access to the “Point Defence Cannons” module. Each Point Defence Cannons module increases the Evasion of the ship by 5.

Infantry Weapons - Physics

Grants access to the "Infantry Weapons" module. Each Infantry Weapons module increases the Firepower of the detachment by Tech Level + 4.

Precision Weaponry - Engineering

Requires Infantry Weapons L2

Grants access to the "Precision" detachment variant. Precision detachments do not count when calculating the Devastation caused by ground combat.

Recon Forces - Xenology

Requires Infantry Weapons L3

Grants access to the "Recon" detachment variant. Recon detachments reduce their Firepower by 25%, but enemy Evasion is reduced by 25 against their attacks.

Heavy Armour - Engineering

Requires Infantry Weapons L3

Grants access to the "Heavy Armour" detachment variant. Heavy Armour detachments increase their Firepower by 50%, but enemy Evasion is doubled against their attacks.

Planetary Defence Forces - Physics

Requires Infantry Weapons L3

Grants access to the "Planetary Defence Force" detachment class and the "Portable Ground to Space Weapons" module (POGS). Planetary Defence Force class detachments cannot leave the planet on which they were constructed.

During an Orbital Bombardment or when enemies attempt to land on a planet, any detachments with POGS modules can attempt to attack the bombarding ships / invading detachments. This works in the same way as a single round of normal combat but only using their POGS modules, with each POGS module granting Tech Level + 4 Firepower.

Artillery - Engineering

Requires Infantry Weapons L4

Grants access to the "Artillery" detachment variant. Artillery detachments have -20 Evasion, but deal +25% damage and count double when calculating the Devastation caused by ground combat.

Infantry Defences - Engineering

Grants access to the "Infantry Armour" module. Each Infantry Armour module increases the Health of the detachment by $(3 * \text{Tech Level}) + 12$.

Reinforced Drop Pods - Engineering

Requires Infantry Defences L2

Grants access to the "Reinforced Drop Pods" module.

Each Reinforced Drop Pods module increases the detachment's Evasion against POGS modules by 25.

Medical Corps - Xenology

Requires Infantry Defences L2

Grants access to the "Medical Corps" module and the "Combat Medics" detachment class. At the end of each turn, each Medical Corps module restores $(3 * \text{Tech Level}) + 12$ Health to a random damaged allied army on the same planet.

Camouflage Fields - Physics

Requires Infantry Defences L2

Grants access to the "Camouflage Fields" module. Each Camouflage Fields module increases the Evasion of the detachment by 5.

APPENDIX B - CLASSES

Ships - Level 1 Basic

Patrol Ship

Nothing to write home about. The shipyards came up with a basic design for a combat capable spacecraft that didn't break the bank. It wasn't anyone's first choice, but a solid second choice craft which rapidly became the mainstay of every budding space age civilisation.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
1	1	1	2	1

Survey Probe

Finding out if there's any threat out there requires a bit more nuance than shooting each rock that you find. Peering into the depths of space is the Survey Probe's business, and it does it moderately well.

Sublight Engines	Flux Stabiliser	Ship Armour	Deep Space Sensors	Flexible
1	2	1	1	1

Constructor

Once something is found out there in the stars, someone always wants to claim it. Usually by placing an obnoxiously large flag on it. Or perhaps by arming it to the teeth with defences. Either option requires someone to go build it.

Sublight Engines	Flux Stabiliser	Ship Armour	Space Construction Gear	Flexible
1	1	1	2	1

Ships - Level 1 Advanced

Fighter Squadron

Requires Fighters Technology

Short range fighters are fast and heavily armed for their size. Without Flux Stabilisers they can't travel between systems, but in their own space they can chase down most targets and still pack a solid punch. Just try not to get shot.

SPECIAL RULE: Fighter squadrons have a base Evasion of 50 and can be transported as Cargo. See the "Fighters" tech for details.

Sublight Engines	Ship Armour	Ship Weapons
2	1	2

Ships - Level 2

Basic

Gunboat

Once larger hulls became available, it was only natural to scale up the original patrol ship to something with more space. Still fairly basic and fairly cheap, it wasn't much of a problem to churn them out by the dozen. Somehow the Gunboat has just the right level of menace to be a threat, whilst not being overly threatening. In most circumstances.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
1	1	6	6	2

Light Freighter

No one would ever accuse the Light Freighter of being a favourite to command. Yet everyone seems to want one in their fleet. Or preferably more. It turns out that if one wishes to expand beyond the atmosphere of your home planet, things need to be imported and exported once in a while. Rumour has it you can fit a whole army in one of these tin cans. Not many try that though, unless the situation is pretty desperate.

Sublight Engines	Flux Stabiliser	Ship Armour	Cargo Space	Flexible
3	3	3	5	2

Ships - Level 2

Advanced

Militarised Survey

See new things. And shoot them. That was the design philosophy behind this class. Not necessarily the ship you want to bring to a fight, but one that won't shy away from it either. Rated to deal with class h threats and below, it's a plucky ship that won't get destroyed by every anomaly that it finds. Probably.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Deep Space Sensors	Flexible
2	3	3	3	3	2

Tactical Destroyer

Sometimes just relying on old fashioned designs won't cut it. Not in this new age of space exploration. Who knows what dangers might be out there? Exciting new designs for ships abound, but many of them aren't particularly popular. Eventually the idea of being ready for each situation at the same time took hold. Counter proposals fell on deaf ears, and so the Tactical Destroyer was born.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Deep Space Sensors	Space Construction Gear	Flexible
2	2	4	4	1	1	2

Science Ship

The military might make the most noise, but everyone knows the research division is the one that makes the most progress. It isn't possible to do that whilst everyone is shooting each other. Someone has to patiently explore the universe. And they are most likely on a Science Ship.

Sublight Engines	Flux Stabiliser	Ship Armour	Deep Space Sensors	Cargo Space	Flexible
2	3	1	6	2	2

Ships - Level 2

Advanced

Light Carrier

Once fighters had been designed, some bright spark decided that it would be useful to be able to actually move them around without stripping them apart. They designed the Light Carrier by pulling stuff off a destroyer and filling it with launch bays.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Cargo Space	Fighter Bays	Flexible
1	2	4	3	2	2	2

Militarised Constructor

As soon as they see how hostile the galaxy is, poor civilians start getting panicky and saying things like "I don't want to go build an asteroid mine in hostile space" and "Oh no, they're going to shoot me". Rather than actually send a warship escort, why not just give them some guns and tell them to man up?

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Space Construction Gear	Flexible
2	3	3	3	3	2

Bigger Constructor

The engineers wanted something bigger, so the ship designers begrudgingly built a larger version of the standard construction ship model. They couldn't be bothered to come up with a snappy class name though.

Sublight Engines	Flux Stabiliser	Ship Armour	Space Construction Gear	Cargo Space	Flexible
2	3	1	6	2	2

Ships - Level 3

Basic

Heavy Cruiser

True warriors are proponents of the Heavy Cruiser design. Nothing smaller would be able to withstand the onslaught of the secondary batteries, installed just to make sure that anything smaller would be destroyed.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
1	2	13	13	3

Heavy Freighter

The less diplomatic have named this ship class the smuggler's class. But no one takes any notice of them, they don't know the truth. The truth being that this is such a lumbering beast it is almost useless as a smuggling ship. Very good for hauling a large volume of bulk goods from one place to another though; you'll see quite a few plying the paths of any moderately well travelled trade lanes.

Sublight Engines	Flux Stabiliser	Ship Armour	Cargo Space	Flexible
3	6	8	12	3

Ships - Level 3

Advanced

Light Cruiser

At a certain tonnage it became impossible to reconcile all schools of thought into harmony. Therefore the cruiser class split into two main groups. Those that thought speed was the most important, and those that thought power was the most important. Anyone wanting to insult the other group makes their escape on a Light Cruiser. In order to catch a small ship, one has to think like a small ship.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
6	3	10	10	3

Blockade Runner

A rarely seen ship in the spacelanes, many call it a waste of a ship. But those in the know are aware that this is the smuggler's choice of ship. More engines than it knows what to do with, and a limited hold. This is a ship to get something from one end of the universe to the other in the absolute shortest time period possible.

Sublight Engines	Flux Stabiliser	Ship Armour	Cargo Space	Flexible
8	8	5	8	3

Long Range Science Ship

Requires Sensors L3

All the universe is out there just waiting to be discovered. Organised. Catalogued. And poked with a stick. The Universe Poker 5000 has just been loaded, along with a tremendous amount of equipment that half the crew cannot identify. But the food was also loaded, so no one asked too many questions.

Sublight Engines	Flux Stabiliser	Ship Armour	Deep Space Sensors	Nebula Sensors	Cargo Space	Flexible
4	6	1	11	1	6	3

Ships - Level 3

Advanced

Engineering Vessel

Things to make, things to build, and everyone knows that the military aren't the people to do it. Probably the most sleek and well crafted vessel everyone's visual organs have ever seen. Well, you do have to make a good impression with your engineering vessels, don't you?

Sublight Engines	Flux Stabiliser	Ship Armour	Space Construction Gear	Flexible
4	4	8	12	4

Q-Ship

This modified transport ship is a trap for pirates. It appears as a standard Heavy Transport, but has concealed weapons and has converted some of its cargo space into fighter bays. It can't chase anyone down, but if attacked it will put up one hell of a fight.

SPECIAL RULE: Q-Ships appear to all onlookers to be standard Heavy Freighters.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Cargo Space	Fighter Bays	Flexible
1	3	10	5	5	5	3

Defence Satellites

These hulks of armour and weaponry are ideal for ruining the day of anyone trying to invade your homeworld. Or anything else really. They pack a solid punch.

Ship Weapons	Ship Armour	Flexible
17	17	1

Strike Cruiser

Someone asked for something even faster than a Light Cruiser and still wanted it to be useful in a fight. Though sceptical, the engineering team came up with this - take off most of the armour and shift it into Engines. Hopefully it won't ever get shot at!

Sublight Engines	Flux Stabiliser	Ship Armour	Deflector Shields	Ship Weapons	Flexible
8	5	3	2	11	3

Ships - Level 4

Basic

Battlecruiser

A very simple question was asked with the Battlecruiser. How do we shoot something to the smallest pieces possible? In fact, it wasn't a question that was posed at all. But it was answered anyway.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
4	4	16	28	4

Ships - Level 4

Advanced

Frigate

There comes a time when one must consider whether engineering magnificence may have gone too far. But surely we are not there yet asked the designers of the Frigate. Taking inspiration from the humble Patrol Ship, the Frigate seeks to be the most efficient use of space, taking the middle ground in any debate.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
8	4	20	20	4

Battleship

Those running away from the designers of the Battlecruiser have opted for the safest design that they could think of. The one with sixteen layers of armour. It can also double as an asteroid.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
1	2	37	12	4

Carrier

Once the majority of ideas from naval combat were explored in the form of spacecraft, one remained elusive. If you are aiming for maximum coverage of a system, then surely a Carrier is the best approach? Lumbering through space, these behemoths are vulnerable to enemy fire themselves, but when escorted, who knows what they are capable of?

Sublight Engines	Flux Stabiliser	Ship Armour	Cargo Space	Fighter Bays	Flexible
1	5	20	13	13	4

Flux Stability Field Projector

The Flux Stability Field Projector module has a lot of potential - at least, that's what the engineer who designed it insisted. It better do, given the investment required!

Sublight Engines	Flux Stabiliser	Ship Armour	Cargo Space	Flux Stability Field Projector	Flexible
4	10	24	8	6	4

Ships - Level 5

Basic

Dreadnaught

Right, this is it. The absolute pinnacle of military technology. Pushing the boundaries further than anyone thought possible, and certainly further than many wished, this mammoth construction can strike fear into the most heartless of our enemies. Unless they're AI of course, and then they simply register as a significant threat.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
2	3	39	39	5

Ships - Level 5

Advanced

Assault Carrier

Someone dared to dream big, and the Assault Carrier was born. This colossal vessel combines the brute strength of a battleship with the versatility of a carrier. Packed with fighter bays and a cargo hold that defies logic, it can launch waves of fighters while shrugging off enemy fire.

Sublight Engines	Flux Stabiliser	Ship Armour	Cargo Space	Fighter Bays	Flexible
2	5	36	20	20	5

Ultra Science Ship

Requires Long Range Science Ship

Why? Because science rocks, that's why. The Ultra Science Ship is the pinnacle of research vessels, brimming with cutting-edge technology. Equipped with sensors that can detect a pin drop on the other side of the galaxy and enough lab space to make any scientist swoon, this ship is a mobile research station. It's not just about exploring the universe; it's about understanding it in ways no one ever imagined.

Sublight Engines	Flux Stabiliser	Ship Armour	Deep Space Sensors	Cargo Space	Space Construction Gear	Nebula Sensors	Flexible
5	10	2	35	10	20	1	5

Assault Dreadnaught

When someone thought the Dreadnaught couldn't get any scarier, the Assault Dreadnaught was born. This behemoth of destruction is the result of pushing every boundary known to shipbuilding and then some. It's not just a ship; it's a statement. Armed to the teeth, the Assault Dreadnaught can take on anything the galaxy throws at it and come out laughing. With its massive arsenal, this ship doesn't just engage in combat; it dominates it. This is the ship you call in when you absolutely, positively need to obliterate everything in sight.

Sublight Engines	Flux Stabiliser	Ship Armour	Ship Weapons	Flexible
4	6	28	45	5

Detachments - Level 1

Basic

Survey Team

The eyes and sensors of any army are the cartographers. Often the first into any situation, usually before anyone knows that there is a situation. All modern military operations run off of having good intelligence and maps. Who gets it? Often these guys. Oh, just don't call them military though. They don't like that very much.

Infantry Armour	Planetary Survey Corps	Suborbital Tranports	Flexible
2	2	1	1

Construction Gang

Rag tag bag of misfits and the odd wrench. Some gangs are pulled from prison duty, others volunteer for the role. It really is a mystery why anyone would want to join up to go to alien worlds and build things on them. But it takes all sorts. Another sort that get twitchy about being called military...they don't often take well to orders either.

Infantry Armour	Engineering Corps	Suborbital Tranports	Flexible
2	2	1	1

Security Team

The first group that actually want to be called military, but no one ever does. Carrying a few light arms and wearing some body armour doesn't technically qualify you for being called military, but that doesn't stop this bunch trying. Really, you can't please everyone.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
2	2	1	1

Detachments - Level 1

Advanced

"Heavy" Security Team

They call themselves heavy, ostensibly that's because they get to wear something more than a flak vest (they get a helmet, too). These guys are mostly just employed as corporate security - they'll defend the building they're stationed in, but not stray far from the supply of biscuits.

Infantry Armour	Infantry Weapons
3	3

Detachments - Level 2

Basic

Infantry Battalion

It's at this stage that the issue tends to warrant a little more precision in the killing. Almost always these units are military, or paramilitary, for those wishing to have a little less association with the blood spilling and carapace cracking. Still, a dash of organisation and military bearing goes a long way.

Infantry Armour	Infantry Weapons	Suborbital Transports	Flexible
5	8	1	2

Pioneers

Some people always want to know what's over the next hill, and then when they see it they want to stick a big flag in it saying "mine". That makes them surprisingly good at finding new colony sites - send them to a planet and they'll scout it out and build on it without bothering to wait for anyone else.

Infantry Armour	Engineering Corps	Planetary Survey Corps	Suborbital Transports	Flexible
2	5	5	2	2

Detachments - Level 2

Advanced

Recon Unit

Sending in the professionals is usually a good idea when you need to get a good idea of what is going on. Some of the more exotic equipment can't be afforded by smaller groups. Sometimes you find a good mineral outcrop, other times an ancient civilisation. Rarely anything negative. Don't ask why everyone is wearing armour and carrying rifles.

Infantry Armour	Infantry Weapons	Planetary Survey Corps	Suborbital Transports	Flexible
4	3	4	3	2

Planetary Defence Force

If you want to stop looking at the skies in panic every time a meteor skips across the atmosphere, then you want to maintain a solid group of planetary defence experts. They stop any meteor becoming a meteorite, and stop anything else landing too.

SPECIAL RULE: Planetary Defence Forces cannot leave the planet on which they were constructed.

Infantry Armour	Portable Ground to Space Weapons	Flexible
6	8	2

Combat Medics

You don't have to have been in combat to be put back together by these guys, but it may move you to the front of the line. Their skills are usually in high demand unfortunately, but they are really very good at keeping troops alive.

Infantry Armour	Medical Corps	Suborbital Transports	Flexible
7	5	2	2

Detachments - Level 3

Basic

Infantry Regiment

When you want an area held, then, it would be wise to reinforce with a regiment or two. Fully organised and lethal, this level of investment leads to good outcomes, usually.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
12	15	2	3

Detachments - Level 3

Advanced

Archaeologists

These are the guys you send in when you want to find out everything about a place. They'll dig it all up, package it carefully, and send it home. Just don't ask them to tidy up afterwards. And that guy with the hat and whip isn't with us.

Infantry Armour	Planetary Survey Corps	Scavengers	Suborbital Transports	Flexible
7	15	3	4	3

Mechanised Infantry

Trading survivability for mobility, the Mechanised Infantry use lightly armoured personnel carriers to deliver lightning fast strikes at priority targets.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
8	15	6	3

Guerrilla Fighters

A number of steps above your basic militia, these guys will make an invader's life absolute hell. With high mobility, expert survival skills and their own medics, they can stall out an invasion force for years. They don't have the firepower to be overly useful on the offensive, though.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Combat Medics	Camouflage Fields	Flexible
14	5	6	2	2	3

Assault Troopers

When the landing zone is hotter than the sun, you send in the Assault Troopers. These elite soldiers drop in fast and hit hard, encased in nearly indestructible pods that shrug off enemy fire. Once they hit the ground, they hold the line with unyielding resolve until reinforcements arrive. Built for speed and strength, they're the first in and the last standing.

Infantry Armour	Infantry Weapons	Suborbital Transports	Reinforced Drop Pods	Flexible
14	12	1	2	3

Detachments - Level 4

Basic

Infantry Brigade

This is the sort of unit you deploy when you really want to make a point. Explosively. Once a brigade gets involved there often isn't much of a destination left. Well, aside from the large crater.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
22	27	3	4

Detachments - Level 4

Advanced

Siege Engineers

When you need a fortress built overnight, you call the Siege Engineers. These specialists are the backbone of any prolonged engagement. Armed with advanced construction tools and reinforced materials, they can erect impenetrable fortifications in record time. Whether it's building defensive walls, bunkers, or entire bases, they transform any location into a stronghold. Their expertise in fortification ensures your forces are protected and ready for whatever comes next.

Infantry Armour	Infantry Weapons	Engineering Corps	Combat Medics	Flexible
30	5	15	2	4

Heavy Assault Brigade

When the going gets tough, Heavy Assault gets going. These units are the epitome of brute force, equipped with the most devastating weaponry available. They're built to smash through enemy lines and break the toughest defenses. Moving like unstoppable tanks, they absorb punishment and dish it out in equal measure. If you need a wall of firepower to crush your foes, the Heavy Assault Team is your answer.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
13	35	4	4

Detachments - Level 5

Basic

Infantry Division

Less of a precision weapon and more of a “to whom it may concern” broadside, a division of infantry will certainly make for a permanent memory. For anyone left alive at the end to remember the incident, of course. But these small details, much like the buildings and cities in the wake of the division, will simply melt away to dust.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
35	45	3	5

Detachments - Level 5

Advanced

Mega Science Corps

Whoever thought a civilian unit could get this big clearly had too much coffee. The Mega Science Corps is a massive assembly of the brightest minds in the galaxy, armed with more lab equipment and engineering tools than you can shake a slide rule at. They build, they research, they probably overanalyze lunch. Sure, they might trip over their own feet sometimes, but when it comes to science and engineering, they're unstoppable. Just don't ask them to march in formation.

Infantry Armour	Planetary Survey Corps	Engineering Corps	Suborbital Transports	Flexible
5	35	35	8	5

Strike Division

When speed and size matter, the Rapid Response Division answers the call. This colossal unit combines unmatched mobility with overwhelming force, ready to deploy anywhere in the galaxy at a moment's notice. With state-of-the-art transports and elite troops, they can cover ground faster than anyone thought possible. Need a planet secured by lunchtime? No problem. They move so quickly that they sometimes arrive before the battle even starts. If you want something done yesterday, the Rapid Response Division is your best bet.

Infantry Armour	Infantry Weapons	Suborbital Tranports	Flexible
33	40	10	5